



# **International Defence Training (Army) Catalogue**

British Army Training

[www.army.mod.uk/idta](http://www.army.mod.uk/idta)



# Introduction

## FOREWORD

The British Army is a highly professional organisation with extensive experience in training officers, soldiers, defence civilian staff and international students. It is rightly acknowledged as a leader in the provision of world class military training. This training expertise, coupled with the British Army's operational record ensures that our training is delivered from a base of experience and not just theory.

International Defence Training (Army (IDT(A)) continues to maintain very close relationships with DE STRAT, International Policy and Plans (IPP), and the Army International Branch (AIB) to ensure that the training delivered to international students is in line with Defence Engagement policy. This training is a vital enabler in supporting the Defence Engagement principles abroad and developing partner nation's personnel in the disciplines of defence and security.

IDT(A) is the primary point of contact for international students attending British Army individual training courses and is responsible for their administration and attendance.

IDT(A) aims to continue to provide a substantial and meaningful contribution to Defence Engagement and Army International Activities (AIA) whilst helping to establish long term relationships in the wider international defence community.

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**IDT (A)**

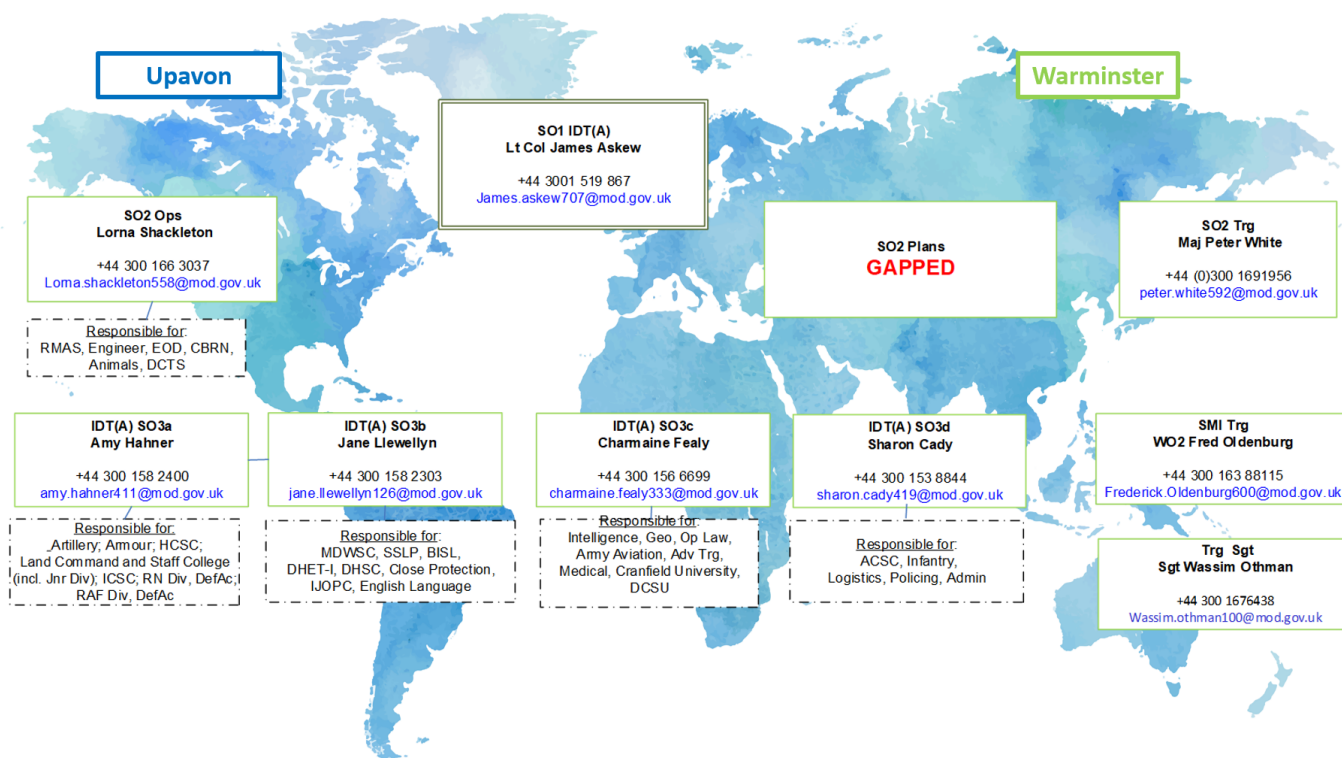
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# Administration

## INTERNATIONAL DEFENCE TRAINING (ARMY)





## APPLYING TO TRAIN WITH THE BRITISH ARMY

### Who should originate the application?

Applications are made either through the Enhanced Security Cooperation Activity Plan Application for Defence Engagement (ESCAPADE) or by written approach to the appropriate IDT(A) desk officer detailing the type of course / training required. This also includes Joint Services Command & Staff College, Royal Military Academy Sandhurst and all Tier 1 courses which, although administered by IDT(A), are by invitation only. The originating authorities are listed below:

### When should the originating authority apply?

Bids are more likely to be successful if applications are made six months in advance of the course start date, although every effort will be made to accommodate bids submitted in a shorter time.

### The Offer of Training

Upon receipt of a training request the IDT(A) desk officer will check training availability, dates, cost and any clearances required.

IDT(A) will issue a formal offer of training three months before the course starts (including English language requirements, security and assurance certificates, medical standards etc). Joining Instructions will also be issued 2 months beforehand. On receipt of the formal offers by the originating authority, the student will sit the International English Language Testing System (IELTS) assessment, if necessary.

### How do we accept offer of training?

The Letter of Training Arranged (LOTA) is accepted by the originating authority by completing Annex B of the LOTA and/or written confirmation and where possible, confirming the Name, Rank and Number of the student who will be attending the training. The letter of acceptance should also confirm the methods of funding for the training. The Certificate of Security & Assurance (Annex C) should also be completed and returned.

Once formal acceptance of the course place has been made by the originating authority, IDT(A) will raise formal paperwork to the training unit,

copied to the originating authority. The originating authority will make all necessary arrangements, including travel arrangements to prepare the student for training in the UK. Invoices will be forwarded by Defence Business Services (DBS) in Liverpool.

If the deadline for acceptance of the training has passed and the offer of training has not been accepted, declined or an extension of the deadline requested, it will be assumed by IDT(A) that the training is not required and it may be offered elsewhere.

Once the course has begun IDT(A) will monitor the student's progress, forwarded to the originating authority and advise and liaise as necessary on welfare or disciplinary problems. On completion of the training, the training unit will forward final reports to the originating authority.

### What happens if we have to cancel our place?

Since training places are in high demand, the British Ministry of Defence (MoD) reserves the right to raise cancellation charges once the offer of training is formally accepted. Valid reasons for cancellation are normally accepted without charge. What happens if the student is withdrawn from training? IDT(A) will give maximum warning to the originator copying in relevant authorities, when failure to progress, disciplinary problems or other reasons may lead to a student's withdrawal from training. The overseas DA in London will be encouraged to discuss any problems with the students. However, once the decision to suspend a student has been taken it is final.

## PHYSICAL FITNESS REQUIREMENTS

Candidates training with the British Army should be in general good health and physically fit. Where training courses have specific medical or physical standards, these are detailed in the catalogue.

### **The basic fitness standard is assessed by the British Army Soldier Conditioning Review (SCR)**

The SCR is a gender and age-free strength and conditioning diagnostic tool. It uses a series of gym-based exercise to indicate the overall physical conditioning of an individual across all the components of fitness. As part of the Army Physical Training System, the SCR is designed to highlight strengths and weaknesses across all these components. A useful video explaining the SCR can be seen [here](#). More information can be gained on the fitness level required for each course, from IDT(A).

The SCR consists of:

1. Broad Jump – a horizontal jump from the standing position; to assess the lower limb explosive power.
2. Seated Medicine ball throw – a seated, weighted throw with a 4kg medicine ball; to measure explosive upper body strength.
3. Hex Bar Deadlift – a basic deadlift using a Hex bar; to assess lower limb strength.
4. 100m shuttle sprint – 5 x 20m sprints; to assess lower body explosive power and anaerobic capacity.
5. Pull-ups – using over-grasp grip; to assess upper body strength.
6. 2km run – 2 km best effort run following a group warm up; to assess aerobic capacity.

Some courses are more physically demanding (e.g. the Platoon Sergeants Battle Course and the Commissioning Course at the Royal Military Academy at Sandhurst) and students must be physically fit and robust for such courses. IDT(A) can provide information about the physical requirements for these courses. Failure to meet these standards could result in the withdrawal of a student from training.

## WHAT ABOUT FUNDING?

At the time of the course request the originator should state how the course/training will be funded. The main forms of funding are as follows:

- **Recipient Nation Funded/Self-funded.**  
The country whose personnel is attending/using the training will pay.
- **UK funded:** Funding may be available through: Defence Assistance Fund (DAF); Conflict, Stability and Security Fund (CSSF); Counter-Terrorism Programme Fund (CTPF); Defence Engagement Provision (DEP).
- The British Defence Attaché/Adviser in country will know if he has the funds allocated for use by the overseas country.

It is assumed that all training will be self-funded unless the ESCAPADE informs us to the contrary.

### What about payment for the training and invoicing?

Once the Defence Business Services (DBS) is satisfied that the student is on the course, they will raise an invoice for the course fee and, where appropriate, food and accommodation charges. Payment is due on receipt of the invoice to DBS at the address given on the invoice. In many cases the request for payment, and the subsequent payment itself, will complete the financial transaction since the sum requested will take account of all costs associated with the course. In some cases however supplementary payments may be required, or refunds may be due. These will be calculated by DBS at the end of the course.

On occasions it may be necessary to present a supplementary bill after a course is completed for additional costs which cannot be forecast in advance. Examples of such costs are stores, ammunition, extra tuition, additional travel costs and medical expenses. Payment for additional tuition will be calculated to the nearest day.

### What is included in the course charges?

British Army Training charges are liable to revision throughout the year. The fees for training courses cover:

- Tuition.
- The cost of transport on duty journeys taken as part of the course, and payment of subsistence allowance to students whilst on course visits.
- Medical and Dental treatment provided by the UK Armed Forces Medical Services, should this be necessary, during the period of training, with the exception of the supply of spectacles, dental bridges or dental appliances for pre-existing medical or dental conditions.
- The loan of working/protective clothing and kit as necessary for the course. Normally these articles are to be returned when no longer required in connection with the course of instruction. Charges will be made for any article lost or damaged in circumstances in which a charge would be made against a British student.
- Messing (food) and accommodation charges.

### What is not included in the course charges?

- **Pay and Allowances:** Responsibility for pay and allowances for International students whilst training with the British Army rests with the parent government concerned. UK Service Accounting Officers have no authority to issue pay and allowances to students from MOD funds, but may pay as agents if the appropriate High Commission/Embassy first provides a cheque for the requisite amount drawn in favour of the Training Establishment's public account. Accounting Officers may also assist in opening bank accounts for students if it is the wish of their government that they should receive their pay and allowances in this manner.
- **Compensation:** Compensation payable to third parties for death or injury, or loss or damage to property, caused by the student
- **Transportation:** The cost of transport before the course, on leaving the course, between courses or whilst on leave or other non-duty journeys during the course, is the responsibility of the student's own authorities. Students living in private accommodation with their families are to pay for their own transport to and from the place of training.

- **Non-effective Benefits:** The responsibility for retired pay, pensions, disability awards etc, payable to, or in respect of, the student, remains with the parent government concerned.
- **Messing and Accommodation:** Some courses will make a separate, additional charge for messing and accommodation which is determined according to rank and standard of accommodation (see below for more details). This will be made clear in the offer letter.
- **Loss of Uniform/Equipment:** MOD will not be responsible for compensating the student for the loss of, or damage to, his uniform or Service equipment.
- **Mess Bills:** Students are required to pay their Mess Bills personally and are to pay for cigarettes, confectionery, drinks and extra food consumed in canteens and clubs. Officer's and SNCO's Mess Bills, which include mandatory charges, such as mess subscriptions, are to be paid in sterling on the due date to the respective Mess managers.
- **Clothing Maintenance:** This includes charges for and dry cleaning of personal laundry; alterations to uniforms; footwear repairs.
- **Funeral expenses:** Funeral expenses following the death of a student.
- **Family Maintenance.**
- **External Examination Fees.**
- **Medical/Dental Treatment for Families.**

### **What about Food and Accommodation?**

Most International Students are accommodated and fed (messing) in single living accommodation in either the Officers' or Warrant Officer/Sergeants' Messes. Most courses are flat rate' and include Messing and Accommodation (M & A) charges. However, students are still required to pay their personal mess bills (see above - 'What is not included in the course charges'). Occasionally, Messing and Accommodation charges are not included in the tuition fees of some courses. In such cases, International students are required to pay what is called the 'non-entitled rates' for their M & A. These M & A charges can either be added to the same bill as the tuition charges (Value Added Tax (VAT) at 20% is not added to this bill) or where countries have agreed, they can pay the M & A locally, whilst at the course (VAT is thus applicable). Locally payable M & A charges should be paid by cash or cheque to the relevant mess.

## ENTRY STANDARDS - INTERNATIONAL ENGLISH LANGUAGE TESTING SYSTEM (IELTS)

In order to gain maximum benefit from the training, International students require a defined level of English. Some courses will require a higher level of English than others, particularly those involving technical work or where safety procedures are a major factor. All British Army Training should have a defined level of English which equates to an International English Language Testing System level. The IELTS assessment is run in most capital cities by the British Council. (See [www.britishcouncil.org](http://www.britishcouncil.org) and [www.ielts.org](http://www.ielts.org) for further information).

### Who is exempt from taking an IELTS assessment?

The following potential students are not required to take an IELTS assessment:

- Those whose first language is English.
- Those who originate from a NATO nation (equivalent STANAG result required)
- Those who are returning for training within 5 years of taking a test (providing the IELTS requirement is not at a higher level)

### How does the potential student take the IELTS assessment?

If the potential student is required to take the IELTS assessment, the student can contact the British Embassy or High Commission to organise a test. Alternatively, the student can approach the British Council direct, in their country. The originating authority will pay the test charges for potential students who do not reach the required IELTS score. IDT(A) will pay for one test per course place for UK funded students only. The originating authority will pay the test charges in all other cases or when potential students do not reach the required IELTS standard.

### What if the student is unable to take the IELTS assessment?

The requirement to take an IELTS assessment can be waived in exceptional circumstances. In these circumstances the originating authority is responsible for ensuring that the potential student has acquired the appropriate level of English to participate in the training. The British Army reserves the right to withdraw any students from training if their English is not adequate for the

course and the originating authority will still be liable for all course fees.

### Where can English Language Training be given?

- With the British Council in country. This is most suitable for refresher training immediately prior to a student's departure for UK. This is usually an inexpensive option.
- Defence Centre for Languages and Culture at Shrivenham (DCLC) specialises in full-time, high-intensity, language courses, and its training design and delivery are certified to the ISO 9001 international quality standard. Its main role is to provide foreign language training to the British Armed forces and English language training to military personnel from overseas. Please contact IDT(A) for details of courses at DCLC or see courses listed in this brochure.
- Private language schools in the UK. It should be borne in mind that standards vary considerably, and that the course will not be tailored to military expectations. IDT(A) cannot administer students looking for or undertaking private language training.

### What does the IELTS Score mean?

Band	Level	Remarks
9	Expert User	Has fully operational command of language: appropriate, accurate and fluent with complete understanding.
8	Very Good User	Has fully operational command of language with only occasional unsystematic inaccuracies and inappropriacies. Misunderstandings may occur in unfamiliar situations.
7	Good User	Has operational command of language, though with occasional inaccuracies. Generally handles complex language well and understands detailed reasoning.
6	Competent User	Has generally effective command of English, despite some misunderstandings. Can use and understand fairly complex language, particularly in familiar situations.
5	Modest User	Has partial command of English, coping with overall meaning in most situations, although many mistakes will be made.
4	Limited User	Basic competence in familiar situations. Is not able to use complex language.
3	Extremely Limited User	Conveys and understands only general meaning in very familiar situations. Frequent breakdowns in communication occur.
2	Intermittent User	Only very basic understanding of English, with great difficulty in understanding of written and spoken English.
1	Non User	No ability to speak English beyond possibly a few isolated words.
0	No test	No assessable information provided.

## MEDICAL ARRANGEMENTS

Except for pre-existing medical or dental conditions, medical, optical or dental treatment provided by the British Armed Forces are covered by fees charged. There is therefore no charge for such treatment except for supply of spectacles, dental bridges or dental appliances and prescription charges. Dependants are not covered by this concession, unless it is covered under the terms of a Memorandum of Understanding. Any student whose course lasts less than six months, unless covered by a reciprocal agreement, will have to pay for any NHS (or state) hospital treatment they receive. Accident and Emergency services alone are provided free of charge. Students whose course lasts longer than six months are fully entitled to NHS hospital treatment at no charge. As a rule, dependants receive the same status as the student in this case.

## SECURITY

Governments **MUST** provide **CERTIFICATES OF SECURITY AND ASSURANCE** for their students. The certificates advise the level of clearance granted to the student for receipt of his own national information and give an assurance that any UK information passed to the student will be protected. This should be sent at least 2 months before the commencement of the training. A blank certificate is attached to the LOTA at Annex C. It should be noted, that students will be given access to information and material, only up to the security grading authorised by the MOD, for the particular training for which they have been accepted.

## PASSPORTS AND VISAS

### Passport Certification

Students must ensure that the following certificate (obtainable from British Embassies/Consulates abroad) is inserted into passports: Alien's exemption from registration whilst attending long military courses in the UK'.

### Visas

Requirements for International students to enter the UK will depend on their nationality and length of stay. Failure to obtain and present appropriate documentation at the point of entry to the UK may result in a student being delayed or refused entry by a Border Force Officer. Securing of visas for students (where required) is the responsibility of the sending nation and should be arranged with the Foreign & Commonwealth Office visa section in-country. UK Defence Sections will assist and advise their nations on specific requirements as necessary.

### Visa Extensions

Should an extension of stay be required (e.g. because of re-coursing etc), it will be the responsibility of the individual (who will have been made aware of the requirement by the Immigration Officer, on arrival in the UK) to apply for a Visa extension. For more information please refer to <https://www.gov.uk/student-visa/extend-your-visa>

During your flight to the UK you may be given an Immigration Form to complete. Keep this form ready to hand in at Immigration Control on your arrival in the UK.



## TRAVEL WITHIN THE UNITED KINGDOM

High Commissions and Embassies in London are responsible for meeting and accommodating students on arrival in the UK and for arranging their transport to the Training Establishment in time for the commencement of the course. Similarly, they are responsible for looking after the students during course recesses and on completion of courses and before their return home. As a general rule, students will not be available for return flights to their country before the scheduled end of course date. All students are to be in possession of a valid passport on arrival at their Training Establishment and retain it whilst under training.

### Travel to Central London

If you are flying to the UK, it is likely that you will arrive at either London Heathrow Airport (LHR) or Gatwick (LGW). It is your responsibility, and that of your Embassy/High Commission, to arrive at your Training Establishment in time for the start of the training and you will almost certainly need to travel into London for your onward journey. If your London Embassy/High Commission has not arranged transport there are four ways of travelling into London: (below prices are approximate and correct as of November 2022): (below prices are approximate and correct as of November 2022):

- **Taxi**

You should use only an authorised taxi, usually painted black and always having a clearly visible meter. Make sure the driver switches this on before leaving and pay only what is shown on the meter plus any additional charge if you have a lot of luggage. This is expensive, in relation to other methods of travel, and is in the region of in the region of £100 from Heathrow and £150 from Gatwick (as of 2022) to the centre of London - and costs even more late at night.

- **Coach**

The airports have good coach links into coach/bus stations in Central London. Travelling by coach is good value. Visit [www.thetrainline.com/buses](http://www.thetrainline.com/buses) for more information

- **Tube/Underground Railway**

LHR is on the end of the Piccadilly Line and Elizabeth Line. There is a frequent, inexpensive service into London, Make sure you plan your journey on the Underground. Useful apps include 'Tube Map' and 'CityMapper', both of which will help you plan your journey in London. If you are going to

use the Underground (and London buses) frequently, then you should consider purchasing an Oyster Card. These can be bought at ticket windows in Underground stations.

- **Rail**

Travel by train to Central London from LHR or LGW can be achieved using the Heathrow or Gatwick Express services. The Heathrow Express is a 15-minute direct train ride (20 minutes from Terminal 5) from LHR to Paddington Station in the centre of London. This service runs every 15 minutes from 0510 - 2340 hrs. 0345 600 1515 (within the UK) [www.heathrowexpress.com](http://www.heathrowexpress.com) The Gatwick Express is a 30 minute direct train from Gatwick to Victoria Station. The service runs every 15 minutes from 0520-0435 hrs. 0345 272 930 (within the UK) [www.gatwickexpress.com](http://www.gatwickexpress.com). There is also a regular train service from Gatwick which takes 30 minutes. The Stansted Express is a 45 minute train from Stansted Airport to Liverpool Street Station, London via Tottenham Hale. The service runs every 30 minutes between 0500 - 0800 hrs then 1630-2300 hrs and every 15 minutes from 0815 - 1630 hrs. 0345 600 7245 (within the UK) [www.stanstedexpress.com](http://www.stanstedexpress.com)

- **Air Travel**

This is quite an expensive method of travel and there are services only between the major cities. For journeys up to 200 miles the train is often quicker.

There is a good network of services between the main towns and cities particularly for journeys from and into London. Inter-City trains are fast, comfortable and frequent, with a restaurant/buffet service available on most long journeys. For journeys to rural areas, however, trains are less frequent. The rail companies operate a wide range of tickets at varying prices. Always ask at the booking office to find out which is the best suited to your journey. There are First and Standard classes of travel on most journeys. [www.thetrainline.com](http://www.thetrainline.com)

- **Bus/Coach**

London has an excellent bus service. Please refer to Citymapper app [www.londontransport.co.uk/buses/contact](http://www.londontransport.co.uk/buses/contact) Other cities and large towns also have good bus services and Tourist Information Offices may be able to provide timetable information. Buses in rural areas can be infrequent. There is also a comprehensive inter-city express coach service which is inexpensive (compared with air and rail). [www.GoByCoach.com](http://www.GoByCoach.com)

## DRIVING

### Car

Please remember that vehicles in the UK are right hand drive and are driven on the left hand side of the road. Most vehicles available for hire in the UK are stick shift and not automatic transmission, although automatic transmission vehicles may be obtained from the Car Hire Company upon request.

### Driving in the UK as a visitor

The rules concerning the driving of civilian vehicles in the UK by visitors from overseas are governed by the Driving and Vehicle Licensing Authority. Those rules are summarised below:

### Age

Minimum age is 17 for cars and motorcycles and 18 for medium vehicles with a valid licence.

### Buying a Vehicle in the UK

If a student attending British Army training decides to purchase a vehicle whilst in the UK then they must comply with the following British Laws:

- Have valid motor insurance.
- Have valid Road Fund licence (available from Post Offices and online).
- Hold a valid Ministry of Transport Test Certificate (MOT) from an approved testing garage.

**Warning: The penalties for driving whilst under the influence of alcohol or drugs in the UK are severe.**

## CLOTHING

All students (except those attending Commissioning Courses at Royal Military Academy Sandhurst) are to be in possession of and wear uniforms appropriate to their own Armed Forces and appropriate to the training. This should be outlined in the Joining Instructions for the Training course.

Students must have sufficient clothing to cope with the diverse weather in the UK together with their appropriate rank and cap badges. Where student's uniform is inadequate they will be allowed to obtain UK uniform clothing on local repayment or Embassies/High Commissions can be invoiced by DBS Liverpool via IDT(A).

### Discipline

International students in the UK are subject to British Civil and Criminal Law. Accordingly, the appropriate civil authorities will deal with offences committed against the Laws in force. All students will be expected to respect the rules and regulations enforced locally, together with the customs of the British Army. Serious breaches of conduct will be reported to the national authority via the originating authority.

### Security

Students staying in UK Ministry of Defence establishments are to obey the Security Regulations set out in the Standing Orders and other notices of the Training Establishment. A student possessing a camera is to report the fact to the Unit Security Officer on arrival. Depending on local security regulations, he may be permitted to do one of the following:

- Retain the camera in the unit.
- Be required to surrender the camera for the duration of the stay or until a permit for its retention is granted.
- Be required to keep it outside the unit.

However, be aware that it is forbidden to photograph, without authority, any military equipment, building or installation or reproduce them in the form of sketches, painting or models of any kind.

### Leave/vacation

Course lengths quoted in offer letters may include leave periods. During this time the Training Establishment may close and Messing and Accommodation facilities may not be available. During such periods it is the responsibility of the national authorities to make alternative arrangements for the student. Where International students are attending long courses, the dates of main leave periods may be obtained from the appropriate IDT(A) desk officer upon request before the course commences.

Requests for compassionate leave are to be referred to the training unit and then IDT(A) who will liaise with the Embassy/High Commission of the student.

### Public Holidays

Unfortunately it is impractical to observe International public holidays as there are so many students from different countries training with the British Army. It is therefore customary for International students to observe British Army rules and regulations concerning UK public holidays, weekend and seasonal leave.

### Religious Festivals

During religious festivals it is recognised that there is normally a requirement for certain students to meet the obligations of their faith. When these obligations interfere with training it is expected that students will obtain religious dispensation from the appropriate authorities. In particular, this is because students who are fasting may be unable to give full attention to instruction or be able to participate in physical activity required by the course and as such they should be authorised to eat and drink normally. Time off for prayer is not normally given and national authorities (particularly Embassy/High Commission staff in the UK) are aware of this.

### **Dietary Requirements**

The training establishment should be informed, before the course commences, if the student has a specific dietary requirement (e.g. vegetarian or religious). The student should also inform the Sergeant Major responsible for administering the course and the Mess staff upon arrival at the course to avoid any problems in this area.

### **Accommodation**

Students should, whenever possible, live in the Service accommodation provided. When Service accommodation is not available, the Training Establishment may make arrangements for private accommodation to be used or the national representative in UK will be advised to make alternative arrangements for accommodation, keeping IDT(A) informed. Unaccompanied students may choose to live in private accommodation at their own expense, but only with the permission of their Embassy/High Commission and of the Training Establishment's Commanding Officer.

### **Accommodation Of Families**

With the exception of those attending certain long courses (over 6 months), overseas students are not entitled to MOD married accommodation (married quarters). There are, however, some occasions when married quarters may be made available. In such cases the Service Attaché/ Adviser handling the application should forward to the appropriate unit, in accordance with Joining Instructions, details of all personnel who require a married quarter. Such application for quarters must be received at least 2 months before the start of the course.

International students will not be allocated married quarters for a course less than 6 months in duration or if they are single or married but unaccompanied. If a student is not allocated a married quarter and still requires his family to be with him, he should travel to the United Kingdom alone. The student will then be required to make his own arrangements to secure private accommodation, obtain the approval of his Commanding Officer to live in his chosen accommodation, and then send for his family. Unfortunately, the MOD has neither the facilities nor the staff to assist in finding private rented accommodation.

### **Pay**

Responsibility for issuing pay and travelling allowances for students rests with the student's Embassy/High Commission. Exceptionally, the Training Unit Admin Officer will arrange to pay the student, provided he has the Embassy/High Commission's prior authority and a cheque for the required amount made payable to the MOD Public Account. If the student wishes to open a bank account in the UK the Training Unit Admin Officer will advise.

### **Travel Tickets**

Railway tickets will normally only be issued for travel if it is a necessary and integral part of the training. Railway tickets can occasionally be issued under other circumstances but the cost of the ticket will be recouped from the originating authority via DBS in Liverpool.

### **Personal or Domestic Problems**

Students should inform the British Training Establishment of any matters of ill health, confirmation of flight, arrangements at the end of training etc. The Establishments will then deal directly with the appropriate Embassy or High Commission in London. Establishments will also contact the student's London based Embassies/ High Commissions directly on more serious matters arising outside normal office hours when a delay might prove embarrassing or injurious. IDT(A) will then be informed at the beginning of the next working day.

All communications on delicate, disciplinary or potentially controversial subjects or on matters to do with new or additional training, should always be addressed to IDT(A).

### **Monitoring of Progress**

Throughout training, students' progress is monitored by means of assessments. These may be either in the form of end of phase examinations, assessments of exercises, or narrative reports throughout training phases by course instructors. The purpose of such monitoring is to assess the students progress under training, their comprehension of the subject being taught and, ultimately, their ability to reach the course standards.

### **Interim/Progress Reports**

Training units will, where appropriate to the course, issue reports recording the students' progress under training. In instances of poor student progress, reports will be submitted to IDT(A) for onward transmission to the National Authority.

### **Unsatisfactory Progress**

The continuous monitoring of students throughout training enables instructors and training staffs to identify those students who are having problems meeting course standards. In such cases the training authority will counsel students and, if necessary or appropriate, may give additional tuition. At the time such problems are encountered, the training authority will warn IDT(A) who will advise the Originating Authority accordingly. Should a student continue to fail IDT(A) will discuss with the training authority the most appropriate course of action and advise the Originating Authority accordingly. For some courses it may be possible for students to repeat phases of training. Ultimately, however, students who fail to meet the necessary standards after the actions described above, may be withdrawn from training and returned to their Embassy/High Commission.

### **After Training Final Mess Bill**

Students must ensure that their final personal Mess bills (e.g. for cigarettes, confectionery, drinks, telephone calls and extra food consumed in canteens and clubs and mandatory charges, such as mess subscriptions) are settled in cash before leaving the training establishment.

### **End Of Course Reports**

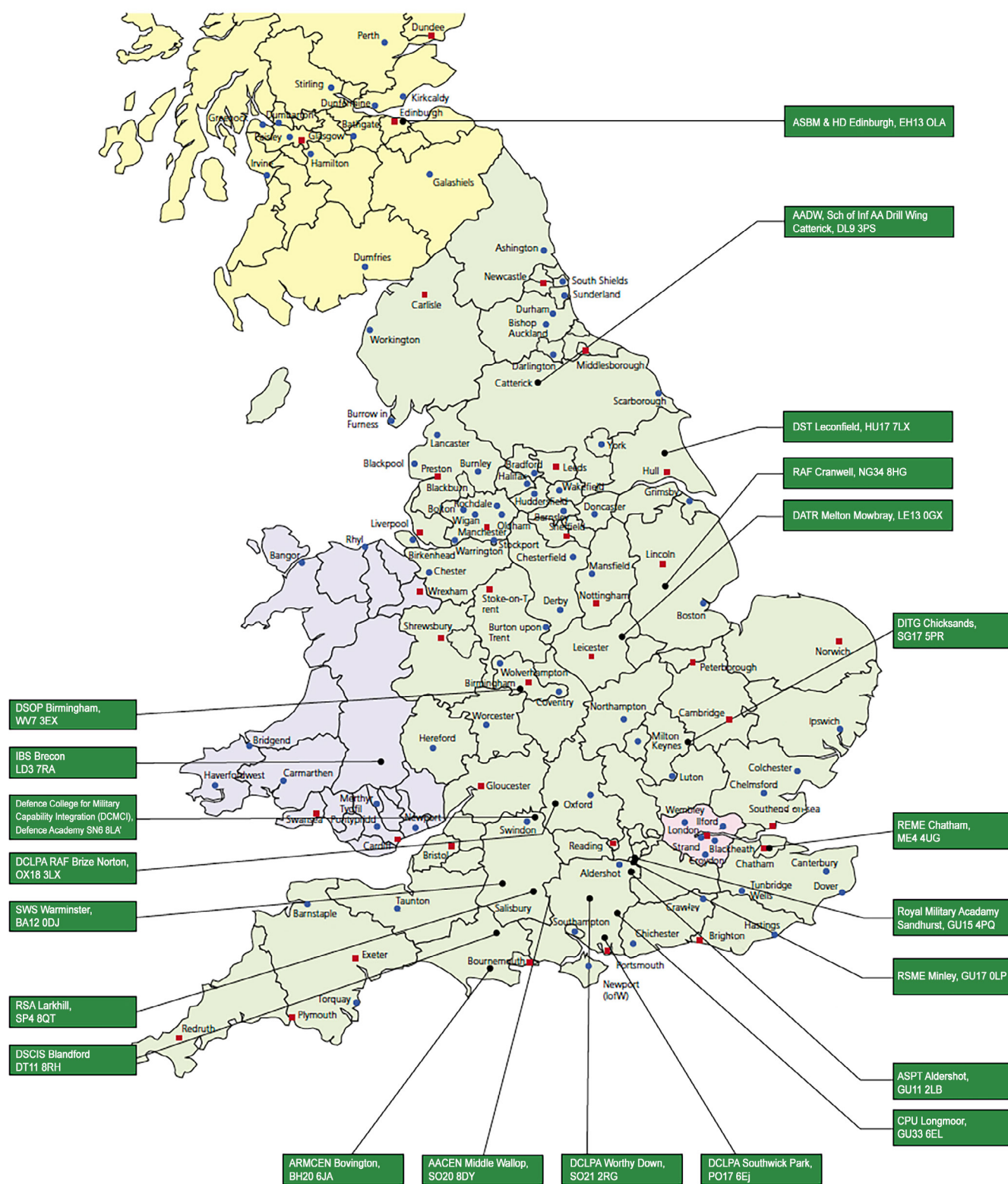
At the end of training a course report will be produced for all students. These reports will detail the student's performance on the course and will, generally, include a narrative by the Instructor or Course Director detailing particular points of interest, e.g. strengths and weaknesses. International students are generally expected to reach the same standards as their UK counterparts and are assessed accordingly. Training authorities will qualify assessments where International students could not be expected to meet the UK standards e.g. due to unfamiliarity with equipment. End of Course reports may also include recommendations on a student's suitability for further training with the British Army.

### **External Examinations**

International students sometimes express a wish to improve their academic qualifications by studying for and taking UK examinations which are not a part of their course. Usually, there is no objection to this provided the Officer in charge of the course agrees that the extra study involved will not adversely affect the student's performance. The student's National Authority must then provide written agreement to this and also accept responsibility for the repayment of the examination fees to the MOD. Alternatively, the student may pay his own examination fees to the Establishment in which he is being trained.



## LWC / ARITC / DEFENCE / ARMY UK TRAINING LOCATIONS



## SCHOOLS & CONTACTS

School	Location	Category/Course	Desk Officer
Defence EOD, Munitions and Search Training Regiment	Kineton	EOD & Counter-IED	Lorna.Shackleton558@mod.gov.uk
Defence EOD, Munitions and Search Training Regiment	Bicester	EOD & Counter-IED	Lorna.Shackleton558@mod.gov.uk
Defence Animal Training Regiment (DATR)	Melton Mowbray	Animal Related	Amy.Hahner411@mod.gov.uk
Armour Centre	Bovington	Armour Centre Courses	Amy.Hahner411@mod.gov.uk
Armour Centre	Lulworth	Armour Centre Courses	Amy.Hahner411@mod.gov.uk
Armour Centre	Warminster	Armour Centre Courses	Amy.Hahner411@mod.gov.uk
Royal School of Artillery	Larkhill	Artillery Courses	amy.Hahner411@mod.gov.uk
Defence College of Support	Worthy Down, Winchester, Hampshire	Catering Courses	Sharon.Cady419@mod.gov.uk
Combined Arms Manoeuvr School	Warminster	Combined Arms & Collective Training Courses	Amy.Hahner411@mod.gov.uk
The Royal Military Academy Sandhurst	Sandhurst	Combined Arms & Collective Training Courses	Lorna.Shackleton558@mod.gov.uk
Combined Arms Manoeuvr School	Salisbury Plain, Longmoor Urban Area, Sennybridge Training Area	Combined Arms & Collective Training Courses	Amy.Hahner411@mod.gov.uk
Combined Arms Manoeuvr School	Warminster	Combined Arms & Collective Training Courses	Amy.Hahner411@mod.gov.uk
Combined Arms Manoeuvr School	Bovington	Combined Arms & Collective Training Courses	Amy.Hahner411@mod.gov.uk
Combined Arms Manoeuvr School	Warminster	Combined Arms & Collective Training Courses	Amy.Hahner411@mod.gov.uk
Defence Academy	Shrivenham	Combined Arms & Collective Training Courses	Jane.Llewellyn126@mod.gov.uk
Defence College for Military Capability Integration	Shrivenham	Defence College for Military Capability Integration (DCMCI) Courses	Charmaine.Fealy333@mod.gov.uk
Defence College for Military Capability Integration	Shrivenham & Cranfield University Campus	Defence College for Military Capability Integration (DCMCI) Courses	Charmaine.Fealy333@mod.gov.uk
Defence College for Military Capability Integration	Blandford	Defence College of Technical Training	Charmaine.Fealy333@mod.gov.uk
School Of Infantry	Catterick	Drill Courses	Sharon.Cady419@mod.gov.uk
Defence School of Transport	Leconfield	Driving Courses	Sharon.Cady419@mod.gov.uk
Royal School of Military Engineering (RSME)	Chatham	Engineering Courses	Lorna.Shackleton558@mod.gov.uk
Royal School of Military Engineering (RSME)	Minley	Engineering Courses	Lorna.Shackleton558@mod.gov.uk
Defence School of Electronic & Mechanical Engineering	Lyneham	Engineering Courses	Lorna.Shackleton558@mod.gov.uk
Defence CBRN Centre (DCBRNC)	Winterbourne Gunner	Engineering Courses	Lorna.Shackleton558@mod.gov.uk
Defence College of Support	Worthy Down, Winchester	Finance & Admin Courses	Sharon.Cady419@mod.gov.uk
The Infantry Battle School	Brecon	Infantry Courses	Sharon.Cady419@mod.gov.uk
Special Weapon School	Warminster	Infantry Courses	Sharon.Cady419@mod.gov.uk
The Infantry Battle School JUNGLE WARFARE DIVISION	Brunei	Infantry Courses	Sharon.Cady419@mod.gov.uk
Defence Intelligence Training Group	Chicksands	Intelligence & Security Courses	Lorna.Shackleton558@mod.gov.uk
joint Intelligence training Group	Hermitage	Intelligence & Security Courses	Lorna.Shackleton558@mod.gov.uk
Defence Academy of the United Kingdom	Shrivenham	Intelligence & Security Courses	Lorna.Shackleton558@mod.gov.uk
Defence Academy	Shrivenham	JSCSC Courses	Lorna.Shackleton558@mod.gov.uk



School	Location	Category/Course	Desk Officer
Defence Centre for Languages and Culture (DCLC)	Shrivenham	Language Courses	Sharon.Cady419@mod.gov.uk
Defence College of Support	Worthy Down, Winchester	Logistics Courses	Sharon.Cady419@mod.gov.uk
Logistic Specialist Training Wing Defence School of Logistics and Administration,	Southampton	Logistics Courses	Sharon.Cady419@mod.gov.uk
Defence Movements Training Squadron	RAF Brize Norton	Logistics Courses	Sharon.Cady419@mod.gov.uk
Defence Medical Services	Whittington	Medical Courses	Sharon.Cady419@mod.gov.uk
Royal Military School of Music,	HMS Nelson Portsmouth	Music Courses	Sharon.Cady419@mod.gov.uk
Royal Military School of Music	Edinburgh	Music Courses	Sharon.Cady419@mod.gov.uk
Royal Military School of Music	Minley	Music Courses	Sharon.Cady419@mod.gov.uk
joint Intelligence training Group	Cosford	Photography Courses	Charmaine.Fealy333@mod.gov.uk
Army School of Physical Training (ASPT)	Aldershot	Physical Training Courses	Charmaine.Fealy333@mod.gov.uk
Defence school of Policing and Security	Southwick	Police Training Courses	Sharon.Cady419@mod.gov.uk
The Royal Military Academy Sandhurst	Sandhurst	RMAS Courses	Lorna.Shackleton558@mod.gov.uk
Defence Intelligence Training Group	Hermitage	Survey Courses	Charmaine.Fealy333@mod.gov.uk
Close Protection Unit	Longmoor Camp	Close Protection Courses	Jane.Llewellyn126@mod.gov.uk

# EOD & Counter-IED

## INTERNATIONAL IMPROVISED EXPLOSIVE DEVICE DISPOSAL (IEDD)

**Course No: 0029b**

**DEMS Kineton**

Aim of Course	Outline of Syllabus	Remarks
To train international EOD operators in UK Defence's Tactics, Techniques & Procedures (TPs) relating to Improvised Explosive Device Disposal (IEDD).	<ul style="list-style-type: none"> <li><b>Week 1</b> Covers all the theoretical aspects of IED together with the introduction and practical use of all current IED equipment used in the British Army.</li> <li><b>Week 2</b> Students are given realistic IEDD scenarios and are expected to carry out render safe procedures with supervision and guidance. This week is not assessed.</li> <li><b>Week 3</b> Simulated IEDs are deployed in realistic scenarios within a multi-million pound IEDD specific training area. All scenarios are based on real incidents; if possible from the student's country of origin, and in every case the scenarios are actual IED incidents, which have, occurred somewhere in the world within the last 24 months.</li> </ul>	For more information please contact: lorna.shackleton558@mod.gov.uk

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Officers and Senior Non Commissioned	IELTS level 6. Previous training in IEDD or experience of Explosive Ordnance Disposal.	3 weeks	Certificate of attendance only.	2 courses per year

# EOD & Counter-IED

## INTERNATIONAL MARITIME EXPLOSIVE ORDNANCE DISPOSAL (EOD)

**Course No: 0710**

**DEMS Bicester**

Aim of Course	Outline of Syllabus	Remarks
To provide Basic to Advanced level familiarisation training on EOD equipment and procedures employed during maritime and tidal Mine Counter Measure (MCM) tasks. The course emphasis will be on techniques and procedures most applicable to littoral EOD operations. Completion of the course should enable personnel to understand and execute all phases associated with Mine Investigation and Exploitation (MIE) tasks.	<ul style="list-style-type: none"> <li>• Basic explosive theory.</li> <li>• Description of Land Service Ammunition (LSA) to include projectiles, mortars, rockets, grenades and air dropped weapons (ADW)</li> <li>• Description of underwater Naval Weapons to include mines, torpedoes and associated fuses.</li> <li>• Reconnaissance procedures on land and in poor visibility.</li> <li>• Use of applicable MCM EOD equipment.</li> <li>• Demolition techniques training: surface, low order, shape charges and explosive stripping</li> <li>• Render safe procedures</li> <li>• Exploitation technique and procedures.</li> </ul>	The course incorporates a live demolitions phase at SHOEBOURNNESS for 3 days of land-based demolitions training on various explosive exploitation and low order techniques. The Naval Training Area at BICESTER encompasses a shipboard trainer, a 7m deep man-made lake with over 30 items of ordnance including naval mines, torpedoes and depth charges.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Senior Non Commissioned Officers and Officers	IELTS Band 6. Trainees should be experienced in Maritime EOD operations in their own nation. All trainees must be trained in basic explosive handling procedures and be competent to perform tasks in arduous conditions and adverse weather. Students MUST arrive with appropriate uniform items to work in these conditions as none will be provided.	4 weeks	Certificate of attendance only.	1 course per year

# EOD & Counter-IED

## INTERNATIONAL SEARCH ADVISERS (ISA)

**Course No: 8860**

**DEMS Bicester**

Aim of Course	Outline of Syllabus	Remarks
<p>To train international students as Search Advisers. The course teaches the student to conduct a Threat Assessment, plan and execute low-risk searches and operate Search equipment using appropriate techniques. On completion, students will be able to contribute to building a safe and secure environment, combat extremist and crime, in support of the maintenance of the rule of law.</p>	<p>The course covers the following subjects:</p> <ul style="list-style-type: none"> <li>• Intensive instruction on intermediate search procedures and documentation</li> <li>• International terrorist threat and methods of attack</li> <li>• All aspects of search planning, including the conduct of threat assessments and the search estimate process.</li> </ul> <p>The planning of various types of search including:</p> <ul style="list-style-type: none"> <li>• Large-scale venues</li> <li>• Area</li> <li>• Vehicles</li> <li>• Routes</li> <li>• Aircraft</li> <li>• Buildings</li> <li>• The use and maintenance of relevant current British In-service search equipment.</li> </ul>	<p>Instruction Training is delivered by subject matter expert Officers and Senior Non-Commissioned Officers who have operational Search experience in all theatres. The latest technology and methods are utilised. Overseas students are fully integrated into the course and will gain a thorough understanding of British Military ethos and Search doctrine.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Sergeant to Major	IELTS level 6	3 weeks	Certificate of attendance only.	3 course per year

# EOD & Counter-IED

## INTERNATIONAL COUNTER - IMPROVISED EXPLOSIVE DEVICE (C-IED) TRAINER

**Course No: 4902**

**DEMS Bicester**

Aim of Course	Outline of Syllabus	Remarks
To provide international instructors with the knowledge and skills required to deliver unit-level -IED training.	<p>The candidate will be instructed in the following C-IED disciplines in accordance with current UK military doctrine:</p> <ul style="list-style-type: none"> <li>• IED Threat Assessment.</li> <li>• Person Search.</li> <li>• Vehicle Search.</li> <li>• Forensics.</li> <li>• Route Check.</li> <li>• Area /Building Rummage.</li> <li>• Compound Search.</li> <li>• CIED Actions-on.</li> <li>• Search Documentation.</li> <li>• Hand Held Metal Detector.</li> </ul>	<p>Trainees will receive theory and practical training in procedures and techniques used to counter the I ED threat. Lessons are roughly split 70% -30% theory to practical, meaning a large portion of the course is spent in the classroom. The course culminates in a series of theory tests and individual teach-back lessons delivered to the other students. The teach back lessons demonstrate the ability of the student to relate their theoretical knowledge and apply it in an instructional scenario.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Sgt-Mai	IELTS Band 6 Students should hold a Parent Nation instructors qualification.	2 weeks	International students will receive either a Pass Certificate or a Certificate of Attendance depending on results.	3 per year



# EOD & Counter-IED

## INTERNATIONAL GROUND SIGN AWARENESS INSTRUCTOR

**Course No: 4901**

**DEMS Bicester**

Aim of Course	Outline of Syllabus	Remarks
To train international personnel in the knowledge and skills required to instruct Ground Sign Awareness (GSA) techniques and procedures in all environments.	<p>The candidate will be instructed in the following GSA disciplines in accordance with current UK military doctrine:</p> <ul style="list-style-type: none"> <li>• Basics of tracking.</li> <li>• Facts and Deductions.</li> <li>• Urban GSA.</li> <li>• Night GSA.</li> <li>• Basic Counter-Explosive Ordnance.</li> </ul>	<p>Trainees will receive theory and practical training in procedures and techniques used in the skill of GSA. Lessons are roughly split 60% - 40% practical to theory meaning a large portion of the course is spent outside. Students are tested to the same standard as the UK course variant.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Sgt-Mai	IELTS Band 6 Students should hold a Parent Nation instructors qualification.	1 weeks	Students are assessed to the same standard as UK personnel. International students will receive either a Pass Certificate or a Certificate of Attendance depending on results.	2 per year

# Animal Related Courses

## ARMS EXPLOSIVE SEARCH (AES) DOG HANDLER

**Course No: 435/008**

**DATR Melton Mowbray**

Aim of Course	Outline of Syllabus	Remarks
To provide students with the knowledge and skills necessary to become an operational AES Dog Handler.	<p>On completion of the course, the dog handler will be capable of:</p> <ul style="list-style-type: none"> <li>• Maintaining a close working relationship with a trained AES dog</li> <li>• Advising a Search Team Commander of the correct procedures for the employment of an AES dog under various operational situations</li> <li>• Employ the dog to search, find and indicate the presence of arms, ammunition, explosives and related items</li> <li>• Recognising common terrorist booby traps, weapons and explosives</li> <li>• Operating an AES dog to detect and clear all types of buildings (occupied and unoccupied), outside areas including route clearances, vehicles, aircraft, shops etc</li> <li>• Completing reports and understanding safety precautions</li> <li>• Recognise the basic signs of health, detect signs of sickness and report any abnormalities</li> <li>• Conducting all forms of continuation training in order to maintain the dog at a high standard of operational efficiency.</li> </ul>	<p>The Defence Animal Centre can sometimes provide trained dogs. Please refer any queries to IDT(A).</p> <p>Related Course: Patrol Dog Handler's Course.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private soldiers and all noncommissioned ranks	IELTS level 6. Experience in basic dog handling.	9 weeks	A Pass Certificate is awarded to successful students	3 courses per year



# Animal Related Courses

## CURRENCY DETECTION DOG HANDLER

**Course No: 435/051**

**DATR Melton Mowbray**

Aim of Course	Outline of Syllabus	Remarks
To provide students with the knowledge and skills necessary to become an operational Currency Detection Dog Handler.	<p>On completion of training, the Currency Detection Dog Handler will be capable of:</p> <ul style="list-style-type: none"> <li>• Maintaining a close working relationship with a trained Currency Detection Dog</li> <li>• Stating the regulations and safety precautions relating to searching</li> <li>• Employing the dog to search, find and indicate the presence of hidden currency</li> <li>• Assessing an operational situation and advising the employing agency on whether or not the dog can be usefully employed</li> <li>• Operating a Currency Detection Dog in searches for hides and in buildings, all types of vehicles, ships, aircraft, outside areas and personal possessions</li> <li>• Interpreting dog behaviour and reactions whilst searching for currency</li> <li>• Recognising the basic signs of health, detect signs of sickness and report any abnormalities</li> <li>• Conducting all forms of continuation training in order to maintain his dog at a high standard of operational efficiency.</li> </ul>	The Defence Animal Centre can sometimes provide trained dogs. Please refer any queries on this to IDT(A).

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private soldiers and all noncommissioned ranks	IELTS level 6. Experience in basic dog handling.	9 weeks	A Pass Certificate is awarded to successful students	As required

# Animal Related Courses

## DRUG DETECTION DOG HANDLER (MULTI-PURPOSE)

**Course No: 435/065**

**DATR Melton Mowbray**

Aim of Course	Outline of Syllabus	Remarks
To provide students with the knowledge and skills necessary to become an operational Multi-Purpose Drugs Detection Dog Handler.	<p>On completion of training, the Drugs Detection Dog Handler will be capable of:</p> <ul style="list-style-type: none"> <li>• Maintaining a close working relationship with a trained Drugs Detection Dog</li> <li>• Stating the regulations and safety precautions relating to the storage, handling and use of controlled drugs</li> <li>• Employing the dog to search, find and indicate the presence of cannabis and its derivatives, heroin, cocaine, amphetamines and their derivatives (and currency if required)</li> <li>• Recognising cannabis, heroin, cocaine and amphetamines by sight and smell</li> <li>• Assessing an operational situation and advising the employing agency on whether or not the dog can be usefully employed</li> <li>• Operating a Drugs Detection Dog in searches for controlled drugs' hides and ancillary equipment in buildings, all types of vehicles, ships, aircraft, outside areas, personal possessions (e.g. luggage) and pedestrians and passengers</li> <li>• Interpreting dog behaviour and reactions whilst searching for drugs</li> <li>• Recognising the basic signs of health, detect signs of sickness and report any abnormalities</li> <li>• Conducting all forms of continuation training in order to maintain the dog at a high standard of operational efficiency.</li> </ul>	<p>This course replaces the Passive and Proactive Drugs Detection Dog Handler.</p> <p>The Defence Animal Centre can sometimes provide trained dogs. Please refer any queries to IDT(A).</p> <p>Related Course: Patrol Dog Handler's Course.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private soldiers and all noncommissioned ranks	IELTS level 6. Fluency in written and spoken English. Experience in basic dog handling.	9 weeks	A pass certificate is awarded to successful students	4 courses per year

# Animal Related Courses

## KENNEL ASSISTANT

**Course No: 435/019**

**DATR Melton Mowbray**

Aim of Course	Outline of Syllabus	Remarks
To provide students with the knowledge and skills necessary to carry out the duties of a kennel assistant in a working dog section.	<p>On completion of the course the kennel assistant will be capable of:</p> <ul style="list-style-type: none"> <li>• Maintaining a kennel, the kennel area and kennel equipment in a clean and tidy condition</li> <li>• Walking and exercising dogs under control and carrying out basic obedience</li> <li>• Recognising the basic signs of health, detect signs of sickness and report any abnormalities</li> <li>• Administering and recording veterinary treatments as directed</li> <li>• Understanding the health and safety regulations regarding dog sections</li> <li>• Restraining and manipulating a dog for veterinary inspection and treatment.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private soldiers and all non-commissioned ranks	IELTS level 6. A reasonable level of physical fitness.	5 days		As required

# Animal Related Courses

## KENNEL MANAGER

**Course No: 435/011**

**DATR Melton Mowbray**

Aim of Course	Outline of Syllabus	Remarks
To provide students with the knowledge and skills necessary to become an efficient and effective kennel manager.	<p>On completion of the course the kennel manager will be capable of:</p> <ul style="list-style-type: none"> <li>• Supervising the maintenance of a kennel section, the kennel area and kennel equipment in a clean and tidy condition</li> <li>• Supervising obedience with trained handlers and dog, both leashed and unleashed</li> <li>• Recognising the basic signs of health, detect signs of sickness and report any abnormalities</li> <li>• Demonstrating the health and safety requirements required for managing a dog section</li> <li>• Carrying out all the procedures for taking a sick or injured dog to a veterinary officer</li> <li>• Completing all the relevant documentation for the running of the dog section</li> <li>• Advising management on the employment of dogs within the Unit</li> <li>• Conducting all forms of continuation training to maintain the dog teams at a high level of operational efficiency.</li> </ul>	Related Course: Patrol Dog Handler's Course.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private soldiers and all non-commissioned ranks	IELTS level 6. Experience in basic dog handling. A reasonable level of physical fitness.	5 days		5 courses per year

# Animal Related Courses

## PATROL DOG HANDLER

**Course No: 435/007**

**DATR Melton Mowbray**

Aim of Course	Outline of Syllabus	Remarks
To provide students with the knowledge and skills necessary to become an operational Patrol Dog Handler.	<p>On completion of the course the dog handler will be capable of:</p> <ul style="list-style-type: none"> <li>• Maintaining the dog, kennel, the kennel area and kennel equipment in a clean, healthy and tidy condition</li> <li>• Carrying out obedience with a trained dog both leashed and unleashed</li> <li>• Recognising the basic signs of health, detect signs of sickness and report any abnormalities</li> <li>• Patrolling continuously for at least 3 hours in all weather conditions with the dog at heel</li> <li>• Interpreting the dog's behaviour and "reading" its silent indication of the presence of an intruder at a minimum distance of 300 metres in good weather and 50 metres in bad weather</li> <li>• Demonstrating the correct challenge, release and arrest procedures for apprehending an intruder with the aid of the dog</li> <li>• Controlling the dog whilst carrying out the search and escort of an intruder</li> <li>• Conducting all forms of continuation training to maintain his dog at a high level of operational efficiency.</li> </ul>	The Defence Animal Centre can sometimes provide trained dogs. Please refer any queries on this to IDT(A).

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
The course is open to Private soldiers and all noncommissioned ranks	IELTS level 6. A reasonable level of physical fitness.	2 weeks		12 courses per year



# Animal Related Courses

## POLICE DOG HANDLER

**Course No: 435/030**

**DATR Melton Mowbray**

Aim of Course	Outline of Syllabus	Remarks
To provide students with the knowledge and skills necessary to become an operational Police Dog Handler.	<p>On completion of the course, the dog handler will be capable of:</p> <ul style="list-style-type: none"> <li>Applying basic canine husbandry.</li> </ul> <p>Patrol</p> <ul style="list-style-type: none"> <li>Patrolling continuously for at least 3 hours</li> <li>Interpreting the dog's behaviour and "reading" its silent indication of the presence of an intruder in all weather conditions</li> <li>Demonstrating the correct procedures for apprehending an intruder with a dog</li> <li>Controlling the dog whilst searching and escorting an intruder.</li> </ul> <p>Search</p> <ul style="list-style-type: none"> <li>Using the dog to search open areas to find foreign objects</li> <li>Using the dog to find an intruder hiding in a building.</li> </ul> <p>Tracking</p> <ul style="list-style-type: none"> <li>Using the dog to cast an open area in search of tracks</li> <li>Following a track in reasonable weather conditions</li> <li>Recognising different types of dog evasion</li> <li>Conducting continuation training to maintain the dog at a high standard of operational efficiency.</li> </ul>	<p>The Defence Animal Centre can sometimes provide trained dogs. Please refer any queries on this to IDT(A).</p> <p>Related Course: Patrol Dog Handlers Course.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private soldiers and all noncommissioned ranks	IELTS level 6. Fluency in written and spoken English. Experience in basic dog handling.	9 weeks (45 working days)	A Pass Certificate is awarded to successful students	As required

# Animal Related Courses

## PRACTICAL TRAINING ASSISTANTS - PTA

**Course No: 435/058**

**DATR Melton Mowbray**

Aim of Course	Outline of Syllabus	Remarks
To provide students with the knowledge and skills necessary to assist dog trainers and handlers in man. work training techniques for protection dogs.	<p>On completion of the course, the dog handler will be capable of:</p> <ul style="list-style-type: none"> <li>• Applying general safety precautions when carrying out man work exercises for protection dogs</li> <li>• Demonstrate the ability to use all types of baiting equipment</li> <li>• Assist a Patrol Dog handler in the training and testing of Patrol in various man work scenarios</li> <li>• Advise the dog handler on the most beneficial man work continuation training for his dog</li> <li>• Select and set up an area for wind scenting, pick up and indication training</li> <li>• Conducting all forms of continuation training in order to maintain the Unit dogs at a high standard of operational efficiency.</li> </ul>	<p>The Defence Animal Centre can sometimes provide trained dogs. Please refer any queries on this to IDT(A).</p> <p>Related Course: Patrol Dog Handlers Course.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private soldiers and all noncommissioned ranks	IELTS level 6. Experience in basic dog handling.	5 days	A Pass Certificate is awarded to successful students	As required



# Animal Related Courses

## TRACKER DOG HANDLER

**Course No: 435/021**

**DATR Melton Mowbray**

Aim of Course	Outline of Syllabus	Remarks
To provide students with the knowledge and skills necessary to become an operational Tracker Dog Handler.	<p>On completion of the course, the dog handler will be capable of:</p> <ul style="list-style-type: none"> <li>• Maintaining a close working relationship with a trained Tracker dog Assessing an operational situation and advise the employing agency as to whether or not his dog can be employed</li> <li>• Using the dog to cast an open area in search of tracks.</li> <li>• Interpreting the dog's behaviour and reactions, and advising the Team Commander of results</li> <li>• Identifying and following a track under all reasonable weather conditions</li> <li>• Recognising different methods employed in Dog Evasion</li> <li>• Recognising the basic signs of health, detect signs of sickness and report any abnormalities</li> <li>• Completing reports and understanding safety precautions</li> <li>• Conducting all forms of continuation training in order to maintain his dog at a high standard of operational efficiency.</li> </ul>	<p>The Defence Animal Centre can sometimes provide trained dogs. Please refer any queries on this to IDT(A).</p> <p>Related Course: Patrol Dog Handler's Course.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private soldiers and all noncommissioned ranks	IELTS level 6. Experience in basic dog handling.	6 weeks	A Pass Certificate is awarded to successful students	As required

# Animal Related Courses

## VEHICLE SEARCH DOG HANDLER

**Course No: 435/063**

**DATR Melton Mowbray**

Aim of Course	Outline of Syllabus	Remarks
To provide students with the knowledge and skills necessary to become an operational Vehicle Search Dog Handler.	<p>On completion of the course, the dog handler will be capable of:</p> <ul style="list-style-type: none"> <li>• Maintaining a close working relationship with a trained Vehicle Search dog</li> <li>• Advising a Search Team Commander of the correct procedures for the employment of a Vehicle Search dog under various operational situations</li> <li>• Employing the dog to search, find and indicate the presence of arms ammunition explosive and associated items</li> <li>• Recognising common terrorist booby traps, weapons and explosives</li> <li>• Operating a Vehicle Search dog to detect and clear all types of vehicles</li> <li>• Controlling the dog to search vehicles at Vehicle Check Points both leashed and unleashed</li> <li>• Completing reports and understanding safety precautions</li> <li>• Recognising the basic signs of health, detect signs of sickness and report any abnormalities</li> <li>• Conducting all forms of continuation training in order to maintain his dog at a high standard of operational efficiency.</li> </ul>	Related courses Patrol Dog Handlers Course. The Defence Animal Centre can sometimes provide trained dogs. Please refer any queries on this to IDT(A).

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private soldiers and all noncommissioned ranks	IELTS level 6. Experience in basic dog handling.	4 weeks		2 courses per year

# Animal Related Courses

## INTERNATIONAL ARMS AND EXPLOSIVE SEARCH DOG HANDLER

**Course No: -**

**Defence Animal Training Regiment, Melton Mowbray**

Aim of Course	Outline of Syllabus	Remarks
To provide students with the knowledge and skills necessary to become an operational Arms Explosive Search (AES) Dog Handler.	The following elements are covered: Safe handling of explosives, standards of efficiency for dog & handler, SOPs, capabilities and limitations of an AES dog, continuation training Searches of routes urban and rural; Open areas and rummage, buildings occupied, un-occupied and derelict, vehicles and quartering of areas. The course also conducts varied and in-depth environmental training.	The Defence Animal Centre can sometimes provide trained dogs.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Score of 6. This course relies on experience of military working dog handling and the RSME must be consulted to assess a candidate's suitability. This course has arduous elements and students must be medically and physically fit.	45 days.		3 courses per year.

# Animal Related Courses

## MILITARY WORKING DOG (MWD) HANDLER CLASS 1

**Course No: -**

**Defence Animal Training Regiment, Melton Mowbray.**

Aim of Course	Outline of Syllabus	Remarks
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To provide each student with the skills and knowledge necessary for them to become an operationally effective MWD Handler Class 1.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Score of 6. Personnel selected for the course must have experience of dog handling (ideally completion of MWD Class 3 course and associated workplace training). This course has arduous elements and students must be medically and physically fit.	10 days.		3 courses per year.

# Animal Related Courses

## MILITARY WORKING DOG (MWD) HANDLER CLASS 3

**Course No: -**

**Defence Animal Training Regiment, Melton Mowbray.**

Aim of Course	Outline of Syllabus	Remarks
Deliver the knowledge and skills necessary to become an efficient and capable basic MWD handler. On completion of the course the individual will be able to deploy operationally with a Patrol Dog, carry out continuation training, maintaining its health, welfare and assist other handlers to maintain their dog's standard of efficiency in bite work.	The course includes: Care, use and fitting of all dog equipment Kennel hygiene. Grooming. Interpreting animal behaviour. Rules of engagement. Bite work. Basic signal skills. Treating bites and related injuries. Wind scenting. Handling at night. Tactical use of Dogs. Animal welfare. Creation and maintenance of dog documentation. Practical training techniques.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Score of 6. This course has arduous elements and students must be medically and physically fit.	35 days.	The course syllabus contributes to Service Dog Handler Level 2 Diploma City and Guilds qualification.	5 courses per year.



# Armour Centre Courses

## DRIVING & MAINTENANCE INSTRUCTOR

**Course No: 408/044**

**ARMCEN Bovington**

Aim of Course	Outline of Syllabus	Remarks
To train Regimental Driver & Maintenance instructors to Army standard of all types of Armoured Fighting Vehicle (AFV) in current (to each Arm) use prior to their appointment as Driver & Maintenance School instructors.	<p>On completion of this course students will be able to:</p> <ul style="list-style-type: none"> <li>Teach soldiers Driving &amp; Maintenance up to and including their own arms standard</li> <li>Carry out additional duties.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Senior Non Commissioned Officer	IELTS level 5	55-70 days depending on Arms' syllabus	Driving & Maintenance ISchotruto	1 course per year



# Armour Centre Courses

## NCO GUNNERY INSTRUCTOR CV(T) CLOSE RECONNAISSANCE

**Course No: 408/095**

**ARMCEN Lulworth**

Aim of Course	Outline of Syllabus	Remarks
To train NCOs to instruct CVR(T) Gunnery and to supervise Live Firing.	<p>On completion of this course students will be able to:</p> <ul style="list-style-type: none"> <li>• Carry out instruction of a gunnery syllabus by demonstrating instructional skills and conducting turret, weapon and simulator system lessons</li> <li>• To carry out gunnery continuation training practice period in turret and simulator lessons</li> <li>• To carry out testing procedures in turret, weapon and simulator systems and supervise AV Operational Shooting Policy training tests</li> <li>• Supervise live firing in static firing, crew Fire &amp; Movement Exercise firing and crew field firing.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance-Corporal to Corporal from Armoured Corps and Infantry units	IELTS level 5	45 working days	Gunnery Instructor	2 course per year

# Armour Centre Courses

## REGIMENTAL GUNNERY OFFICER CHALLENGER 2 OR CVR(T)

**Course No: 408/096**

**ARMCEN Lulworth**

Aim of Course	Outline of Syllabus	Remarks
To train officers in all aspects of CR2 or CVR(T) 30mm gunnery.	<ul style="list-style-type: none"> <li>Advise the Commanding Officer on general gunnery matters, gunnery equipment and capabilities, the best use of training facilities, including ranges, course programming and open range practices</li> <li>Assess the standard of instruction and coaching within the Regiment. Instruct on gunnery theory at Crew Gunner level and provide continuation training on gunnery theory at Armored Fighting Vehicle Commander level</li> <li>Plan and conduct unit gunnery continuation training, pre course training and supervise Regimental Class 2 gunnery courses and related trade testing Plan and organise a Regimental firing period</li> <li>Conduct weapon safety templates.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lieutenant to Captain	IELTS level 6. Officers attending should have completed 2 years service.	70 working days	CR2 Regimental Gunnery Officer or CVR(T)	1 course per year

# Armour Centre Courses

## REGIMENTAL NCO GUNNERY CR2 INSTRUCTOR

**Course No: 408/097**

**ARMCEN Lulworth**

Aim of Course	Outline of Syllabus	Remarks
To train NCOs to become C2 Regimental Gunnery Instructors.	<p>On completion of this course students will be able to:</p> <ul style="list-style-type: none"> <li>• Operate and maintain all gunnery training equipment</li> <li>• Deliver instruction on a Crew Gunner course, carry out continuation training to vehicle commander level, conduct employment testing at Crew Gunner level and carry out coaching and assessing of turret crews during continuation training/open range practices.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance-Corporal to Corporal from Armoured units	IELTS level 5	60 working days	CR2 Regimental Gunnery Instructor	3 course per year

# Armour Centre Courses

## REGIMENTAL NCO GUNNERY INSTRUCTOR

**Course No: 408/098**

**ARMCEN Lulworth**

Aim of Course	Outline of Syllabus	Remarks
To train Armored Corps NCOs to become Armoured Recce Regimental Gunnery Instructors.	<p>On completion of this course students will be able to:</p> <ul style="list-style-type: none"> <li>• Operate 30mm training equipment Deliver instruction on a 30mm crew gunner course</li> <li>• Carry out pre course and pre firing training</li> <li>• Carry out testing procedures and conduct crew gunner course firing exercises.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance-Corporal to Corporal from Armoured units	IELTS level 5	50 working days	CV(T) Regimental Gunnery Instructor	3 course per year

# Armour Centre Courses

## ARMoured TROOP LEADER

**Course No: 1/C601**

**ARMCEN Bovington, Lulworth and Warminster**

Aim of Course	Outline of Syllabus	Remarks
To give newly commissioned Royal Armoured Corps officers' basic training in CHALLENGER 2 Gunnery, Driving and Maintenance, Signals and in commanding a tank troop	<p><b>Gunnery</b></p> <ul style="list-style-type: none"> <li>Recognise and identify Armoured Fighting Vehicles (AFV) and aircraft using visual and thermal imaging sight systems.</li> <li>Engagement procedures.</li> <li>Vehicle servicing.</li> <li>Troop and crew control.</li> </ul> <p><b>Driving and Maintenance</b></p> <ul style="list-style-type: none"> <li>Operate automotive systems.</li> <li>Administrative responsibilities of a Troop Leader.</li> <li>Command and drive CHALLENGER 2 on road and cross country.</li> </ul> <p><b>Signals</b></p> <ul style="list-style-type: none"> <li>Voice Procedure.</li> <li>Working a communications network.</li> <li>Watchkeeping.</li> <li>Map marking.</li> <li>Call for Fire.</li> <li>Use of VHF data and ComBAT.</li> </ul> <p><b>Tactics</b></p> <ul style="list-style-type: none"> <li>Plan and execute all types of tactical actions.</li> <li>Preparation of an armoured troop for operations.</li> <li>Maintain combat effectiveness of vehicles and crews.</li> <li>Mounted navigation.</li> <li>Command an armoured troop on operations in all environments by day and night.</li> <li>Conduct operations in a combined arms battlegroup context</li> </ul>	The Course should be followed by a period of practical experience in command of an Armoured Troop

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Second Lieutenant to Lieutenant	<p>IELTS level 5.5.</p> <p>Students must hold the national equivalent of a full B licence</p>	23 weeks	Troop Leader Armoured	3 course per year

# Armour Centre Courses

## LIGHT CAVALRY TROOP LEADER

**Course No: 1/C603**

**ARMCEN Bovington, Lulworth and Warminster.**

Aim of Course	Outline of Syllabus	Remarks
To give newly commissioned Royal Armoured Corps officers' basic training in JACKAL Gunnery, Driving and Maintenance, Signals and in commanding a reconnaissance troop including tactical exercise phases	<p><b>Gunnery</b></p> <ul style="list-style-type: none"> <li>• Recognise and identify Armoured Fighting Vehicles (AFV) and aircraft using visual and thermal imaging sight systems.</li> <li>• Engagement procedures.</li> <li>• Vehicle servicing.</li> <li>• Troop and crew control.</li> </ul> <p><b>Driving and Maintenance</b></p> <ul style="list-style-type: none"> <li>• Operate automotive systems.</li> <li>• Administrative responsibilities of a Troop Leader.</li> <li>• Command and drive JACKAL on road and cross country.</li> </ul> <p><b>Signals</b></p> <ul style="list-style-type: none"> <li>• Voice procedure.</li> <li>• Working a communications network.</li> <li>• Watchkeeping.</li> <li>• Map marking.</li> <li>• Electronic warfare.</li> <li>• Technical digital communications.</li> </ul> <p><b>Tactics</b></p> <ul style="list-style-type: none"> <li>• Application of fieldcraft skills.</li> <li>• Preparation of an armoured troop for operations.</li> <li>• Maintain combat effectiveness of vehicles and crews.</li> <li>• Identify the threat.</li> <li>• Command a troop on operations</li> </ul>	The Course should be followed by a period of practical experience in command of a Light Reconnaissance Troop.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Second Lieutenant to Lieutenant	<p>IELTS level 5.5.</p> <p>Students must hold the national equivalent of a full B licence.</p>	14 weeks	Troop Leader Light Cavalry.	3 course per year



# Armour Centre Courses

## ARMoured INFANTRY PLATOON COMMANDERS

**Course No: 1/C630**

**ARMCEN Bovington, Lulworth and Warminster.**

Aim of Course	Outline of Syllabus	Remarks
To give newly commissioned Armoured Infantry officers' basic tactical training on the WARRIOR platform including gunnery, driving and maintenance, signals and command of an armoured platoon at battlegroup level, including a practical phase.	<p><b>Gunnery</b></p> <ul style="list-style-type: none"> <li>• Recognise and identify Armoured Fighting Vehicles (AFV) and aircraft using visual and thermal imaging sight systems.</li> <li>• Engagement procedures.</li> <li>• Vehicle servicing.</li> <li>• Troop and crew control.</li> </ul> <p><b>Driving and Maintenance</b></p> <ul style="list-style-type: none"> <li>• Operate automotive systems.</li> <li>• Administrative responsibilities of a Platoon Commander.</li> <li>• Command and drive WARRIOR on road and cross country.</li> </ul> <p><b>Signals</b></p> <ul style="list-style-type: none"> <li>• Voice procedure.</li> <li>• Working a communications network.</li> <li>• Watchkeeping.</li> <li>• Map marking.</li> <li>• Electronic warfare.</li> <li>• Technical digital communications.</li> </ul> <p><b>Tactics</b></p> <ul style="list-style-type: none"> <li>• Application of armoured infantry fieldcraft skills.</li> <li>• Preparation of an armoured platoon for operations.</li> <li>• Maintain combat effectiveness of vehicles and crews.</li> <li>• Mounted navigation.</li> <li>• Command an armoured platoon on operations in all environments day and night</li> </ul>	The Course should be followed by a period of practical experience in command of an Armoured Infantry Platoon

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Second Lieutenant to Lieutenant	<p>IELTS level 5.5.</p> <p>Students must hold the national equivalent of a full B licence.</p>	14 weeks	Armoured Infantry Platoon Commander.	3 course per year

# Artillery Courses

## GUNNERY STAFF COURSES

**Course No: GS01, GS03, GS07, GO01/GS08, GS09**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of the course is to train selected Officers and Senior Non-Commissioned Officers to be able to advise and instruct on the employment of artillery, specific to their area of expertise. This will provide Artillery Regiments and Schools with professionally qualified personnel who can integrate the functional effects of the artillery system of systems into any plan or programme from Company Group through to Division.</p>	<p><b>GS01 - Common Module.</b> This module lasts for 5 weeks, focussing on enhancing instructor capabilities by education on methods of delivery via Defence Train the Trainer Course (DTC), a foundation on course design &amp; implementation, Tactics and doctrine in the Fires environment and project management. The delivery of training (DTC) is exclusively within the Subsequent Trade Training (STT) environment. Encompassing a range of teaching methods, the course prepares the individual with essential skills and techniques for teaching. Tactics &amp; Doctrine (Fires) takes trainees out of their comfort zone and is designed to introduce fires doctrine so that it can be applied in an operational and tactical context. Centred on AFM Fires, it provides the trainees with the framework of understanding for our approach to operations and combat. The project management leg will be delivered (online) and will be assessed by an external invigilator.</p> <p><b>CLOSE SUPPORT (CS).</b> All CS courses commence with a common module which goes through basic gun design, ammunition and factors affecting first round accuracy. Using mathematical and engineering knowledge, individuals will study the more complex subjects of internal and external ballistics and discuss the causes and how to resolve the indirect fire problem. All CS courses will culminate in a Safety module which will teach them how to plan and conduct artillery live fire ranges.</p> <p><b>GS03 - Artillery Command Systems (Strike).</b> The course will conduct a two-week common ACS leg in conjunction with other disciplines, consisting of a Bowman CIS equipment refresher and an overview of the wider strategic communication structures. Trainees will then specialise within discipline and conduct a reconnaissance &amp; manoeuvre leg, in-depth Command Post training inclusive of Divisional Fires, Battlespace Management and Combat Estimate.</p> <p><b>GS07 - Gun Group Soldier.</b> The course focuses on an indepth study into artillery indirect fire equipment and gun design, reconnaissance and manoeuvre and Command Post procedures.</p> <p><b>GO01/GS08 - Joints Fires Officer &amp; Soldier.</b> The course aims to provide the expertise needed to competently integrate fires and support a manoeuvre unit through the co-ordination and deployment of all Fires Assets. Trainees will complete the Joint Tactical Targeting Course (National caveats apply) and will conduct a conceptual exercise at the divisional level.</p> <p><b>GS09 - Divisional Fires.</b> This sub-module is not available to international trainees due to UK security clearance restrictions.</p>	<p>The Gunnery Staff embodies the highest standards and expertise of the UK artillery profession. Members of the Gunnery Staff are experts who undergo a rigorous selection and training programme to drive technical and tactical artillery excellence by advising the Chain of Command, developing and delivering world-class training, and developing future artillery capability. The gateway to the Gunnery Staff is through the Gunnery Staff Course for Officers (GO) and Soldiers (GS). These courses broaden employability in the Operations, Operations Support, Capability and Acquisition, and Training career Fields</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Officers and Senior Non-Commissioned Officers	IELTS level 5.5 or equivalent			

# Artillery Courses

## GUNNERY STAFF COURSES -GROUND BASED AIR DEFENCE (GBAD).RECCE)

**Course No: GS14,GS15,GS06,GO02**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>All GBAD courses will commence at Larkhill with the 5 Weeks CM module, all courses will then relocate from Larkhill to Thorney to conduct a 5 week Command, Deployment and Tactics phase with both the ACS &amp; GBAD soldier courses conducting the GBAD Warfare Officers (GWO) course and the GBAD Officers course conducting 5 weeks of Concept, Analysis, Planning, Execution and a confirmation Battle Plan Exercise phase alongside the GWO Cse.</p>	<p><b>GS14 - CS GBAD Soldier.</b> The GBAD Soldiers course will continue its special to discipline training in Thorney Island. This will see trainees complete a GBAD Training Analysis phase, then a GBAD Common Module with all GBAD Courses covering all GBAD system overviews, followed by 6 weeks of in detail of platform systems training including High Velocity Missile (HVM) LML/SL &amp; SP variants, this will be followed by a Range safety package and an exercise phase including Prac Round firings.</p> <p><b>GS15 – GS GBAD Soldier.</b> The GBAD GS course is the first iteration of Sky Sabre training being delivered purely by RSA, the course consists of four StD modules to encompass the Sky Sabre package within a 16 week equipment programme. The student will cover Network landceptor (NLC) BMC4i, G-AMB, and LEAPP as part of their. The students will also cover the Training analysis and Common module in line with their peers.GS06 - Artillery Command Systems (GBAD). The course will conduct a two-week common ACS leg at Larkhill in conjunction with the other disciplines, consisting of a Bowman CIS equipment refresher and an overview of the wider strategic communication structures. Trainees will then conduct the GBAD Common Phase covering all GBAD system overviews at Thorney Island, followed a GBAD ASC specialise to discipline module, It will then conduct a platform overview phase covering HVM &amp; Skye Sabre in detail. Towards the end of the term, it will conduct an exercise phase including the Tactical Air Battle Management and an additional Electronic Warfare Courses.</p> <p><b>GO02 - GBAD Officer.</b> This course also commences with a Special to Discipline training phases at both Thorney &amp; Larkhill, this will see the trainees conduct 5 weeks of development of a greater understanding of analysis and conceptual thinking in all GBAD matters, it will conduct a Command &amp; Tac Phase under the Command &amp; Tac wing conducting analysis on past operations. Into the second term it will see the trainees conduct a GBAD Common module, it will then see trainees looking at all GBAD equipment available in detail including HVM, SkySabre and LEAPP and how they feed into the divisional level planning, the GBAD officers will also conduct a Range safety package to stage 5, plus run and plan an exercise phase including a Prac Round firings, it too will also conduct Tactical Air Battle Management and Electronic Warfare Courses.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Officers and Senior Non-Commissioned Officers	IELTS level 5.5 or equivalent			



# Artillery Courses

## GUNNERY STAFF COURSES -ISTAR

**Course No: GS10,GS04.GS11-S2,GS13,GS12,GS05,G002**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>All GBAD courses will commence at Larkhill with the 5 Weeks CM module, all courses will then relocate from Larkhill to Thorney to conduct a 5 week Command, Deployment and Tactics phase with both the ACS &amp; GBAD soldier courses conducting the GBAD Warfare Officers (GWO) course and the GBAD Officers course conducting 5 weeks of Concept, Analysis, Planning, Execution and a confirmation Battle Plan Exercise phase alongside the GWO Cse.</p>	<p><b>GS14 - CS GBAD Soldier.</b> The GBAD Soldiers course will continue its special to discipline training in Thorney Island. This will see trainees complete a GBAD Training Analysis phase, then a GBAD Common Module with all GBAD Courses covering all GBAD system overviews, followed by 6 weeks of in detail of platform systems training including High Velocity Missile (HVM) LML/SL &amp; SP variants, this will be followed by a Range safety package and an exercise phase including Prac Round firings.</p> <p><b>GS15 – GS GBAD Soldier.</b> The GBAD GS course is the first iteration of Sky Sabre training being delivered purely by RSA, the course consists of four StD modules to encompass the Sky Sabre package within a 16 week equipment programme. The student will cover Network landceptor (NLC) BMC4i, G-AMB, and LEAPP as part of their. The students will also cover the Training analysis and Common module in line with their peers.GS06 - Artillery Command Systems (GBAD). The course will conduct a two-week common ACS leg at Larkhill in conjunction with the other disciplines, consisting of a Bowman CIS equipment refresher and an overview of the wider strategic communication structures. Trainees will then conduct the GBAD Common Phase covering all GBAD system overviews at Thorney Island, followed a GBAD ASC specialise to discipline module, It will then conduct a platform overview phase covering HVM &amp; Skye Sabre in detail. Towards the end of the term, it will conduct an exercise phase including the Tactical Air Battle Management and an additional Electronic Warfare Courses.</p> <p><b>G002 - GBAD Officer.</b> This course also commences with a Special to Discipline training phases at both Thorney &amp; Larkhill, this will see the trainees conduct 5 weeks of development of a greater understanding of analysis and conceptual thinking in all GBAD matters, it will conduct a Command &amp; Tac Phase under the Command &amp; Tac wing conducting analysis on past operations. Into the second term it will see the trainees conduct a GBAD Common module, it will then see trainees looking at all GBAD equipment available in detail including HVM, SkySabre and LEAPP and how they feed into the divisional level planning, the GBAD officers will also conduct a Range safety package to stage 5, plus run and plan an exercise phase including a Prac Round firings, it too will also conduct Tactical Air Battle Management and Electronic Warfare Courses.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Officers and Senior Non-Commissioned Officers	IELTS level 5.5 or equivalent			

# Artillery Courses

## ROYAL ARTILLERY STAFF OFFICERS' COURSE (RASOC)

**Course No: T10Z**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The purpose of the RASOC is to train Royal Artillery Officers and Warrant Officers, who operate at formation level, to understand and plan the integration and use of ISTAR and fires (including Air Defence (AD)). The course is designed to produce staff officers/WOs capable of contributing effectively to formation level staff estimates; producing the appropriate elements of formation-level Operational Staff Work (OSW) i.e. Intelligence, Surveillance Targeting Acquisition Reconnaissance (ISTAR), Fires and AD annexes; understanding land tactical targeting; advising the commander on ISTAR and Artillery operations.</p>	<p>Capabilities. Briefs are delivered by the key Royal Artillery formation commanders (1st Artillery Brigade, 7 Air Defence changing to a group, Intelligence Surveillance and Reconnaissance Brigade, and HQ Watchkeeper Force) and their staff outlining employment and deployment, operating procedures and, current and future issues. Students will also understand how a peer adversary operates and the correct means to counter this threat followed by an introduction to full spectrum targeting methodologies. Additional periods are conducted by Air Support Operations Squadron (ASOS), Military Intelligence, HQ 3rd (UK) Division (Targeting and Current Operations Team), and US Army representatives to further enhance understanding and interoperability for staff processes within the formation construct. Brigade/Division Level Staff Work. Scenario-based, syndicate training driving students to develop operational staff work to include; OpOrder main body input, specific annexes (ISTAR, Fires, AD) and Battlespace Management graphics and products to include the high payoff target list, high value target list, effects guidance matrix, decision support overlays and intelligence collection plan supported by Subject Matter Experts (SMEs) from the field. An understanding of all RA related activity during the planning cycle and estimate process is delivered including Wargaming. Simulation Exercises. The course conducts a series of low-level tactical simulation exercises which facilitate understanding and reinforce an appreciation of the complexities RA personnel operating at staff level and the Air Land Integration processes required therein.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Officers and Warrant Officers		5 Days	RASOC.	3 Courses per year

# Artillery Courses

## YOUNG OFFICERS COURSE – TROOP COMMANDER MODULE

**Course No: YO1Z**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
To develop the “Officership” of newly commissioned RA Officers and to deliver a technical and tactical foundation to enable them to command effectively on their initial tour of duty.	<p>Training objectives cover four main areas:</p> <ol style="list-style-type: none"> <li><b>Organisation and Deployment.</b> The capabilities, organisation, roles and tactical employment of UK artillery.</li> <li><b>Roles and Responsibilities of a Royal Artillery Troop Commander.</b> The administration and management of vehicles, equipment and personnel both in-barracks and on deployment.</li> <li><b>Technical Training.</b> The detailed technical understanding of UK artillery systems including command and control. On selection of discipline deeper technical training is undertaken which is pertinent to the chosen discipline.</li> </ol>	The course is designed to develop the professional knowledge and skills of junior officers in order to prepare them technically and professionally for their first regimental appointment.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Minimum rank of 2nd Lieutenant		6 Weeks	Royal Artillery Troop Commander	3 times per year usually starting: Early January, Late April and Early September. Each iteration of the course is followed immediately by separate “Special to Discipline” Young Officer courses lasting between 3 – 8 weeks.



# Artillery Courses

## YOUNG OFFICER – CLOSE SUPPORT (CS)

Course No: YO1A

Royal School of Artillery Larkhill

Aim of Course	Outline of Syllabus	Remarks
The aim of the course is to train selected officers to carry out the duties of a CPO CS	<p>Training objectives cover the following:</p> <ul style="list-style-type: none"> <li>• <b>Operate within a Close Support Regiment Structure.</b> Understand the mission of a Gun Regiment within brigade and divisional settings.</li> <li>• <b>Carry out the Duties of a CPO during Deployment.</b> To include the understanding of the tactical picture, deployment and occupation procedures.</li> <li>• <b>Carry out Fire Missions Procedures.</b> Learn and develop technical competence in the computation of firing data using the current in service systems, Fire Control Battlefield Information Systems Application (FCBISA and Manual Production Of Data (MPOD)). Develop an in-depth theoretical and practical knowledge of all RA indirect fire missions. The course Includes both simulation, dry and live serials working in both field and Urban settings.</li> <li>• <b>Manage Battery Equipment.</b> Develop an understanding of the maintenance chain within a Gun Regiment and procedures that need to be completed.</li> <li>• <b>Introduction to Ballistics.</b> Conducted at the Defence Academy Shrivenham, an in depth, 3 day study into the development of artillery systems and application of ballistics for artillery.</li> <li>• <b>Safety.</b> The competences of range staff, safety staff and unit personnel in the planning control, conduct and safety of live practices involving discipline-specific equipment.</li> </ul>	This course qualifies trainees to become a Command Post Officer (CPO) Close Support (CS). The CPO is responsible for the efficient operation of the Command Post in response to Calls for Fire. They supervise the computation of ballistic data and relay this information to the Gun Platforms.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Minimum rank of 2nd Lieutenant		8 Weeks	a. Young Officer Close Support. b. Close Support Gun Position Safety Officer (GPSO).	3 times per year immediately after the Young Officers course Common Module usually starting: Mid February, Early June and Mid October.

# Artillery Courses

## G-AMB COURSE DC

**Course No: L11F**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of this course is to develop the knowledge and skills of selected personnel to carry out duties of a Giraffe – Agile Multi Beam Detachment Commander (G-AMB DC). The course sits within the GBAD career stream and provides consolidation of knowledge/skills at unit level and development of the skills/ knowledge to perform effectively at up to battery level.</p>	<p>The course covers four main areas:</p> <ol style="list-style-type: none"> <li>Conduct reconnaissance and tactical movement. Students will be introduced to the concept of carrying out system location reconnaissance, deployment planning and site layouts. This includes the use of electronic planning tools and tactical movement between positions as well as Link 16 outputs.</li> <li>Deploy and operate the radar system. The students will be taught how to control the deployment and set up the system. They will also be able to configure and optimise the capability against the known threat and prepare the system for movement and further deployment.</li> <li>Conduct Electronic Warfare (EW) management. The students are given further information on how the system works in relation to EW activity, its potential impact whilst gaining a full understanding to ensure system full potential is maintained.</li> <li>Maintain the system. Maintain the radar system. The students will cover how to carry out detachment maintenance procedures, fault diagnosis and testing using specialist equipment. This also includes how to disable the system if required.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Minimum rank of 2nd Lieutenant		8 Weeks	<ol style="list-style-type: none"> <li>Young Officer Close Support.</li> <li>Close Support Gun Position Safety Officer (GPSO).</li> </ol>	3 times per year immediately after the Young Officers course Common Module usually starting: Mid February, Early June and Mid October.

# Artillery Courses

## FIRE SUPPORT TEAM COMMANDER (DISMOUNTED)

**Course No: TO2A**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The Fire Support Team (FST) Commander course will provide the participant with the expertise to enable them to competently command an FST. This involves supporting a manoeuvre sub-unit through the coordination and deployment of all forms of Joint Fires assets. The FST Commander will also be expected to translate the Subunit Commander's intent, provide continuous surveillance of the battlefield and facilitate the passage of tactical information..</p>	<p>Artillery Observer. The initial phase of the course will last 6 weeks and will include instruction on all artillery mission practices.</p> <ul style="list-style-type: none"> <li>• <b>Joint Fires.</b> The subsequent 4 weeks will focus on their role as an FST Commander. It introduces students to the different fire support assets available to a Battlegroup and instructs them on how to fire plan whilst integrating the assets effectively and safely</li> <li>• <b>Joint Fires Cell and Battlegroup Command Post (BGCP).</b> The final week-long package introduces students to the BGCP, providing insight into how the Battery Commander (BC) influences the battle. Participants will focus on BC's Fire Plans and how an effective Joint Fires Cell integrates into the BGCP.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5.5	11 weeks	<p>Fire Support Team Commander.</p> <p>Junior Officer Tactical Awareness Course (JOTAC).</p>	

# Artillery Courses

## YOUNG OFFICER - AIR DEFENCE (GBAD)

**Course No: YO1B**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
The aim of the course is to train selected officers to carry out the duties of a Troop Commander (TC)/ Command Post Officer (CPO) Ground Based Air Defence (GBAD).	<p>Training objectives cover all technical knowledge and practice to qualify as a Ground Based Air Defence Troop Commander:</p> <ol style="list-style-type: none"> <li>Organisation and Deployment. The organisation, roles and tactical employment of UK GBAD artillery. Identify the key components of the Joint AD environment and the way in which UK GBAD can be fully integrated. Includes both NATO and UK, (Land, Maritime and Air) Command and Control (C2) structures and procedures.</li> <li>GBAD Liaison Officer (LO). The role and responsibilities of the GBAD LO within Division (Div), Brigade (Bde) and Battle Group (BG) to include GBAD current and future planning on operations in support of the commanders mission. To provide the Bde/BG with an AD technical expert whilst on operations.</li> <li>Roles and Responsibilities of an Air Defence Troop Commander. Understanding the management, employment and deployment including C2 of UK GBAD systems.</li> <li>Technical Training. The detailed technical understanding of UK GBAD weapon systems, land/air/ maritime integration air space planning, Battlespace Management (BM) and C2 systems.</li> <li>Practical Training. Students conduct base line weapon system training in siting and deployment exercises and Brigade level staff planning training to include war gaming and simulation.</li> </ol>	The course is designed to ensure the necessary knowledge and experience is given to qualify a junior officer as a Ground Based Air Defence Troop Commander in an Air Defence regiment.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Minimum 2nd Lieutenant	IELTS level 5.5	6 weeks and 2 days	Young Officer GBAD.	3 times per year immediately after the Young Officers course Common Module usually starting: Mid February, Early June and Mid October.



# Artillery Courses

## YOUNG OFFICER - SURVEILLANCE TARGET ACQUISITION (STA)

**Course No: Y01H**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
To train and develop selected Young Officers to carry out the deployed duties of a Troop Commander within 5 Regt RA.	<p>Training objectives cover two main areas:</p> <p>a. <b>Conduct Counter-Fires planning.</b> Conduct planning and execution at BG and Bde level, employing understanding of RA capabilities and those of adversaries in the counter-fires battle.</p> <p>b. <b>Conduct Recce.</b> For Acoustic Weapon Locating and Weapon Locating Radar systems in service with 5 Regt RA.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Minimum 2nd Lieutenant	IELTS level 5 5	3 weeks long, comprising of a counter-fires and capabilities week, a recce week and finally, a summative assessment exercise in week three	Young Officer STA.	3 times per year, immediately after the Young Officers course Common Module usually

# Artillery Courses

## YOUNG OFFICER COURSE - MULTIPLE LAUNCH ROCKET SYSTEM (MLRS) COMMAND POST OFFICERS & BATTERY RECCE OFFICERS COURSE

**Course No: YO1E**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
The aim of the course is to train and develop the skills and knowledge of selected Officers and Senior Non-Commissioned Officers to perform the tasks of an MLRS Command Post Officer (CPO) and Battery Reconnaissance Officer (BRO).	<ul style="list-style-type: none"> <li>a. Interpret and execute deployment orders.</li> <li>b. Conduct the duties of a CPO during deployment.</li> <li>c. Carry out recce procedures for standard and nonstandard deployments.</li> <li>d. Implement the survey plan.</li> </ul>	The course is aimed at Officers on initial specialto-discipline training for employment as a Troop Commander within a MLRS Battery. AIM. The aim of the course is to train and

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
<ul style="list-style-type: none"> <li>a. 2Lt or Above.</li> <li>b. SNCO.</li> </ul>		5 weeks	<ul style="list-style-type: none"> <li>a. MLRS Command Post Officer.</li> <li>b. MLRS Battery Recce Officer</li> </ul>	2 times per year



# Artillery Courses

## INTERNATIONAL TACTICAL TARGETING (NON FYES)

### Course No:

### Royal School of Artillery Larkhill

Aim of Course	Outline of Syllabus	Remarks
<p>The course is designed for International Partners who will be employed at Headquarters using tactical targeting procedures. On completion it will enable individuals to operate competently within a targeting organisation, specifically at the Component Command level, and offer advice as an effective member of a targeting group at the tactical level.</p>	<p>Week 1. Week one of the course comprises a series of presentations including Targeting Cycles, Battle Damage Assessment, Analytical Tools, and targeting outputs of Intelligence Preparation of the Environment (IPE). It includes a series of briefings relating to key enabling and integrated activity of the targeting process. Areas of focus are: Legal Considerations, Intelligence Support to Targeting, and Information Activities and Outreach. Week 2. In week two, students put the topics from week one into practise through syndicate exercises, in which the students demonstrate their understanding through the production of targeting products and back briefs. The final phase of week two enables students to look at infrastructure targets and analyse the targeting considerations of these targets in order to present options to a commander for a decision. Training Objectives. The following training objectives will be achieved:</p> <ol style="list-style-type: none"> <li>Manage a Targeting Cell.</li> <li>Understand and conduct the Targeting Process.</li> <li>Understand and apply Land Integrated Action.</li> <li>Plan and integrate Munitions and Non- Munitions Based Effects.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>IELTS level 5.5</p> <p>Experience in military planning. Experience with IT (use of MS Word, Excel and PowerPoint is essential). Security cleared via associated Embassy and UK MOD</p>	10 days	There is no formal qualification for this course.	1 course per year

# Artillery Courses

## JOINT TACTICAL TARGETING COURSE (JTTC) (FVEYS1 ONLY)

**Course No: T13F**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus			Remarks
<p>The JTTC is designed for staff who will be employed at Headquarters using tactical targeting procedures. This will enable them to operate competently within a targeting organisation, specifically at the Component Command level, and offer advice as an effective member of a targeting group at the tactical level. This course includes a one-week Collateral Damage Estimation Module. This examinable course is lecture-based and incorporates practical exercises and external visits to industrial and infrastructure sites. The course is aimed at OR4 up to OF4.</p>	<p><b>Week 1.</b> The first week of the course covers all aspects of the Joint and Tactical Targeting Cycles. It primarily comprises of guest speaker briefings from subject matter experts across the UK Defence Targeting Enterprise (DTE). The topics covered include briefings from UK targeting organisations at strategic, operational, and tactical levels, as well as NATO targeting procedures within the Allied Rapid Reaction Corps (ARRC). There is also a series of briefings from key enablers in the targeting process, including Legal Considerations, Intelligence Support to Targeting, and Information Activities and Outreach.</p> <p><b>Week 2.</b> The second week of the course is when students conduct the UK Collateral Damage Estimation (CDE) Methodology Module. The aim of this week is to teach students how to conduct a formal Collateral Damage Estimate of a target as part of the Deliberate Targeting Process. The week consists of presentations on UK CDE Policy and the technical scientific data behind the methodology. Students work their way through a series of practical exercises in which they practise the application of the CDE methodology within different exercise workbook scenarios. The final part of the CDE module is a practical and written assessment.</p> <p><b>Week 3.</b> The third week of the course comprises of a series of presentations including Battle Damage Assessment, Analytical Tools, and Targeting Outputs of Intelligence Preparation of the Environment (IPE) Students then put these topics into practise through syndicate exercises in which the students demonstrate their understanding through the production of targeting products and back briefs. The final confirmation of this week is an execute phase using simulation.</p> <p><b>Week 4.</b> The final week is broken down into stages. Students visit a complex urban environment and as part of the course scenario, conduct analysis of infrastructure as potential targets. Syndicate exercises enable students to discuss and present targeting considerations of these targets. The targets are then presented as target packs for delivery to a Target Engagement Authority (TEA) on a Target Clearance Board (TCB). This process is repeated for numerous targets in preparation for the final assessment.</p> <p>The following training objectives will be achieved:</p> <ol style="list-style-type: none"><li>1. Manage a Targeting Cell.</li><li>2. Understand and conduct the Planning Process.</li><li>3. Understand the application of UK Targeting Policy and the associated legal considerations.</li><li>4. Understand and apply Integrated Action.</li><li>5. Plan and integrate Munitions and Non-Munitions Based Effects.</li><li>6. Understand and conduct UK Collateral Damage Estimation.</li></ol>			
Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR4 up to OF4	<p>IELTS level 5.5</p> <ol style="list-style-type: none"><li>a. Experience in military planning.</li><li>b. Experience with IT (use of MS Word, Excel and PowerPoint is essential).</li><li>c. Minimum of SC security clearance</li></ol>	20 working days	Qualified UK Joint Tactical Targeteer (Q-JTT) and UK Collateral Damage Analyst (Q-CDEUK)1	3 courses per year, they are conducted in Jan, May, and Oct.

# Artillery Courses

## FIRE SUPPORT TEAM DC COURSE

**Course No: T09D**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of this course is to upgrade trainees to Fire Support Team (FST) DC, giving them the confidence and experience to fulfil the role of an FST Assistant (FST Ack). The course will provide trainees with the skills to operate at a sub-unit level, assisting their FST Commander in the control and integration of fires during training and on operations. It will also enhance their instructional abilities and develop the skills to administrate, train and manage their FST.</p>	<p>The course is a residential four weeklong training package with both in-camp training, field lessons and exercise phases. The course will be integrated, in part, with the FST Commander Course and focuses on the following elements:</p> <ol style="list-style-type: none"> <li>Fire planning and integrating fires at sub-unit level.</li> <li>Live Firing: Sub unit level fire planning</li> <li>Supervising and delivering FST training.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Bombardier.	IELTS 5.5	4 Weeks	Fire Support Team Assistant.	

# Artillery Courses

## FIRE SUPPORT TEAM 2IC COURSE

**Course No: T09A**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of this course is to train service personnel to Fire Support Team (FST) Level 2ic standard; giving them the basic skills needed to conduct missions as a secondary FST assistant. The course will provide trainees with the skillset required to assist their FST when operating at Company/Squadron level. The focus of the course is to enable the soldier to conduct an array of fire missions under the direction of the FST Commander or Assistant. The soldier will also be qualified to conduct missions as a Fire Support Individual on operations and in extremis. In addition, students are also taught the basics of Observation Posts, FST Surveillance and Target Acquisition equipment, and the administration of the FST.</p>		

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance Bombardier		7-week long training package with both in-camp training, field lessons and a 2-week live firing period.	FST 2ic	



# Artillery Courses

## FIRE SUPPORT TEAM BC ASSISTANT COURSE

**Course No: T09E**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of this course awareness of battle group (BG) level operations and give them the confidence and experience to fulfill the role of BCs ACK is to upgrade trainees to Fire Support Team (FST). The course will provide trainees with the knowledge and skills to assist their BC in the control and integration of fires at the Battlegroup (BG) level, as well as playing a crucial role in the training and administration of the Tactical Group.</p>	<p>The course is a residential four weeklong training package with both in-camp training and field lessons. The course will be integrated, in part, with the BC's Course and focuses on the following elements:</p> <ol style="list-style-type: none"> <li>Fire planning and integrating fires at a Battlegroup level.</li> <li>Supporting a BC in a combined arms Battlegroup.</li> <li>Managing and delivering Tactical Group training.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Sgt	IELTS 5.5	4 weeks	Battery Commander's Assistant.	

# Artillery Courses

## BATTERY COMMANDER COURSE

**Course No: T01A**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of this course is to develop the knowledge and skills of selected Officers to carry out BC duties within a Close Support environment. It provides the experience of working with a Battery Commander's Assistant (BC's Ack) both in the Battlegroup (BG) Command Post and deployed. The course will provide trainees with the knowledge and skills to assist their Commanding Officer by controlling and the integration of fires at the BG level. Oversight of the Battery from a training and administration perspective as well as overall artillery capabilities.</p>	<p><b>SCHEDULE:</b> The course is a residential three weeklong training package with both in-camp training and field activity. The course will be integrated, in part, with the BC's Ack Course and focuses on the following elements:</p> <ol style="list-style-type: none"> <li>Fire planning and integration of fires at Battlegroup level.</li> <li>Advise the Commanding Officer in a combined arms Battlegroup on the employment of fires.</li> <li>Managing and delivering of Jt Fires training and safety procedures</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>IELTS 5.5</p> <p>ICSC(L) qualified</p>	3 weeks	Battery Commander's Course (Close Support).	



# Artillery Courses

## GBAD BATTERY COMMANDER COURSE

**Course No: TO1C**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of this course is to develop the knowledge and skills of selected Officers to carry out BC duties within a Close Support environment. It provides the experience of working with a Battery Commander's Assistant (BC's Ack) both in the Battlegroup (BG) Command Post and deployed. The course will provide trainees with the knowledge and skills to assist their Commanding Officer by controlling and the integration of fires at the BG level. Oversight of the Battery from a training and administration perspective as well as overall artillery capabilities.</p>	<p><b>SCHEDULE:</b> There is one course per year (duration 3 weeks). The course covers five main areas:</p> <ol style="list-style-type: none"> <li><b>UK GBAD Capabilities.</b> Students will gain a technical awareness of all UK GBAD weapon systems and Land Environment Air Picture Provision (LEAPP) assets.</li> <li><b>GBAD Planning.</b> The students will be updated on the threats currently faced by UK GBAD forces, including briefs from Fixed Wing (FW) and Rotary Wing (RW) pilots. They will then receive training on how to conduct GBAD planning, focusing on the Brigade Air Defence Cell (BADC), the conduct of the GBAD estimate as well as carrying out GBAD table top planning exercises up to and including the deployment of GBAD assets.</li> <li><b>GBAD Command and Control (C2) and Integration.</b> Students will be able to understand how the air defence battle is controlled from the Formation Air Defence Cell (FADC) down to the Fire Co-Ordination Cell (FCC) at Battlegroup level, including an insight into GBAD Command Post (CP) procedures. They will also find out how GBAD is integrated into the air and maritime components.</li> <li><b>GBAD Assurance Processes.</b> The students will get the opportunity to visit the UK GBAD formation headquarters and gain an understanding on how they assure their GBAD Units. This will include what role the Battery Commander plays in the process.</li> <li><b>GBAD Range Practices.</b> The students will gain an understanding on how to plan and conduct GBAD range practices. The students will undertake the Officer in Charge (OIC) Practice training, which will allow them to conduct Battery missile practice camps</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Minimum Rank Lieutenant	IELTS 5.5	3 weeks	<p>Upon completion of the course students will be trained with sufficient knowledge to perform the duties of a GBAD BC able to:</p> <ol style="list-style-type: none"> <li>Train the Battery.</li> <li>Plan and deliver GBAD including Missile Practice Camps.</li> <li>Act as a Liaison Officer as required.</li> <li>Plan and direct formation battlespace management (delivered on the Joint Battlespace Management Course).</li> </ol>	

# Artillery Courses

## GBAD INTERNATIONAL BATTERY COMMANDER COURSE

**Course No: K003**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
The aim of the course is to develop the skills and knowledge of selected officers in order to train them to perform the tasks of a Ground Based Air Defence (GBAD) International Battery Commander (BC).	<p>The course covers four main areas:</p> <ol style="list-style-type: none"> <li><b>GBAD Planning.</b> The students will be updated on the threats currently faced by UK GBAD forces, including briefs from Fixed Wing (FW) and Rotary Wing (RW) SMEs. They will then receive training on how to conduct GBAD planning, focusing on the Brigade Air Defence Cell (BADC), the conduct of the GBAD estimate as well as carrying out GBAD table top planning exercises up to and including the deployment of GBAD assets.</li> <li><b>GBAD Assurance Processes.</b> The students will get the opportunity to visit the UK GBAD formation headquarters and gain an understanding on how they assure their GBAD Units. This will include what role the BC plays in the process.</li> <li><b>GBAD Range Practices.</b> The students will gain an understanding on how to plan and conduct GBAD range practices (only for UK GBAD weapon systems). The students will undertake the Officer in Charge (OIC) Practice qualification, which will allow them to conduct Battery missile practice camps.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Minimum Rank Lieutenant	Good English language ability or IELTS Level 5.0	10 Days	<p>Upon completion of the course students will be trained with sufficient understanding to perform the duties of a GBAD BC able to;</p> <ol style="list-style-type: none"> <li>Train the Battery.</li> <li>Plan and deliver GBAD including MPCs.</li> <li>Act as a Liaison Officer as required.</li> <li>Plan and direct formation battlespace management.</li> </ol>	1 Per year

# Artillery Courses

## GBAD WARFARE OFFICER (GUIDED WEAPONS)

**Course No: A26**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of this course is to develop the knowledge and skills of selected personnel in order to train them to carry out duties of a GBAD Warfare Officer (GWO) within a Guided Weapons (GW) environment.</p>	<p>The course covers nine main areas:</p> <ol style="list-style-type: none"> <li>Integrate GBAD into the Joint AD environment. Students will be able to understand how the air defence battle is controlled from the Formation Air Defence Cell (FADC) down to the Fire Co-Ordination Cell (FCC) at Battlegroup level, including an insight into GBAD Command Post (CP) procedures. They will also find out how GBAD is integrated into the air and maritime components.</li> <li>Conduct GBAD Planning. The students will be updated on the threats currently faced by UK GBAD forces, including briefs from Fixed Wing (FW) and Rotary Wing (RW) pilots. They will then receive training on how to conduct GBAD planning, focusing on the Brigade Air Defence Cell (BADC), the conduct of the GBAD estimate as well as carrying out GBAD table top planning exercises up to and including the deployment of GBAD assets.</li> <li>Deconflict airspace. Students will be taught how to achieve the requirements of GBAD airspace deconfliction.</li> <li>Employ GBAD assets. Students will be able to understand how to apply the principles of GBAD employment as well as employing the principles of joint AD. They will be able to plan for GBAD deployment tasks and understand the requirements needed to command GBAD assets.</li> <li>Coordinate airspace control. Students will be taught how to apply airspace control and employ early warning procedures.</li> <li>Deploy GBAD assets. Students will be able to understand the requirements needed for deploying GBAD assets, including; receiving and interpreting orders, conducting local Intelligence Preparation of the Environment (IPE), deploying recce assets, conducting Co-ord, managing deployment orders, planning deployments, establishing the Air Defended Area (ADA) and planning for future tasking.</li> <li>Conduct hostile threat procedures. Students will be taught how to conduct the escalation / de-escalation processes.</li> <li>Maintain battle rhythm. Students will be taught how to conduct tactical map marking as well as being able to employ passive GBAD measures and given the tools to deliver coherent verbal briefings.</li> <li>Explore C4i systems. Students will be taught how to use and utilise the Communication Battlefield Application Tool (ComBAT) and GBAD Battlefield Information System Application (GBAD BiSA) systems.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
<p>Soldier - Staff Sergeant / Warrant Officer 2.</p> <p>Officer - Lieutenant / Major.</p>	<p>Good English language ability or IELTS Level 5.0</p>	30 Day		2 Per year

# Artillery Courses

## MULTIPLE LAUNCH ROCKET SYSTEM (MLRS)

**Course No: G33Z**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The course develops the professional knowledge and skills of substantive Bombardiers in order to prepare them technically and professionally as MLRS Level 4 Detachment Commanders. The course upgrades MLRS Level 2ic Advanced Operators to Level 4 Detachment Commanders. The course is specifically designed to train soldiers to competently operate the MLRS in the field and in barracks.</p>	<p>Training objectives include:</p> <ol style="list-style-type: none"> <li>Live Firing Drills.</li> <li>React to Equipment Faults.</li> <li>Command the SPLL.</li> <li>Ammunition Drills.</li> <li>Conduct Unit Training.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Bombardier or above.	<p>IELTS 5.0</p> <p>MLRS Armoured Fighting Vehicle Commander. MLRS Advanced Operator (L2ic).</p>	5 weeks	MLRS Detachment Commander	1 Per year



# Artillery Courses

## MULTIPLE LAUNCH ROCKET SYSTEM (MLRS) 2IC

**Course No: G33Z**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
The course is designed to develop the professional knowledge and skills of Lance Bombardiers or above in order to prepare them technically and professionally as MLRS Advanced Operators. The course upgrades MLRS basic operators to 2ic. The course is specifically designed to train soldiers to competently operate the MLRS and act as the detachment 2IC in the field and in barracks.	<p>Training objectives include:</p> <ol style="list-style-type: none"> <li>Operations of the Gunner Display Unit.</li> <li>Maintenance tasks.</li> <li>MLRS deployment procedures.</li> <li>Fire mission procedures in extremis.</li> <li>Survey drills.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance Bombardier or above.	<p>IELTS 5.0</p> <p>MLRS Armoured Fighting Vehicle driver.</p> <p>MLRS Basic Operator.</p>	4 weeks	Multiple Launch Rocket System Advanced Operator.	1 Per year

# Artillery Courses

## LEAPP COURSE DC

**Course No: L10D**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of this course is to develop the knowledge and skills of selected personnel to carry out duties of a Land Air Picture Provision Detachment Commander (LEAPP DC). The course sits within the GBAD career stream and provides consolidation of knowledge/skills at unit level and development of the skills/ knowledge to perform effectively at up to battery level.</p>	<p>The course covers four main areas:</p> <ol style="list-style-type: none"> <li><b>Conduct reconnaissance.</b> Students will be introduced to the concept of carrying out system location reconnaissance, deployment planning and site layouts. This includes the use of electronic planning tools and tactical movement between positions as well as mobile operations.</li> <li><b>Deploy and operate the system.</b> The students will be taught how to control the deployment and set up the system. They will also be able to configure and optimise the capability against the known threat and prepare the system for movement and further deployment.</li> <li><b>Conduct detachment training.</b> students are taught how to look after their detachment whilst in the field but also how to plan and deliver training whilst in barracks. This includes the use of simulation equipment and system theory to enhance their understanding of the capability.</li> <li><b>Maintain the system.</b> The students will cover how to carry out detachment maintenance procedures, fault finding and testing using specialist equipment. Practice qualification, which will allow them to conduct Battery missile practice camps.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance Bombardier or equivalent	<p>IELTS 5.0</p> <p>Qualified LEAPP operator.</p> <p>Must hold Security Clearance (SC).</p>	10 Days	<p>Upon completion of the course students will be trained as Detachment Commanders, who will be able to fulfil:</p> <ol style="list-style-type: none"> <li>Conduct reconnaissance.</li> <li>Deploy and operate the system.</li> <li>Conduct detachment training.</li> <li>Maintain the system.</li> </ol>	2 courses per year



# Artillery Courses

## HVM (LML) - TACTICAL CONTROLLER

**Course No: A46A**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
The aim of the HVM (LML) Level 3 Tactical Controller course is to develop the knowledge and skills of soldiers who are already Level 2 Operators and allow them to carry out the role of tactical controller on the weapon system.	<p>The course covers four main areas:</p> <ol style="list-style-type: none"> <li><b>Standing Drills.</b> The students will be taught how to control the deployment and set up the weapon system. They will also be able to configure and optimise the weapon system for the terrain and threat they will be facing. This also includes preparing the system for movement and further deployment.</li> <li><b>Tactical Control duties.</b> The students will be able control engagements and direct operators in a wide range or serials and events. They will get the opportunity to practice and test their skills in purposebuilt detachment engagement simulator. As part of their duties they will understand how to conduct local defence and deliver tactical GBAD briefs.</li> <li><b>Weapon system servicing and testing.</b> The students will cover how to carry out detachment maintenance procedures, fault finding and testing using specialist equipment.</li> <li><b>Weapon System Theory.</b> The students are given further information on how the weapon system works, to build and develop the knowledge. This allows them to gain an understanding of how to use the system to its full potential and assist in fault diagnosis.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Minimum rank substantive Lance Bombardier or equivalent.	IELTS 5.0	18 Days	<p>Upon completion of the course students will be trained as Detachment Commanders, who will be able to fulfil:</p> <ol style="list-style-type: none"> <li>Conduct reconnaissance.</li> <li>Deploy and operate the system.</li> <li>Conduct detachment training.</li> <li>Maintain the system.</li> </ol>	2 per year

# Artillery Courses

## HVM (LML) DETACHMENT COMMANDER

**Course No: A46**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
The aim of the HVM (LML) Level 4 DCs course is to give soldiers who are already Level 3 qualified sufficient knowledge and skills to enable them to command a HVM detachment in the field.	<p>The course covers five main areas:</p> <ol style="list-style-type: none"> <li><b>Tactics and Doctrine.</b> The students will study factors that affect weapon system employment including the air threat, formation structures and doctrine.</li> <li><b>Reconnaissance and siting.</b> Students will be introduced to the concept of carrying out weapon system location reconnaissance, deployment planning and site layouts. This includes the use of electronic planning tools and tactical movement between positions as well as mobile operations.</li> <li><b>Detachment management.</b> The students are taught how to look after their detachment whilst in the field but also how to plan and deliver training whilst in barracks. This includes the use of simulation equipment.</li> <li><b>Weapon system servicing and testing.</b> The students will cover how to supervise maintenance procedures, carry out commander's checks, fault finding and testing using specialist equipment. e. Weapon System Theory. The students are given further information on how the weapon system works, to build and develop their knowledge. This also includes how to disable the system if required.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Minimum rank substantive Bombardier or equivalent.	Good English Language ability or IELTS Level 5.0	15 Days	<p>Upon completion of the course students will be trained as Detachment Commanders, who will be able to fulfil:</p> <ol style="list-style-type: none"> <li>Conduct reconnaissance.</li> <li>Deploy and operate the system.</li> <li>Conduct detachment training.</li> <li>Maintain the system.</li> </ol>	2 per year

# Artillery Courses

## HVM (LML) - FIRE GROUP COMMANDER (FGC)

**Course No: A43**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of the HVM (LML) Level 5 FGCs course is to give soldiers who are already Level 4 qualified, sufficient knowledge and skill to enable them to command an HVM Fire Group in the field.</p>	<p>The course covers three main areas:</p> <ol style="list-style-type: none"> <li><b>GBAD Planning.</b> The students will be taught about the combat estimate, a planning tool used by Battlegroups. The students will focus on GBAD elements of this process. In addition to this they will gain an understanding of the different tactical actions conducted by Battlegroups and how GBAD features in each of them.</li> <li><b>Reconnaissance and siting.</b> Students will develop their existing knowledge on the concept of carrying out weapon system location reconnaissance, deployment planning and site layouts. This includes: the use of electronic planning tools and detailed map analysis.</li> <li><b>Fire Group command and control.</b> The students are taught how to command a Fire Group of 6 vehicles and control its movement and action on the battlefield. The students will get the opportunity to discuss concepts with current FGCs and get the chance to practice their skills in a simulated environment.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Minimum rank substantive Sergeant or equivalent.	Good English Language ability or IELTS Level 5.0.	11 Days	<p>Upon completion of the course students will be trained as FGCs, who will be able to fulfil:</p> <ol style="list-style-type: none"> <li>GBAD Planning.</li> <li>Reconnaissance and siting.</li> <li>Fire Group command and control.</li> </ol>	1 per year

# Artillery Courses

## HIGH VELOCITY MISSILE SELF PROPELLED (HVM (SP))

### HVM (SP) – TACTICAL CONTROLLER

**Course No: A39A**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of the HVM (SP) Level 3 Tactical Controller course is to develop the knowledge and skills of soldiers who are already basic Operators and allow them to carry out the role of tactical controller on the weapon system.</p>	<p>The course covers four main areas:</p> <ol style="list-style-type: none"> <li><b>Standing Drills.</b> The students will be taught how to control the deployment and set up the weapon system. They will also be able to configure and optimise the weapon system for the terrain and threat they will be facing. This also includes preparing the system for movement and further deployment.</li> <li><b>Tactical Control duties.</b> The students will be able control engagements and direct operators in a wide range of serials and events. They will get the opportunity to practice and test their skills in purposebuilt detachment engagement simulator. As part of their duties they will understand how to conduct local defence and deliver tactical GBAD briefs.</li> <li><b>Weapon system servicing and testing.</b> The students will cover how to carry out detachment maintenance procedures, fault finding and testing using specialist equipment.</li> <li><b>Weapon System Theory.</b> The students are given further information on how the weapon system works, to build and develop the knowledge gained at Level 2. This allows them to gain an understanding of how to use the system to its full potential and assist in fault diagnosis.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Minimum rank substantive Sergeant or equivalent.	Good English Language ability or IELTS Level 5.0.	18 Days	<p>Upon completion of the course students will be trained as Tactical Controllers, to be able to fulfil:</p> <ol style="list-style-type: none"> <li>Weapon System Set Up.</li> <li>Tactical Control duties.</li> <li>Weapon system servicing and testing.</li> <li>Target Identification, Engagement Procedures and associated orders.</li> </ol>	1 per year



# Artillery Courses

## HVM (SP) - DETACHMENT COMMANDER

**Course No: A39**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
The aim of the HVM (SP)DC DC course is to give soldiers who are already qualified sufficient knowledge and skills to enable them to command a HVM detachment in the field.	<p>The course covers five main areas:</p> <ol style="list-style-type: none"> <li><b>Tactics and Doctrine.</b> The students will study factors that affect weapon system employment including the air threat, formation structures and doctrine.</li> <li><b>Reconnaissance and siting.</b> Students will be introduced to the concept of carrying out weapon system location reconnaissance, deployment planning and site layouts. This includes the use of electronic planning tools and tactical movement between positions as well as mobile operations.</li> <li><b>Detachment management.</b> The students are taught how to look after their detachment whilst in the field but also how to plan and deliver training whilst in barracks. This includes the use of simulation equipment.</li> <li><b>Weapon system servicing and testing.</b> The students will cover how to supervise maintenance procedures, carry out commander's checks, fault finding and testing using specialist equipment.</li> <li><b>Weapon System Theory.</b> The students are given further information on how the weapon system works. This also includes how to disable the system if required.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Minimum rank substantive Bombardier or equivalent	IELTS 5.0	17 Days	<p>Upon completion of the course students will be trained as DCs able to fulfil:</p> <ol style="list-style-type: none"> <li>Weapon System Set Up.</li> <li>Tactical Control duties.</li> <li>Weapon system servicing and testing.</li> <li>Target Identification, Engagement Procedures and associated orders.</li> </ol>	2 per year

# Artillery Courses

## HVM (SP) FIRE GROUP COMMANDER

**Course No: A42Z**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
The aim of the HVM (SP) Level 5 FGC's course is to give soldiers who are already qualified, sufficient knowledge and skill to enable them to command an HVM Fire Group in the field.	<p>The course covers three main areas:</p> <ol style="list-style-type: none"> <li><b>GBAD Planning.</b> The students will be taught about the combat estimate, a planning tool used by Battlegroups. The students will focus on GBAD elements of this process. In addition to this they will gain an understanding of the different tactical actions conducted by Battlegroups and how GBAD features in each of them.</li> <li><b>Reconnaissance and siting.</b> Students will develop their existing knowledge on the concept of carrying out weapon system location reconnaissance, deployment planning and site layouts. This includes the use of electronic planning tools and detailed map analysis.</li> <li><b>Fire Group command and control.</b> The students are taught how to command a Fire Group of 6 vehicles and control its movement and action on the battlefield. The students will get the opportunity to discuss concepts with current FGCs and get the chance to practice their skills in a simulated environment.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Minimum rank substantive Bombardier or equivalent	IELTS 5.0	11 Days	<p>Upon completion of the course students will be trained as FGCs able to fulfil:</p> <ol style="list-style-type: none"> <li>GBAD Planning.</li> <li>Reconnaissance and siting.</li> <li>Fire Group command and control.</li> </ol>	1 per year



# Artillery Courses

## GUN POSITION OFFICER (GPO) ASSISTANT RECCE OFFICER (ARO)

**Course No: G05Z**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of the GPO course is to develop the knowledge and abilities of selected RA personnel to carry out duties of a Gun Position Officer (GPO) focusing on reconnaissance, manoeuvre, technical standards of a gun position and defence. The aim of this course is to develop the knowledge and abilities of selected RA personnel to carry out duties of an Assistant Reconnaissance Officer (ARO) focusing on reconnaissance, manoeuvre, technical standards of a gun position and defence.</p>	<p><b>Weeks 1 &amp; 2:</b> Classroom lessons focusing on the recce and manoeuvre process of offensive support assets/ platforms. In-depth lessons delivered by Royal Engineers regarding map analysis to better understand what can be provided to enhance the manoeuvre capability of offensive support.</p> <p><b>Week 3:</b> Confirm theory lessons delivered through Tactical Exercise Without Troops (TEWT) on Salisbury Plain Training Area (SPTA) to enable personnel to gain practical exposure of the recce and manoeuvre process, utilising current British towed and self-propelled platforms.</p> <p><b>Week 4:</b> L118 battery deployments on SPTA, encompassing live fire Modified Indirect by day. Week 5: AS90 dry battery Deployments on SPTA.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>a. Officers must be Close Support Command Post Officer Qualified.</p> <p>b. ORs must be substantive rank Sergeant and L4 Qualified (FST, ACS, L118 or AS90).</p> <p>c. International trainees must be competent at low level dismounted/ mounted navigational skills.</p>	5 weeks	GPO	2 per year

# Artillery Courses

## GUNNER LIGHT GUN L118 2IC TO DETACHMENT COMMANDER DC

**Course No: G09A**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The Gunner Light Gun Level 2ic Course instructs and qualifies trainees to assist the Detachment Commander (DC) in all aspects of the command and management of resources for the L118 Light Gun, associated equipment and stores. Additionally, successful trainees will be qualified to fire the gun during a basic mission in the absence of the DC.</p>	<p>The course enables the soldier to safely command and control the detachment, in both training and operational environments, and covers the maintenance and servicing of the gun. To ensure a complete understanding of the role, trainees are qualified to fire the L118 live if the DC is absent from the gun. Tactical deployment and gun position procedures are practiced by day and night, and all possible deployment scenarios are taught and rehearsed. In-class tuition is reinforced with large periods of practical, hands-on instruction and both live and dry exercises are conducted over several days. Live-fire exercises will incorporate all possible types of livefire missions - from basic indirect missions through to direct-fire anti-tank and emergency smoke withdrawals; urban deployments and non-standard deployments such as 'Pistol Gun' and 'Quick Actions' are also conducted.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Substantive Lance Bombardier.	Gunner Light Gun L118 Level 2ic (Detachment 2IC).	5 weeks	Gunner Light Gun L118 Level 3 (Detachment 2IC).	2 per year

# Artillery Courses

## GUNNER LIGHT GUN L118 DETACHMENT COMMANDER DC

**Course No: G09Z**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The Gunner Light Gun DC Course instructs and qualifies trainees in all aspects of the command, operation and husbandry of the L118 Light Gun, associated equipment and stores. Successful trainees will be qualified as a Detachment Commander and will be capable of controlling the gun in every phase of employment both in training and on high intensity operations.</p>	<p>The course enables the soldier to operate the L118 Light Gun during both dry and live firing deployments, by day and night. Additionally, they will be capable of maintaining and servicing the gun to ensure availability. To allow complete understanding of the system, trainees are qualified in the duties of Gun Line Section Commander and are given a firm understanding of gun position reconnaissance procedures. All methods and types of tactical deployments are taught, rehearsed and mastered and all gun position procedures are practiced by day and night. In-class tuition is reinforced with large periods of practical, hands-on instruction and both live and dry exercises are conducted over several days. Live-fire exercises will incorporate all possible types of livefire missions - from basic indirect missions through to direct-fire anti-tank and emergency smoke withdrawals; urban deployments and non-standard deployments such as 'Pistol Gun' and 'Quick Actions' are also conducted. Additionally, trainees will be able to deliver instruction to the detachment on a range of subjects.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Substantive Bombardier.		5 weeks	Gunner Light Gun L118 (Detachment Commander).	2 per year

# Artillery Courses

## WEAPON LOCATING RADAR OPERATOR 2IC

**Course No: G55A**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
The aim of the course is to develop the skills and knowledge of selected soldiers in order to train them to perform the tasks of a Weapon Locating Radar Operator 2ic.	<p>The course covers four main areas:</p> <ol style="list-style-type: none"> <li><b>Standing Drills.</b> The trainees will be taught how to control the deployment and set up the Radio Detection and Ranging (RADAR) System. They will also be able to configure and optimise the RADAR beam for the threat they will be facing. This also includes preparing the system for movement and further deployment.</li> <li><b>Tactical Control duties.</b> The trainees will be able to supervise and direct operators in a wide range of deployments. They will get the opportunity to practice and test their skills in a classroom based trainer simulator. As part of their duties they will understand how to conduct local defence and deliver tactical Surveillance &amp; Target Acquisition (STA) briefs.</li> <li><b>Weapon system servicing and testing.</b> The trainees will cover how to carry out detachment maintenance procedures and fault finding.</li> <li><b>Weapon System Theory.</b> The trainees are given further information on how the RADAR system works, to build and develop the knowledge gained at operator. This allows them to gain an understanding of how to use the system to its full potential and assist in fault diagnosis.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Substantive Lance Bombardier.	MAMBA Operator must be successfully completed with 8 months consolidated Training. Must hold RA Communicator part 2 or RA Basic Signaller qualification	15 Days	<p>Upon completion of the course trainees will be trained as (Mobile Artillery Monitoring Battlefied Radar (MAMBA) Level 2ic operators able to fulfil:</p> <ol style="list-style-type: none"> <li>MAMBA System Set Up.</li> <li>Tactical deployment .</li> <li>Location mission.</li> <li>Fire control mission.</li> </ol>	1 per year



# Artillery Courses

## WEAPON LOCATING RADAR OPERATOR DC

**Course No: G56A**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
The aim of the course is to develop the skills and knowledge of selected soldiers in order to train them to perform the tasks of a Weapon Locating Radar Operator Level DC.	<p>The course covers five main areas:</p> <ol style="list-style-type: none"> <li>Tactics and Doctrine. The trainees will study factors that affect the RADAR system employment including the EW threat, formation structures and doctrine.</li> <li>Reconnaissance and siting. Trainees will be introduced to the concept of WLR reconnaissance, deployment planning and hide layouts. This includes the use of electronic planning tools and tactical movement between positions as well as mobile operations.</li> <li>Detachment management. The trainees are taught how to look after their detachment whilst in the field but also how to plan and deliver training whilst in barracks. This includes the use of simulation equipment.</li> <li>Weapon system servicing and testing. The trainees will cover how to supervise maintenance procedures, carry out commander's checks and fault finding.</li> <li>Weapon System Theory. The trainees are given further information on how the RADAR system locates, to build and develop the knowledge gained at Level 2ic. This also includes how to disable the system if required.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Substantive Bombardier or equivalent.	Weapon Locating RADAR Operator Level 3.	13 days	<p>Upon completion of the course trainees will be trained as MAMBA Level 4 operators able to fulfil:</p> <ol style="list-style-type: none"> <li>Apply RADAR Theory.</li> <li>Manage Tactical deployment.</li> <li>Detailed recce and issue of orders.</li> <li>Counter Fires planning.</li> </ol>	2 per year



# Artillery Courses

## SOUND RANGING (SRG) L3

**Course No: G40Z**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus			Remarks
The aim of the course is to upgrade substantive Lance Bombardier Gunner SRg Operator qualified soldiers to Level 2ic.				

# Artillery Courses

## SOUND RANGING (SRG) DETACHMENT COMMANDER L4

**Course No: G39Z**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus			Remarks
The aim of the course is to develop the skills and knowledge of selected soldiers in order to train them to perform the tasks of a Gunner Sound Ranging Detachment Commander (DC) Level 4.				

# Artillery Courses

## SURVEILLANCE AND TARGET ACQUISITION (STA) 2IC

**Course No: G56E**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
The aim of the course is to train and qualify selected Lightweight Counter-Mortar Radar (LCMR) Level operator soldiers to perform the duties and tasks of a Surveillance Target Acquisition (STA) Light Detachment Operator	<p>Training objectives cover eight main areas:</p> <ol style="list-style-type: none"> <li><b>Deploy the LCMR.</b> Conduct a Complete Equipment Schedule (CES) check, prepare the Lightweight Counter Mortar Radar (LCMR) and generator for transport, conduct tactical movement of the LCMR, site the LCMR, understand how to deconflict with adjacent radars and understand how to conduct disablement drills.</li> <li><b>Operate the LCMR.</b> Operate the laptop, use tool suite, conduct reporting with the LCMR, understand how to conduct Electronic Warfare (EW) procedures and monitor levelling and orientation.</li> <li><b>Bring the LCMR out of action.</b> Cease locating and prepare the LCMR and generator for re-deployment.</li> <li><b>Maintain the LCMR.</b> Use Army Equipment Support Publications (AESP's) information, conduct fault finding, conduct established trouble shooting procedures from documentation, review and complete documentation, conduct level 1 repairs and conduct scheduled maintenance in accordance with published maintenance schedule.</li> <li><b>Supervise the operation of the generators associated to LCMR.</b> Supervise start up procedures, supervise re-fuelling procedures, supervise close down procedures, assist in operator maintenance, conduct Level 1 repairs and, review and complete generator documentation.</li> <li><b>Conduct survey drills with in-service Global Positioning System (GPS) equipment.</b> Operate inservice GPS equipment, conduct GPS point to point, conduct Azimuth determination and achieve a state B fix.</li> <li><b>Conduct surveillance.</b> Aid situational awareness.</li> <li><b>Organisation and deployment.</b> Understand how to identify and operate with All Arms organisations at Company and Battlegroup level.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Substantive Lance Bombardier.	Surveillance Target Acquisition background	2 weeks	Once qualified the trainee will be able to perform duties and tasks of a Surveillance Target Acquisition (STA) Light Detachment Operator. a. STA Level 2ic.	1 per year

# Artillery Courses

## SURVEILLANCE AND TARGET ACQUISITION (STA) DC

**Course No: G56F**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of the course is to train and qualify selected Lightweight Counter-Mortar Radar (LCMR) 2ic soldiers to perform the duties and tasks of a Surveillance Target Acquisition (STA) Detachment Commander (DC). The course covers all elements relating to commanding the equipment and the detachment personnel themselves. There is an added element of teaching on Level DC as they will become qualified to instruct Level operator courses back at their Regiments once they gain this qualification.</p>	<p>Training objectives cover ten main areas:</p> <ol style="list-style-type: none"> <li><b>Manage survey.</b> Calibrate and use the prismatic compass and site the LCMR.</li> <li><b>Manage LCMR deployment.</b> Maintain LCMR readiness states, supervise the LCMR detachment, advise on cross-cuing procedures in line with STA Organisation, Deployment and Operating Procedures (ODOPs) and utilise software applications.</li> <li><b>Conduct recce.</b> Receive and interpret orders, provide ground appreciation to the planning of operations, identify a suitable deployment area, conduct a detailed recce, give orders to the detachment and integrate in to the local defence plan.</li> <li><b>Establish communications network.</b> Set up the detachment communications and establish routine.</li> <li><b>Conduct communication procedures.</b> Manage and control crypto equipment and material, select and apply unit nets and paths, transmit and receive STA orders and procedures by radio and conduct electronic warfare.</li> <li><b>Contribute to the intelligence cycle.</b> Conduct briefings, apply mission and collect information.</li> <li><b>Manage the detachment and equipment.</b> Manage the detachment, apply equipment care policy to all LCMR detachment equipment, assist and advise the Intelligence, Surveillance, Target Acquisition, and Reconnaissance (ISTAR) Tac Commander, conduct and co-ordinate detachment training.</li> <li><b>Conduct Intelligence Preparation of the Battlefield (IPE).</b> Maintain a tactical map, determine how STA equipment is employed in the targeting process, apply the core functions of targeting, and examine the IPE.</li> <li><b>Supervise and conduct maintenance.</b> Manage detachment health and safety, manage detachment maintenance, supervise scheduled maintenance, complete and review all equipment documentation and reports and supervise maintenance tasks.</li> <li><b>Organisation and Deployment.</b> Advise on unit STA equipment capability as appropriate, advise on unit STA equipment characteristics and limitations and implement regimental Standard Operating Procedures (SOPs).</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Substantive Bombardier or above.	STA Level 2ic.	4 weeks	Once qualified the trainee will be able to perform duties and tasks of a STA Detachment Commander: STA Level 4.	1 per year



# Artillery Courses

## S2 RPAS AVUAS WASP/PUMA PILOT MODULE

**Course No: G57F**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
The aim of this course is to develop the knowledge and skills of selected personnel to carry out duties of an S2 RPAS Pilot within a RPAS environment.	This training module is currently specific to the in-service S2 RPAS Platform of the Field Army – currently AVUAS PUMA and WASP.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Rank Minimum. Substantive OR3 – OR4	Security Clearance. SC Successful completion of S2 RPAS Ground School Module within the last 3 months. Flying Medical. All trainees are required to have a UK RPAS Pilot medical, as well as completed Human Factors Training.	10 Days	S2 RPAS Certificate of Qualification on Type (CQT)	



# Artillery Courses

## S2 RPAS COMMANDER

**Course No: G57H**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
The aim of this course is to develop the knowledge and skills of selected RA personnel to carry out duties of an S2 RPAS Commander within a RPAS environment.	<p>The overarching topics covered during this course are as follows,</p> <ol style="list-style-type: none"> <li>Interpret and deliver S2 RPAS orders.</li> <li>Recce and site selection for S2 RPAS detachments.</li> <li>Methods of authorising flying activity / Authorise flying activity.</li> <li>Manage maintenance and logbook documentation.</li> <li>Management of crew rest periods (CRP).</li> <li>f. Create briefing packs and Managing S2 RPAS operation.</li> <li>Understand the impact of counter RPAS and Arty Target Missions.</li> <li>Understand the S2 RPAS governance structure.</li> <li>Payload Operation</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Rank Minimum. Lance Bdr	S2 RPAS Commander. SC.	9 Days		

# Artillery Courses

## S2 RPAS GROUND SCHOOL MODULE

**Course No: G60A**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of the Ground School Module 1 G60A course is to train selected soldiers/officers within the Remotely Piloted Air System (RPAS) Community the necessary skills and to provide the required knowledge to enable the soldier or officer to perform the job tasks. On successful completion of the training course the soldier or officer will be employed by the chain of command in accordance with their qualification.</p>	<p>There are two courses per year (duration 2 weeks). The Training objectives cover ten main areas:</p> <ol style="list-style-type: none"> <li>Air Law.</li> <li>RPAS Operational Procedures.</li> <li>Plan Missions.</li> <li>Evaluate Meteorological Information.</li> <li>The Principles of Flight to RPAS Operations.</li> <li>The Knowledge of Aircraft System Components.</li> <li>Complete All Relevant F700 Series.</li> <li>RPAS Specific Additional Tasks.</li> <li>Airspace Management</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
<ol style="list-style-type: none"> <li>None pilot - min rank LBdr.</li> <li>Potential pilot – min rank LBdr and Pilot RPAS Aptitude Test (Cranwell).</li> </ol>	<p>Completed Human Factors foundation training.</p> <p>Potential pilot – Completed RA2135 Aviation Medical Training.</p>	2 weeks		2 Courses per year

# Artillery Courses

## S2 RPAS GROUND SCHOOL MODULE

**Course No: G57D**

**Royal School of Artillery Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of this course is to develop the knowledge and skills of selected personnel in the ground school elements of S2 RPAS pilotage prior to attending the S2 RPAS platform flying module (AVUAS WASP/PUMA Pilot). Completion of this course is a pre-requisite for further S2 RPAS Pilot Training.</p>	<p>The overarching topics covered during this course are as follows, but please note that topics are UK Regulation specific and UK Platform / Orders specific:</p> <ol style="list-style-type: none"> <li>Apply air law to S2 RPAS operating procedures and airmanship.</li> <li>Describe navigation charts.</li> <li>Plan navigation for RPAS mission</li> <li>Conduct RPAS mission planning.</li> </ol>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Rank Minimum: Substantive OR3 – OR4	Security Clearance: SC.	4 days	S2 RPAS Ground School	

# Catering Courses

## DEFENCE BASIC CHEF COURSE

**Course No: 3807 (RAF), 10C1 (Army), 2300 (Navy)**

**Defence College of Support, Worthy  
Down, Winchester, Hampshire**

Aim of Course	Outline of Syllabus	Remarks
<p>The Defence Chef Basic Course is the Initial Trade Training course for all chefs joining the Royal Navy (RN), Army and Royal Air Force (RAF). The aim is to provide the initial culinary foundations required for chefs to be able to operate supervised within the military catering environment.</p>	<p>After a 1-week induction package, the course commences with a 8-week culinary part (A) which combines theory and practical training skills to provide attendees with the required skills to produce both hot and cold, safe, appetising and nutritious food. Trainees will be expected to learn the foundations of food safety and health and safety before embarking on the culinary skills training. The culinary phase of the course is delivered by experienced instructors from either the RN, Army, RAF or Civil Service. The skills delivered during this phase provide the basic skills and knowledge for the trainee to build upon at their first kitchen.</p> <p>All skills are tested formatively throughout the course which culminates in a final summative assessment by the end of week 8. Upon completion of the assessments, Tri-Service trainees undertake specialist training with their respective Service in the (B) phase. There is no entry test, but trainees will require a good level of English to study for the Food Safety Exam. Trainees must also be able to stand for long periods of time and be in possession of a fit to handle food certificate or international equivalent.</p> <ul style="list-style-type: none"> <li>• Apply the principles of Basic Food Hygiene.</li> <li>• Apply the principles of Health and Safety in the workplace.</li> <li>• Demonstrate the recording of chilled and frozen produce.</li> <li>• Prepare, cook and serve various meats in an appropriate manner.</li> <li>• Prepare, cook and serve vegetables and potatoes in an appropriate manner.</li> <li>• Prepare, cook and serve fish and shellfish in an appropriate manner.</li> <li>• Prepare, cook and serve stocks, soups and sauces in an appropriate manner.</li> <li>• Prepare, cook and serve rice, pasta and egg dishes in an appropriate manner.</li> <li>• Prepare, cook and serve sweets and pastry products in an appropriate manner.</li> <li>• Prepare, cook and serve salads and sandwiches in an appropriate manner.</li> <li>• Cater for Diversity.</li> <li>• Demonstrate hot plate dishes.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level: 3	9 Weeks	Highfield Awarding Body for Compliance (HABC) Level 2 Award in Food Safety and Health and Safety.	15 courses per year

# Catering Courses

## PRODUCTION SUPERVISORS COURSE

**Course No: 007G**

**Defence College of Support, Worthy  
Down, Winchester, Hampshire**

Aim of Course	Outline of Syllabus	Remarks
To introduce and develop the supervisory skills of an Army chef to enable them to plan, lead the production of and deliver high quality food using advanced culinary techniques.	<p>The course is designed to equip attendees with the required knowledge and skills to effectively supervise the catering function in a home base unit. The course is delivered over four weeks with a focus on planning and home base catering support activity. The students are tutored in accounts, contract liaison, planning principles, provisioning and are updated on legislative requirements relating to their role. Students are expected to have an awareness of current accounting regulations commensurate with their rank.</p> <p>The course is summatively assessed through a classroom-based theory project.</p> <ul style="list-style-type: none"> <li>• Supervise the operation of a permanent kitchen.</li> <li>• Manage buildings and equipment.</li> <li>• Work as a supervisor within a catering contract environment.</li> <li>• Carry out the catering function in a permanent kitchen.</li> <li>• Ensure commercial awareness.</li> <li>• Supervise the operation in a field environment.</li> <li>• Site a field kitchen.</li> <li>• Comply with relevant legislation.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>IELTS Level: 6</p> <p>All attendees must hold a fit to handle food certificate and have a good understanding of food safety standards.</p>	3 Weeks	Highfield Awarding Body for Compliance (HABC) Level 3 Award in Managing Food safety in catering.	2 Courses per year



# Catering Courses

## UNIT CATERING MANAGERS COURSE

**Course No: 004G**

**Defence College of Support, Worthy  
Down, Winchester, Hampshire**

Aim of Course	Outline of Syllabus	Remarks
The aim of the Unit Catering Managers Course (UCM) is to prepare junior catering managers for roles as line managers of Army Catering.	<p>The UCM course is designed to provide senior catering managers with the required skills and knowledge to deliver a wide range of output in support of the catering function. The main areas of focus are planning and preparation for a catering deployment and supporting contracted delivery in the home base. This includes the processes for siting of a field kitchen, training of staff, maintenance of morale, logistic planning considerations, accounting processes and practice and liaison skills.</p> <p>In addition, the attendees are versed in the Army inspection regime so that they are fully prepared for an operational deployment. The operational side of the course is supplemented by the coverage of the contracts-based material that a UCM will be required to understand in order to deliver effective home base support activity. This includes the understanding of performance management and standard setting. To further equip personnel, they also undertake an accredited Level 4 qualification in managing Food Safety and Level 4 Nutrition training.</p> <p>The course is summatively assessed through a classroom-based theory project.</p> <ul style="list-style-type: none"> <li>• Plan the production of meals in a static kitchen.</li> <li>• Produce a catering management plan.</li> <li>• Carry out pre-deployment preparation.</li> <li>• Plan deployment activity.</li> <li>• Plan the allocation of workforce for a deployed location.</li> <li>• Manage the morale and welfare of Military staff.</li> <li>• Account for rations.</li> <li>• Conduct serviceability checks on facilities and equipment.</li> <li>• Prepare for audit and inspection of facilities..</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level: 4	7 Weeks	Highfield Awarding Body for Compliance (HABC) Level 3 Award in Food Safety and Health and Safety	10 courses per year

# Catering Courses

## DEFENCE CHEF ADVANCE COURSE

**Course No: 1501**

**Defence College of Support, Worthy  
Down, Winchester, Hampshire**

Aim of Course	Outline of Syllabus			Remarks
The Defence Chef Advanced Course is the Subsequent Trade Training course for all chefs within the Royal Navy (RN) and Army following selection for promotion. The aim is to provide an advanced culinary skillset and kitchen supervisory foundations within the military catering environment.	The Defence Chef Advanced Course is the Subsequent Trade Training course for all chefs within the Royal Navy (RN) and Army following selection for promotion. The aim is to provide an advanced culinary skillset and kitchen supervisory foundations within the military catering environment.			
	After a 1-week induction package, the course consists of 6-weeks advanced culinary training which combines theory and practical training skills to provide attendees with the required skills to produce hot, safe, appetising and nutritious food in an operational environment.			
	Trainees will be expected to learn and understand advanced food safety and nutrition theory. The culinary phase of the course is delivered by experienced instructors from either the RN, Army or Civil Service.			
	All skills are tested formatively throughout the course which culminates in a final summative assessment by the end of week 6.			
	There is no entry test but trainees will require a good level of English to study for the Food Safety and nutrition theory assessments. Trainees must also be able to stand for long periods of time.:			
	<ul style="list-style-type: none"><li>• Apply the principles of advanced Food Hygiene.</li><li>• Apply the principles of advanced Health and Safety and nutrition in the workplace.</li><li>• Demonstrate the ordering and delivery of food produce including the recording of chilled and frozen goods.</li><li>• Prepare, cook and serve advanced meat dishes in an appropriate manner.</li><li>• Prepare, cook and serve advanced vegetables and potatoes dishes in an appropriate manner.</li><li>• Prepare, cook and serve advanced fish and shellfish dishes in an appropriate manner.</li><li>• Prepare, cook and serve advanced stocks, soups and sauces in an appropriate manner.</li><li>• Prepare, cook and serve advanced rice and pasta dishes in an appropriate manner.</li><li>• Prepare, cook and serve advanced hot and cold sweets and pastry products in an appropriate manner.</li><li>• Prepare, cook and serve advanced salad dishes in an appropriate manner.</li><li>• Cater for Diversity.</li><li>• Demonstrate hot plate dishes in support to Defence Engagement serials.</li></ul>			
Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level: 4	7 Weeks	Highfield Awarding Body for Compliance (HABC) Level 3 Award in Food Safety and Health and Safety	10 courses per year

# Combined Arms & Collective Training Courses

## SUB-UNIT COMMANDERS' MANAGEMENT COURSE (SUCC)

**Course No: LWS/651**

**ARMCEN Warminster Salisbury Plain Training Area**

Aim of Course	Outline of Syllabus	Remarks
To train sub-unit Commanders of the Combat, Combat Support and Combat Service Support arms in the practical application of combined arms tactics. Successful completion will deliver an officer who can command a sub-unit within, or in support of a battlegroup in both high intensity war fighting and peacetime operations.	<p>Sub-unit management and operations at the Battlegroup level. This highly practical course focuses on in-barracks management and high intensity war fighting. It is both classroom and field based utilising a wide variety of methods of theory-based and practical teaching. It consists of three phases and significant emphasis is placed on syndicate discussion and sharing of experience and expertise.</p> <ul style="list-style-type: none"> <li>• <b>Phase 1</b> - All arms G1 (personnel) and G4 (Logistics) Management Course.</li> <li>• <b>Phase 2</b> - Special to Arm Tactics (Infantry and RAC) including a Light Infantry exercise up to battlegroup level covering offensive, rural and urban operations.</li> <li>• <b>Phase 3</b> - Combined Arms Tactics including Virtual Simulation exercises set at the Combined Arms Battlegroup level.</li> </ul>	The Course should be followed by a period of practical experience in command of a sub-unit.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Captain to Major	<p>IELTS level 5.5. Normally sub-unit commanders of armoured mechanised, light role (including Marines) or air assault battlegroups, but it is particularly valuable for those who are about to take up appointments as a Company/Squadron/Battery Commander/Armoured Engineer Squadron Commander or Artillery Forward Observation Officer. It is also open to staff officers who are about to take up tactics teaching posts and to Operations Officers of the Combat, Combat Support and Combat Service Support arms. Students should have served for a minimum of 3-4 years. An understanding of British military doctrine would be beneficial, although this will be covered in the pre course</p>	3 weeks.	Attendance certificate.	

# Combined Arms & Collective Training Courses

## BRIGADE COMMANDERS' PROGRAMME NATO ONLY (BCP)

**Course No: 490/005**

**RMAS Gp Sandhurst**

Aim of Course	Outline of Syllabus	Remarks
To revise and update selected commanders in appropriate tactical doctrine and combined arms tactics in order to prepare them for brigade command.	Lectures & updates on current and future operations and developments. Brigade battle procedure, military decision-making process, classroom discussions, tactical exercises without troops (TWETs) and war-gaming in a simulated environment.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Limited to NATO brigade commanders and their artillery, engineer and logistics equivalent on the staff. Approximately 8-10 senior officers attend each course.	IELTS level 5.5 Working knowledge of British Military doctrine and terminology.	4 days		2 courses per year

# Combined Arms & Collective Training Courses

## LIGHT CLOSE RECONNAISSANCE COMMANDERS' COURSE (LCRCC)

**Course No: 640F**

**Salisbury Plain, Longmoor Urban Area, Sennybridge Training Area**

Aim of Course	Outline of Syllabus	Remarks
The aim is to qualify students to train and command a light reconnaissance section or platoon in all operations of war.	<p>Tactics</p> <ul style="list-style-type: none"> <li>• 1 week tactical photography course at RAF Cosford.</li> <li>• Preparation and planning in the Reconnaissance role.</li> <li>• Operating in numerous environments in the Reconnaissance role.</li> <li>• Detailed and concentrated Live Firing package concentrating on the 'Contact Drill'.</li> <li>• Field and orientated course that utilises 6 weeks on exercise, forcing all aspects of soldiering and command to increase.</li> <li>• Commanders module to increase planning and briefing for those of the relevant rank.</li> </ul>	The course is traditionally followed by time spent in command within an Infantry Battle Group Reconnaissance Platoon

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Patrol Commanders course, senior Corporal to Sergeant. • Platoon 2IC Senior Sergeant to Colour Sergeant. • Platoon Commander Senior Lieutenant to Captain	IELTS level 5.5.  Students must hold the the national equivalent of a full B licence	13 Weeks	• SCS Tactical Photographer. • Light Close Reconnaissance Patrol Commander. • Light Close Reconnaissance Platoon 2IC. • Light Close Reconnaissance Platoon Commander.	3 courses per year



# Combined Arms & Collective Training Courses

## BRIGADE LEGAL OFFICERS COURSE (BLOC)

**Course No: 495/001**

**OPLAW Warminster**

Aim of Course	Outline of Syllabus	Remarks
To prepare military lawyers for operational deployments with Brigade Headquarters or at Task Force level.	<p>The course is a mixture of practical and academic instruction which assumes both a familiarity with and understanding of the Law of Armed Conflict, Rules of Engagement and to some degree targeting. Those attending will be exposed to a pragmatic approach to legal interpretation required to meet the challenges of the contemporary operating environment.</p> <p>Lectures will range from the tactical to strategic level, to place the Legal Adviser's role in context, and amongst the practical aspects considered will be targeting and the actual application of force in high pressure situations. Specialist presenters are drawn from NGOs, the military, government and academic institutions. Areas of study include counter insurgency, international agreements, international law on human rights, international criminal law, legal aspects of prisoner of war handling and targeting and post conflict resolution.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Suitable for senior Captains to Lieutenant Colonels who have not recently deployed as a legal advisor to a formation headquarters.	IELTS level 5.5	2 weeks		2 courses per year April and October

# Combined Arms & Collective Training Courses

## ARMoured CAVALRY TROOP LEADER

**Course No: 1/C602**

**Bovington, Lulworth and Warminster**

Aim of Course	Outline of Syllabus	Remarks
To give newly commissioned Royal Armoured Corps officers' basic training in Combat Reconnaissance Vehicle Gunnery, Driving and Maintenance, Signals, and in commanding a Reconnaissance Troop	<p><b>Gunnery</b></p> <ul style="list-style-type: none"> <li>Recognise and identify Armoured Fighting Vehicles (AFV) and aircraft using visual and thermal imaging sight systems.</li> <li>Engagement procedures.</li> <li>Vehicle servicing.</li> <li>Troop and crew control.</li> </ul> <p><b>Driving and Maintenance</b></p> <ul style="list-style-type: none"> <li>Operate automotive systems.</li> <li>Administrative responsibilities of a Troop Leader.</li> <li>Command and drive CVR(T) SCIMITAR on road and cross country.</li> </ul> <p><b>Signals</b></p> <ul style="list-style-type: none"> <li>Voice Procedure.</li> <li>Working a communications network.</li> <li>Watchkeeping.</li> <li>Map marking.</li> <li>Electronic Warfare.</li> <li>Technical digital communications.</li> </ul> <p><b>Tactics</b></p> <ul style="list-style-type: none"> <li>Analysis of the threat.</li> <li>Medium reconnaissance vehicle tactics.</li> <li>Vehicle recognition.</li> <li>Receiving and issuing orders.</li> <li>Nuclear, Biological and Chemical defence.</li> <li>Introduction to the all arms battlegroup.</li> <li>Field training exercise.</li> </ul>	The Course should be followed by a period of practical experience in command of a Reconnaissance Troop

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Second Lieutenant to Lieutenant	IELTS Level 5.5 Students must hold the the national equivalent of a full B licence	20 weeks	Troop Leader Armoured Cavalry.	3 courses per year

# Combined Arms & Collective Training Courses

## REGIMENTAL SIGNALS OFFICER

**Course No: 1/500V**

**Bovington**

Aim of Course	Outline of Syllabus	Remarks
To train officers to carry out the duties of a Regimental Signals Officer (RSO)	<p>Operate and exploit Communication Information Systems (CIS) equipment.</p> <ul style="list-style-type: none"> <li>• Use of CIS equipment in support of command, control communications, computers and intelligence structures.</li> <li>• Use of CIS equipment to conduct incident Command System Operations</li> <li>• Conduct CIS planning in close liaison with BOWMAN System Manager and other unit management personnel.</li> </ul>	The individual should be employed as a Regimental Signals Officer within 12 months of course completion.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Captain (Lieutenant by exception and selected for role)	IELTS 5.5	10 weeks	BOWMAN Regimental Signals Officer and BOWMAN Staff User.	3 courses per year

# Combined Arms & Collective Training Courses

## JUNIOR DIVISION, WARMINSTER

### Course No:

### Warminster

Aim of Course	Outline of Syllabus	Remarks
To provide the functional knowledge and understanding of combat and staff procedures in a combined arms environment at battlegroup and brigade levels in order to prepare Capts for staff appts within units and brigades.	<ul style="list-style-type: none"> <li>a. Students conduct a staff skills package, including verbal, written and thinking skills. Students produce an IRTB at the end of this package.</li> <li>b. Capabilities of the Army - Divisions, CSS, wargaming, Urban Ops, stabilisation, legal, Info Manoeuvre, Army lessons.</li> <li>c. Collective Planning Exercises at BattleGroup and Brigade level.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 6 Captains of Substantive seniority of 1 - 3yrs	6 weeks	UK students receive the civilian qualification of level 5 CMI and level 7 ILM	5 courses per year

# Combined Arms & Collective Training Courses

## JUNIOR COMMAND STAFF COURSE

**Course No:**

**ARMCEN Warminster**

Aim of Course	Outline of Syllabus	Remarks
To provide the functional knowledge and understanding of combat and staff procedures in a combined arms environment at Battlegroup and Brigade levels in order to prepare Captains for staff appointments within Units and Brigades.	Understand the British Army's Combined Arms Manoeuvre planning, tactics and execution.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
1-3 years substantive seniority at Captain or national equivalent.				5 per year



# Combined Arms & Collective Training Courses

## THE INTERMEDIATE COMMAND AND STAFF COURSE (LAND) (ICSC(L))

**Course No: -**

**Defence Academy, Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of ICSC(L) is to educate, train and assess Regular officers up to the rank of Major to prepare them for command, regimental duty, and staff appointments up to Grade 1 (OF4).</p>	<p>There are two terms: a 13-week Contemporary Military Studies Term and a 13-week Operations Term. Overseas students may attend the whole course or just the Operations Term if that better meets their national needs. Each syndicate has its own dedicated member of Directing Staff (DS). Syndicates will contain a mixture of officers from across all British Army units from combat arms, combat support and service support arms plus other specialist capabilities. The syndicate will contain both male and female officers and Royal Marines also attend this course.</p> <p>The course covers a broad range of topics which prepare officers to take up positions as Majors (OF3) including planning roles in a Brigade and Divisional headquarters. The course focusses on operational planning at the Brigade and Divisional level. Topics include:</p> <ol style="list-style-type: none"> <li>(1). Staff Fundamentals - Aim: To develop a resilient Officer with the requisite skills and knowledge to effectively communicate analytically robust decisions and direction on the Staff and in Command. A progressive blended programme which develops resilience whilst enhancing analytical and communication skills under incrementally complex and diverse constraints.</li> <li>(2). Security and Defence Policy - Aim: To evaluate the nature of warfare, the current and emerging strategic environment, and how the military contributes to the UK's strategic objectives, in order to understand UK Defence Policy.</li> <li>(3). Management of Defence - Aim: To evaluate critically the Management of Defence and the Army, by understanding, analysing and examining the formulation of Strategy and Policy, the processes and structures used for governance, the finance and assurance frameworks, and the management and context of Risk. The module provides an insight into the workings of UK Defence and the Army and would be useful for anyone working with the British military, particularly the Army at 1<sup>st</sup> formation or higher.</li> <li>(4). Command and Ops - Aim: To critically evaluate the theory, ethics and practise of command, leadership and management in order to enhance understanding and competence.</li> <li>(5). Capability - Aim: To critically evaluate the acquisition process, analyse the constraints of battlefield capability and explore the future technological influences on UK Defence Policy and wider Defence. The Capability module utilises subject matter experts, to deliver an interesting and varied module, intended to highlight the importance of Capability in the round, to Staff Officers and future Sub-Unit Commanders.</li> <li>(6). Operations - Aim: To develop students' problem solving and decision-making skills by applying the knowledge gained within the Foundations Term to illustrative scenarios within the IOPC25 framework. It also develops students' understanding of the Combat Estimate, Combined Arms Manoeuvre, the Manoeuvrist Approach, and Integrated Action. Multinational perspectives are considered through a two-week overseas training exercise at the US Command and General Staff College in Fort Leavenworth, Kansas.</li> </ol> <p>Assessments. Students will be assessed throughout the course and will sit 5 summative written or oral assessments. A detailed report is written on each student at the end of the course.</p> <p>Pre-course preparation. Overseas students will be given access to the Defence Learning Environment (DLE) which includes links to some basic pre-course reading. Candidates should aim to complete the online course Military Knowledge ICSC(L) prior to arriving on the course.</p> <p>ICSC(L) is a Master's degree-earning course. Students attending the complete course receive 100 credits of the 180 necessary for a Master's degree and then undertake additional work, including a dissertation, in the two years after the course. The credits can also be put towards an MBA and many universities recognise the course. International students may study for a Master's degree with King's College London but an additional fee will be payable to cover the marking, library access and ongoing support including the 2 years after the course.</p>	<p>The Intermediate Command and Staff Course (Land) (ICSC(L)) is a 26 week fully residential course held at the Defence Academy, Shrivenham. The course runs twice a year and is open to international students. ICSC(L) is a mandatory course for most UK officers upon promotion from Captain (OF2) to Major (OF3). UK Direct Entry (DE) officers must have attended the course before they can be considered for promotion to Lieutenant Colonel (OF4).</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Up to Major (OF3)	An IELTS score of 6.5 - 7 would allow students to get the most from the course but there is a degree of flexibility. Overseas students will be given access to the Defence Learning Environment (DLE) which includes links to some basic pre-course reading. Candidates should aim to complete the online course Military Knowledge ICSC(L) prior to arriving on the course.	There are two terms: a 13-week Contemporary Military Studies Term and a 13-week Operations Term. Overseas students may attend the whole course or just the Operations Term if that better meets their national needs.	On completion of the course, students will be issued with a course certificate, end of course report and a course photograph.	

# Combined Arms & Collective Training Courses

## JUNIOR OFFICERS TACTICS AWARENESS COURSE (JOTAC)

**Course No: 490/001**

**ARMCEN Warminster**

Aim of Course	Outline of Syllabus	Remarks
<p>To prepare officers for the rank of Captain by raising their awareness of combined arms tactics and by developing their combat staff skills.</p> <p>Endstate: The course end state is an officer who has the requisite combat knowledge required of a sub-unit 2IC, a watch keeper, a liaison officer and with further training, a specialist troop commander or combat staff officer.</p>	<p>The course consists of 1 week of residential pre-course training, followed by a 4 week main course consisting of tactical exercises without troops and classroom exercises assisted by computer simulation. The focus is on the subunit activities, but there is exposure to the battle group level. The training objectives include mission planning, force preparation, deployment and recovery, simulated ground manoeuvre, protection and the management of combat service support.</p>	<p>3-4 years of Regimental Duty An understanding of British Military Doctrine and terminology would be most useful although this is covered in the pre. course for international students.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lieutenant to Captain	IELTS level 5.5	4 weeks preceded by 1 week pre-course training for international students. Total 5 weeks		7 courses per training year available to international students

# Combined Arms & Collective Training Courses

## JUNIOR COMMAND AND STAFF COURSE (LAND) (JCSC(L))

### Course No:

Aim of Course	Outline of Syllabus	Remarks
To deliver tactical command and staff education to officers and prepare them for future employment as a captain on the staff.	<p>Students will be educated to:</p> <ul style="list-style-type: none"> <li>Understand and apply the British Army's Combat Estimate to tactical problems at both Battlegroup and Brigade level.</li> <li>Understand and apply the communication, cognitive and analytical abilities of a staff officer.</li> <li>Understand Army structures and how they support operations and training.</li> <li>Have an awareness of contemporary warfighting challenges.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Captain (Platoon Commander, sub-unit 21C, junior Staff Officer)	IELTS level 6. No age limit but should have 4-8 years of military (Land Forces) experience Be capable of walkina 2km, over rough terrain, with a daysack of not more than 15kg	Each course is 7 weeks long. This includes 1 week of pre- course training specifically designed for international students but NOT language training		Typically there will be 3 courses each year, however, his may vary. IDT(A) can advise on course availability.

# Defence College for Military Capability Integration (DCMCI)

## CYBER DEFENCE AND INFORMATION ASSURANCE

**Course No:**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
Designed to develop military and defence industry professionals who can lead in a defensive cyber environment, to effectively exploit the threats and opportunities of cyberspace at the organisational level. The course focuses on understanding and articulating the strategic and executive-level responses to serious present and emerging threats in the information domain.	<p>Compulsory modules</p> <ul style="list-style-type: none"> <li>• Foundations of Cyber</li> <li>• Thesis</li> </ul> <p>Elective modules - Eleven of the modules from the following list need to be taken as attendance only modules:</p> <ul style="list-style-type: none"> <li>• Understanding Risk</li> <li>• Cyber Attack - Threats and Opportunities</li> <li>• Social Technologies</li> <li>• Data-led Decision Support &amp; Artificial Intelligence</li> <li>• Emerging Technology Monitoring</li> <li>• Incident Management</li> <li>• Cyber Law</li> <li>• Information Operations</li> <li>• Cyber Deception</li> <li>• The Human Dimension</li> <li>• Critical Networks and Cyber-Physical Systems</li> <li>• Systems Thinking for Organisational Viability</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>To study for a formal award at Cranfield you will need to demonstrate that you can communicate effectively in English in an academic environment. Full details of how you can meet this requirement can be found in our English language requirements section. We welcome applications from talented individuals of all backgrounds and each application is considered on its individual merit. Usually applicants must hold:</p> <p>A UK lower second-class (2:2) undergraduate degree with honours, as a minimum, or equivalent international qualification.</p>	MSc - 1 year full-time PgDip / PgCert - up to 2 years part-time	MSc / PgDip / PgCert	1 per year

# Defence College for Military Capability Integration (DCMCI)

## CYBERSPACE OPERATIONS

**Course No:**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The Cyberspace Operations programme is designed to develop professionals to support military manoeuvre in cyberspace, in contested operations and as part of integrated planning.	<p>Compulsory modules:</p> <ul style="list-style-type: none"> <li>• Foundations of Cyber</li> <li>• Cyber Law</li> <li>• Cyber Deception</li> <li>• Information Operations</li> <li>• Thesis</li> <li>• Offensive Cyber Operations</li> </ul> <p>Elective modules (Seven of the modules from the following list need to be taken as attendance only modules)</p> <ul style="list-style-type: none"> <li>• Understanding Risk</li> <li>• Cyber Attack - Threats and Opportunities</li> <li>• Social Technologies</li> <li>• Data-led Decision Support &amp; Artificial Intelligence</li> <li>• Emerging Technology Monitoring</li> <li>• Incident Management</li> <li>• The Human Dimension</li> <li>• Systems Thinking for Organisational Viability</li> <li>• Critical Networks and Cyber Physical Systems</li> </ul>	Due to the nature of the subject matter in this course, a UK or 5EYES enhanced security clearance will be required.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>To study for a formal award at Cranfield you will need to demonstrate that you can communicate effectively in English in an academic environment. Full details of how you can meet this requirement can be found in our English language requirements section.</p> <p>We welcome applications from talented individuals of all backgrounds and each application is considered on its individual merit. Usually applicants must hold:</p> <p>A UK lower second-class (2:2) undergraduate degree with honours, as a minimum, or equivalent international qualification.</p>	MSc - 1 year full-time PgDip / PgCert - up to 2 years part-time	MSc / PgDip / PgCert	1 per year



# Defence College for Military Capability Integration (DCMCI)

## DEFENCE SIMULATION AND MODELLING

**Course No:**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course addresses the design, development, procurement, use and management of models and simulations for applications in experimentation, training, testing, analysis and assessment of military forces, systems and equipment.</p>	<p>Compulsory modules:</p> <ul style="list-style-type: none"> <li>• Introductory Studies</li> <li>• Foundations of Modelling and Simulation</li> <li>• Modelling and Simulation Acquisition and Techniques</li> <li>• Real Time Graphics</li> <li>• War Gaming and Combat Modelling</li> <li>• Synthetic Environments and Virtual Simulation</li> <li>• Experimentation Analysis and Trials for Simulation</li> <li>• Weapon System Performance Assessment</li> <li>• Networked and Distributed Simulation</li> <li>• Advanced Module 1</li> <li>• Advanced Module 2</li> <li>• Advanced Module 3</li> <li>• Networked and Distributed Simulation Exercise</li> <li>• Thesis</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>To study for a formal award at Cranfield you will need to demonstrate that you can communicate effectively in English in an academic environment. Full details of how you can meet this requirement can be found in our English language requirements section.</p> <p>We welcome applications from talented individuals of all backgrounds and each application is considered on its individual merit. Usually applicants must hold:</p> <p>A UK lower second-class (2:2) undergraduate degree with honours, as a minimum, or equivalent international qualification.</p>	<p>MSc - 1 year full-time PgDip / PgCert - up to 2 years part-time</p>	<p>MSc / PgDip / PgCert</p>	<p>1 per year</p>

# Defence College for Military Capability Integration (DCMCI)

## EXPLOSIVES ORDNANCE ENGINEERING

**Course No:**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>The Explosives Ordnance Engineering MSc will teach you the necessary understanding behind explosives engineering, munitions and target response and look to the future in explosives development.</p>	<p>Compulsory modules:</p> <ul style="list-style-type: none"> <li>• Introduction to Explosives Engineering</li> <li>• Research Tools</li> <li>• Munitions and Target Response</li> <li>• Future Developments: Scanning the Horizon in EOE</li> <li>• Thesis</li> </ul> <p>Elective modules - A number of modules from the following list (totalling 60 credits) must be taken from the following list:</p> <ul style="list-style-type: none"> <li>• Introductory Studies</li> <li>• Gun Propellants</li> <li>• Testing and Evaluation of Explosives</li> <li>• Rocket Motors and Propellants</li> <li>• Pyrotechnics</li> <li>• Explosives and the Environment</li> <li>• Maritime Underwater Munitions</li> <li>• Manufacture and Material Properties of Explosives</li> <li>• Delivery Systems</li> <li>• Counter Improvised Explosive Devices Capability</li> <li>• Design for Vulnerability</li> <li>• Safety Assurance in EOE</li> <li>• Addressing EOE Capability Gaps</li> <li>• Weapon Life Assessment</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>To study for a formal award at Cranfield you will need to demonstrate that you can communicate effectively in English in an academic environment. Full details of how you can meet this requirement can be found in our English language requirements section.</p> <p>We welcome applications from talented individuals of all backgrounds and each application is considered on its individual merit. Usually applicants must hold:</p> <p>A UK lower second-class (2:2) undergraduate degree with honours, as a minimum, or equivalent international qualification.</p>	<p>MSc - 1 year full-time PgDip / PgCert - up to 2 years part-time</p>	<p>MSc / PgDip / PgCert</p>	<p>1 per year</p>

# Defence College for Military Capability Integration (DCMCI)

## FORENSIC EXPLOSIVE AND EXPLOSION INVESTIGATION

### Course No:

### DCMCI, Shrivenham & Cranfield University Campus

Aim of Course	Outline of Syllabus	Remarks
<p>Using cutting edge research, latest methodologies and in-depth forward thinking. The Forensic Explosive and Explosion Investigation MSc aims to enhance your understanding in a fast-paced science. It will give you a broad introduction into the subject, and will utilise highly practical and hands-on sessions, aiming to produce forensic experts capable of giving expert witness testimonies in a courtroom situation and elsewhere.</p>	<p>The course consists of a one-week period of introductory studies followed by academic instruction in modular form. Most modules are of five days duration, interspersed with weeks devoted to private study. Students are required to take eight core modules and choose three elective modules based on their particular background, future requirements or interests. This is followed by a four-month research project and either a thesis or literature review and paper.</p> <p>Core Modules</p> <ul style="list-style-type: none"> <li>• Introductory Studies</li> <li>• Investigation and Evidence Collection</li> <li>• Reasoning for Forensic Science</li> <li>• Courtroom Skills</li> <li>• Forensic Investigation of Explosives and Explosive Devices</li> <li>• Fires, Explosions and their Investigation</li> <li>• Counter Improvised Explosive Devices Capability</li> <li>• Introduction to Shock Impact</li> <li>• Ballistic Impact and Protection</li> <li>• Explosive Effects on Structures</li> </ul>	<p>This course is delivered by Cranfield University using DCMCI facilities. The course allows you to flexibly choose a number of elective modules to suit your prospective career. You can choose from a list of different capabilities within the scope of the course, whether that be hazardous materials, counter-improvised explosive devices (IED) investigation or firearms and their investigation.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>To study for a formal award at Cranfield University you will need to demonstrate that you can communicate effectively in English in an academic environment. Full details of how you can meet this requirement can be found <a href="http://www.cranfield.ac.uk/study/application-guide/entry-requirements">www.cranfield.ac.uk/study/application-guide/entry-requirements</a></p> <p>A first or second class honours degree or equivalent in forensic science or scientific discipline, or the professional equivalent. Students with other degrees who can show a knowledge of and interest in the scientific elements of the subject will also be considered.</p>	<p>MSc: 11 months full-time, up to three years part-time; PgDip: up to 11 months full-time, up to two years part-time</p>	<p>The MSc of this course is accredited by The Chartered Society of Forensic Sciences.</p>	<p>1 course per year</p>

# Defence College for Military Capability Integration (DCMCI)

## GUIDED WEAPON SYSTEMS

**Course No:**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course is an essential prerequisite for many specific weapons postings in the UK and overseas forces. It also offers an ideal opportunity for anyone working in the Guided Weapons industry to get a comprehensive overall understanding of all the main elements of guided weapons systems.</p>	<p>Compulsory modules:</p> <ul style="list-style-type: none"> <li>• Introductory and Foundation Studies</li> <li>• GW Propulsion</li> <li>• GW Aerodynamics</li> <li>• GW Control Theory</li> <li>• GW Electro-optics and Infrared Technology</li> <li>• GW Control and Guidance</li> <li>• GW Energetics</li> <li>• GW Structures, Aeroelasticity and Materials</li> <li>• Radar Principles</li> <li>• GW Power Electronics and Communication Systems</li> <li>• Missile System Design</li> <li>• GW Systems Integration</li> </ul>	

Elective modules - One of the following modules must be taken:

- GW Electronic Warfare
- Hypersonic Guided Weapons

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>To study for a formal award at Cranfield you will need to demonstrate that you can communicate effectively in English in an academic environment. Full details of how you can meet this requirement can be found in our English language requirements section.</p> <p>We welcome applications from talented individuals of all backgrounds and each application is considered on its individual merit. Usually applicants must hold:</p> <p>A UK lower second-class (2:2) undergraduate degree with honours, as a minimum, or equivalent international qualification.</p>	<p>MSc - 1 year full-time PgDip / PgCert - up to 2 years part-time</p>	<p>MSc / PgDip / PgCert</p>	<p>1 per year</p>



# Defence College for Military Capability Integration (DCMCI)

## INFORMATION CAPABILITY MANAGEMENT

**Course No:**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>On average, over 25,000 web sites are created every day across multiple platforms, technology streams by both the private and public sectors. This makes the need for expertise in information capability and management one of the most important faucets for expertise and strategy moving into a more digital future.</p> <p>We aim to create skilled professionals who can source, analyse and strategise improvements, assess digital infrastructure and keep up with an ever-increasing and developing world of information and technology.</p>	<p>Compulsory modules:</p> <ul style="list-style-type: none"> <li>• Foundations of Information Systems</li> <li>• Professional Issues</li> <li>• Programme and Project Management for Information Systems</li> <li>• Systems Thinking for Organisational Viability</li> <li>• Software Engineering</li> <li>• Methods and Tools for Information Systems Development</li> <li>• Systems Architecture</li> <li>• Emerging Technology Monitoring</li> <li>• Data Modelling, Storage and Management</li> <li>• Data-led Decision Support &amp; Artificial Intelligence</li> <li>• Cyber Security and Information Assurance</li> <li>• Digital Business Strategy</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>To study for a formal award at Cranfield you will need to demonstrate that you can communicate effectively in English in an academic environment. Full details of how you can meet this requirement can be found in our English language requirements section.</p> <p>We welcome applications from talented individuals of all backgrounds and each application is considered on its individual merit. Usually applicants must hold:</p> <p>A UK lower second-class (2:2) undergraduate degree with honours, as a minimum, or equivalent international qualification.</p>	<p>MSc - 1 year full-time PgDip / PgCert - up to 2 years part-time</p>	<p>MSc / PgDip / PgCert</p>	<p>1 per year</p>



# Defence College for Military Capability Integration (DCMCI)

## MILITARY AEROSPACE AND AIRWORTHINESS

**Course No:**

**Cranfield Campus and Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course has been designed to address the needs of employees in the MoD, the armed forces and the international defence industry. It provides practising engineers with the knowledge and skills to enable them to work more effectively in aerospace engineering, airworthiness, and safety.</p>	<p>Compulsory modules:</p> <ul style="list-style-type: none"> <li>• Airworthiness of Military Aircraft</li> <li>• Aviation Safety Management</li> <li>• Fixed-Wing Aeromechanics</li> <li>• Military Aircraft Systems</li> <li>• Propulsion Systems</li> <li>• Safety Assessment of Aircraft Systems</li> <li>• Study Skills (non-assessed)</li> </ul> <p>Elective modules - Seven of the following modules must be taken:</p> <ul style="list-style-type: none"> <li>• Aircraft Accident Investigation and Response</li> <li>• Aircraft Fatigue and Damage Tolerance</li> <li>• Aircraft Survivability</li> <li>• Aviation Maintenance Operations</li> <li>• Design Durability and Integrity of Composite Aircraft Structures</li> <li>• Fundamentals of Aircraft Engine Control</li> <li>• Guided Weapons</li> <li>• Human Factors in Aircraft Maintenance</li> <li>• Introduction to Aircraft Structural Crashworthiness</li> <li>• Military Avionics -STA Communications and Navigation</li> <li>• Practical Reliability</li> <li>• Rotary-Wing Aeromechanics</li> <li>• Uninhabited Aircraft Systems / Remotely Piloted Aircraft Systems</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>To study for a formal award at Cranfield you will need to demonstrate that you can communicate effectively in English in an academic environment. Full details of how you can meet this requirement can be found in our English language requirements section.</p> <p>We welcome applications from talented individuals of all backgrounds and each application is considered on its individual merit. Usually applicants must hold:</p> <p>A UK lower second-class (2:2) undergraduate degree with honours, as a minimum, or equivalent international qualification.</p>	PgDip / PgCert - up to 2 years part-time	PgDip / PgCert	1 per year

# Defence College for Military Capability Integration (DCMCI)

## MILITARY ELECTRONIC SYSTEMS ENGINEERING

**Course No:**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course provides education and training in selected military electronic systems. It is particularly suitable for those who will be involved with the specification, analysis, development, technical management or operation of military radar, electro-optics, communications, sonar or information systems, where the emphasis will be on an electronic warfare environment.</p>	<p>This course includes judgemental elicitation and analysis techniques, mathematical analysis methods (including optimisation), war gaming and combat modelling, logistics modelling and simulation methods. The use and utility of all the methods are explored through practical exercises and studies.</p> <p>Core Modules</p> <ul style="list-style-type: none"> <li>• Introductory Studies</li> <li>• Introduction to Operational Research Techniques</li> <li>• Discrete and Continuous Simulation</li> <li>• Decision Analysis</li> <li>• War Gaming and Combat Modelling</li> <li>• Statistical Analysis and Trials</li> <li>• Weapon System Performance Assessment</li> <li>• Intelligent Systems</li> <li>• Logistics Modelling</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>To study for a formal award at Cranfield you will need to demonstrate that you can communicate effectively in English in an academic environment. Full details of how you can meet this requirement can be found in our English language requirements section.</p> <p>We welcome applications from talented individuals of all backgrounds and each application is considered on its individual merit. Usually applicants must hold:</p> <p>A UK lower second-class (2:2) undergraduate degree with honours, as a minimum, or equivalent international qualification.</p>	<p>MSc - 1 year full-time PgDip / PgCert - up to 2 years part-time</p>	<p>MSc / PgDip / PgCert</p>	<p>1 per year</p>

# Defence College for Military Capability Integration (DCMCI)

## COMMUNICATIONS ELECTRONIC WARFARE

**Course No:**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
Examine and understand the methods of electronically intercepting, contesting and protecting the information environment generated by communications systems.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Introduction to Communications Electronic Warfare: Electronic attack, surveillance and defence.</li> <li>• Electronic Attack: Jamming techniques and effects, calculation of SJNR, jamming of satellite and ground-based links, GPS vulnerability.</li> <li>• Electronic Defence: ED methods (Antenna null-steering, Spread-spectrum techniques).</li> <li>• Comms EW receivers: Requirements, sensitivity and dynamic range of intercept receivers; communications ESM receiver types (swept superhet, channelised, FFT-based channelised).</li> <li>• Direction-finding: DF techniques (DF loop, Adcock antenna, rotary DF systems, interferometers, time difference of arrival method, pseudo-Doppler techniques, amplitude comparison methods); Commercial DF and military EW systems;; Geolocation.</li> <li>• Military tactical data links: a case study of high-level EW protection applied to a military data network.</li> <li>• Spectral estimation: Classical and parametric methods, eigenvector-based methods.</li> <li>• Guest lectures from defence industry</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## SENSORS ELECTRONIC WARFARE

### Course No:

### DCMCI, Shrivenham

Aim of Course	Outline of Syllabus	Remarks
<p>This PgCert covers a selection of Electronic Warfare topics relevant to military systems, covering the specification, analysis, development, procurement, and technical management of military radar, electro-optics and infrared sensor systems.</p>	<p>The main focus of the course, being Electronic Warfare in relation to sensor systems, requires a good understanding of these systems before going on to consider how to defend them from electronic attack or intercept..</p> <p>Core Modules</p> <ul style="list-style-type: none"> <li>• Electromagnetic Propagation and Devices</li> <li>• Signal Processing, Statistics and Analysis</li> <li>• Radar Principles</li> <li>• Radar Electronic Warfare</li> <li>• Electro-Optics and Infrared Systems 1 &amp; 2</li> </ul>	<p>The following are Postgraduate courses required by the UK Ministry of Defence and delivered by Cranfield University. Successful graduates of this course should be fully equipped for roles in defence intelligence, systems development and acquisition, involving the specification and analysis of such systems; and working individually or as part of a team either in the military or in the defence industry.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>To study for a formal award at Cranfield University you will need to demonstrate that you can communicate effectively in English in an academic environment. Full details of how you can meet this requirement can be found <a href="http://www.cranfield.ac.uk/study/application-guide/entry-requirements">www.cranfield.ac.uk/study/application-guide/entry-requirements</a></p> <p>A first or second class honours degree or equivalent in an appropriate discipline (normally electronics, electrical engineering or physics). Alternatively, a lesser qualification with relevant professional experience may be acceptable.</p>	PgCert part-time two years		1 course per year

# Defence College for Military Capability Integration (DCMCI)

## ENVIRONMENTAL AWARENESS AND COMPLIANCE IN DEFENCE

**Course No:**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
This course has been introduced to raise awareness of environmental issues, with a primary focus within the Defence sector and the acquisition process.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Introduction to environmental awareness within defence acquisition</li> <li>• Defence-related activities influencing the quality of the environment</li> <li>• Effective methods of environmental protection in Defence acquisition</li> <li>• Introduction to environmental legislation</li> <li>• Defence-related case studies</li> <li>• Written exam.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		2 days	CPD	3 per year



# Defence College for Military Capability Integration (DCMCI)

## FAILURE OF STRUCTURAL MATERIALS

Course No: -

DCMCI, Shrivenham

Aim of Course	Outline of Syllabus	Remarks
<p>This course is designed to give a concise but comprehensive account of the behaviour of materials under stress. Particular reference will be made to composite materials, modern developments in the treatment of brittle fracture and fatigue using fracture mechanics and materials selection.</p> <p>This course is appropriate to officers and civilians in the MOD, research establishments and industry who need to have an understanding of the failure of structural materials in their work which includes research, design, development or production.</p>	<p><b>The course will provide a basic understanding of the way in which stresses and strains develop in engineering components. Methods of determining stresses will be explained. From knowledge of stress distributions, criteria will be developed which determine the failure of engineering components.</b></p> <p><b>The study of failure will include instability, yield, brittle fracture and fatigue. The use of fracture will be treated in some depth. The mechanics of fibre-reinforced composite materials will also be discussed.</b></p>	<p>This course is required by the UK Ministry of Defence and delivered by Cranfield University.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		3 days		2 courses per year

# Defence College for Military Capability Integration (DCMCI)

## INTRODUCTION TO DEFENCE SIMULATION

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The aim of the course is to provide an overview of Live, Constructive and Virtual Simulation for those members of the defence community who require an introduction to this area of technology.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Basic terminology, techniques and technology currently employed in simulation,</li> <li>• The application of simulation across all operational domains (land, sea and air) to areas such as military training, operational analysis, rapid prototyping, doctrine development, mission planning,</li> <li>• Consideration of costs, limitations and trade-offs,</li> <li>• An overview of current simulation capabilities in the UK, Europe and the United States including – research and development (in both the public and private sectors), procurement, current users, future plans.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 Days	CPD	2 per year

# Defence College for Military Capability Integration (DCMCI)

## MILITARY LASER SAFETY

**Course No: -**

**Online**

Aim of Course	Outline of Syllabus	Remarks
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This course is designed to train Laser Safety Officers (LSO) from all services and MOD departments and their range contractors.

Topics covered:  
2 days - lectures and written test at the end (30 minutes)

A certificate will be issued to students who complete it which is mandatory for any LSO appointed by MOD. The course gives a grounding in laser physics of operation which then leads on to laser eye and skin safety considerations. The duties on an LSO and the content of JSP390 are reviewed. Military and civilian guest lecturers cover laser safety and human eye response and laser range procedures. The secretary of MLSC is normally present and is the sponsor of this course. Laser safety calculations, military laser technology and its applications are also taught. No previous knowledge is required and comprehensive notes for future reference are supplied.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		2 Days	CPD	2 per year

# Defence College for Military Capability Integration (DCMCI)

## MILITARY OPERATIONAL ANALYSIS APPRECIATION

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course provides an introduction to analysis and operational research in a defence context.</p> <p>Includes:</p> <ul style="list-style-type: none"> <li>Details of the use of operational research in defence decision making, how it is used and by whom</li> <li>An introduction and exposure to the methods and tools which are used in defence analysis</li> <li>Hands-on practical exercises.</li> </ul>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>Origins and concepts of operational research</li> <li>Model building in operational research</li> <li>Weapon and defence system assessment</li> <li>Measures of effectiveness and performance</li> <li>Logistics modelling</li> <li>Mathematical combat modelling</li> <li>Wargaming</li> <li>Combat modelling and simulation</li> <li>Human in the loop simulation</li> <li>Distributed simulation for defence applications</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 Days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## PETROLEUM CHEMISTRY AND TECHNOLOGY

**Course No: -**

**DCMCI, Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>The course provides students with a basic scientific and technical understanding of the production, behaviour and handling of hydrocarbon fuels and lubricants, so enabling them to contribute effectively in technically demanding appointments in the field of petroleum chemistry and technology.</p> <p>The course covers both conventional petroleum-based fuels and alternative fuels derived from synthetic or biological materials.</p>	<p>The course is delivered by a mix of lectures, tutorials, laboratory classes, directed reading, information searches and site visits. The key teaching areas are:</p> <ul style="list-style-type: none"> <li>Fuels and lubricants</li> <li>Applied chemistry</li> <li>Hydraulics</li> <li>Electrical safety</li> <li>Foundation maths</li> </ul>	<p>This course is required by the UK Ministry of Defence and delivered by Cranfield University. This is a nine week intensive course providing an excellent introduction to the subject for those involved in the procurement, management, specification, supply or distribution of hydrocarbon fuels and lubricants.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		10 Weeks		Enquire for course dates



# Defence College for Military Capability Integration (DCMCI)

## PROJECT ORIENTED ENVIRONMENTAL MANAGEMENT SYSTEMS

**Course No: -**

**Dependent on delivery mode**

Aim of Course	Outline of Syllabus	Remarks
<p>Environmental Management within Defence Acquisition is a mandatory requirement as detailed in the Secretary of State (SoS) for Defence's Policy Statement. This course aims to meet that requirement.</p> <p>This course will be delivered either online or face-to-face depending on which dates you choose. The course aims and content remain comparable between the two courses, though there are some key differences you may like to take into account when deciding which version to attend.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Taught elements:</li> <li>• POEMS requirements, structure and implementation process,</li> <li>• Information regarding application of POEMS to Commercial and Military off the Shelf and User Requirement Documents,</li> <li>• Introduction to influencing and communication skills, restricted materials, available assessment tools and POEMS Audit,</li> <li>• Identifying the need for further environmental assessment in the context of POEMS.</li> </ul> <p>Assessment:</p> <ul style="list-style-type: none"> <li>• Continuous assessment in the form of theoretical activities throughout the course,</li> <li>• End of course written exam.</li> </ul> <p>On-the-job training:</p> <ul style="list-style-type: none"> <li>• Completion of practical activities as part of a structured mentored programme.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 Days	CPD	2 per year

# Defence College for Military Capability Integration (DCMCI)

## (RE) FORCE PROTECTION ENGINEERING

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This is an advanced course that explores the fundamental theory that underpins security engineering.</p> <p>It enables suitably experienced practitioners to apply their detailed knowledge to provide appropriate advice and solutions to a range of force protection engineering problems. The course aims to provide a detailed assessment of the threats and damage mechanisms coupled with a range of solutions or mitigating techniques.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Weapon design</li> <li>• Materials, armour and terminal ballistics</li> <li>• Blast loading</li> <li>• Rapid structural assessment</li> <li>• Structural response to blast, ballistic and impact loading</li> <li>• Groundshock and ground penetration</li> <li>• Design of structures to resist accidental explosions</li> <li>• Fences, barriers and perimeter security.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		8 Weeks	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## SIMULATION EMPLOYMENT TRAINING

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>The course provides an overarching understanding of the capability and application of defence modelling and simulation systems, underpinned by an appreciation of the domain's underlying technologies and tools. A broad range of applications of modelling and simulation are addressed; including training and education, acquisition, analysis and experimentation.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• The role of models, simulations and synthetic environments within Defence</li> <li>• The fundamental principles of Defence models, simulations and synthetic environments</li> <li>• The role of hardware and software in the creation of modelling and simulation solutions</li> <li>• The key defence modelling and simulation organisations, their structure, capabilities and activities</li> <li>• The methods and principles of combat modelling and wargaming in analysis and training</li> <li>• Methodologies and techniques used in analysis and experimentation</li> <li>• The principles of Computer Generated Forces (CGFs) and Semi-Automated Forces (SAFs)</li> <li>• The enabling technologies and methodologies underpinning real time graphics (RTG), including 3D Modelling and terrain building</li> <li>• The challenges and opportunities in the use of commercial off the shelf products (COTS) for Defence modelling and simulation, including games technologies and components</li> <li>• The role of Defence synthetic environments (networked, federated and distributed simulations), the technology and standards used to create them and the interoperability issues and challenges when so doing</li> <li>• Participate in a practical example of the design, develop, construct and use of a synthetic environment</li> <li>• Issues in the practical development and acquisition of modelling and simulation through case studies of real programmes and visits to selected sites.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 Weeks	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## SUSTAINABLE DEVELOPMENT IN DEFENCE ACQUISITION

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course is part of a suite of three environmental courses to aid MOD environmental officers and staff become practitioners in environmental management.</p> <p>This course will be delivered either online or face-to-face depending on which dates you choose. The course aims and content remain comparable between the two courses, though there are some key differences you may like to take into account when deciding which version to attend.</p> <p>The online course includes the same content, but has less emphasis on discussion and group work and therefore places more emphasis on independent study. This means there are fewer networking and opportunities for discussion during the online course, although sessions are set aside specifically for this purpose.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Definition of sustainable development,</li> <li>• History of sustainable development,</li> <li>• Accountability and ethics in business and organisations,</li> <li>• Sustainable consumption and production,</li> <li>• Tools such as the sustainability appraisal,</li> <li>• Multiple choice and short essay question exam.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		2 Days	CPD	2 per year

# Defence College for Military Capability Integration (DCMCI)

## CAPABILITY & ACQUISITION PRACTITIONER (CAPAC) COURSES

**Course No: -**

**Hybrid**

Aim of Course	Outline of Syllabus	Remarks
<p>The three Capability and Acquisition Practitioner courses bring together, in one forum, all those involved in the MOD's CAPAC processes and cover the how, who, what, when, why and with whom of CAPAC management within the Defence Operating Model (DOM). Please select one of the three courses which is most relevant to you (Strategic Direction and Capability Planning, Deliver, or In-Service) having considered the delivery dates and delivery locations for that course listed on the webpage.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Strategic direction to the development and generation of sustainable military capabilities,</li> <li>• The Defence Operating Model,</li> <li>• Strategic force development,</li> <li>• Finance,</li> <li>• Command-level planning,</li> <li>• Capability coherence and strategic balance of investment,</li> <li>• Command models and the generic capability management model,</li> <li>• Evidence-based decision making,</li> <li>• The role of science in capability management,</li> <li>• Project delivery,</li> <li>• Sub-portfolio management,</li> <li>• The delivery of change and the management of in-service capability.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>You are required to complete the online Defence Learning Environment (DLE) training sessions prior to attending any practitioner course.</p> <p>You should also familiarise yourselves with 'How Defence Works' available on the Gov.uk website.</p>	5 Days per Course	CPD	Multiple times per year



# Defence College for Military Capability Integration (DCMCI)

## FINANCIAL AND MANAGEMENT CAPABILITY MANAGEMENT - ADVANCED

**Course No: -**

**Online**

Aim of Course	Outline of Syllabus	Remarks
<p>This course identifies the senior management and leadership challenges and opportunities facing those responsible for the implementation of Financial Military Capability Management.</p> <p>Adopting a systems approach and building on existing knowledge and experience, this interactive course uses case studies, individual exercises, group activities and presentations from both the Defence Academy and current FinMilCap practitioners to develop a framework for the analysis; design and implementation of performance improvement across the processes, structures and interfaces that underpin Financial Military Capability Management.</p>	<p>The aim of the FinMilCap (Advanced) course is to inform and prepare leaders and key managers within the FinMilCap environment with the detailed process knowledge and higher level thinking skills necessary to perform their roles.</p> <p>By the end of the course its membership will have acquired the knowledge, skills and attitudes necessary for the analysis, management, design and implementation of performance improvement across the various activities that underpin Financial and Military Capability Management.</p>	<p>This course is required by the UK Ministry of Defence and delivered by Cranfield University.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency

# Defence College for Military Capability Integration (DCMCI)

## CHEMICAL, BIOLOGICAL, RADIOLOGICAL & NUCLEAR DEFENCE SCIENCE

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>As the only course of its kind to run in the UK, the CBRN Defence Science course provides background technical knowledge to support staff in a wide range of Chemical, Biological, Radiological, and Nuclear (CBRN) appointments.</p> <p>This two week course provides a good mixture of theoretical lectures, laboratory practicals, demonstrations and activities as well as site visits to the Defence CBRN Centre and to the Defence Science and Technology Laboratory (DSTL) to study current development and research.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Chemical Agents</li> <li>• Biological Agents</li> <li>• Radiological Hazards</li> <li>• Nuclear Hazards</li> <li>• Physical Protection (individual and collective)</li> <li>• Detection</li> <li>• Decontamination</li> <li>• Demilitarisation</li> <li>• International and national controls of CBRN</li> <li>• Chemical Hardening</li> <li>• Current science and future developments</li> <li>• CBRN Practitioners and their roles</li> <li>• Security Briefing</li> <li>• Historical Weapons and Atmospheric Dispersion</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		10 Days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## ORDNANCE, MUNITIONS & EXPLOSIVES SAFETY (INTERMEDIATE)

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>The course deals first of all with basic explosives chemistry and properties and progresses through explosion effects to applications in ordnance systems.</p> <p>The latter part of the course is concerned with the arrangements in place to control the risk from explosives. Lectures are provided on relevant Health and Safety legislation in the UK and the associated regulations. MOD policy, standards and internal regulations, classification, storage, security and conveyance of explosives, range safety and accident reporting and investigation are covered.</p>	<p>Topics covered:</p> <p>Classroom work is supported by a visit to the on-site explosives range and demonstration area, and a visit to the ammunition hall. General explosives subjects are taught by the academic staff of Cranfield University, whilst specialist areas such as policy, legal security and range safety are undertaken by visiting lecturers from MOD and the Defence industry.</p> <p>This course is specifically designed to relate to the UK MOD competency framework for ordnance, munitions and explosives safety at practitioner level providing a formal educational baseline to support individuals in evidencing (alongside other supporting elements) their competence.</p> <p>A multiple-choice online assessment is available to assess the taught elements. Failure of this assessment will result in the issue of an ATTENDANCE ONLY CERTIFICATE, which will be sent direct to the student's sponsor (if appropriate) for further action. A pass mark obtained in this test will merit a SUCCESSFUL COMPLETION CERTIFICATE."</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		8 days over two consecutive weeks	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## ENVIRONMENTAL AWARENESS AND COMPLIANCE IN DEFENCE

**Course No: -**

**DCMCI, Shrivenham/ Online**

Aim of Course	Outline of Syllabus	Remarks
<p>This course has been introduced to raise awareness of environmental issues, with a primary focus within the Defence sector and the acquisition process.</p> <p>The over-use of natural resources within Defence has increased considerably over time, and it is inevitable that future growth and essential operational requirements will add to the existing pressures of the global system.</p>	<p>This course has been introduced to raise awareness of environmental issues, with a primary focus within the Defence sector and the acquisition process.</p> <p>Core content</p> <ul style="list-style-type: none"> <li>• Introduction to environmental awareness within defence acquisition</li> <li>• Defence-related activities influencing the quality of the environment</li> <li>• Effective methods of environmental protection in Defence acquisition</li> <li>• Introduction to environmental legislation</li> <li>• Defence-related case studies</li> <li>• Written exam</li> </ul>	<p>This course is required by the UK Ministry of Defence and delivered by Cranfield University .This course will be delivered either online or face-to-face depending on which dates you choose. The course aims and content remain comparable between the two courses, though there are some key differences you may like to take into account when deciding which version to attend.</p> <p>The online course includes the same content, but has less emphasis on discussion and group work and therefore places more emphasis on independent study. This means there are fewer networking and opportunities for discussion during the online course, although sessions are set aside specifically for this purpose.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	Successful completion of this course partially fulfils the requirements for Practitioner membership of the Institute of Environmental Management and Assessment (IEMA). Successful completion of the IEMA approved suite of courses Sustainable Development in Defence Acquisition (SDDA), Project Oriented Environmental Management Systems (POEMS) practitioner course and Environmental Awareness and Compliance in Defence (EACD) provides delegates with IEMA Practitioner membership.	2 Days		2 Courses per year

# Defence College for Military Capability Integration (DCMCI)

## AIRWORTHINESS OF MILITARY AIRCRAFT PRACTITIONER

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course will provide an understanding of MOD airworthiness organisations, policies and procedures. The course explains the application of airworthiness to air systems and includes law, design, type and continuing airworthiness, integrity, gas turbine engines, avionics, software and human factors.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Aviation safety, airworthiness and flight safety</li> <li>• Air law, regulations and roles and responsibilities</li> <li>• Safety management systems</li> <li>• Safety assessment</li> <li>• Design and maintenance approvals</li> <li>• Type and Continuing airworthiness</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 Days	CPD	2 per year



# Defence College for Military Capability Integration (DCMCI)

## AEROSYSTEMS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The AeroSystems course is multidisciplinary, covering the areas of uninhabited aircraft systems, guided weapons, electro-optics, communications, radar, electronic warfare and information networks. The course covers the key concepts, fundamental principles, and considerations of design and critical thinking associated with the above mentioned areas.	<p>Compulsory modules:</p> <ul style="list-style-type: none"> <li>• Communication Principles</li> <li>• Electro-Optics and Infrared Systems 1</li> <li>• Electro-Optics and Infrared Systems 2</li> <li>• Electromagnetic</li> <li>• Propagation and Devices</li> <li>• Foundations of Modelling and</li> <li>• Simulation</li> <li>• Guided Weapons</li> <li>• Information Networks</li> <li>• Pre Sessional Postgraduate Studies</li> <li>• Radar Electronic Warfare</li> <li>• Radar Principles</li> <li>• Systems Research Methods</li> <li>• Signal Processing, Statistics and Analysis</li> <li>• Thesis</li> <li>• Uninhabited Aircraft Systems / Remotely Piloted Aircraft Systems</li> </ul>	Acceptance to the Cranfield MSc is not acceptance to the UK MoD Air & Space Warfare Centre Aerosystems Course (Qualified Aerosystems (QAS)). Experienced aircrew candidates who desire to undertake this 12 month residential course to progress to roles with the Test & Evaluation community should contact aswc-aerosystems@mod.gov.uk for guidance on applying.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>To study for a formal award at Cranfield you will need to demonstrate that you can communicate effectively in English in an academic environment. Full details of how you can meet this requirement can be found in our English language requirements section.</p> <p>We welcome applications from talented individuals of all backgrounds and each application is considered on its individual merit. Usually applicants must hold:</p> <p>A UK lower second-class (2:2) undergraduate degree with honours, as a minimum, or equivalent international qualification.</p>	3 Years part-time	MSc	1 per year

# Defence College for Military Capability Integration (DCMCI)

## ADVANCED RADAR

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
Advanced Radar aims to provide you with a detailed understanding of specialist radar applications and techniques. It builds on foundation material previously covered in Radar Principles and Radar Electronic Warfare.	Topics covered: <ul style="list-style-type: none"> <li>• Millimetre Wave Radar</li> <li>• Bistatic SAR</li> <li>• Waveform design</li> <li>• Non Cooperative Target Recognition</li> <li>• Advanced SAR</li> <li>• SAR techniques</li> <li>• Laboratory SAR</li> <li>• Ultra-wide band (UWB) radar</li> <li>• Introduction to Tracking</li> <li>• Kalman Filter, and Extended Kalman Filter</li> <li>• FMCW radar module demonstration</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## ADVANCED SENSOR DATA PROCESSING

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The aim of Advanced Sensor Data Processing is to provide you with an understanding of various processing algorithms and methods that are applicable to modern sensor systems.	Topics covered: <ul style="list-style-type: none"> <li>• Adaptive Signal Processing</li> <li>• Sonar signal processing</li> <li>• Multi-layer perceptrons</li> <li>• Fuzzy logic</li> <li>• Adaptive linear elements</li> <li>• Sensor processing</li> <li>• Sensor fusion</li> <li>• MATLAB</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## AIRCRAFT SURVIVABILITY

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The aim of this course is to provide you with knowledge of the threat environment and vulnerabilities of aircraft systems, structures and payloads. It will then introduce the design strategies and technology used to counter such threats.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Introduction, anti-aircraft systems and survivability</li> <li>• Threats to aerial systems: Missiles and smart munitions</li> <li>• Terminal ballistics</li> <li>• Avoiding the threat: Stealth</li> <li>• Sensors and threat detection</li> <li>• Defensive aids suites</li> <li>• Resisting the threat: Vulnerability assessment</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## AIRWORTHINESS OF MILITARY AIRCRAFT FUNDAMENTALS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>The 3 day AMAC Fundamentals course provides you with a thorough understanding of airworthiness organisations, policies and processes. The lectures are a combination of academic learning by Cranfield University academic staff and training briefs by Military Aircraft Airworthiness (MAA) and military subject matter specialists.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Airworthiness principles,</li> <li>• Military airworthiness development and the maa regulatory framework,</li> <li>• Concept of certification and approvals,</li> <li>• Role of a project team,</li> <li>• Type airworthiness,</li> <li>• Continuing airworthiness,</li> <li>• Safety management systems and risk management,</li> <li>• Human factors and error management,</li> <li>• Lessons learned from accident,</li> <li>• Release to service,</li> <li>• Legal accountability,</li> <li>• Integrity management of military aircraft,</li> <li>• Beyond life airworthiness management.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		3 days	CPD	2 per year



# Defence College for Military Capability Integration (DCMCI)

## BALLISTIC AND CRUISE MISSILE TECHNOLOGY INTRODUCTION

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The aim of this short five day course is to deliver a broad understanding of the principles of ballistic and cruise missile flight and the technologies for those involved in Missile Technology Control Regime (MTCR) activities.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• The MTCR Annex</li> <li>• Missiles as systems</li> <li>• Proliferation</li> <li>• Payloads</li> <li>• Propulsion and propellants</li> <li>• Guidance systems</li> <li>• Instrumentation</li> <li>• Flight control</li> <li>• Airframes</li> <li>• Materials technology</li> <li>• Trials, production and testing</li> <li>• UAVs</li> <li>• Sounding rockets and Satellite Launch Vehicles</li> <li>• Ballistic Missile Defence</li> <li>• Laboratory Tours</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## BALLISTICS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This ten day course taught at Cranfield University at Shrivenham takes you through all aspects of ballistics for weapon design of all calibres.</p> <p>The course covers propellants, internal ballistics, barrel wear, intermediate ballistics, external ballistics and hit probabilities, terminal ballistics including armour materials, armour design and body armour and ammunition types including cannon ammunition, fragmenting warheads, smart ammunition and guided weapons.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Internal, Intermediate, External and Terminal Ballistics,</li> <li>• Propellants and Rocket Propulsion,</li> <li>• Armour Materials and Attack of Armour,</li> <li>• Dispersion of Fire,</li> <li>• Gun Barrel Wear and Erosion,</li> <li>• Light Weapons,</li> <li>• Direct and Indirect Fire Systems,</li> <li>• Wound Ballistics,</li> <li>• Gun Design,</li> <li>• Fuzes,</li> <li>• Fragmentation and explosives</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		10 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## CAPABILITY AND ACQUISITION AWARENESS COURSE

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The aim of the course is to provide individuals with the overarching knowledge and outline understanding needed to prepare them for their first role with within Capability and Acquisition.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Components of capability</li> <li>• Basic contracting</li> <li>• Defence operational model</li> <li>• Project delivery</li> <li>• Strategic / Defence force development</li> <li>• Enablers (DE&amp;S, Defence Digital, DIO, DSTL)</li> <li>• Stakeholder management</li> <li>• Risk and issues management</li> <li>• Role of defence industry</li> <li>• Approvals</li> <li>• Finance</li> <li>• User and system requirements</li> <li>• Capability based planning</li> <li>• System and capability acceptance</li> <li>• Annual budget cycle</li> <li>• Sustaining capability through life</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	2 per year

# Defence College for Military Capability Integration (DCMCI)

## COMMUNICATION PRINCIPLES

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
Communication Principles aims provide you with an understanding of modern military and commercial communications systems, the threats that they face and the measures that may be taken to protect them.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Introduction: Transmitter and receiver communications system model,</li> <li>• Voice source coding: Pulse code modulation, delta modulation, vocoders, demonstrations,</li> <li>• Analogue modulation: Amplitude modulation, DSB/SSB. Frequency modulation, demonstrations,</li> <li>• Digital modulation: ASK, FSK, PSK, DPSK, QPSK, Offset QPSK, MSK, QAM, demonstrations,</li> <li>• Communications channel: Multipath effects, fading and diversity, Egli and Murphy,</li> <li>• Receivers: superheterodyne systems, balanced and unbalanced mixers, frequency synthesisers,</li> <li>• Link budget analysis</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## COMMUNICATION SYSTEMS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
Providing you with an understanding of how modern military and commercial communications systems utilise the principal techniques taught during the communications principles module.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Multiplexing and multiple access: FDM, TDM, statistical multiplexing, multiple access methods FDMA, TDMA and CDMA.</li> <li>• Fibre-optic communications,</li> <li>• Error correction codes: Block, convolutional and trellis coding. LDPC, Polar and Turbo codes.</li> <li>• Wideband multicarrier techniques: Spread spectrum techniques, OFDM. MIMO systems.</li> <li>• Encryption: Terminology, secret key and public-key systems, authentication, key exchange.</li> <li>• Mobile Communications: GSM system architecture, signalling, framing and frequency bands.</li> <li>• 3G UMTS and 4G LTE systems and signalling.</li> <li>• 5G NR developments and features,</li> <li>• HF systems. Scatter-based systems,</li> <li>• Software Defined Radio,</li> <li>• Satellite communications,</li> <li>• GPS. System description,</li> <li>• Military Communications Systems</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year



# Defence College for Military Capability Integration (DCMCI)

## COUNTER IMPROVISED EXPLOSIVE DEVICE CAPABILITY

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of the C-IED Capability course is to educate and inform students, industry, military and civilian MoD C-IED and Counter Threat professionals in a system engineering &amp; critical thinking approach to the Counter IED/Threat systems.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• The C-IED approach in accordance with JDP 3-65(AJP-3.15(C)) and other civilian and military approaches,</li> <li>• Understand the development of IED threats based on historical perspective and how these have been countered,</li> <li>• Technologies involved in C-IED across Detect, Neutralise, Mitigate and Exploit,</li> <li>• How to present information to senior and specialist staff on C-Threat,</li> <li>• The importance of 'Understand' and information management to maintain effectiveness,</li> <li>• Application of influence activities to C-Threat,</li> <li>• Analysing adversary IED/ threat systems and identifying points of influence and effect.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## CRITICAL NETWORKS AND CYBER-PHYSICAL SYSTEMS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
Critical Networks and Cyber-Physical Systems will examine the management and technical considerations relating to critical networks and control systems focusing on interdependence and resilience.	Topics covered: <ul style="list-style-type: none"> <li>• Critical national infrastructure</li> <li>• Cyber Physical Systems</li> <li>• SCADA and OT</li> <li>• IoT and smart technologies</li> <li>• Strategic effects</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## CYBER ATTACK: THREATS AND OPPORTUNITIES

Course No: -

Cranfield University at Shrivenham

Aim of Course	Outline of Syllabus	Remarks
<p>Cyber Attack: Threats and Opportunities aims to develop an understanding of the wider context of cyber within an organisation. It will provide a contextual link between the management and governance of an organisation and the organisation's cyber requirements. It will examine the operational aspects of cyber, information assurance and security.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Cyber activity           <ul style="list-style-type: none"> <li>» Different types of malware, how they are used and combined within a malicious event,</li> <li>» Approaches for modelling the attacker TTPs,</li> <li>» Lifecycles for infrastructure supporting cyber attacks,</li> <li>» Complexities of attribution,</li> <li>» The Insider threat.</li> </ul> </li> <li>• Attacks and vulnerabilities           <ul style="list-style-type: none"> <li>» The common approaches to reconnaissance prior to hostile cyber activity,</li> <li>» An exploration of the nascent vulnerabilities in network infrastructure, web applications and native code,</li> <li>» The attacks and exploits that target these vulnerabilities,</li> <li>» The approaches to understanding the business and mission effects from malicious activity.</li> </ul> </li> <li>• Defensive TTPs           <ul style="list-style-type: none"> <li>» Common tools, techniques and procedures that can be used to improve an organisations defensive posture,</li> <li>» Approaches to cyber threat hunting</li> </ul> </li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## CYBER DECEPTION

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course will equip you with the awareness and ability to employ cyber deception in both active network defence and computer network exploitation.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• This course will address this important emerging discipline by moving beyond established practices of passive network defence such as firewalls and anti-virus patching. Consideration will be given to both the psychological and the technical aspects of exploiting deceptive assets on a network within a wider deception campaign that leverages them.</li> <li>• The course equips you with a critical understanding of the opportunities and vulnerabilities you face when considering the issues of managing deceptive activities to create active and proactive network defence capabilities.</li> <li>• The course will emphasise the need for a systematic, human factors based approach to both technical and enterprise risk management in this area.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days plus 7 weeks online	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## CYBER LAW

Course No: -

Cranfield University at Shrivenham

Aim of Course	Outline of Syllabus	Remarks		
The course will equip you with the awareness and ability to critique different legal and ethical frameworks and factors that need to be considered when designing and delivering cyber operations against a range of adversarial actors or deploying cyber capabilities as part of a Full Spectrum Operation.	<p>Topics covered:</p> <ul style="list-style-type: none"><li>• This course will consider the range of different legal regimes that need to be considered when planning or conducting offensive cyber operations. The course will look at the applicable legal framework for intelligence operations, military operations, information operations and propaganda. It will consider the obligations provided through customary international law, international humanitarian law and domestic legislation that need addressing when considering a cyber operation.</li><li>• You will look at the implication of conducting cyber operations in a range of different contexts, considering cyber as part of a military campaign, prior to the declaration of war and against non-state actors. The applicability of the Laws of Armed Conflict will be explored when considering cyber operations.</li><li>• You will be introduced to a range of different concepts that could be considered when developing appropriate courses of action for cyber operations. The concepts include but are not limited to: sovereignty, right to self-defence, espionage, sabotage, subversion, intelligence, ius ad bellum, ius in bello, armed attack, threat or use of force, necessity, proportionality, distinction, targeting, perfidy, ruse and state responsibility.</li><li>• Finally, this course will allow you the opportunity to look at the various proposed legal frameworks for cyber operations and assess their suitability to support operational planners.</li></ul>			
Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days plus 7 weeks online	CPD	1 per year



# Defence College for Military Capability Integration (DCMCI)

## CYBER SECURITY AND INFORMATION ASSURANCE

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course will enable to understand the field of Cyber Security &amp; Information Assurance (IA), to be able to make use of the concepts that underpin the subject and to appreciate the dependencies between them.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Foundations of Cyber Security &amp; IA,</li> <li>• Risk theory and practice,</li> <li>• Strategy &amp; digital literacy,</li> <li>• Threats &amp; vulnerabilities,</li> <li>• Governance, law &amp; management,</li> <li>• Socio-Technical perspectives.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## DATA LED DECISION SUPPORT AND ARTIFICIAL INTELLIGENCE

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
This course will provide an understanding of the processes by which organisations and individuals can gain insight and actionable intelligence from data.	Topics covered: <ul style="list-style-type: none"> <li>Machine Learning and Artificial Intelligence,</li> <li>Data mining pipeline,</li> <li>Big Data models for exploring data,</li> <li>Data Science.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days plus 7 weeks online	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## DATA MODELLING, STORAGE AND MANAGEMENT

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
Data Modelling, Storage and Management will lead you through the different approaches to data modelling. The course will also consider the best practices for storage and retrieval of information and data using both traditional and innovative technologies.	Topics covered: <ul style="list-style-type: none"> <li>• Data, Information and Knowledge,</li> <li>• Introduction to data storage technologies,</li> <li>• Data retrieval techniques,</li> <li>• Structure Query Language (SQL),</li> <li>• Physical storage,</li> <li>• Non-traditional models for data storage - NoSQL, Big Data, Cloud</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days plus 7 weeks online	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## DELIVERY SYSTEMS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
Delivery Systems aims to provide you with an understanding of the ways in which a lethality mechanism (warhead) may be delivered to a selected target.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Light and heavy guns, cannons and mortars and small arms; charge systems, external ballistics and relevant design features,</li> <li>• Torpedoes; underwater ballistics, underwater propulsion, guidance and control,</li> <li>• Detection: IR and optical sensing, radar systems,</li> <li>• Guided weapon design: Propulsion, aerodynamics, control, guidance.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## DESIGN FOR VULNERABILITY

**Course No:**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of the Design for Vulnerability course is to explore the policies and processes used to manage the consequences of such EA2 events throughout the munition lifecycle; the science underpinning the response of energetic materials and weapons systems to these EA2 events; design principles to minimise the responses; and tools and techniques to manage these responses</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Policy &amp; Rationale for IM, HC &amp; ERA,</li> <li>• EA2 threats and examples,</li> <li>• Theory &amp; experimental methods for Shock initiation, cook-off and deflagration to detonation transition,</li> <li>• Advances in formulation and processing for EA2 - understand the pertinent issues facing the formulator when optimising for performance and safety,</li> <li>• EA2 design principles for warheads, rocket motors and pyrotechnic devices – energetic materials structural design, mitigation features,</li> <li>• Consideration of munitions safety as a through life and systems approach, including threat hazard analysis, consequence modelling, and a warfighter perspective of operational imperatives balanced against safety.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year



# Defence College for Military Capability Integration (DCMCI)

## DIGITAL BUSINESS STRATEGY

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
Digital Business Strategy will equip you with the knowledge and skills to develop and review an Information System/Information Technology/ Digital Business Strategy to support an organisation's business goals, including digital transformation, and the development of plans to drive forward and manage that strategy within an organisational framework.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Digital business strategy,</li> <li>• Digital technologies and digital transformation,</li> <li>• Strategy development and analysis,</li> <li>• Strategy analysis tools,</li> <li>• Alignment and co-evolution of organizational and digital business strategies,</li> <li>• Digital platforms.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days plus 7 weeks online	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## ELECTRO-OPTIC AND INFRARED SYSTEMS 1

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>The field of electro-optic and infrared (EO/IR) technology continues to progress rapidly. EO/IR systems are commonplace in both civil and military applications and as the technology matures their capability continues to grow and their cost begins to come down.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Simple radiometry and power calculations,</li> <li>• Signature generation (solid and gaseous),</li> <li>• Contrast,</li> <li>• Atmospheric effects,</li> <li>• Optical systems,</li> <li>• Detector type (thermal, photon, one- and two-dimensional arrays, fibre sensors),</li> <li>• Cooling requirements,</li> <li>• Detector performance characteristics,</li> <li>• Simple electronic processing,</li> <li>• Display options,</li> <li>• Electro-optic and infrared seeker systems,</li> <li>• Countermeasures (including stealth) and counter-countermeasures,</li> <li>• Digital image processing.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## ELECTRO-OPTIC AND INFRARED SYSTEMS 2

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The field of electro-optic and infrared (EO/IR) technology continues to progress rapidly. This course is designed to cover more advanced application of EO/IR technology and will enable the student to understand its importance in the context of the wider defence system.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Advanced radiometry and power calculations,</li> <li>• Modulation transfer function,</li> <li>• Minimum resolvable temperature difference,</li> <li>• Advanced digital image processing,</li> <li>• Laser systems (principles and applications),</li> <li>• Laser directed energy weapons,</li> <li>• Laser countermeasures,</li> <li>• Electro-optic protection measures</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## ELECTROMAGNETIC PROPAGATION AND DEVICES

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course will provide you with an understanding of electromagnetic propagation, antennas and devices relevant to military sensor, communications and electronic warfare systems.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Course introduction: course structure, aims and objectives,</li> <li>• Information resources: computer centre, library, information retrieval,</li> <li>• Propagation: radio propagation, reflection, refraction, multipath, fading, attenuation, ionosphere propagation, troposcatter, anomalous propagation,</li> <li>• Antennas: fundamental antenna concepts and definitions; impedance match, radiation patterns, directivity, gain, polarization, axial ratio, EIRP, effective aperture, noise temperature, etc.</li> <li>• Overview of antenna types for communications and radar applications including wire antennas, aperture antennas, reflector antennas, low profile and microstrip antennas,</li> <li>• Antenna arrays: introduction to phased array theory, types of antenna array, feed network design, beam steering and radiation pattern shaping,</li> <li>• Electromagnetic devices: high power tubes including magnetron, coaxial magnetron, Klystron, Extended Interaction Klystron and Travelling Wave Tube Amplifier,</li> <li>• Guided waves: waveguides, coaxial lines, microstrip and other RF planar transmission line structures,</li> <li>• RF and microwave power dividers, combiners and couplers active solid-state devices: RF diodes and transistors and their application in amplifiers and oscillators, ferrite non-reciprocal devices (circulators and isolators),</li> <li>• PIN diode switches, modulators and phase shifters.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		10 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## EMERGING TECHNOLOGY MONITORING

**Course No: -**

**Online**

Aim of Course	Outline of Syllabus	Remarks
Through covering topics such as emerging hardware, software, communication technologies and associated ICT products, this course will enable you to provide an on-going assessment of their relevance and potential value to the organisation.	<p>Topics covered:</p> <p>Generic methods and tools:</p> <ul style="list-style-type: none"> <li>• Horizon scanning,</li> <li>• Predictive methods,</li> <li>• Strategic assessment of new technologies,</li> <li>• Evaluation,</li> <li>• Maintaining personal awareness.</li> </ul> <p>Emerging technologies:</p> <ul style="list-style-type: none"> <li>• A selection of currently relevant technologies will be studied.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year



# Defence College for Military Capability Integration (DCMCI)

## EXPERIMENTATION ANALYSIS AND TRIALS FOR SIMULATION

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The course is delivered as a 5-day face-to-face taught course comprising a mixture of academic lectures, visiting speakers from MOD and defence industry, laboratory practicals and group discussions.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Experimental Design including sampling and ethical considerations,</li> <li>• Methodology and analysis of statistical data (Inference, ANOVA and Regression),</li> <li>• Definition, Execution, Analysis, Present and Critical assessment of simulation based experimentation and trials reports,</li> <li>• Visiting speakers from MOD and Defence Industry as appropriate to complement coverage of:</li> <li>• Integrated Test Evaluation and Acceptance and planning (ITEAP),</li> <li>• Simulation Experimentation.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## EXPLOSIVES AND THE ENVIRONMENT

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
This course provides a comprehensive overview of the behaviour of explosives in the environment and their pollutant linkages.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• The use of explosives in the environment,</li> <li>• The effects on the environment,</li> <li>• Environmental risk assessment of explosives,</li> <li>• Contaminated air, land and water,</li> <li>• Soil systems and sampling techniques,</li> <li>• Environmental issues through life of explosives.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## FAILURE OF STRUCTURAL MATERIALS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This three-day introductory course provides engineers with a fundamental understanding of how stresses and strains develop in materials and components, and how these can lead to different modes of structural failure.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Stress, strain, and material response under tension, compression, and torsion,</li> <li>• Structure of materials and influence on mechanical behaviour,</li> <li>• Experimental stress analysis techniques and laboratory demonstration,</li> <li>• Mohr's circles for stress and strain,</li> <li>• Criteria for predicting ductile and brittle failure,</li> <li>• Instability and buckling mechanisms,</li> <li>• Fundamentals of fatigue and fatigue-life estimation,</li> <li>• Introduction to fracture mechanics and its applications,</li> <li>• Behaviour of composite and lightweight materials,</li> <li>• Corrosion and stress interactions,</li> <li>• Materials selection for structural performance and durability.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		3 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## FIGHTING VEHICLE DESIGN

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This five-day course provides a fundamental understanding of the engineering principles and design considerations underpinning the development of modern armoured fighting vehicles (AFVs), from protection and mobility to weapons, power, and crew integration.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• AFV design principles and capability trade-offs,</li> <li>• Armour design, materials, and ballistic protection,</li> <li>• Attack mechanisms: kinetic energy, shaped charge, and IED effects,</li> <li>• Mine and blast protection strategies and structural design,</li> <li>• Mobility, terramechanics, and suspension systems,</li> <li>• Propulsion, power requirements, and energy management,</li> <li>• Transmission and steering technologies,</li> <li>• Vehicle protection, defensive-aid and signature-reduction systems,</li> <li>• Radar, sensor, and surveillance system integration,</li> <li>• Vehicle systems integration and packaging exercise,</li> <li>• Human factors, ergonomics, and crew layout considerations,</li> <li>• Health and Usage Monitoring Systems (HUMS) and condition assessment.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## FIXED WING AEROMECHANICS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
This course will provide you with an understanding of the principles, concepts and analysis techniques of fixed-wing platforms.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>Aerodynamics: Fundamental definitions; basic fluid dynamics; basic aerodynamics; the origins of lift; drag subsonic flight speeds; compressible flow; transonic flight; supersonic flight; drag reduction in high-speed flight.</li> <li>Aerostructures: History of aircraft structural design developments; fundamental aerospace stress and structural analysis methods; structural layout methods; structural loads.</li> <li>Flight mechanics 1: Performance; airspeeds; cruise performance; mass definitions; climbing and descending flight; manoeuvres; take-off and landing; energy-height concept.</li> <li>Flight mechanics 2: Trim, stability and control; longitudinal static stability; lateral/directional static stability; lateral dynamic stability; control methods.</li> <li>Tutorials.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year



# Defence College for Military Capability Integration (DCMCI)

## FOUNDATIONS OF CYBER

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course aims to develop an understanding of the wider context of cyber within an organisation. It will provide a contextual link between the management and governance of an organisation and the organisation's cyber requirements, and will examine the operational aspects of cyber, information assurance and security.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Course structure and the cyber professional,</li> <li>• Cyber overview,</li> <li>• Enabling technologies and core terminology overview,</li> <li>• Cyber strategy overview,</li> <li>• Research methods, learning and study skills.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## FOUNDATIONS OF MODELLING AND SIMULATION

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of the course is to provide an overview of live, constructive and virtual simulation for those members of the defence community who require an introduction to this area of technology.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• The general principles of modelling and simulation,</li> <li>• The role of modelling and simulation in supporting Defence decision making, training and analysis,</li> <li>• The typical components of M&amp;S systems,</li> <li>• The technologies of live, constructive and virtual simulation and their Defence applications,</li> <li>• An introduction to defence synthetic environments,</li> <li>• Organisations involved in Defence M&amp;S, both in the UK and elsewhere,</li> <li>• Practicals hands-on with different Defence M&amp;S systems.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## FUNDAMENTALS OF BALLISTICS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course takes you through the fundamental principles of ballistics for ammunition design. The teaching is conducted in a military environment using static displays and the explosive range to aid the teaching environment.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Internal ballistics,</li> <li>• Intermediate ballistics,</li> <li>• External ballistics,</li> <li>• Rocket propulsion,</li> <li>• Sabot design,</li> <li>• Charge and shell design,</li> <li>• Shell blast and fragmentation,</li> <li>• KE ammunition and cannon ammunition.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## GUIDED WEAPONS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The aim of this course is to provide a general overview of guided weapon systems and technology.	Topics covered: <ul style="list-style-type: none"> <li>• Introduction</li> <li>• GW Propulsion – Rockets &amp; Air-Breathers</li> <li>• Aerodynamics</li> <li>• Control</li> <li>• Guidance</li> <li>• Radar Surveillance and Target Acquisition</li> <li>• mmW radar seekers</li> <li>• Electro-optic systems and countermeasures</li> <li>• Laser Principles &amp; Applications</li> <li>• Warheads</li> <li>• Structures &amp; Materials</li> <li>• Aircraft Integration</li> <li>• Airworthiness Issues</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## GUIDED WEAPONS AERODYNAMICS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
A one-week introduction to propulsion and aerodynamic theory, specifically related to guided weapon systems.	Topics covered: <ul style="list-style-type: none"> <li>• Fundamental Definitions</li> <li>• Basic Fluid Dynamics</li> <li>• Hydrodynamics</li> <li>• Basic Aerodynamics</li> <li>• Origins of Lift</li> <li>• Subsonic Drag</li> <li>• Compressible Flow</li> <li>• Transonic Flow</li> <li>• Supersonic Flow</li> <li>• GW Aerodynamics Applications</li> <li>• General Aerodynamics: Supporting tutorials.</li> <li>• Weapon Aerodynamics: Supporting tutorials.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year



# Defence College for Military Capability Integration (DCMCI)

## GUIDED WEAPONS CONTROL AND GUIDANCE

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course will provide you with an understanding of the principles, methods and design of guided weapon autopilot and guidance systems and the interaction between autopilot, guidance and other missile sub-systems.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Introduction to Missile Control and Guidance</li> <li>• Control &amp; Actuation Methods</li> <li>• Missile Instrumentation</li> <li>• Missile Dynamics &amp; Autopilots</li> <li>• Homing Guidance</li> <li>• Target Tracking</li> <li>• Command Guidance</li> <li>• Navigation Guidance</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## GUIDED WEAPONS CONTROL THEORY

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course is specifically designed as an introduction course for the control and guidance module.</p> <p>The course offers a solid foundation of control system theory specifically for Guided Weapon Systems thus incorporating the key assumptions and challenges surrounding guided weapons.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Modelling</li> <li>• S-plane Analysis and Time Response</li> <li>• Frequency Response.</li> <li>• Frequency Response – Case Study.</li> <li>• Root Locus</li> <li>• Compensation</li> <li>• Compensation – Case Study</li> <li>• State Space</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## GUIDED WEAPONS ELECTRO OPTICS AND INFRARED TECHNOLOGY

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
To provide the students with an understanding of the principles, design and analysis of EO/IR and laser technologies. This is in the context of STA and homing and beam-riding methods for GW applications. Students will then be able to relate this to the design and analysis of a GWS.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>EO/IR Theory:           <ul style="list-style-type: none"> <li>» Radiometry and power calculations, signature generation (solid and gaseous) contrast, minimum resolvable temperature difference, atmospheric effects, detector type (thermal, photon, two dimensional arrays, fibre sensors), cooling requirements, simple electronic processing, modulation transfer function, minimum resolvable temperature difference, fundamentals of optical systems, fundamentals of digital image processing, detector performance characteristics, modulation transfer function, laser systems (principles and applications).</li> </ul> </li> <li>EO/IR Application:           <ul style="list-style-type: none"> <li>» EO/IR seeker systems, EO/IR STA systems, Laser-based STA, designation and beam riding emitter and sensor methods.</li> </ul> </li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## GUIDED WEAPONS ELECTRONIC WARFARE

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
To provide the students with an understanding of the principles, design and analysis of the electronic threats to radar and EO/IR systems and how they may be protected.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>RF Countermeasures (including stealth) and counter-countermeasures, RF directed energy weapons, RF protection measures,</li> <li>EO/IR countermeasures (including stealth) and counter-countermeasures, laser directed energy weapons, laser countermeasures and electro-optic protection measures,</li> <li>Missile sensor and airframe damage assessment and impact on kinematic and dynamic performance.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## GUIDED WEAPONS ENERGETICS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
This course provides an understanding of the principles, concepts and techniques of various key facets of GW design, including propellants, explosives, warheads, fuses and terminal effects	Topics covered: <ul style="list-style-type: none"> <li>• Warheads</li> <li>• Non-conventional Warhead Technologies</li> <li>• Explosives</li> <li>• Terminal Effects</li> <li>• Fuses</li> <li>• Rocket Propellants</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year



# Defence College for Military Capability Integration (DCMCI)

## GUIDED WEAPONS POWER ELECTRONICS AND COMMUNICATION SYSTEM

Course No: -

Cranfield University at Shrivenham

Aim of Course	Outline of Syllabus	Remarks
<p>To provide the students with an understanding of the electronics theory required in a Guided Weapon and relate this to the GW power chain, actuation and communications technology and requirements. To also provide students with the necessary understanding of signal processing methods for reliable sensor information and communication signals and the necessary command and control functions.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>Electronics basic principles, fundamentals of electronic circuits and functionality, pulse width, frequency and amplitude modulation methods, DC, AC and 3-phase AC principles, brushed and brushless motors for actuation.</li> <li>Importance of Electrical Power Supplies (EPS) in a GW, role of intelligent and performance enhancement of EPS for a Guided Weapon system, power generation and distribution for a Guided Weapon, EPS design in association to switching characteristics.</li> <li>Probability, random variables, probability distributions, covariance, correlation. Noise sources, noise bandwidth, noise figure, noise temperature. Cascaded networks. Mathematical representation of noise, correlation and convolution, Matched filters, the z-transform. Advantages/ disadvantages of DSP, sampling and quantisation, digital filters, DFT and FFT, the effect of filters on sensor and communications information, DSP applications in communications and radar.</li> <li>Communication methods for short, medium and long-range missile systems. Transmitter and receiver communication system models, multipath effects</li> <li>Command and control for different missile systems and environments.</li> <li>Guided Weapon EPS Design: A MATLAB based tutorial exploring the critical EPS design factors for an air-launched guided weapon system. To consider the EPS performance enhancement and key realisation constraints within the context of GW systems.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## GUIDED WEAPONS PROPULSION

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
Provides you with an understanding of the principles, concepts and techniques of Guided Weapon propulsion.	Topics covered: <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Thermodynamics</li> <li>• Gas Dynamics</li> <li>• Performance Parameters</li> <li>• Flight Mechanics</li> <li>• Introduction to Air-Breathers</li> <li>• Gas Turbine Engines</li> <li>• Rockets</li> <li>• Rocket Design</li> <li>• Introduction to Rocket Propellants</li> <li>• Ramjets</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## GUIDED WEAPONS STRUCTURES, AEROELASTICITY AND MATERIALS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course provides an understanding of the principles, concepts and techniques of various facets of GW design, especially involving the key disciplines of structures, vibrations &amp; aeroelasticity and materials</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>Structures: the structural design of guided weapons; the behaviour of loaded materials; cylinders and spheres; stresses in beams; bending stresses in beams; second moments of area; beam slope and deflection; beams subjected to accelerations; shear stresses on open-section beams; torsion.</li> <li>Vibrations &amp; Aeroelasticity: Sources of vibrations on a GW, aeroelastic effects acting on the guided weapon airframe.</li> <li>Materials: Description of the main failure modes in materials in the guided weapon context; review on composite materials, steels, aluminium alloys and materials for radomes, airframes, nozzles and rocket motor insulation; exploration on the use of radar absorbing materials.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## GUIDED WEAPONS SYSTEMS INTEGRATION

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
This course provides you with the skills and knowledge to create new and manage existing complex weapon systems and their integration.	Topics covered: <ul style="list-style-type: none"> <li>• System of Systems</li> <li>• Physical Integration.</li> <li>• Data Integration</li> <li>• Domain Specific Issues</li> <li>• Integration Facilities</li> <li>• In-service Safety</li> <li>• MTDS/Life Cycle</li> <li>• Trials Planning</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## GUN PROPELLANTS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course will help you develop a comprehensive knowledge and skills on various propellants, raw materials of gun propellants, their properties and function, vulnerability, requirement of novel propellants, internal ballistics, fundamentals of thermodynamics and heat transfer as applied to conventional guns.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Conventional gun propellants: chemical compositions, methods of manufacture and properties,</li> <li>• Next generation propellants: properties and testing,</li> <li>• Combustion and performance of gun propellant,</li> <li>• Internal ballistics,</li> <li>• Heat transfer measurement and correlations,</li> <li>• Gun barrel wear and erosion,</li> <li>• Storage, ageing and surveillance.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year



# Defence College for Military Capability Integration (DCMCI)

## HYPERSONIC GUIDED WEAPONS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The aim of this course is to provide a general overview of hypersonic guided weapon systems and technology; introduce students to the theoretical design of hypersonic guided weapon subsystems; demonstrate how these subsystems form the overall weapon system.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Introduction to Hypersonic Weapons</li> <li>• Aerodynamics</li> <li>• Hypersonic Missile Propulsion</li> <li>• Hypersonic Flight Dynamics and Stability</li> <li>• Guidance, Navigation and Control</li> <li>• Hypersonic Aeromechanics</li> <li>• Hypersonic Electronic Warfare</li> <li>• Hypersonic threats and countermeasures.</li> </ul>	To undertake this course you must have successfully completed the Guided Weapons - Propulsion, Guided Weapons - Aerodynamics and Guided Weapons Control Theory courses

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## INCIDENT MANAGEMENT

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This module will enable you to gain an understanding of threat detection and management at the macro and micro levels. It will develop both the knowledge of strategic business continuity management and introduce practical approaches to identifying, triaging and responding to threats and attacks.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>Incident identification               <ul style="list-style-type: none"> <li>» The role of the security operations centre, Intrusion detection methods and tools.</li> </ul> </li> <li>Incident containment               <ul style="list-style-type: none"> <li>» Intrusion management, Intrusion analysis, monitoring and logging, Evidence preservation.</li> </ul> </li> <li>Incident management               <ul style="list-style-type: none"> <li>» Backup management, Disaster recovery techniques, Business continuity management, Stakeholder management.</li> </ul> </li> </ul>	<p>To undertake this course you must have successfully completed the Guided Weapons - Propulsion, Guided Weapons - Aerodynamics and Guided Weapons Control Theory courses</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days plus 7 weeks online	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## INFORMATION NETWORKS

Course No: -

Cranfield University at Shrivenham

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of this course is to provide the students with an understanding of networks in a modern military electronic sensor or communications system, their vulnerabilities and how they can be protected.</p>	<p>Topics covered</p> <ul style="list-style-type: none"> <li>Communicating data and the function of networks,</li> <li>Military network requirements,</li> <li>Building a local area network (LAN): media, devices and protocols,</li> <li>Internet history, addressing and services, including the role of * Internet authorities and registries,</li> <li>Internet architecture and protocols,</li> <li>IP addresses and domains,</li> <li>Reliable communication,</li> <li>Layered models: The Open Systems Interconnection (OSI) and * Internet models,</li> <li>Wide area networks (WANs) and routing,</li> <li>Network security,</li> <li>Network analysis and monitoring,</li> <li>Wireless networks,</li> <li>Mobile ad hoc networks (MANETs),</li> <li>The World Wide Web(WWW),</li> <li>Network modelling, simulation and emulation.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## INFORMATION OPERATIONS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course equips you with a critical understanding of the opportunities and vulnerabilities faced when planning Information Operations as part of an integrated operation to enhance the overall impact achieved through military action or in planning a full spectrum response against an adversary.</p>	<p>Topics covered:</p> <p>This course approaches the domain of professional practice of Information Operations as the need to change the behaviour of target audiences through the coordination of multiple military and civilian capabilities including emerging cyber based activities.</p> <p>This course will be built on three core foundations:</p> <ul style="list-style-type: none"> <li>• That military actors cannot avoid communicating messages in some form by direct action or inaction,</li> <li>• That when seeking to change the behaviour of a target audience, there is an implicit need to understand that target audience from their own stakeholder perspectives,</li> <li>• In designing an Information Operation to modify the behaviour of a target audience the military planner should be aware of their own personal perspectives, assumptions and values around the target behaviours as well as the perspectives of their host organisation.</li> </ul> <p>These three foundations underpin the course's recognition of the unique context of seeking behaviour modification in a military context. This context is addressed in the course content through coverage of the following areas:</p> <ul style="list-style-type: none"> <li>• Overview of the core concepts of Information Operations, military capabilities and different international approaches to this area of professional practice,</li> <li>• Individual and Group Target Audience Analysis,</li> <li>• Theories of behavioural and social change.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days plus 7 weeks online	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## INTEGRATED CAPABILITY MANAGEMENT (ADVANCED) COURSE - ICM(A)

**Course No: -**

**Online**

Aim of Course	Outline of Syllabus	Remarks	
<p>This course identifies the senior management and leadership challenges and opportunities facing those responsible for the implementation of the significant changes which have been initiated by the MOD with regard to defence acquisition.</p>	<p>Topics covered:</p> <p>Course Overview. Including a discussion-driven examination of:</p> <ul style="list-style-type: none"><li>• The goals and structure of the new defence acquisition processes.</li><li>• The role of the National Armaments Director and the Military Strategic Headquarters.</li><li>• Key principles behind defence reform and their application in the development of structures and approaches.</li><li>• The behavioural and cultural dimensions of organisational changes and their influence on the successful implementation of the new procedures.</li></ul> <p>Strategic Context. An investigation of:</p> <ul style="list-style-type: none"><li>• The effect of strategy, policy, national and international issues on defence acquisition.</li><li>• The processes by which critical issues are assessed to determine national priorities.</li></ul> <p>Planning Processes. A practical analysis of:</p> <ul style="list-style-type: none"><li>• The translation of Strategic Direction into Prioritised Strategic Outcomes.</li><li>• The Design, Development and Delivery of an Integrated Force to achieve Strategic Outcomes.</li><li>• The relationship between finance and defence planning assumptions.</li><li>• Capability Coherence.</li><li>• Implications and practicalities of Lead Service arrangements.</li><li>• The management of interfaces and dependencies required to achieve the Strategic Requirement.</li></ul> <p>Managing. An evaluation of:</p> <ul style="list-style-type: none"><li>• Operating framework.</li><li>• The role of Portfolio management.</li><li>• The role of Programme management.</li><li>• The role of Sponsors, Portfolio Directors and Senior Responsible Owners.</li><li>• Process by which MOD Allocates funding from HMT to deliver agreed Defence Outputs.</li><li>• Risk, Issue and Opportunity Management.</li><li>• Holding to Account.</li><li>• The role of the NAD.</li></ul>		
Rank Range	Duration	Qualifications gained	Frequency
	5 days	CPD	3 per year



# Defence College for Military Capability Integration (DCMCI)

## INTRODUCTION TO EXPLOSIVES ENGINEERING

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
This course, which is taught at MSc standard, will provide a through life perspective of explosives ordnance engineering.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Introduction to achieving desired target effects,</li> <li>• Initiation mechanism and the differences between deflagration and detonation,</li> <li>• Introduction to primary and secondary explosives, propellants and pyrotechnics and their application in military environments,</li> <li>• Relevance of safety, legislation, and environmental requirements,</li> <li>• Introduction to properties of explosions,</li> <li>• Workshops that focus on explosive ordnance engineering to support learning.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## LIGHT WEAPON DESIGN

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
This five day intensive course focuses on the fundamental principles of small arms design.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Operation and safety,</li> <li>• Ballistics,</li> <li>• Hit probability,</li> <li>• Operating mechanisms of rifles and machine guns,</li> <li>• Firing mechanisms,</li> <li>• Gun springs,</li> <li>• Extractor design,</li> <li>• Sighting systems,</li> <li>• Introduction to grenades,</li> <li>• Introduction to less lethal weapons systems.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## MANUFACTURE AND MATERIALS PROPERTIES OF EXPLOSIVES

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The aim of this course is to provide a critical understanding of the properties of explosive materials and their methods of synthesis and manufacture.	<p>Topics covered:</p> <p>Chemistry of explosive molecules and associated materials</p> <ul style="list-style-type: none"> <li>• Basic chemistry of nitration,</li> <li>• Synthesis examples of RDX, HMX, NC, NG, TNT, Lead Azide/Styphnate.</li> <li>• Basic stability/compatibility (to be extended in testing module),</li> <li>• Polymer chemistry.</li> </ul> <p>Material science of explosive materials</p> <ul style="list-style-type: none"> <li>• Basic hazard/performance properties,</li> <li>• Crystal properties,</li> <li>• Binder properties,</li> <li>• Mechanical properties.</li> </ul> <p>Engineering of the manufacture of explosives</p> <ul style="list-style-type: none"> <li>• Filling process,</li> <li>• Plant design, safety, storage,</li> <li>• Quality control,</li> <li>• Melt cast compositions,</li> <li>• Polymer Bonded Explosives,</li> <li>• Materials Modelling.</li> </ul> <p>Manufacturing Health &amp; Safety</p> <ul style="list-style-type: none"> <li>• Toxicity &amp; Health Effects,</li> <li>• Environmental Awareness,</li> <li>• Legislation.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## MARITIME UNDERWATER MUNITIONS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course offers comprehensive insights into the principles of maritime and underwater warfare. Delivered by Cranfield University staff and guest speakers, the course includes a combination of informative lectures, collaborative group workshops, and a maritime-related field visit.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Principles of underwater warfare,</li> <li>• Engineering materials for underwater munitions,</li> <li>• Physics of underwater explosions,</li> <li>• Explosive materials used in underwater munitions,</li> <li>• Safe storage and carriage of munitions at sea,</li> <li>• Countering threats at sea,</li> <li>• Rendering safe procedures for underwater IEDs and mines,</li> <li>• History of sea dumped munitions,</li> <li>• Geopolitical impact of dumped munitions,</li> <li>• Environmental impact of underwater munitions,</li> <li>• Detection, monitoring and handling of sea dumping munitions,</li> <li>• Safety implications of munition clearance,</li> <li>• Remediation of sea dumped munitions,</li> <li>• Emerging threats against the future of underwater munition capability,</li> <li>• Group workshops and external visit to enhance student learning.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## MECHATRONICS FOR UAV

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of this short course is to enhance practical skills and hands-on embedded hardware development and programming experience on small UAV and similar robotic platforms. Short and concise taught sessions will be focused on state-of-the-art technologies in modern autonomous UAV system architectures, system design processes, applications, resource procurements and testing methods. Practical sessions and demonstrations comprise majority of the course with real-world application relevance. You will gain hands-on experience on designing, troubleshooting, software development and testing.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Introduction to analog/digital electronics basics</li> <li>• Embedded systems</li> <li>• Passive and active sensors with demonstration</li> <li>• UAV processing electronics</li> <li>• Embedded software</li> <li>• Actuators and control</li> <li>• Wireless communication protocols, security, and hardware overview</li> <li>• Quadcopter systems design</li> <li>• Autonomous control algorithms</li> <li>• Control system design - Basic flight control, obstacle detection, and surveillance</li> <li>• Stability control: Kalman filter</li> <li>• Autonomous UAV control strategies: demonstrations</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year



# Defence College for Military Capability Integration (DCMCI)

## METHODS AND TOOLS FOR INFORMATION SYSTEMS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
Information Systems Development can be a time consuming and complex process. On this course you will be exposed to the principles and concepts underlying the various process models suggested for developing information systems. We will examine the different philosophies that underlie different systems development methodologies, and examine why the systems development process can sometimes breakdown.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Software Development Lifecycle (SDLC) Models,</li> <li>• Systems thinking,</li> <li>• IS development methodologies: Hard, Soft, Agile.</li> <li>• Information Systems Failure,</li> <li>• Alternative approaches to IS development: Enterprise Resource Planning Systems, Commercial, off-the-shelf (COTS) -based development.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days plus 7 weeks online	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## MILITARY AIRCRAFT SYSTEMS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The course aims to expand students working knowledge of military airframe systems, focusing upon their roles, technology and integration with modern military aircraft platforms.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Actuation, Control surfaces and Data Transfer</li> <li>• Aviation Fuels &amp; Fuel Systems</li> <li>• Landing gear design</li> <li>• Hydraulic/Pneumatic systems</li> <li>• Electrical systems</li> <li>• Pneumatic systems</li> <li>• Environmental control systems</li> <li>• Emergency systems and De-Icing &amp; Anti-Icing Systems</li> <li>• Design exercise</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## MILITARY AVIONICS - STA, COMMUNICATIONS AND NAVIGATION

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
Current military aircraft include a comprehensive range of displays, weapons systems, navigation equipment, sensors, communications and electronic warfare systems which are crucial to their lethality and survivability.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Military Airborne Radar</li> <li>• Airborne radar EW</li> <li>• Digital and Satellite Communications</li> <li>• Communications EW</li> <li>• Airborne EO/IR Sensors</li> <li>• Laser Applications and DEW</li> <li>• Displays (head up/down, helmet)</li> <li>• GPS</li> <li>• Inertial Navigation</li> <li>• Terrain Based Navigation</li> </ul> <p>Introduction – the need for terrain based systems; methods – TerCoM (Terrain Contour Matching), DSMAC (Digital Scene Matching Area Correlation), TCM (Terrain Characteristic Matching)</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## MILITARY ELECTROMAGNETIC WARFARE

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>A short course designed to provide defence analysts or military weapons electronic engineers with a foundation in the techniques used in electromagnetic warfare (EW). The material covered will encompass applications to communication systems, radar systems, and electro-optic systems.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>EW applications to communication systems, radar systems, and electro-optic systems.</li> <li>The communications element of the course will examine the use of modern signal-processing techniques as applied to the EW aspects of system design.</li> <li>It will review specific ECM/EPM techniques such as spread spectrum, jamming and adaptive antennas and cover their use in connection with typical military communication systems.</li> <li>The radar and electro-optic elements of the course will examine the use of EW techniques in the suppression of the radar and electro-optic sensors that are used for target detection and weapon guidance. For this, the principles underlying radar sensors, electro-optic sensors and weapon guidance will be addressed, and then radar elint/ESM and radar and electro-optic ECM/EPM will be discussed.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## MISSILE SYSTEMS DESIGN

Course No: -

Cranfield University at Shrivenham

Aim of Course	Outline of Syllabus	Remarks
Comprehend the systems design principles of all major classes of modern missiles in the land, sea and air domains, and the parametric trade-offs associated with missile system design.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Systems Design: Multi-disciplinary optimization of all relevant GW system and sub-system technology areas, datalinks.</li> <li>• Hydrodynamics: Buoyancy, virtual mass effects, cavitation and ventilation.</li> <li>• Sea Systems: – Naval attack, naval defence, torpedo systems, underwater sonar, underwater propulsion, tutorials.</li> <li>• Land Systems: Guided shells, rockets &amp; mortars, ballistic missiles, cruise missiles, anti-tank GW, surface-air missiles, ballistic missile defence, tutorials.</li> <li>• Air Systems: Air-air weapons, air-surface weapons, UAV-mounted GW and UCAVs, tutorials.</li> <li>• Guided Weapon Parametric Study: Introduction to the parametric study exercise with reference to background theory. Introduction and demonstration of supporting software.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		10 days	CPD	1 per year



# Defence College for Military Capability Integration (DCMCI)

## MODELLING & SIMULATION TECHNIQUES AND ACQUISITION

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course aims to give you an introduction to the wide range of modelling and simulation techniques used in Defence applications, from the basic underpinning principles of their construction through to the challenges and issues in their procurement, acquisition and capability management.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Verification and Validation of Defence M&amp;S solutions</li> <li>• Different approaches for implementing Defence M&amp;S solutions</li> <li>• Intelligent systems techniques and issues</li> <li>• Discrete Event Simulation</li> <li>• System Dynamics modelling</li> <li>• Big Data and Analytics</li> <li>• Software Development, Implementation and Management</li> <li>• Acquisition of Defence M&amp;S</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## MUNITIONS AND TARGET RESPONSE

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The aim of the course is to provide you with the skills and knowledge to analyse targets and defeat mechanisms.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Introduction to warheads and ammunition;</li> <li>• Introduction to armour design;</li> <li>• Wound ballistics and human vulnerability;</li> <li>• Fragmentation theory and warheads;</li> <li>• Small arms and cannon ammunition;</li> <li>• Shell and projectile design;</li> <li>• Target penetration and shock events covering subsonic to hydrodynamic regimes;</li> <li>• Shaped charge and EFP warhead design;</li> <li>• KE ammunition and penetrator design;</li> <li>• Mine threat and damage mechanisms;</li> <li>• Complex armour, spacing, obliquity, disposition and failure mechanisms;</li> <li>• Characterisation and testing of materials for high strain rate loading;</li> <li>• Blast effects, blast-structure interactions including internal detonations;</li> <li>• Terminal ballistics demonstration</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		10 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## NETWORKED AND DISTRIBUTED SIMULATION

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This five-day course introduces the main ways in which defence simulation systems make use of networking technology.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Fundamentals of computer communications, networking, LANs and WANs,</li> <li>• Main hardware components of computer networks (bearer media, interfaces, switches, routers, etc),</li> <li>• The ISO OSI architecture and network protocols, especially TCP/IP,</li> <li>• The management, configuration and testing of networks for distributed simulation (including DSEEP),</li> <li>• Networking standards in defence simulation (eg DIS, HLA, TENA),</li> <li>• Strategy for the development and use of networked and distributed simulations and synthetic environments in UK and allies,</li> <li>• Practical exercises in design, construction and operation of LAN and WAN based networked simulations using the Defence Academy Simulation and Synthetic Environment Laboratory.</li> </ul> <p>Where student numbers permit, a larger practical distributed simulation exercise is normally held subsequently to the course itself, as an additional follow-on activity of one to two weeks duration. This provides an opportunity to practice and confirm instruction by linking the SSEL via WAN to a number of off-site facilities. While this exercise is mainly intended as an advanced module in NDS for registered postgraduate students, short course participants are also welcome to participate.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## NETWORKED AND DISTRIBUTED SIMULATION EXERCISE

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of this course is to allow those who have completed the pre-requisite Networked and Distributed Simulation course to work as a group to design, setup and operate a basic battlespace Synthetic Environment (SE) exercise employing LAN and WAN distributed simulation technology.</p>	<p>Topics covered:</p> <p>A collective group project to:</p> <ul style="list-style-type: none"> <li>Design, build, test and operate a basic distributed battlespace exercise composed of a heterogeneous mix of simulation systems, in order to conduct a series of experimental runs to generate and collect data relevant to a given study problem.</li> <li>Conduct post-exercise analysis and review of the data collected in the experiments, describing the results obtained and delivering a critical technical appraisal of the project and lessons learned.</li> </ul> <p>Note that the Networked and Distributed Simulation Exercise typically requires physical attendance at Shrivenham for two weeks.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		10 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## OFFENSIVE CYBER OPERATIONS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
Cyberwarfare in Intelligence and Military Operations will equip you with a critical understanding of the opportunities and vulnerabilities faced when planning to deploy cyber capabilities, as part of an integrated operation to enhance the overall impact achieved through military action, or in planning a full spectrum response against a deliberate cyber intrusion which was intended to cause damage, disruption or destruction against our systems.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Current doctrine, policy and strategies - assessment</li> <li>• Constructs, concepts, cases of – critical review</li> <li>• Existing Academic Theories and their applicability In Cyberspace – assessment</li> <li>• Military Planning Considerations and their applicability in Cyberspace – assessment</li> <li>• Evolving Technologies &amp; Cyberspace Landscape - assessment</li> </ul>	Due to the nature of the subject matter in this course, a UK or 5EYES enhanced security clearance will be required.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days plus 7 weeks online	CPD	1 per year



# Defence College for Military Capability Integration (DCMCI)

## ORDNANCE, MUNITIONS AND EXPLOSIVES SAFETY: AWARENESS

**Course No: -**

**Hybrid**

Aim of Course	Outline of Syllabus	Remarks
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This course content is primarily designed to complement the Ministry of Defence OME Safety Head of Profession Competency Framework at Awareness level.

Topics covered:

The course touches upon the following subjects from an MOD perspective:

- Health and safety at work
- Health and safety organisation
- An introduction to explosives
- Hazards to and from OME
- Competency levels within OME
- Accidents involving OME
- The storage of OME
- The transportation of OME
- General safety and security of OME
- Live firing demonstration (where practical).

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		2 days	CPD	2 per year

# Defence College for Military Capability Integration (DCMCI)

## PROFESSIONAL ISSUES

**Course No: -**

**Online**

Aim of Course	Outline of Syllabus	Remarks
The course will promote awareness of legal and regulatory issues which affect information systems professionals, and introduce the professional bodies of relevance to such professionals.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>Legislation and regulations of relevance to the information systems professional (e.g. data protection, copyright, computer misuse etc),</li> <li>Professional responsibilities, professional societies and codes of practice (e.g. those of BCS),</li> <li>Contemporary issues relating to information capability management.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## PROGRAMME AND PROJECT MANAGEMENT FOR INFORMATION SYSTEMS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
As dependence on information systems grows, the ability to identify and implement change is becoming increasingly important to organisations. This course addresses the need for increasing capability in project management, in order to implement the required system changes.	Topics covered: <ul style="list-style-type: none"> <li>• Portfolio management,</li> <li>• Programme management,</li> <li>• Project management,</li> <li>• Project teams, leadership and management.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days plus 7 weeks online	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## PROPULSION SYSTEMS

Course No: -

Cranfield University at Shrivenham

Aim of Course	Outline of Syllabus	Remarks
<p>This course will provide students with an understanding of the design and performance of aviation propulsion systems for fixed-wing, rotary-wing and UAV applications.</p>	<p>Topics covered:</p> <p>Gas turbine fundamentals</p> <ul style="list-style-type: none"> <li>Basic principles; thermodynamics; gas dynamics; dimensional analysis; ideal (Joule) gas turbine cycle.</li> </ul> <p>Gas turbine components</p> <ul style="list-style-type: none"> <li>Fixed-wing intakes; rotary-wing intakes; centrifugal-flow compressors; axial-flow compressors; combustion chambers; axial-flow turbines; nozzles.</li> </ul> <p>Aviation internal combustion engines</p> <ul style="list-style-type: none"> <li>Petrol engine (Carnot) cycle and applications, diesel engine cycle and application.</li> </ul> <p>Applications</p> <ul style="list-style-type: none"> <li>Aircraft propulsion; turboshaft cycle; turbojet cycle; turbofan cycle; the engine running line. STOVL aircraft applications. IC engine applications.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## PYROTECHNICS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
To provide an understanding of basic pyrotechnic reactions, the concept of required effects, physical properties of pyrotechnic compositions, simple examples and the associated hazards. This leads to more complex applications of pyrotechnics; provide an understanding of how pyrotechnics and pyrotechnic munitions are manufactured and work, advanced electromagnetic effects, current pyrotechnic advances and research, hands on experience of laboratory manufacture and the demonstration of the manufactured devices.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>Differences between pyrotechnics and explosives/propellants,</li> <li>The combustion reaction; heats of reaction, rates of reaction, heat flow in reacting body,</li> <li>Required effect, heat, light, smoke, gas,</li> <li>Pyrotechnic mixtures, selection of ingredients, laboratory manufacture and hazards,</li> <li>Practical – manufacture of pyrotechnics and demonstration,</li> <li>Pyrotechnic munition design,</li> <li>Industrial production of pyrotechnics,</li> <li>Storage and ageing of pyrotechnics,</li> <li>Current topics in pyrotechnics.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year



# Defence College for Military Capability Integration (DCMCI)

## RADAR ELECTRONIC WARFARE

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The course will start with an outline of sensitivity, resolution, and discrimination to establish the capabilities and applications of radar electronic warfare.	Topics covered: <ul style="list-style-type: none"> <li>• Radar ES</li> <li>• Radar electronic attach (EA)</li> <li>• Radar electronic protection (EP)</li> <li>• Low probability of intercept radar waveforms</li> <li>• Jamming of SAR systems</li> <li>• Anti-Radiation Missile Seekers</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## RADAR PRINCIPLES

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
This course will provide you with an understanding of the fundamental principles, design and analysis of radar systems.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Radar detection theory</li> <li>• Pulsed Radar Parameters</li> <li>• Losses</li> <li>• CW and FM ranging</li> <li>• Radar cross-section</li> <li>• Pulse compression</li> <li>• Clutter</li> <li>• CFAR</li> <li>• Pulse-doppler radar</li> <li>• MTI radar</li> <li>• GMTI</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## REAL-TIME GRAPHICS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
Real-Time Graphics introduces the principles, concepts and techniques behind modern 3D computer graphics solutions. It addresses the fundamentals behind their design and operation, including the use of scene graphs, graphics libraries and relevant standards.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Coordinate systems and transforms,</li> <li>• 3D Printing and CAD Modelling,</li> <li>• Rendering techniques,</li> <li>• Graphics application programming,</li> <li>• Graphics hardware and architectures,</li> <li>• Games technologies and engines,</li> <li>• Applications of real-time computer graphics, including standards.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## ROCKET MOTORS AND PROPELLANTS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The Rocket Motors course provides an understanding of the principles of rocket propulsion and rocket propellant composition and performance.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>Rocket Propulsion:</li> <li>Principles of reaction propulsion</li> <li>Fundamental principles of applied thermodynamics and gas dynamics</li> <li>Mach number, flow function, flow area relationship</li> <li>Convergent-divergent nozzles</li> <li>Definitions of propulsion performance criteria</li> <li>Internal ballistics of solid propellant rocket motors</li> <li>Charge design for particular applications</li> <li>Rocket motor components</li> <li>Thrust vector control methods</li> <li>Velocity and range equations for accelerating and cruising projectiles.</li> </ul> <p>Chemistry:</p> <ul style="list-style-type: none"> <li>Principles of rocket propellant composition</li> <li>Properties and applications of cast and extruded double base propellants</li> <li>Properties and applications of rubbery composite propellants</li> <li>Properties and applications of liquid monopropellants and bipropellants</li> <li>New developments in propellant composition and formulation</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## ROTARY WING AEROMECHANICS

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
This course will provide students with an understanding of the principles, concepts and analysis techniques of rotary-wing (RW) platforms.	Topics covered: <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Rotor axial flight performance</li> <li>• Rotor control</li> <li>• Rotor forward flight</li> <li>• Rotary wing aircraft performance</li> <li>• RW aircraft trim, stability and control</li> <li>• Cross-couplings and vibrations</li> <li>• Transmissions</li> <li>• Tutorials, practical demonstrations and a case study.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year



# Defence College for Military Capability Integration (DCMCI)

## SAFETY ASSURANCE FOR EOE

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
Students will learn how to apply appropriate safety assurance for activities involving explosives and ordnance.	Topics covered: <ul style="list-style-type: none"> <li>• Key safety legislation and regulations,</li> <li>• Threats and failure modes of munitions,</li> <li>• Safety assessments,</li> <li>• Complexity of safety protocols.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## SIGNAL PROCESSING, STATISTICS AND ANALYSIS

Course No: -

Cranfield University at Shrivenham

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of this course is to provide the students with the essential signal analysis and statistical tools used in communications and sensor systems. The main areas covered are analogue and digital signal processing, statistics and the detection of signals in noise.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>Statistics and Noise: Probability, random variables, probability distributions, covariance, correlation. Noise sources, noise bandwidth, noise figure, noise temperature. Cascaded networks. Mathematical representation of noise,</li> <li>Analogue and Digital Signal Processing 1: Analogue methods used to describe, analyse and process signals and the behaviour of systems: Fourier and Laplace transforms, correlation and convolution, impulse response and transfer function,</li> <li>Analogue and Digital Signal Processing 2: Matched filters, the z-transform. Advantages/ disadvantages of DSP, sampling and quantisation, digital filters, DFT and FFT, DSP applications in communications and radar,</li> <li>Decision Theory: Hypothesis testing, probabilities of false alarm and detection, Bayesian systems, error probability and bit error rate, receiver operating characteristics.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## SOCIAL TECHNOLOGIES

Course No: -

Cranfield University at Shrivenham

Aim of Course	Outline of Syllabus			Remarks
This course will allow students to develop an understanding of the impact of social media, from the perspective of security, intelligence and cyber influence.	Topics covered:			
	Overview			
	<ul style="list-style-type: none"><li>• What are social technologies and media,</li><li>• Development and horizon scanning,</li><li>• Social interaction, E-inclusion and the citizenship agenda &amp; other uses of social media – education, scenario planning, simulation and design social technologies and security,</li><li>• Impact on productivity and working practices &amp; understanding generational differences,</li><li>• Social technologies and OSINT.</li></ul>			
	Security awareness and policies			
	<ul style="list-style-type: none"><li>• Social networks and information exploitation,</li><li>• Personas, identity, privacy and anonymity,</li><li>• Information leakage,</li><li>• Social technologies and intelligence,</li><li>• Open source exploitation,</li><li>• Challenges for situational awareness,</li><li>• Operational security (OPSEC).</li></ul>			
	Social technologies and influence			
	<ul style="list-style-type: none"><li>• Social marketing,</li><li>• Mobility and pervasiveness,</li><li>• Persuasive technologies,</li><li>• Terrorism and social media,</li><li>• Social mobilisation,</li><li>• Two-way communication and dialogue,</li><li>• Second life and alternative worlds,</li><li>• Data analytics &amp; big data driving behavioural profiling,</li><li>• Automated tools and techniques,</li><li>• Influence and Information Operations.</li></ul>			
Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days plus 7 weeks online	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## SOFTWARE ENGINEERING (IS)

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course looks at Systems Modelling, completing a syllabus considering Software Engineering from various perspectives in the System Architectures and the Methods and Tools for Information Systems Development courses.</p>	<p>Topics covered:</p> <p>Software engineering foundations</p> <ul style="list-style-type: none"> <li>• Introducing the problem,</li> <li>• Introduction to software engineering; software product life cycles and software engineering, processes,</li> <li>• Requirements analysis,</li> <li>• Software design, implementation, reuse and maintenance,</li> <li>• Selecting a programming language.</li> </ul> <p>Software modelling techniques</p> <ul style="list-style-type: none"> <li>• Justification and benefits,</li> <li>• Case study: unified modelling language,</li> </ul> <p>Building confidence (verification, validation, testing, analysis, QA, reviews)</p> <ul style="list-style-type: none"> <li>• Reviews and inspections,</li> <li>• Software testing.</li> </ul> <p>Human computer interaction</p> <ul style="list-style-type: none"> <li>• Foundations and justifications for good human computer interface (HCI) design,</li> <li>• Modelling and design tools for HCI.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days plus 7 weeks online	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## SURVIVABILITY

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This one week course provides the underpinning science to aspects of military survivability pertaining to blast, and ballistic impact including armour technology. Ballistic and explosive effects demonstrations are included.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Extent and constraints on survivability and the requirements of survivability within different theatres,</li> <li>• Terminal ballistics and armour materials, hydrodynamic and sub-hydrodynamic penetration,</li> <li>• Penetration mechanisms and design against penetration,</li> <li>• Choice of materials against protection and fabrication criteria,</li> <li>• Armour systems including complex armour, body armour and protection against mine threats. prediction of armour performance including analytical and numerical methods survival in depth and the layered approach,</li> <li>• Electronic systems for protection including battlefield ID, defensive aids suites and electro optic protection,</li> <li>• Human vulnerability and the mitigation of threats,</li> <li>• Integrated survivability and its analysis including analytical methods, modelling and simulation,</li> <li>• Survivability against Chemical Biological Radiological and Nuclear threats including typical threats, detection, individual protection and collective protection,</li> <li>• An appreciation of of the influence of autonomy in the survivability domain.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year



# Defence College for Military Capability Integration (DCMCI)

## SYNTHETIC ENVIRONMENTS AND VIRTUAL SIMULATION

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course enables you to understand the issues and challenges in specifying, designing and constructing real-time computer graphics systems, together with their components, with particular reference to interactive virtual environments and simulators as used in Defence.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Typical composition of virtual simulator systems – including * Display systems and Motion Systems,</li> <li>• Relevant architectures and standards such as CIGI (Common Image Generator Interface),</li> <li>• Geospatial data and terrain/ environment construction,</li> <li>• Workflow, creation, adaptation and integration of components in virtual simulation solutions,</li> <li>• Virtual Reality (VR), Mixed Reality (MR), Augmented Reality AR), Extended Reality (XR),</li> <li>• Emerging and developing technologies.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## SYSTEMS ARCHITECTURE

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This course provides an introduction to architectural design in Information Systems (IS) and considers architectural roles, design methods and processes, and frameworks for representing complex designs. You will be able to identify the components needed to meet the present and future enterprise strategy. Define and assess the interrelationships between architecture components.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• What is Systems Architecture, how do IS architectures relate to system architecture?</li> <li>• How do we align the need for IS architectures with Enterprise needs, Enterprise Architecture Frameworks (including MoD use of TOGAF and NAF),</li> <li>• How to use viewpoints and views to represent system architectures,</li> <li>• The strategies, styles and patterns used to develop and assess system architectures,</li> <li>• Applying an architecture design and assessment approach, using architecture quality attributes to define, evaluate and select architecture options.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days plus 7 weeks online	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## SYSTEMS THINKING FOR ORGANISATIONAL VIABILITY

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
Through taking a systems thinking approach, this course provides the necessary skills and knowledge that enable professionals working in implementing information systems or critical cyber contexts to consider the wider context and adapt to continual change. It focuses on investigative methods, systems thinking and anticipating futures with a view to problem solving in a real-world context.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Adapting to change in complex environments,</li> <li>• Representing and navigating complexity,</li> <li>• Systems methods including Soft Systems Methodology, the Viable Systems Model and Critical Systems Heuristics,</li> <li>• Organisational dynamics and change,</li> <li>• Monitoring and adapting,</li> <li>• Anticipating future requirements,</li> <li>• Dealing with disruptive and novel technologies, events and emergent changes.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days plus 7 weeks online	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## TESTING AND EVALUATION OF EXPLOSIVES

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
This course will demonstrate how initiation of a reaction in a potentially detonable substance or composition can escalate to full detonation.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Introduction to current safety testing regimes with examples of the required tests,</li> <li>• Discussions on the complexity of legislation applied to the testing protocol within the UK,</li> <li>• Practical demonstration of testing methods and analyse of the data obtained.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## THE HUMAN DIMENSION

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
This course teaches the importance and contribution of the human dimension when designing and implementing Cyber Defence and Information Assurance (IA) measures.	<p>Topics covered:</p> <p>Individual level</p> <ul style="list-style-type: none"> <li>Human performance and error.</li> </ul> <p>Organisational/stems level</p> <ul style="list-style-type: none"> <li>Socio-technical context of use,</li> <li>System weaknesses and latent errors,</li> <li>Circumventing security.</li> </ul> <p>Interventions</p> <ul style="list-style-type: none"> <li>Behaviour change,</li> <li>Awareness and training for cyber security,</li> <li>Designing security measures for and with the end user.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days plus 7 weeks online	CPD	1 per year



# Defence College for Military Capability Integration (DCMCI)

## UNDERSTANDING RISK

**Course No: -**

**Online**

Aim of Course	Outline of Syllabus	Remarks
The course develops an understanding of the importance of taking a risk-based approach to Cyber Security and Information Assurance.	<p>Topics covered:</p> <p>Mapping the Landscape:</p> <ul style="list-style-type: none"> <li>Definitions and terminology,</li> <li>History of hacking,</li> <li>Threat landscape.</li> </ul> <p>Cyber Security Risk Management in Practice</p> <ul style="list-style-type: none"> <li>Basic principles,</li> <li>Legislation and standards,</li> <li>Risk management approaches,</li> <li>Strategies for managing risk.</li> </ul> <p>Complexity</p> <ul style="list-style-type: none"> <li>Quantifying risk in a complex environment,</li> <li>Risk economics,</li> <li>Social dimension of risk,</li> <li>Risk communication.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## UNINHABITED AIRCRAFT SYSTEMS (UAS)

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This five day course focuses on the up-to-date UAV systems level technologies and artificial intelligence based methods for mission planning and energy based range extenders, autopilots. Furthermore, the course covers the connectivities of airworthiness and cyber threat in the modern airspace.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Overview of UAS and Military Airworthiness</li> <li>• UAV/RPAS passive hard subsystems</li> <li>• UAV/RPAS Active Hard Subsystems</li> <li>• UAS/RPAS Soft methods</li> <li>• UAS/RPAS Design and Analysis Methods</li> <li>• UAS/RPAS AI Design Design Based Guidance</li> <li>• UAS/RPAS applications and Airworthiness - Test cases</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## VEHICLE SYSTEMS INTEGRATION

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>This intensive five-day course provides a comprehensive understanding of how electrical, electronic, mechanical, electro-optic, and software-based subsystems are engineered and integrated to deliver full operational capability within both modern and legacy combat vehicles.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Systems engineering approach to military vehicle integration.</li> <li>• Power generation, distribution, and energy storage systems.</li> <li>• Motor and actuator technologies for mobility and control.</li> <li>• Power budgeting and electronic subsystem integration.</li> <li>• Vetrronics and digital battlefield architectures.</li> <li>• Civilian and military data-bus standards and operation.</li> <li>• Radio communication systems.</li> <li>• Electro-optic subsystems: thermal imaging, image intensifiers, and laser designators.</li> <li>• Health and Usage Monitoring Systems (HUMS) and system assessment.</li> <li>• Ergonomics and human-machine interface design.</li> <li>• Generic Vehicle Architecture (GVA) concepts and applications.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## WAR GAMING AND COMBAT MODELLING

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
This course offers details of war games and combat models across a broad range of types. It covers many of the methods used in the modelling of combat and their application in support of key decisions and in the training of military and civilian personnel.	Topics covered: <ul style="list-style-type: none"> <li>• Introduction</li> <li>• Combat Simulation</li> <li>• Lanchester's Equations</li> <li>• War Gaming/Interactive Simulation.</li> <li>• War Gaming and Combat Modelling Practicals</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College for Military Capability Integration (DCMCI)

## WEAPON SYSTEM PERFORMANCE ASSESSMENT

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
The course is delivered as a 5-day course comprising a mixture of academic lectures, visiting speakers from MOD and defence industry.	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Concepts of performance and effectiveness measures,</li> <li>• Dispersion of fire,</li> <li>• Accuracy, consistency and precision,</li> <li>• Calculation of single shot kill probability for direct fire weapons,</li> <li>• Modelling of area effect weapons (eg shells, grenades) including using the damage function,</li> <li>• Modelling of minefields and calculation of stopping power,</li> <li>• Assessment of direct fire systems examples,</li> <li>• Methods for modelling of land, sea and air targets,</li> <li>• Approaches to the analysis of various other weapon systems,</li> <li>• Force effectiveness comparisons,</li> <li>• Practical exercises to illustrate the theories,</li> <li>• Cost effectiveness principles.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year



# Defence College for Military Capability Integration (DCMCI)

## WEAPON SYSTEMS TECHNOLOGY - INTRODUCTION

**Course No: -**

**Cranfield University at Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>The course covers the engineering and technology behind large calibre guns and cannons, as well as barrel strength, recoil systems, gun dynamics and feedback control for gun accuracy.</p> <p>The objective of the course is to provide an introduction to the engineering and technology that makes guns possible, and the processes and calculations that must be gone through in the design of a gun.</p>	<p>Topics covered:</p> <ul style="list-style-type: none"> <li>• Build-up of a gun,</li> <li>• Target analysis,</li> <li>• Fire control systems,</li> <li>• Gun dynamics,</li> <li>• Gun control systems.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
		5 days	CPD	1 per year

# Defence College of Technical Training

## BASIC TRADE COURSES

**Course No:**

**DSCIS Blandford**

Aim of Course	Outline of Syllabus	Remarks
<p>The school delivers trade specific training aimed at the Land environment for Communication Systems Engineers (Comms Sys Engr), Communication Systems Operator (Comms Sys Op), Electronic Warfare Operator (EW Op), Royal Signals Electrician (Elec), Installation Technician (Install Tech) and Communication Logistic Specialist (CLS). Basic trade courses are designed to cater for personnel with limited or no experience of engineering; and build upon taught basic engineering principles in order to develop trainees into Class 3 tradesmen (to work under supervision) within their trade group.</p>		Booked via IDT(RAF)

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR2-3	IELTS level 5.5			

# Defence College of Technical Training

## CLASS 1 (UPGRADER) COURSES

**Course No:**

**DSCIS Blandford**

Aim of Course	Outline of Syllabus	Remarks
The Class 1 (C11) courses develop Class 2 (C12) experienced tradesmen (gained at unit level) in all trades, into tradesmen suitable to work unsupervised; supervise others and certify standards of work. Tradesmen arriving on their C11 course should be suitably experienced in their trade cohort and be recommended for further trade trainina.		Booked via IDT(RAF)

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR3-4	IELTS level 5.5	41 weeks		

# Defence College of Technical Training

## SUPERVISOR COURSES

### Course No:

### DSCIS Blandford

Aim of Course	Outline of Syllabus	Remarks
<p>Supervisor courses are run specifically for the Comms Sys Engr, EW Op and CS Op within DSCIS Blandford. The Supervisor courses build upon previous C11 course content and engineering knowledge gained whilst at units in order to give a broader range of trade knowledge. Emphasis on the supervisor courses is also placed on engineering management and in depth understanding across a wide range of subjects. Course loading for the supervisor course is via a stringent selection process and are qualified at Foundation degree for the Operators, Bachelor of Science (BSc) or Bachelor of Engineering (BEng) for the Engineers.</p>		Booked via IDT(RAF)

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Minimum OR6 (OR4 may be promoted to attend)	IELTS level 5.5	Foreman of Sianals course is 70 - 80 weeks and Yeoman of Signals course is 60 weeks.		

# Defence College of Technical Training

## TROOP COMMANDER

**Course No:**

**DSCIS Blandford**

Aim of Course	Outline of Syllabus	Remarks
To provide young officers with sufficient knowledge of signal tactics, equipment and communications and information systems to enable them to command a Signal Troop efficiently, effectively and with confidence.		4 International Officers on each course  Booked via IDT(RAF)

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
2L+/L+ (OF 1-2)	IELTS level 5.5	25 weeks		3 courses per year



# Defence College of Technical Training

## INSTALLATION TECHNICIAN C1

**Course No:**

**DSCIS Blandford**

Aim of Course	Outline of Syllabus	Remarks
To instruct the student on fixed communications network design were they work with copper and fibre optic cabling both underground and overhead.		Booked via IDT(RAF)

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR4-5	IELTS level 5.5	22 weeks		2 courses per year

# Defence College of Technical Training

## INTERNATIONAL OFFICERS ELECTRONIC WARFARE

### Course No:

### DSCIS Blandford

Aim of Course	Outline of Syllabus	Remarks
This course provides non UK tri service officers with an overview of Land Electronic Warfare fundamentals from NATO doctrine and the UK perspective in order to enable them to understand and advise how Land EW contributes to joint military operations and the planning considerations for the use of various capabilities.		Up to 20 students

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR8-OF3	IELTS level 5.5	3 weeks		1 course per year, normally held in September.

# Defence College of Technical Training

## DEFENCE SCHOOL OF ELECTRONIC AND MECHANICAL ENGINEERING

### Course No:

### DSCIS Blandford

Aim of Course	Outline of Syllabus	Remarks		
<p>DEME Lyneham run REME career and equipment courses in order to provide trade specific engineering training tailored to experience and career stage. DEME Lyneham also provides 150+ equipment courses designed to address maintaining and repairing specific equipment as held at unit level. The REME Arms School also provides 21 bespoke REME or Equipment Support related courses and engineering leadership and management courses.</p>				
<p><b>Basic Trade Courses:</b> The school delivers trade specific training aimed at the Land environment for Vehicle Mechanic (VM), Electronic Technician (Elect Tech), Armourer (Armr), Metalsmith (MSm), Recovery Mechanic (Mech) and Technical Supply Specialist (TSS). Basic trade courses are designed to cater for personnel with limited or no experience of engineering; and build upon taught basic engineering principles in order to develop trainees into Class 3 tradesmen (to work under supervision) within their trade group. <b>OR2-3.</b></p> <p><b>Class 1 (Upgrader) Courses:</b> The Class 1 (C11) courses develop Class 2 (C12) experienced tradesmen (gained at unit level) in the VM, Elect Tech, Armr, MSm, Mech and TSS trades, into tradesmen suitable to work unsupervised; supervise others and certify standards of work. Tradesmen arriving on their C11 course should be suitably experienced in their trade cohort and be recommended for further trade training. <b>OR3-4.</b></p> <p><b>Artificer Courses:</b> Artificer courses are run specifically for the VM, Tech Elect and Armr trade groups within DEME Lyneham. The Artificer courses build upon previous C11 course content and engineering knowledge gained whilst at units in order to give a broader range of trade knowledge. Emphasis on the artificer courses is also placed on engineering management and in depth understanding across a wide range of subjects. Course loading for the artificer course is via a stringent selection process and are qualified at HND Level 5 (VM &amp; Armr) and Bachelor of Science (BS) for Elect Tech. <b>Minimum OR6 (OR4 may be promoted to attend).</b></p>				
<p><b>Equipment Courses:</b> These courses are designed to maintain and repair a range of electronic and mechanical equipment as held at unit level. There are also courses covering further techniques and development for the MSm and Mech trade groups. Courses vary in length depending on equipment complexity and depth of maintenance required; and are usually trade exclusive (although not always); with prerequisites placed on trade group and standard (CI3, CI2, CI1) and previous experience. There is some capability to tailor these equipment courses to meet specific needs or select certain modules as required. <b>OR2-9.</b></p> <p><b>Engineering and Equipment Support Management Courses:</b> Engineer management and engineering support management courses that provide the necessary skills and technical understanding to enhance engineering processes, procedures and efficiencies or understand the military equipment material concepts and doctrine. <b>ORG-OF4</b></p> <p><b>Health and Safety:</b> Two workplace safety advisors or safety managers course applicable to the military engineering environment. Both courses are designed to be all Arms or attended by civilian equivalents. These courses provide a very good foundation for further advancement in the G4 and/or H&amp;S sphere in support of the MOD. There is also the opportunity to attend British Safety Council H&amp;S examinations on completion of these courses. <b>OR6-OF4</b></p>				
Booked via IDT(RAF)				
Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR2 - OF4	IELTS level 5.5	Range from 1 day to 70+ weeks		

# Drill Courses

## ALL ARMS ADVANCED DRILL INSTRUCTOR

**Course No: 416/001**

**SCHINF Catterick**

Aim of Course	Outline of Syllabus	Remarks
To teach Senior Non Commissioned Officers and Warrant Officers to be supervisors of training and to be trained in ceremonial drill.	<ul style="list-style-type: none"> <li>All aspects of foot and arms drill</li> <li>Ceremonial drill including swords, colors and pacesstick</li> <li>Ceremonial funeral drill</li> <li>Teaching practice.</li> </ul>	Candidates must attend Basic Course first. Students should arrive with medical certificate from their doctor to state they are medically fit to undertake an arduous course.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Sergeants, Staff Sergeants and Warrant Officers	IELTS level 5. Attendance on All Arms Basic Drill Instructor	3 weeks 3 days		2 courses per year

# Drill Courses

## BASIC DRILL INSTRUCTOR

**Course No: 416/002**

**SCHINF Catterick**

Aim of Course	Outline of Syllabus	Remarks
To teach junior non commissioned officers to become drill instructors in their unit or at a training establishment.	<ul style="list-style-type: none"> <li>• All aspects of foot and arms drill</li> <li>• Method of instruction</li> <li>• Teaching practices.</li> </ul>	This course is designed to teach overseas students and Warrant Officers/ Non Commissioned Officers of the reserve forces all that they require to teach drill to recruits and trained soldiers. This is a high intensity course on which the students will be required to work extremely hard. Those nominated should be well motivated. Students should arrive with medical certificate from their doctor to state they are medically fit to undertake an arduous course.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Non Commissioned Officer/Warrant Officer	IELTS level 5	2 weeks		2 courses per year



# Drill Courses

## ALL ARMS BASIC DRILL INSTRUCTOR

**Course No: 416/006**

**SCHINF Catterick**

Aim of Course	Outline of Syllabus	Remarks
To teach Junior Non Commissioned Officers to become drill instructors in their unit or at a training establishment.	<ul style="list-style-type: none"> <li>All aspects of foot and arms drill</li> <li>Method of instruction</li> <li>Teaching practices.</li> </ul>	This course is designed to teach Junior Non Commissioned Officers of the regular army all that they require to teach drill to recruits and trained soldiers. For the young Non Commissioned Officer moving to his first instructional position it is a 'MUST DO' course. Students should arrive with medical certificate from their doctor to state they are medically fit to undertake an arduous course.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Junior Non Commissioned Officer	IELTS level 5	2 weeks 3 days		8 courses per year

# Drill Courses

## DRUM DRILL MAJOR

**Course No: 416/003**

**SCHINF Catterick**

Aim of Course	Outline of Syllabus	Remarks
To teach standard foot and mace drill and ceremonial foot and mace drill	<ul style="list-style-type: none"> <li>• All aspects of foot and mace drill</li> <li>• All aspects of ceremonial drill</li> <li>• Responsibilities of a senior Drum Major on parade</li> <li>• Practical work with military musicians</li> </ul>	Candidates must have undergone a minimum of one week's drill training in their own unit before commencing this course. Students should arrive with medical certificate from their doctor to state they are medically fit to undertake an arduous course.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Senior Non Commissioned Officers and Officers	IELTS level 5 Some experience of drill. Must be a member of a Regimental Band or Corps of Drums.	2 weeks		2 courses per year

# Driving Courses

## DEFENCE STAFF CAR DRIVER

**Course No: 11T/0097**

**Defence School of Transport, Normandy Barracks, Leconfield**

Aim of Course	Outline of Syllabus	Remarks
To train military and civilian drivers to be able to professionally drive VIPs and their families/ guests in the provision of the highest security and safeguarding procedures.	<p>Students will be expected to plan a secure route and drive a vehicle taking all the necessary precautions to safeguard the occupants and themselves. They will learn how to take the necessary evasive action when confronted with an ambush or incidents using the purpose-built training area enabling students to immerse themselves in a realistic environment.</p> <p>A combination of classroom and use of the military training environment, students will also be expected to learn about vehicle maintenance and general safety.</p> <p>Main Training Objectives:</p> <p>Students are to demonstrate effective personal behaviour and have a good understanding in how to engage with high profile personnel.</p> <p>This is a high mileage course and students experience various driving scenarios during the daytime and the hours of darkness.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>IELTS level 6</p> <p>Attendees must have a minimum 12 months driving experience as hold a Full Category B Driving Licence or national equivalent.</p>	8 Days	<p>On completion of the course students are entitled to enrol with the Institute of Advanced Motorist.</p> <p>Defence Staff Car Driver Competency.</p>	6 courses per year

# Driving Courses

## MASTER DRIVER

**Course No: 11T/0054**

**Defence School of Transport, Normandy Barracks, Leconfield**

Aim of Course	Outline of Syllabus	Remarks
<p>To train personnel to be conversant in advising Brigades in assurance and governance in accordance with the management checks, Logistic Support Assurance Framework (LSAF). This course is open to middle management staff within a Unit (Staff Sergeant to Warrant Officer and above).</p>	<p>Students will learn how to advise on transport management procedures and supervise a Defence Testing and Licensing Authority (DeLTA) office. They will be taught how to contract manage driver training, how to carry out 1st line assurance and will visit other civilian/defence organisations.</p> <p>Main Training Objectives</p> <ul style="list-style-type: none"> <li>• Learn to be a Manager in Dangerous Goods.</li> <li>• Deliver a presentation.</li> <li>• Operation Fleet Management, Exercise Management, Budget Management.</li> <li>• Conduct visits to Licensing Authorities within the UK to gain a better understanding of the processes.</li> <li>• LSAF to learn and present yourself as an auditor and visit a unit to conduct assurance activity.</li> <li>• Tri-More Exercise – Testing in a realistic working environment on Operational Fleet Management, a governance-based presentation and conducting a back brief.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>IELTS Level: 6</p> <p>This course is open to middle management staff within a Unit (Staff Sergeant to Warrant Officer and above).</p>	5 weeks	Royal Logistic Corps Master Driver Competency.	2 courses per year

# Driving Courses

## DEFENCE STAFF CAR DRIVER

**Course No: 11T/0054**

**Defence School of Transport, Normandy Barracks, Leconfield**

Aim of Course	Outline of Syllabus	Remarks
To train military and civilian drivers to be able to professionally drive VIPs and their families/ guests in the provision of the highest security and safeguarding procedures.	<p>Students will be expected to plan a secure route and drive a vehicle taking all the necessary precautions to safeguard the occupants and themselves. They will learn how to take the necessary evasive action when confronted with an ambush or incidents using the purpose-built training area enabling students to immerse themselves in a realistic environment.</p> <p>A combination of classroom and use of the military training environment, students will also be expected to learn about vehicle maintenance and general safety.</p> <p>Main Training Objectives: Students are to demonstrate effective personal behaviour and have a good understanding in how to engage with high profile personnel. This is a high mileage course and students experience various driving scenarios during the daytime and the hours of darkness.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>IELTS Level: 6</p> <p>Attendees must have a minimum 12 months driving experience as hold a Full Category B Driving Licence or national equivalent.</p>	<p>8 Days (Monday to Friday).</p> <p>Students will be expected to work daytime and during the hours of darkness.</p>	<p>On completion of the course students are entitled to enrol with the Institute of Advanced Motorist.</p> <p>Defence Staff Car Driver Competency.</p>	6 courses per year



# Driving Courses

## DEFENCE ATTACHÉ STAFF ADVANCED DRIVING

**Course No: 11T/0096**

**Defence School of Transport, Normandy Barracks, Leconfield**

Aim of Course	Outline of Syllabus	Remarks
<p>Allowing students to apply evasive driving techniques this course will teach students how to react and implement safety procedures whilst applying specialist driving skills in a variety of vehicles on and off road and using the skid pan facilities on site.</p> <p>They will learn to apply advanced driving skills in line with the UK Policy Road Craft Manual</p>	<p>During this intense 5-day course students will carry out emergency drills and apply evasive actions in hostile scenarios in a realistic working environment. Training is conducted both day and during the hours of darkness. Full Protection Equipment is issued and used for the duration of the course.</p> <p>Main Training Objectives</p> <ul style="list-style-type: none"> <li>• Maintenance of an Attaché vehicle.</li> <li>• Carry out vehicle recovery and towing procedures.</li> <li>• Complete military transport documentation to meet first line assurance.</li> <li>• Undertake and carry out accident and breakdown procedures.</li> <li>• Comply with Health &amp; Safety legislation in a military transport environment.</li> <li>• Position and secure a loose load.</li> <li>• Theory training on skid prevention.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level: 6 Attendees must have a Full Category B Driving Licence or national equivalent.	5 Days (Monday to Friday).  Students will be expected to work daytime and during the hours of darkness.	Defence Attaché Driver. Defence General Service Driver (DGSD) Module 1 Competency.	8 courses per year

# Driving Courses

## VEHICLE QUAD BIKE OPERATOR

**Course No: 11T/0300**

**Defence School of Transport, Normandy Barracks, Leconfield**

Aim of Course	Outline of Syllabus	Remarks
<p>This course is to train personnel to be competent and qualified Quad Bike Operator. To enable drivers to confidently operate in any environment.</p>	<p>The Quad Bike Training is predominantly delivered over rough terrain both by day and night using Night Vision Goggles (NVG) including towing the Quad Bike Trailer. Full Personal Protection is issued and used for the duration of the course.</p> <p>This course is assessed throughout with theory and practical tests.</p> <p>Main Training Objectives</p> <ul style="list-style-type: none"> <li>• Operating the Quad Bike systems and controls.</li> <li>• Conducting Quad Bike and trailer maintenance.</li> <li>• Conducting riding on a non-public road.</li> <li>• Operating a Quad Bik using NVG.</li> <li>• Positioning and securing a load on the Quad Bike and Trailer.</li> <li>• Conducting platform recovery and emergency procedures.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>IELTS Level: 6</p> <ul style="list-style-type: none"> <li>• UK Category B licence or national equivalent.</li> <li>• Students must be able to meet the UK Driver Standards Agency basic level eyesight requirement for the Category of licence held.</li> </ul>	5 Days (Monday to Friday).	Vehicle Quad Bike Operator	15 courses per year

# Engineering Courses

## CLERK OF WORKS CONSTRUCTION (CLK WKS (C)) COURSE

**Course No: 410/008**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Non-Commissioned Officers (NCOs) for appointments as a Clk Wks (C). Qualified Clk Wks (C) are expected to be the subject matter experts in all area's construction related, primarily vertical civil engineering, but also elements of horizontal. In addition, Clk Wks(C) are expected to manage large scale, multi-discipline construction projects, including all aspects of site management and quality control.	The course includes: foundation phase covering Physics, Maths, Mechanics, Materials technology, Control Systems and Computing A construction engineering phase covering: Design and Resourcing Process. Full site reconnaissance for subsequent construction of buildings, structures, roads, airfields and similar facilities. Soil classification, site survey, design work, specifications and resource management. Design of brick and timber buildings of up to three storeys. Design of formwork, concrete mixes, drainage schemes and simple steel framed structures. Manage the setting out of a construction site or airfield to both line and level. Supervise excavations preparatory to construction work Quality control of construction works and materials. Manage the erection and construction of steel framed structures, traditional brick buildings, reinforced concrete structures, roads and airfields. Design, plan, construct and maintain temporary field accommodation. A project management phase covering: Project Management and Contextualisation. Contract Management. Site Management. Facilities management. Force Protection Engineering. Infrastructure Assessment.	Students are required to have significant experience working on military construction projects. Applicants are to include a CV detailing their technical training and experience to date with their course application.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Corporal to Staff Sergeant	IELTS level 6. This is a technical course and the RSME must be consulted to assess a candidate's suitability. Minimum rank of substantive of OR3.	500 days (inclusive of leave).	The course is accredited with a Diploma in Higher Education (Dip HE) in Civil Engineering (Structures) from the University of Greenwich. This can be increased to a BEng (Hons) following a further 12 months of additional work-based learning. CITB Site Management Safety Training Scheme (SMSTS). Construction Skills Certification Scheme for Managers and Professionals (CSCS MAP). Option to achieve PRINCE 2 Foundation and Practitioner.	1 per year.

# Engineering Courses

## CLERK OF WORKS ELECTRICAL (CLK WKS (E)) COURSE

**Course No: 410/106**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Non-Commissioned Officers (NCOs) for appointments as a Clk Wks (E). Qualified Clk Wks (E) are expected to be the subject matter experts in all things electrical related to construction, including the generation and distribution of electrical power, both High Voltage and Low Voltage. In addition, Clk Wks (E) are expected to manage large scale, multi-discipline construction projects, including all aspects of site management and quality control.	The course includes: A foundation phase covering Physics, Maths, Mechanics, Materials technology, Control Systems and Computing. A general electrical engineering phase covering: Design and Resourcing Process, Switch gear and lighting schemes. Discrimination and protective devices. Internal and external wiring. Transformers, rectifiers, and sub-stations. High and low voltage overhead line and power-cable distribution networks. Aeronautical ground lighting and traffic control systems. Theory of power generation, motors and starters including control techniques. Operational and supervisory experience on direct engine generating plant. Quality control of all electrical works, including the direct supervision of electricians. A project management phase covering: Project Management and Contextualisation. Contract Management. Site Management. Facilities management. Force Protection Engineering. Infrastructure Assessment.	Students are required to have significant experience working on military construction projects. Applicants are to include a CV detailing their technical training and experience to date with their course application.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Corporal to Staff Sergeant	IELTS level 6. This is a technical course and the RSME must be consulted to assess a candidate's suitability. Minimum rank of substantive of OR3.	500 days (inclusive of leave).	The course is accredited with a Diploma in Higher Education (Dip HE) in Electrical Engineering from the University of Greenwich. This can be increased to a BEng (Hons) following a further 12 months of additional work-based learning. CITB Site Management Safety Training Scheme (SMSTS). Construction Skills Certification Scheme for Managers and Professionals (CSCS MAP). Option to achieve PRINCE 2 Foundation and Practitioner.	1 course per year

# Engineering Courses

## CLERK OF WORKS MECHANICAL (CLK WKS (M)) COURSE

**Course No: 410/003**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Non-Commissioned Officers (NCOs) for appointments as a Clk Wks (M). Qualified Clk Wks (M) are expected to be the subject matter experts in all things mechanical related to construction, primarily heating, cooling and water supply. In addition, Clk Wks (M) are expected to manage large scale, multi-discipline construction projects, including all aspects of site management and quality control.	The course includes: A foundation phase covering Physics, Maths, Mechanics, Materials technology, Control Systems and Computing. A general mechanical engineering phase covering: Design and Resourcing Process. Hydraulics-Water Supply and Waste Water. Thermodynamics (Climatology / Heating / Steam & Boiler House). Computer Aided Engineering. Ventilation, Air Conditioning & Refrigeration. Energy management. Noise & Vibration. Lifts/Vertical Transport. Gas and LPG. Petroleum Oil Lubricants. Engines. Compressed Air. Medical gases. A project management phase covering: Project Management and Contextualisation. Contract Management. Site Management. Facilities management. Force Protection Engineering. Infrastructure Assessment.	Students are required to have significant experience working on military construction projects. Applicants are to include a CV detailing their technical training and experience to date with their course application.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Corporal to Staff Sergeant	IELTS level 6. This is a technical course and the RSME must be consulted to assess a candidate's suitability. Minimum rank of substantive of OR3.	500 days (inclusive of leave).	The course is accredited with a Diploma in Higher Education (Dip HE) in Mechanical Building Services from the University of Greenwich. This can be increased to a BEng (Hons) following a further 12 months of additional work-based learning. CITB Site Management Safety Training Scheme (SMSTS). Construction Skills Certification Scheme for Managers and Professionals (CSCS MAP). Option to achieve PRINCE 2 Foundation and Practitioner.	1 per year.



# Engineering Courses

## MILITARY ENGINEER (BRICKLAYER AND CONCRETER) CLASS R

**Course No: 6358**

**RSME Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Soldiers in Bricklaying, Concreting and Scaffolding to enable them to provide a safe and competent performance with the minimum of supervision	<p>The course aims to provide an understanding in all the following relevant units:</p> <ul style="list-style-type: none"> <li>• Use trade tools, materials and equipment</li> <li>• Plan bricklaying and concreting tasks</li> <li>• Set out for basic structures</li> <li>• Build basic masonry structures using bricks and blocks</li> <li>• Construct basic concrete structures using proprietary formwork</li> <li>• Construct and inspect basic scaffolding</li> <li>• Observe Health and Safety requirements.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private to Lance Corporal	IELTS level 6	33 weeks	Intermediate Construction Award in Trowel Occupations	6 courses per year

# Engineering Courses

## MILITARY ENGINEER (ELECTRICIAN)

**Course No: 7374**

**RSME Chatham**

Aim of Course	Outline of Syllabus	Remarks
To prepare selected Engineer soldiers with the necessary technical and practical skills to install electrical, power generation and distribution systems in operations during peace and war.	<p>Each student gains a thorough knowledge of the theoretical and practical applications of:</p> <ul style="list-style-type: none"> <li>• Assessment.</li> <li>• Workshop Skills</li> <li>• Direct Current Theory</li> <li>• Direct Current Machines</li> <li>• Alternating Current Theory</li> <li>• Alternating Current Motors</li> <li>• Electronics</li> <li>• Drawing</li> <li>• Practical Installations Work</li> <li>• Inspection and Testing</li> <li>• Underground Cables</li> <li>• Military Power Generation and Distribution.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private to Corporal	IELTS level 6	6 week assessment followed by 36 weeks Course	City and Guilds 2330 Part 1 and Part 2 Electrical Installations NVQ Level 3	Approximately 10 courses per year

# Engineering Courses

## MILITARY ENGINEER (FITTER GENERAL) CLASS 2

**Course No: 7370**

**RSME Chatham**

Aim of Course	Outline of Syllabus	Remarks
To prepare selected Engineer soldiers with the necessary technical and practical skills to carry out Fitting tasks in operations during peace and war.	<p>Each student gains a thorough knowledge of the theoretical and practical applications of:</p> <ul style="list-style-type: none"> <li>• Installation of mechanical and electrical equipment including electrical generators up to 50kW and water supply equipment</li> <li>• Operation of mechanical and electrical plant equipment as above</li> <li>• Rectification of faults on equipment and vehicle electric/electronic systems</li> <li>• Fitting tasks on mechanical equipment including engines, Engineer construction plant, hydraulic systems, pumps, electrical generating sets, water supply equipment and plant vehicles</li> <li>• Routine maintenance on mechanical equipment as listed above Testing of mechanical equipment listed above</li> <li>• Planning and advising on fitting tasks</li> <li>• Water supply and purification.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private to Lance Corporal	IELTS level 6	4 week assessment followed by 32 week course	NVO Level 2 in Engineering Maintenance	Approximately 8 courses per year

# Engineering Courses

## MILITARY ENGINEER (PLANT OPERATOR MECHANIC) CLASS 2

**Course No: 6356**

**RSME Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train soldiers to operate, manage and maintain in service C vehicles in support of peace time and war fighting operations.	<p>Servicing, maintaining and operating in service C vehicles.</p> <ul style="list-style-type: none"> <li>• Small hand tools (Basic use and ID) Basic manual and auto transmissions hydraulics, engines</li> <li>• Medium Crawler tractor, management, servicing, compaction</li> <li>• 360° Crawler Excavator</li> <li>• WT Light Wheeled tractor, MWT Medium Wheeled tractor</li> <li>• Plant Exercise</li> <li>• Apprenticeship in specialised Plant &amp; Machinery</li> <li>• Intermediate Certificate Specialised Plant &amp; Machinery Operations. Excavator 360° above 10 ton</li> <li>• NVQ, QUA, 762 Plant Operations Level II.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private	IELTS level 6. Holder of a current Driving Licence - Category C.	18 weeks	NVQ 2. CPCS Red Card	10 courses per year

# Engineering Courses

## MILITARY PLANT FOREMAN

**Course No: 6301**

**RSME Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Senior Non-Commissioned Officers for appointments as a Military Plant Foreman.	<p>The student is given a thorough theoretical and practical knowledge in:</p> <ul style="list-style-type: none"> <li>• Operating, servicing, maintaining, and repairing earthmoving construction plant</li> <li>• Preparing bills of quantities for construction projects</li> <li>• Carrying out site investigations, preparing specifications for highway works and technical design and works reports</li> <li>• Designing surface, sub-surface drainage and dewatering</li> <li>• The management of quarries including, environmental prediction, blast design specifications, locating, winning, developing and producing aggregate</li> <li>• Planning and supervising the recovery of all plant and preparing machines for transport by road, rail, sea or air</li> <li>• Preventing and investigating accidents</li> <li>• Plan and manage the construction of rigid and flexible pavements including soil stabilisation</li> <li>• Trained in soil mechanics, the theory of road, bridge, railway, tunnels and airfield design</li> <li>• Being competent to manage a work-site including maintenance, storage, access, force protection, technical accommodation and resources</li> <li>• Supervision of practical piling tasks.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Staff Sergeant, Sergeant or Corporal selected for promotion	IELTS level 7. Holder of a driving licence. Plant and construction experience in a supervisory capacity. Advanced Tradesman and completion of Plant Sergeants Course.	68 weeks	University of Greenwich Foundation Degree in Civil Engineering. EPIC Explosive Supervisor and Shotfirer. CIT Site Safety Supervisors Certificate.	1 course per year



# Engineering Courses

## PROFESSIONAL ENGINEER TRAINING (CIVIL) MSc

**Course No: 6301**

**RSME Chatham**

Aim of Course	Outline of Syllabus	Remarks
<p>To prepare Specialist Engineering Officers to design, plan and control a wide variety of Civil Engineering tasks. The course culminates in the award of an MSc in 'Military Construction Engineering' and if successful, attainment of Chartered Engineer status and Membership of the Institution of Civil Engineers.</p>	<p>The training is in 4 phases:</p> <ul style="list-style-type: none"> <li>Phase 1: 6 months spent at the RSME undertaking post graduate engineering studies. Failure at this stage will preclude the student from continuing with the course.</li> <li>Phase 2: 9 months spent on attachment to a Civil Engineering Contractor's Site in the post of a Site Engineer (or similar). The student will be required to deal with other engineers and workmen at all levels. The student is required to submit a number of site and technical experience reports. Students should be aware that Phase 2 of this course can involve very long hours of work on cold remote construction sites where they will be taught and directed by civilians.</li> <li>Phase 3: 7 months spent on attachment to a Civil Engineering Consultancy as a Design Engineer. The student will be required to produce drawings, design calculations, specifications and bills of quantities for real projects, whilst completing further written work including preparation of MSc thesis.</li> <li>Phase 4: 2 weeks spent at the RSME in which students present on their attachments and may receive a viva voce on their thesis.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Captain to Major	<p>IELTS level 7. Equivalent of a UK BSc(Eng) or B Eng/M Eng in a relevant subject. Copies of certificates and degree transcripts should be sent to IDT(A) at the time of application. Final acceptance will be made by Cranfield University which validates MSc and the Institution of Civil Engineers whose academic requirements for membership must be satisfied.</p>	2 years (112 weeks)	The Institute of Civil Engineers recognises attendance on this course towards its requirements for Chartered Membership. MSc in Military Construction Engineering.	1 course per year

# Engineering Courses

## PROFESSIONAL ENGINEERING TRAINING (ELECTRICAL AND MECHANICAL) MSc

**Course No: 7101**

**RSME Chatham**

Aim of Course	Outline of Syllabus	Remarks
To prepare Specialist Engineering Officers to design, plan and control a wide variety of Electrical and Mechanical Engineering tasks.	<p>The training is in 4 phases:</p> <ul style="list-style-type: none"> <li>Phase 1: 8 months spent at the RSME covering written and design work in lectures and tutorials. Failure to achieve a suitable standard in this phase will preclude the student from continuing with the course.</li> <li>Phase 2: 8 months spent on attachment to a Design Consultant working on electrical and/or mechanical designs to C Eng level.</li> <li>Phase 3: 8 months spent on attachment to a contractor working on site on electrical and/or mechanical construction to C Eng level.</li> <li>Phase 4: 2 weeks at the RSME during which the student is required to present a MSc dissertation written during his attachments. Additionally the student will be briefed on current military issues.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Captain to Major	IELTS level 7. Equivalent of a UK BSc(Eng) or B Eng in a relevant subject. Copies of certificates should be sent to IDT (A) at the time of application. The RSME has spent many years building up valuable goodwill with the Civilian Consultants and Contractors to whom officers attending this course have been attached. It is therefore vital that any student attending the course should have suitable knowledge, experience, confidence and character to integrate well with these organisations.	108 weeks	MSc in Military Construction Engineering from Cranfield University. The Institution of Mechanical Engineers, the Institution of Engineering & Technology and the Chartered Institute of Building Services Engineers recognise attendance on this course towards their requirements for Chartered Membership.	1 course per year

# Engineering Courses

## RE TROOP COMMANDER

**Course No: 5102**

**RSME Minley/Chatham**

Aim of Course	Outline of Syllabus	Remarks
To equip Engineer Officers with the necessary technical, supervisory and administrative skills to command an Engineer Troop	<p>The Principles of construction and military engineering:</p> <ul style="list-style-type: none"> <li>• Project planning including the construction of military and civilian camps. Emphasis is placed on critical path analysis coupled with verbal and written communication skills.</li> <li>• Personnel and equipment management and MS reporting with emphasis on the routine business of a RE Troop Comd.</li> <li>• Humanitarian and Disaster Relief exercise to test contingency planning skills.</li> <li>• Combat and logistic bridge design and construction</li> <li>• Route reconnaissance, simple road design and construction including culverts using earthmoving equipment.</li> <li>• Designing, planning and supervising the construction of fortifications including the hardening of existing structures.</li> <li>• Health and safety with special emphasis on construction sites.</li> <li>• Students gain the British Demolition Safety Officer Qualification which includes the application of explosives theory and effect. They are also offered the opportunity to gain the civilian accredited APMP qualification.</li> <li>• Planning and control of military engineering tasks including two practical field exercises. The first aims to consolidate training in a military construction context; the second tests combat engineering within an all arms battlefield environment.</li> <li>• Virtual application of command in a battlefield environment using the VBS2 system</li> </ul>	International students are fully integrated and will get a thorough understanding of British Military ethos and doctrine.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Second Lieutenant to Captain	IELTS level 6. A sound understanding of technical subjects (specifically maths) and high standards of physical fitness.	27 weeks	Demolition Safety Officer. Watermanship Safety Officer.	3 courses per year

# Engineering Courses

## DEMOLITION SAFETY OFFICER

**Course No: Tp 1107/ Sgts 1307**

**RSME Minley**

Aim of Course	Outline of Syllabus	Remarks
To equip Engineer Officers with the necessary technical, supervisory and administrative skills to command an Engineer Troop	<p>Training is based on the assumption that some or all of the students will not have handled explosive before. Course content includes:</p> <ul style="list-style-type: none"> <li>• Safe use of explosive including:               <ul style="list-style-type: none"> <li>» Explosive theory and the theory of initiation</li> <li>» Use of explosives, accessories and equipment</li> <li>» Safety precautions and procedures.</li> </ul> </li> <li>• Safe detonation of explosive involving:               <ul style="list-style-type: none"> <li>» Preparation of initiation sets and circuits</li> <li>» Initiation of firing circuits.</li> </ul> </li> <li>• Supervision and conduct of Battle noise Simulation (BATSIM) using explosive covering:               <ul style="list-style-type: none"> <li>» BATSIM techniques, including safety rules and precautions</li> <li>» Preparation and firing of BATSIM charges</li> <li>» Reconnoitring, planning and safely carrying out BATSIM using explosive.</li> </ul> </li> <li>• Planning and carrying out tasks using explosive entailing:               <ul style="list-style-type: none"> <li>» The duties and procedures involved</li> <li>» Reconnaissance and planning</li> <li>» Charge calculations and the effects of explosive</li> <li>» Destroying misfires and using explosive</li> <li>» Explosive Methods of Entry</li> <li>» Track cutting.</li> </ul> </li> </ul>	The Course is run by the Battlefield Engineering Wing (BEW) of the Royal School of Military Engineering (RSME)

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Sergeant and above	<p>Students must:</p> <ul style="list-style-type: none"> <li>• Have a good understanding of written and spoken English.</li> </ul> <p>Be one of:</p> <ul style="list-style-type: none"> <li>• A military engineer SNCO with an advanced combat engineer qualification.</li> <li>• A military Warrant Officer (WO) or officer.</li> <li>• A civilian with the status and experience of a WO or above.</li> </ul>	5 days	<p>There are eleven assessments, tests and examinations:</p> <ul style="list-style-type: none"> <li>• Three planning exercises, each assessed practically</li> <li>• Two practical assessments; one on exercise the other a demolition range day.</li> <li>• Two practical tests; one on fault finding and one on misfires</li> <li>• Three written examinations.</li> </ul>	3 courses per year



# Engineering Courses

## JUNIOR COMMANDERS COURSE

**Course No: 2321**

**RSME Minley**

Aim of Course	Outline of Syllabus	Remarks
<p>To equip RE Lance Corporals selected for promotion with the knowledge of command procedures and instructional skills and to develop their leadership qualities so that they can effectively command and administer a section of soldiers in war/peace.</p>	<p>The course covers the mandated Command, Leadership and Management (CLM) modules and the following areas:</p> <ul style="list-style-type: none"> <li>Defence Instructional Techniques (DIT) Students receive a series of lectures and each conduct three teaching practices, two of which are formally assessed for the DIT qualification.</li> <li>Field Craft Students should be proficient in basic field craft such as camouflage and concealment. They will use Charlie/ Delta fire teams, conduct harbour drills, close target recce, patrolling and obstacle crossing by night and day at section and platoon level.</li> <li>FTX The course deploys on two exercises during which all areas of command, leadership, tactics and personal admin are tested.</li> <li>Written and Verbal Communication Students are given instruction in defence writing in accordance with JSP 101 and expected to produce an admin instruction and various forms of correspondence. Their verbal powers of communication are tested during the delivery of orders and a verbal briefing on the plan from their admin instruction. Verbal communications are further enhanced during a two day training package conducted at Communications Training Wing (CTW) in Minley.</li> <li>Command and Tactics Students are given instruction on Mission Command, Mission Analysis and the Combat Estimate prior to practice of delivering orders, firstly in a classroom and later during the FTX. They are also introduced to the Battle Group and IP in order to broaden their military knowledge.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance Corporal selected promotional to Corporal	Basic Engineer knowledge (equivalent to ME CBT CL3)	20 working days		11 courses per year



# Engineering Courses

## MANAGING SUCCESSFUL PROGRAMMES (MSP) COMMANDERS COURSE

**Course No: 7201**

**RSME Chatham**

Aim of Course	Outline of Syllabus	Remarks
To provide recognised best practice guidance on programme management, in order for MOD to improve its execution of programme management across defence.	<ul style="list-style-type: none"> <li>• Programmes - An overview</li> <li>• Defining a programme</li> <li>• Identifying a programme</li> <li>• Programme organisations</li> <li>• Programme vision</li> <li>• Benefits management</li> <li>• Realising benefits</li> <li>• Programme blueprints</li> <li>• Leadership and stakeholder engagement</li> <li>• Programme planning and control</li> <li>• Business cases</li> <li>• Managing tranches</li> <li>• Delivering capability</li> <li>• Programme risk and issue management</li> <li>• Quality and assurance</li> <li>• Closing a programme</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Maj or WO2 or above	IELTS level 6. Minimum rank of OR-8 or F-3 for Military personnel. In a role (or about to take up post) where formal programme management training is directly beneficial. Complete pre-course reading. Prior achievement of APMP or other project management qualification.	5 days	APMG International Managing Successful Programmes (MSP) Practitioner Certificate	2 courses per year

# Engineering Courses

## BASIC TRADE

### Course No:

### DSEME Lyneham

Aim of Course	Outline of Syllabus	Remarks
<p>The school delivers trade specific training aimed at the Land environment for Vehicle Mechanic (VM), Electronic Technician (Elect Tech), Armorer (Armr), Metalsmith (MSm), Recovery Mechanic (Mech) and Technical Supply Specialist (TSS). Basic trade courses are designed to cater for personnel with limited or no experience of engineering; and build upon taught basic engineering principles in order to develop trainees into Class 3 tradesmen (to work under supervision) within their trade group.</p>		<p>Course lengths range from 1 day to 70+Weeks</p> <p>Booked via IDT(RAF).</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR2-3	IELTS level 5.5			

# Engineering Courses

## CLASS 1 (UPGRADER)

### Course No:

### DSEME Lyneham

Aim of Course	Outline of Syllabus	Remarks
The Class 1 (CI1) courses develop Class 2 (CI2) experienced tradesmen (gained at unit level) in the VM, Elect Tech, Armr, MSm, RMech and TSS trades, into tradesmen suitable to work unsupervised; supervise others and certify standards of work. Tradesmen arriving on their CI1 course should be suitably experienced in their trade cohort and be recommended for further trade training.		Course lengths range from 1 day to 70+Weeks  Booked via IDT(RAF).

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR3-4	IELTS level 5.5			

# Engineering Courses

## ARTIFICER

### Course No:

### DSEME Lyneham

Aim of Course	Outline of Syllabus	Remarks
Run specifically for the VM, Tech Elect and Armr trade groups within DSEME Lyneham. The Artificer courses build upon previous CI1 course content and engineering knowledge gained whilst at units in order to give a broader range of trade knowledge. Emphasis on the artificer courses is also placed on engineering management and in depth understanding across a wide range of subjects. Course loading for the artificer course is via a stringent selection process and are qualified at HND Level 5 (VM & Armr) and Bachelor of Science (BSc) for Elect Tech.		Course lengths range from 1 day to 70+Weeks  Booked via IDT(RAF).

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Minimum OR6 (OR4 may be promoted to attend)	IELTS level 5.5			

# Engineering Courses

## EQUIPMENT

### Course No:

### DSEME Lyneham

Aim of Course	Outline of Syllabus	Remarks
<p>These courses are designed to maintain and repair a range of electronic and mechanical equipment as held at unit level. There are also courses covering further techniques and development for the MSm and Mech trade groups. Courses vary in length depending on equipment complexity and depth of maintenance required; and are usually trade exclusive (although not always); with prerequisites placed on trade group and standard (CI3, CI2, CI1) and previous experience. There is some capability to tailor these equipment courses to meet specific needs or select certain modules as required.</p>		<p>Course lengths range from 1 day to 70+Weeks</p> <p>Booked via IDT(RAF).</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR2-9	IELTS level 5.5			



# Engineering Courses

## ENGINEERING AND EQUIPMENT SUPPORT MANAGEMENT

**Course No:**

**DSEME Lyneham**

Aim of Course	Outline of Syllabus	Remarks
Engineer management and engineering support management courses that provide the necessary skills and technical understanding to enhance engineering processes, procedures and efficiencies or understand the military equipment material concepts and doctrine.		Course lengths range from 1 day to 70+Weeks  Booked via IDT(RAF).

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR6-OF4	IELTS level 5.5			

# Engineering Courses

## HEALTH AND SAFETY

**Course No:**

**DSEME Lyneham**

Aim of Course	Outline of Syllabus	Remarks
Two workplace safety advisors or safety managers courses applicable to the military engineering environment. Both courses are designed to be all Arms or attended by civilian equivalents. These courses provide a very good foundation for further advancement in the G4 and/or H&S sphere in support of the MOD. There is also the opportunity to attend British Safety Council H&S examinations on completion of these courses.		Course lengths range from 1 day to 70+Weeks  Booked via IDT(RAF).

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR6-OF4	IELTS level 5.5			

# Engineering Courses

## C-CBRN INSTRUCTOR COURSE

**Course No: -**

**Defence CBRN Centre (DCBRNC) at Winterbourne Gunner**

Aim of Course	Outline of Syllabus	Remarks
Provide C-CBRN instructors	<p>The course includes:</p> <ul style="list-style-type: none"> <li>• Training to fit, repair and maintain the General Service Respirator (GSR) and operate the Respirator Testing System (RTS).</li> <li>• To deliver training on:</li> <li>• In-service chemical and radiation detection and monitoring equipment.</li> <li>• Chemical and nuclear/radiological warning measures.</li> <li>• Recce and survey.</li> <li>• Hazard management</li> <li>• Defence Decontamination Lines,</li> <li>• Training of C-CBRN Protection Groups.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. Minimum rank of OR3. Hold an instructional delivery qualification. This course has arduous elements and students must be medically and physically fit.	14 days.		2 courses per year

# Engineering Courses

## CBRN ENHANCED FIRST AID COURSE

**Course No: -**

**Defence CBRN Centre (DCBRNC) at Winterbourne Gunner**

Aim of Course	Outline of Syllabus	Remarks
To train Team Medics (TM) with the skills to deal with a causality in a CBRN environment.	The course includes tactics, techniques and procedures to triage and treat CBRN casualties in a military context.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS score of 6. Team Medic course, or equivalent.	2 days.		3 courses per year.

# Engineering Courses

## ROYAL ENGINEERS TROOP COMMANDEERS COURSE (RETCC)

Course No: -

**Royal School of Military Engineering (RSME) Minley and Chatham**

Aim of Course	Outline of Syllabus	Remarks
To equip Military Engineer officers with the necessary technical, supervisory and administrative skills to command an Engineer Troop	The principles of construction and military engineering including: Project planning including the construction of military and civilian camps. Emphasis is placed on critical path analysis coupled with verbal and written communication skills. Personnel and equipment management and appraisal reporting with emphasis on the routine business of a Royal Engineer Troop Commander. Combat and logistic bridge design and construction. Route reconnaissance, simple road design and construction including culverts using earthmoving equipment. Designing, planning and supervising the construction of fortifications including the hardening of existing structures. Health and safety with an emphasis on construction sites. Students gain the British Demolition Safety Officer Qualification which includes the application of explosives theory and effect. They are also offered the opportunity to gain the civilian accredited PRINCE2 qualification. Planning and control of military engineering tasks including two practical field exercises. The first aims to consolidate training in a military construction context; the second tests combat engineering within an all-arms battlefield environment. Virtual application of command in a simulated battlefield environment.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	Rank range Second Lieutenant to Captain. A sound understanding of technical subjects (specifically maths) and high standards of physical fitness	135 days	Demolition Safety Officer. PRINCE2	3 courses per year.



# Engineering Courses

## BATTLEGROUP ENGINEER (BGE)

**Course No: -**

**Royal School of Military Engineering (RSME)  
Minley and Salisbury Plain Training Area**

Aim of Course	Outline of Syllabus	Remarks
To train RE officers (OF1/2) and Senior Non-Commissioned Officers (SNCOs) (OR7) for engineer staff appointments within a Battlegroup HQ within a Combined Arms context.	The BGE course is predominately aimed at RE Officers before their second/third tour assignment. The course complements the cap badge non-specific training provided on the Junior Officer Tactical Awareness Course (JOTAC) and prepares RE Officers for subsequent employment as a Staff Officer. Furthermore, the course is open to SNCO which might be employed in BGE staff appointments. The course will be delivered in two phases with external lectures aimed at improving knowledge of the Military Engineering capability. The content of the course will be delivered via central lectures, online media, planning cycles and synthetic training execution. Week 1 will ensure that the student has the knowledge and skills to become a competent BGE. Week 2 will work on developing their experience and test the student's planning, delivery and execution of orders.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	Desirable Junior Officers' Tactics Awareness Course for Officers or equivalent. Royal Engineers Field Sergeants course for SNCOs or equivalent. Bowman Staff User / Watchkeeper. Bowman ComBAT Infrastructure and Platform (BCIP) version 5.6.	10 days.		2 courses per year.

# Engineering Courses

## MILITARY ENGINEER - FIELD SECTION COMMANDER COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Minley**

Aim of Course	Outline of Syllabus	Remarks
To qualify Military Engineer Junior Non-Commissioned Officers (JNCOs) for appointments as engineer battlefield Section Commanders.	Individuals will be required to 'live in the field' under arduous conditions for five days whilst retaining the ability to operate effectively. During this time, they will be expected to wear an appropriate form of personal clothing system (PCS), footwear and personal protective equipment (PPE) including helmet, webbing and a bergen weighing up to 30 kg. Types of activities expected to be conducted in the Section Commander will include: Basic Field Engineering. Water Supply. Bridging. Demolitions & table calculations. Force Protection. Mine Warfare. Combat Engineer Field Exercise .	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. Completed and passed Army Leadership Development Program Military Training or equivalent Junior Commanders course, there is no academic arrival test for this course. Must be in date with the following British Army Individual Training Requirements: Rifle, Role Fitness Test, Navigation, Battlefield Casualty Drills, Communications and Fieldcraft or equivalent. This is an arduous course and students must be medically and physically fit.	22 days.	Site Supervisor Training Scheme (SSTS) valid for 5 years.	3 courses per year.

# Engineering Courses

## MILITARY ENGINEER (COMBAT) 2-1 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Minley**

Aim of Course	Outline of Syllabus	Remarks
The aim of the ME (Combat) 2-1 course is to train Military Engineer Junior Non-Commissioned Officers (JNCO) in the planning, execution and supervision of Combat Engineer tasks.	Individuals will be required to 'live in the field' under arduous conditions for five days whilst retaining the ability to operate effectively. During this time, they will be expected to wear an appropriate form of Personal Clothing System (PCS), footwear and Personal Protective Equipment (PPE) including helmet, webbing and a bergen weighing up to 30 kg. Types of routine activities the individual is likely to undertake include: Basic Field Engineering Basic Construction Techniques Watermanship Water Supply Bridging Demolitions & demolition calculations Force Protection Mine Warfare Combat Engineer Field Exercise	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. Must be in date with the British Army Role Fitness or equivalent. This is an arduous course and students must be medically and physically fit.	35 days.		7 courses per year.

# Engineering Courses

## WATERMANSHIP SAFETY OFFICER (BASIC) COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train, coach and assess and qualify selected students to carry out the duties of a Watermanship Safety Officer (Basic).	Provision of a safety system for troops training or operating on, near or over inland waterways.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. Must pre-qualify as a Basic Boat Operator. Minimum rank of OR6. This course has arduous elements and students must be medically and physically fit. All students must have passed a Military Swim Test (MST).	3 days.		6 courses per year.

# Engineering Courses

## ALL ARMS SAFETY BOAT OPERATOR COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train, coach and assess All Arms JNCOs and above, to carry out the duties of a Safety Boat Operator.	Operation of Mk 6 Assault Boat, Rigid Inflatable Boat, W525 General Purpose Inflatable Boat fitted with an OBM with tiller steering in a safety role on inland waterways.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. Must pre-qualify as a Basic Boat Operator. Minimum rank of OR3. This course has arduous elements and students must be medically and physically fit. All students must have passed a Military Swim Test (MST).	3 days	RYA Power Boat L2	6 courses per year.



# Engineering Courses

## COMBAT SUPPORT BOAT OPERATOR

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train, coach and assess selected NCOs, who are suitably qualified to operate and maintain the Combat Support Boat (CSB).	The course includes: Maintenance and operation of the Mk2 CSB on inland and inshore waters. Helm the Mk2 CSB on the following advanced tasks: Safety boat, Diving Operations and Pushing & Towing operations. Basic Sea Survival drills.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5 Must hold the All-Arms Safety Boat Operator qualification, or equivalent. Minimum rank of OR3. This course has arduous elements and students must be medically and physically fit. All students must have passed a Military Swim Test (MST).	15 days.		2 courses per year.

# Engineering Courses

## ALL-ARMS BASIC BOAT OPERATORS (AABBO) COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Minley**

Aim of Course	Outline of Syllabus	Remarks
The aim of the All-Arms Basic Boat Operators (AABBO) course is to qualify soldiers as competent operators/commanders of the in-service recce boat and outboard motor-powered assault boats on inland waterways.	The course includes: Watermanship principles. Practical boat handling (powered/unpowered). User maintenance of outboard motors.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. This course has arduous elements and students must be medically and physically fit. All students are required to pass a Military Swim Test (MST).	4 days.		4 courses per year.

# Engineering Courses

## MILITARY ENGINEER (DESIGN DRAUGHTSMAN) 2-1 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the planning, execution and supervision of design and drafting tasks to support Military Design Authorities and Military Construction Forces.	<p>The course includes:</p> <ul style="list-style-type: none"> <li>• Drafting task planning, calculations of materials and labour, gant charts, programme of works, supervising of trades people and local labour.</li> <li>• The design of structures, large span roofs, cladding systems.</li> <li>• Production of sketch designs, measured drawings and production drawings.</li> <li>• The design of elevators and tanking systems.</li> <li>• Design of public buildings.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. Military Engineer (Design Draughtsman) 0-2 Course, or equivalent. This is a technical course and the RSME must be consulted to assess a candidate's suitability.	105 days.	Defence Awarding Organisation Level 5 Diploma for Construction Draughtsman (Military Engineering)	1 course per year.

# Engineering Courses

## MILITARY ENGINEER (DESIGN DRAUGHTSMAN) 0-2 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the fundamental principles and basic skills of drafting required to support Military Design Authorities and Military Construction Forces.	The course includes: Basic Draughting techniques. The use of AutoCAD. The production of site plans, building elevations, sub structure and superstructure construction details. Design considerations for temporary camps, airfields, field hospitals, POW camps. The production of constructions specifications using British and European standards. Applicable areas of UK Health and Safety legislation.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. This is a technical course and the RSME must be consulted to assess a candidate's suitability.	200 days.	Level 3 Award in 2D Computer Aided Design (City and Guilds). Defence Awarding Organisation Level 3 Diploma for Construction Draughtsman (Military Engineering).	2 courses per year.

# Engineering Courses

## MILITARY ENGINEER (DRAUGHTSMAN ELECTRICAL & MECHANICAL) 2-1 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the planning, execution and supervision of electrical and mechanical design and drafting tasks to support Military Design Authorities and Military Construction Forces.	The course includes: Drafting task planning, calculations of materials and labour, gant charts, programme of works, supervising of electrical and mechanical drafters and local labour. The production of engineer designs including building services, water systems, fire protection systems, security systems, emergency lighting systems.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. Military Engineer (Draughtsman Electrical and Mechanical) 0-2 Course, or equivalent. This is a technical course and the RSME must be consulted to assess a candidate's suitability.	150 days	Defence Awarding Organisation Level 5 Diploma for E&M Draughtsman (Military Engineering)	1 course per year.



# Engineering Courses

## MILITARY ENGINEER (DRAUGHTSMAN ELECTRICAL & MECHANICAL) 0-2 COURSE

**Course No:**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the fundamental principles and basic skills of Electrical and Mechanical drafting required to support Military Design Authorities and Military Construction Forces.	The course includes: Basic Draughting techniques. The use of AutoCAD. The production of engineer drawings including building services, water systems, fire protection systems, security systems, emergency lighting systems. The production of Electrical and Mechanical specifications using British and European standards. Applicable areas of UK Health and Safety legislation.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. This is a technical course and the RSME must be consulted to assess a candidate's suitability.	150 days	Level 3 Award in 2D Computer Aided Design (City and Guilds). Defence Awarding Organisation Level 3 Diploma for E&M Draughtsman (Military Engineering).	1 course per year.

# Engineering Courses

## ALL ARMS LIGHT WHEELED TRACTOR OPERATOR COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train candidates how to operate and maintain the LWT AA and its ancillaries in a military context.	The course includes: Operation and maintenance of the JCB 4CX Sitemaster LWT. Operation and maintenance Terex TA3 Dumper Ultra-light.Servicing and Vehicle Management. Applicable areas of UK Health and Safety legislation.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5 Minimum of CAT C Driving licence, or equivalent. This course has arduous elements and students must be medically and physically fit.	35 days	National Plant Operators Registration Scheme (NPORS).	6 courses per year.

# Engineering Courses

## MILITARY ENGINEER (FABRICATOR AND WELDER) 2-1 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the planning, execution and supervision of fabricator and welder tasks in a military context.	The course includes: Task planning, calculations of materials and labour, gant charts, programme of works, supervising of trades people and local labour. Complex metal fabrication techniques.OA, MMA, MIG and TIG welding processes Welding of aluminum and stainless steel.The use of oxyacetylene torches.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	Military Engineer (Fabricator and Welder) 0-2 Course, or equivalent.This is a technical course and the RSME must be consulted to assess a candidate's suitability.	140 days.	Level 3 NVQ in Welding.	3 courses per year.

# Engineering Courses

## ELECTRICIAN 2-1

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the planning, execution and supervision of electrical installation tasks in a military context.	The course includes: Electrical installation task planning, calculations of materials and labour, gant charts, programme of works, supervising of trades people and local labour. Electronic Theory (AC and DC). Installation complex single and three phase circuits and components. Inspection, testing and Commissioning of three phase electrical installations. Installations and operations of Field Electrical Power Supplies (FEPS) generator sets in parallel. Design of electrical installations.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IETS level 5. Military Engineering (Electrician) 0-2 course, or equivalent. This is a technical course and the RSME must be consulted to assess a candidate's suitability.	127 days.	Defence Awarding Organisation Level 4 Diploma in Electrotechnical Studies and Practice (Military Engineering). City and Guilds 2391 Testing and inspection (Not mandatory)	2 courses per year.

# Engineering Courses

## ALL ARMS GENERAL PURPOSE FIELD POWER INSTRUCTOR (AAGPFPI) COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train candidates in the selection, set up, testing and instruction of in-service field power generation equipment.	The course includes: Site selection of the Field Electrical Power System (FEPS).Pre start checks of the FEPS.Starting and testing of the FEPS.Installation and testing of the Field Electrical Power Distribution System (FEPDS).Installation and testing of the Power Management Distribution System (PMDS).The installation and use of the Variable Tactical Electrical Generator (VTEG).The installation and maintenance of in-service Field Lighting equipment.Applicable areas of UK Health and Safety legislation.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. Minimum rank of OR3. Hold an instructional delivery qualification.	15 days		6 courses per year.



# Engineering Courses

## MILITARY ENGINEER (FITTER EQUIPMENT) 2-1 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the planning, execution and supervision of complex mechanical maintenance tasks in a military context.	The course includes: Advanced mechanical, electrical and hydraulic engineering. Advanced diagnostic techniques and practices. Awareness of supervisory and inspection standards. Project management. Maintenance and inspection of quarrying and drilling equipment and diving, compression and pneumatic systems.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5 Military Engineer (Fitter General) 0-2 Course, or equivalent. This is a technical course and the RSME must be consulted to assess a candidate's suitability.	140 days.	City and Guilds 1788-30 Level 3 Certificate in Engineering Maintenance	2 courses per year.

# Engineering Courses

## MILITARY ENGINEER (FITTER UTILITIES AND PETROLEUM) 2-1- COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the planning, execution and supervision of complex utilities and petroleum maintenance tasks in a military context.	The course includes: Advanced mechanical, electrical and hydraulic engineering. Advanced diagnostic techniques and practices. Awareness of supervisory and inspection standards. Project management. Maintenance and inspection of pumping equipment, water and sewage treatment, mobile and static compressed air systems. The design, construction, testing and operation of bulk fuel installations and infrastructure.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5 Military Engineer (Fitter General) 0-2 Course, or equivalent. This is a technical course and the RSME must be consulted to assess a candidate's suitability.	171 training days (35 weeks).	City and Guilds 1788-30 Level 3 Certificate in Engineering Maintenance	One course per year.

# Engineering Courses

## MILITARY ENGINEER (FITTER AIR CONDITIONING & REFRIGERATION) 2-1 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the planning, execution and supervision of complex refrigeration systems maintenance tasks in a military context.	The course includes: Air Conditioning and Refrigeration task planning, calculations of materials and labour, gant charts, programme of works, supervising of trades people and local labour. The design (including heat load calculations), installation, repair and maintenance of commercial and industrial refrigeration systems. Design, install and repair of ductwork. Install, repair, maintain and balance ventilation equipment, liquid chiller systems and VRF/VRV air conditioning systems.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. Military Engineer (Fitter Air Conditioning and Refrigeration) 0-2 Course, or equivalent. This is a technical course and the RSME must be consulted to assess a candidate's suitability.	100 days.	City & Guilds (2097) F (Fluorinated) Gas Certification. City & Guilds Hydrocarbons.	4 courses per year.

# Engineering Courses

## MILITARY ENGINEER (FITTER AIR CONDITIONING & REFRIGERATION) 0-2 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
Train Military Engineers in design, installation, commissioning and maintenance of basic refrigeration systems in a military context.	The course includes: installation, repair and maintenance of basic commercial and industrial refrigeration systems (including refrigerated ISO containers) and small ice machines. Installation, repair and maintenance of split air conditioning units and air conditioning plant. Applicable areas of UK Health and Safety legislation.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. Driving licence (car). This is a technical course and the RSME must be consulted to assess a candidate's suitability.	200 days.	City & Guilds (2097) F (Fluorinated) Gas Certification. City & Guilds Hydrocarbons. CAT C license.	4 courses per year.

# Engineering Courses

## WATER SAFETY EQUIPMENT MAINTENANCE COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train students to carry out the duties of a water safety equipment maintainer.	The course includes: Operate and maintain Sea Survival equipment, recognise faults and conduct remedial action. Recording of the servicing and maintenance of Sea Survival Equipment.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. Nil	3 days.		4 courses per year.



# Engineering Courses

## ENGINEERING CONSTRUCTION PLANT (WHEELED) MAINTAINERS COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Equipment Support Specialists to maintain wheeled Engineering Construction Plant (ECP) (Light Wheeled Tractor (LWT), Medium Wheeled Excavator (MWT), Medium Wheeled Tractor (MWT)).	The course includes:ECP manoeuvring and marshalling.Hydraulic and electrical vehicle subsystems. Servicing and routine maintenance activities including fault diagnosis and repair.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. This is a technical course and the RSME must be consulted to assess a candidate's suitability.	15 days.		1 course per year.

# Engineering Courses

## ENGINEERING CONSTRUCTION PLANT (TRACKED) MAINTAINERS COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Equipment Support Specialists to maintain tracked Engineering Construction Plant (ECP) (Excavator Towed Ultra-Light (ETUL), Medium Crawler Excavator (MCE), Medium Crawler Tractor (MCT)).	The course includes: Task planning, calculations of materials and labour, gant charts, programme of works, supervising of trades people and local labour. Finishing techniques to include airless spray painting, plastering, rendering, metal stud partitioning, contract flooring, cement and sand floor screeding, domestic and Improvised Bullet Resistant glazing (IBR).Tube and fitting scaffolding and Cuplock scaffolding, supervising, inspection and certification of scaffold systems.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. This is a technical course and the RSME must be consulted to assess a candidate's suitability.	15 days.	Defence Awarding Organisation (DAO) Level 3 Diploma in Defence Engineering Building and Structural Finisher	1 course per year.

# Engineering Courses

## BUILDING AND STRUCTURAL FINISHER 2-1

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the planning, execution and supervision of building and structural finishing tasks in a military context.	The course includes: Task planning, calculations of materials and labour, gant charts, programme of works, supervising of trades people and local labour. Finishing techniques to include airless spray painting, plastering, rendering, metal stud partitioning, contract flooring, cement and sand floor screeding, domestic and Improvised Bullet Resistant glazing (IBR).Tube and fitting scaffolding and Cuplock scaffolding, supervising, inspection and certification of scaffold systems.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. Military Engineer (Building & Structural Finisher) 0-2 Course, or equivalent.This is a technical course and the RSME must be consulted to assess a candidate's suitability.	100 days	Defence Awarding Organisation (DAO) Level 3 Diploma in Defence Engineering Building and Structural Finisher	2 courses per year

# Engineering Courses

## MILITARY ENGINEER (BUILDING & STRUCTURAL FINISHER) 0-2 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the fundamental principles and basic skills of a Building and Structural Finisher in a military context.	The course includes: Wall finishing to include painting, ceramic tiling, Dry lining, patch plaster repair. Floor finishing to include tiling (ceramic, vinyl and quarry floor tiling). Erection and dismantling Cuplock scaffolding and lightweight towers. Applicable areas of UK Health and Safety legislation.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. This is a technical course and the RSME must be consulted to assess a candidate's suitability.	114 days.	Enrolled on MECT Apprenticeship (Level-3) in Defence Engineering Building and Structural Finishing. Civilian Accreditation: 18 Month apprenticeship granted – NVQ Level 2 in Building and Structural Finishing following submission of field-based evidence and completion of End Point Assessment.	2 courses per year

# Engineering Courses

## MILITARY ENGINEER (BRICKLAYER AND CONCRETER) 2-1 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the planning, execution and supervision of bricklaying and concreting tasks in a military context.	The course includes: Task planning, calculations of materials and labour, gant charts, programme of works, supervising of trades people and local labour.Reinforced concrete columns, walls, ring beams and suspended slabs. Ground works to include kerb and path edge laying, brick and slab paths. Construction of pre-cast concrete units including lintels and culverts.Tube and fitting scaffolding and Cuplock scaffolding, supervising, inspection and certification of scaffold systems.Practical bricklaying techniques including manholes and inspection chambers, fireplaces and chimney stacks, and decorative panels.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. Military Engineer (Bricklayer and Concreter) 0-2 Course or equivalent.This is a technical course and the RSME must be consulted to assess a candidate's suitability.	160 days.	Military Engineering Construction Technician (MECT) level 3 Bricklayer and Concreter.	3 courses per year.



# Engineering Courses

## MILITARY ENGINEER (BRICKLAYER AND CONCRETER) 0-2 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the fundamental principles and basic skills of bricklaying and concreting in a military context.	The course includes: Concreting the production, placement and finishing of concrete (using all appropriate plant and equipment), including ground floor slabs, foundations of various types and reinforced concrete slabs. Erection and dismantling Cuplock scaffolding and lightweight towers. Brickwork to including solid and cavity walling. Minor alterations to masonry structures (using dead shoring methods). Applicable areas of UK Health and Safety legislation.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. This is a technical course and the RSME must be consulted to assess a candidate's suitability.	160 days.	Military Engineering Construction Technician (MECT) level 3 Bricklayer and Concreter.	3 courses per year.

# Engineering Courses

## MILITARY ENGINEER (CONSTRUCTION MATERIALS TECHNICIAN) 2-1 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the planning, execution and supervision of construction materials testing and selection tasks to support Military Design Authorities and Military Construction Forces.	The course includes CMT task planning, calculations of materials and labour, gant charts, programme of works, supervising of trades people and local labour. Chemical, geotechnical and bituminous materials testing. Ground investigation and geophysics. Stabilisation of materials for use in roads. Concrete design and testing. Design and evaluation of pavements. Design of military roads, including drainage. Road and airfield evaluation.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. Military Engineer (Construction Materials Technician) 0-2 Course, or equivalent. This is a technical course and the RSME must be consulted to assess a candidate's suitability.	164 training days (33 weeks).	Defence Awarding Organisation Level 5 Diploma in Construction Materials Technologies.	2 course per year.

# Engineering Courses

## MILITARY ENGINEER (CONSTRUCTION MATERIALS TECHNICIAN) 0-2 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the fundamental principles of construction materials testing and selection to support Military Design Authorities and Military Construction Forces.	The course includes: Engineering geology.Site investigation.Classification of soils, including the assessment of soil strength.Testing and classification of aggregates.Design and testing of concrete.Applicable areas of UK Health and Safety legislation.Drafting of technical engineer reports.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. This is a technical course and the RSME must be consulted to assess a candidate's suitability. Excavator Towed Ultra Light (ETUL) licence.	115 days.	Defence Awarding Organisation Level 3 Diploma in Construction Materials Technology.	2 Courses per year.

# Engineering Courses

## MILITARY ENGINEER (HEATING AND PLUMBING) 0-2 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the fundamental principles in the design, installation, commissioning and maintenance of basic heating and plumbing systems in a military context.	The course includes: Design principles underpinning basic water, heating and electrical systems. Design and installation of cooper, steel, plastic and lead hot and cold plumbing systems. Design and installation of sanitation and drainage systems. Design and installation of basic heating systems. Applicable areas of UK Health and Safety legislation.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. This is a technical course and the RSME must be consulted to assess a candidate's suitability.	140 days.	Defence Awarding Organisation Level 3 Diploma Construction Technology (Plumbing and Heating) CITB Level 3 in Plumbing Abrasive Wheels Certification	4 courses per year.

# Engineering Courses

## MILITARY ENGINEER (SURVEY ENGINEER) 2-1 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the planning, execution and supervision of survey tasks to support Military Design Authorities and Military Construction Forces.	The course includes: Task planning, calculations of materials and labour, gant charts, programme of works, supervising of trades people and local labour. Applicable aspects on contract law. Survey techniques for deformation monitoring, tunnelling, hydrographic survey and road design.	Students are required to have experience working on military construction projects with Engineering Construction Plant. International applicants are to include a CV detailing their technical training and experience to date with their course application. This is a technical course and the RSME must be consulted to assess a candidate's suitability.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. Military Engineer (Survey Engineer) 0-2 Course, or equivalent.	150 days	Defence Awarding Organisation Level 3 Diploma in Engineering Surveying.	1 course per year.



# Engineering Courses

## MILITARY ENGINEER (SURVEY ENGINEER) 0-2 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the fundamental principles of surveying to support Military Design Authorities and Military Construction Forces.	The course includes: The operation and maintenance of survey equipment. Underpinning mathematical principles essential for survey. The basic principles of linear survey, route reconnaissance, levelling, total stations, traversing, tacheometry, triangulation, electronic survey, horizontal curves and setting out. Applicable areas of UK Health and Safety legislation.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. This is a technical course and the RSME must be consulted to assess a candidate's suitability.	140 days.	Defence Awarding Organisation Level 3 Diploma in Engineering Surveying.	2 courses per year.

# Engineering Courses

## MILITARY ENGINEER (PLANT OPERATOR MECHANIC) 0-2 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers to operate and maintain specific earthmoving vehicles, ancillaries and Engineering Construction Plant in a military context	The course includes: Operation and maintenance of Medium Crawler Tractor, Wheeled Shovel Loaders (Light Wheeled Tractor and Medium Wheeled Tractor) and 360 Excavator (Tracked). Fault-finding, operator maintenance, servicing and vehicle management. Applicable areas of UK Health and Safety legislation.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. This course has arduous elements and students must be medically and physically fit. CAT C & C+E driving licence. This is a technical course and the RSME must be consulted to assess a candidate's suitability.	102 days	NVQ Level 2 Plant Operations. CITB Health & Safety in the Environment.	4 courses per year

# Engineering Courses

## MILITARY ENGINEER (CARPENTER AND JOINER) 2-1 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the planning, execution and supervision of carpentry and joinery tasks in a military context.	The course includes: Task planning, calculations of materials and labour, gant charts, programme of works, supervising of trades people and local labour. Manufacture specialist joints, construction of stairs, identify design and construct internal joinery fitments (including doors and windows). Install load bearing and fire check partitions, identify and install double floors, manufacture pitched roofs with hips and valleys, form work and shoring. Interpret relevant scaffolding regulations, conduct and supervise the construction of tubular and proprietary scaffolding.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. Military Engineer (Carpenter and Joiner) 0-2 Course or equivalent. This is a technical course and the RSME must be consulted to assess a candidate's suitability. This course has arduous elements and students must be medically and physically fit.	60-118 days.	Defence Awarding Organisation (DAO) Level 3 Diploma in Defence Engineering Carpentry and Joiner.	2 courses per year.

# Engineering Courses

## MILITARY ENGINEER (CARPENTER AND JOINER) 0-2 COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the fundamental principles and basic skills of carpentry and joinery in a military context.	The course includes: Identify and use of basic hand tools, identify and use of portable power tools and maintaining power tools. Plan Carpentry and Joinery tasks from sketches and working drawings. The use and maintenance of workshop machinery. Prepare timber for use, manufacture joints, use adhesives, produce windows, door frames, door linings and internal joinery fitments. Carry out general construction work, first fix timber frames, second fix internal joinery fitments. Install partitions, floors, roofing, timber framed buildings, form work and shoring. Construct scaffolding, interpret scaffold terms, erect access scaffold and install access ladders. Applicable areas of UK Health and Safety legislation.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. This is a technical course and the RSME must be consulted to assess a candidate's suitability. This course has arduous elements and students must be medically and physically fit.	60-122 days.	Defence Awarding Organisation (DAO) Level 3 Diploma in Defence Engineering Carpentry and Joiner.	3 courses per year.

# Engineering Courses

## MILITARY PLANT FOREMAN (MPF) COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Non-Commissioned Officers (NCOs) for an appointment as a Military Plant Foreman. Qualified MPF's are expected to be the subject matter experts in all areas of horizontal and ground engineering. In addition, MPFs are expected to manage large scale, multi-discipline construction projects, including all aspects of site management and quality control.	The course includes: A foundation phase covering Physics, Maths, Mechanics, Materials technology, Control Systems and Computing. A general civil engineering phase covering: Design and Resourcing Process. Preparing bills of quantities for construction projects. Structural analysis and design. Concrete design and production. Carrying out site investigations, preparing specifications for highway works and technical design and works reports. Designing surface, sub-surface drainage and dewatering. The management of quarries including, environmental prediction, blast design specifications, locating, winning, developing, and producing aggregate. Plan and manage the construction of rigid and flexible pavements including soil stabilisation for highways and airfields. Trained in geotechnical engineering and soil mechanics, the theory of road, hydraulic structures, bridge, railway, tunnels and airfield design. Sustainable construction approaches. Being competent to setup and manage a worksite including maintenance, storage, access, force protection, technical accommodation, Health & Safety and resources. A project management phase covering: Project Management and Contextualisation. Contract Management. Site Management. Facilities management. Force Protection Engineering. Infrastructure Assessment.	Students are required to have significant experience working on military construction projects. Applicants are to include a CV detailing their technical training and experience to date with their course application.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 6. This is a technical course and the RSME must be consulted to assess a candidate's suitability. Minimum rank of substantive of OR3.	400 days (inclusive of leave).	The course is accredited with a Diploma in Higher Education (Dip HE) in Civil Engineering (Roads and Airfields) from the University of Greenwich. This can be increased to a BEng (Hons) further 12 months of additional work-based learning. CITB Site Management Safety Training Scheme (SMSTS). Construction Skills Certification Scheme for Managers and Professionals (CSCS MAP). Option to achieve PRINCE 2 Foundation and Practitioner.	1 per year.



# Engineering Courses

## PLANT SERGEANTS COURSE (PSC)

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in the design of drainage systems, roads and quarrying techniques. The Plant Sgt supports the management of large construction projects as well providing advice on employment of technical plant within sub-units.	The course includes: Military road and drainage design and repair methods. Survey Techniques. Construction Materials analysis and understanding. Conducting trafficability assessments and route reconnaissance. Management of C vehicle fleet. Basic computer skills development to produce technical reports. Layout and set-up of a construction site to UK H&S standards. Project Management fundamentals and scheduling of projects. Earthmoving considerations and calculations for planning and delivery of large construction projects. Force protection engineering fundamentals and planning of infrastructure upgrades in austere environments. Identifying construction risk and mitigation measures.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. This is a technical course and the RSME must be consulted to assess a candidate's suitability. Minimum rank of substantive of OR4. Completion of Plant Section Commanders Course, or equivalent.	25 days.	CITB Site Management Safety Training Scheme (SMSTS).	2 courses per year.

# Engineering Courses

## PLANT SECTION COMMANDER COURSE (PSCC)

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
To train Military Engineers in basic drainage and road design, in order to fulfil the role of Military Plant Section Commander. A trained Plant Section Commander is expected to manage single plant tasks and support the Plant Sgt on larger projects.	The course includes: Military road and drainage design and repair methods. Survey Techniques. Construction Materials analysis and understanding. Management of an Engineering Construction Plant (ECP) fleet. Servicing, maintenance, demanding equipment. Basic computer skills development to produce technical reports. Layout and set-up of a construction site. Project Management fundamentals and scheduling of projects. Earthmoving considerations and calculations for planning and delivery of construction projects. Force protection engineering fundamentals and planning of infrastructure upgrades in austere environments. Identifying construction risk and mitigation measures.	Students are required to have experience working on military construction projects with Engineering Construction Plant. International applicants are to include a CV detailing their technical training and experience to date with their course application.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 5. This is a technical course and the RSME must be consulted to assess a candidate's suitability. Minimum rank of substantive of OR3.	20 days.	CITB Level 3 CSkills accreditation in Plant Supervision.	2 courses per year.

# Engineering Courses

## INFRASTRUCTURE ASSESSMENT PRACTITIONER COURSE

**Course No: -**

**Royal School of Military Engineering (RSME) Chatham**

Aim of Course	Outline of Syllabus	Remarks
Develop students' understanding of the preparation, conduct, output, and dissemination of Infrastructure Assessments (IA).	The course includes: Importance of understanding infrastructure Infrastructure doctrine & terminology Infrastructure assessment overview Intelligence cycle: Integration and Interpretation Network analysis (by sector) Cross sector analysis Threat and vulnerability assessments Reporting IA findings Operational assessments and context Infrastructure assessment exercise Infrastructure assessment findings presentation.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 6.5. Technical background strongly preferred: Chartered Engineer, Clerk of Works, or infrastructure experience.	5 days.		3 per year.

# Finance & Admin Courses

## ALL ARMS BASIC BOOKKEEPER

**Course No: 13A/1040**

**Defence College of Support, Worthy Down, Winchester**

Aim of Course	Outline of Syllabus	Remarks
To provide students with the basic knowledge and skills required to enable them to maintain a single service fund account.	<p>The AABB course is designed to teach accounting manually for a single fund using the double-entry bookkeeping method. The course ensures trainees know how to open a new month, complete double entry transactions, deal with subsidiary books and monthly closures in preparation for audits.</p> <p>Trainees are assessed on the 4 main aspects of manual accounting. Assessments will focus on opening an accounting month, transactions, subsidiary books and closing an accounting month.</p> <p>Main Training Objectives:</p> <ul style="list-style-type: none"> <li>• Demonstrate the handling of cash and the issuing of cheques.</li> <li>• Demonstrate operating a commercial bank account.</li> <li>• Explain how to ensure the safe custody of Financial Instruments.</li> <li>• Demonstrate how to provide advice to Fund Managers.</li> <li>• Demonstrate how to process taxes.</li> <li>• Demonstrate how to maintain manual accounts.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 6	10 days		3 courses per year

# Finance & Admin Courses

## POTENTIAL OFFICERS DEVELOPMENT COURSE

**Course No: 13A/PODP**

**Defence College of Support, Worthy Down, Winchester**

Aim of Course	Outline of Syllabus	Remarks
Though always tailored toward the individual, the PODP looks to develop a potential Officer's: self-confidence, cultural interests, communication skills. Interpersonal skills, analysis, planning and problem-solving. This will ultimately improve their chances of officer selection.	<p>The PODP is a 12-week residential course featuring: essay writing, formal presentations, discussions, and debates alongside a rigorous PT program. This is designed to address likely areas for development. However, PO's will also identify personal goals and create an individual learning plan which the programme with flexibly facilitate.</p> <p>Formative assessment throughout as part of developmental feedback</p> <p>Main Training Objectives</p> <ul style="list-style-type: none"> <li>• Demonstrate group influence.</li> <li>• Demonstrate aerobic fitness and muscular endurance.</li> <li>• Analyse current political, defence and cultural issues.</li> <li>• Perform arithmetic calculations.</li> <li>• Communicate effectively.</li> <li>• Display the values and standards of an officer cadet.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level: 6.5	12 Weeks		3 per year



# Infantry Courses

## ALL ARMS SKILL AT ARMS INSTRUCTOR

**Course No: 478/001**

**IBS Brecon**

Aim of Course	Outline of Syllabus	Remarks
To train All Arms NCOs to deliver Small Arms Training	Course trains NCOs to plan and deliver Small Arms lessons on UK weapons systems. Predominantly aimed at NCOs who will be employed to teach basic weapons training to recruits, the course also teaches NCOs how to maintain standards of weapon handling on return to unit.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
LCpl to Warrant Officer	IELTS level 6.  Students should have some experience in methods of instruction. Ideally have a knowledge of UK weapon systems. .	2 Weeks	Students will be given an “attended” or “Passed” certificate on completion of the course.	3 Courses per year

# Infantry Courses

## LIVE FIRING TACTICAL TRAINING (LFTT)

**Course No: 478/008**

**IBS Brecon**

Aim of Course	Outline of Syllabus	Remarks
To qualify students in range conduct and safety procedures, conduct and supervision of firing infantry weapons during Live Fire Tactical Training.	Planning, conduct, and supervision of Infantry Live Fire Tactical Training, on purpose built UK ranges, up to Platoon level. Course includes: hand held anti-armour weapons, throwing of live grenades, construction of weapon danger area templates, application of principles of UK range safety, destruction of blinds and misfires of ammunition.	International students will not routinely fire weapons on this course, as it is not a qualifying requirement. If customers would like their students to fire and gain the full course experience, a separate preparation course must be sourced through a hosting UK unit or International Defence Training (Army). IBS cannot qualify students ahead of the course start date.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
LCpl to Major	IELTS level 6.  Experience of planning and conducting static weapon ranges. Experience in the use of Infantry small arms. Knowledge of map reading.	6 weeks	Students will be given an "attended" or "Passed" certificate on completion of the course.	6 courses per year

# Infantry Courses

## PLATOON COMMANDERS TACTICS COURSE (PCBC TAC)

**Course No: 478/034**

**IBS Brecon**

Aim of Course	Outline of Syllabus	Remarks
To train officers in the operational and administrative duties of a rifle platoon commander in order to meet the operational requirements of the Infantry, the Army and Defence	<p>The course includes 10 weeks Tactical training. 2 weeks foundation and basic skills, 1 week combined arms training, 4 weeks tactical training in different environments, 3 weeks assessment module.</p> <p>Key Training Themes:</p> <ul style="list-style-type: none"> <li>• Conduct Platoon offensive ops</li> <li>• Command the Infantry Platoon</li> <li>• Inform the Infantry Platoon</li> <li>• Protect the Infantry Platoon</li> <li>• Sustain the Infantry Platoon</li> </ul>	Students must arrive with a high level of physical fitness to be able to complete the course. They must be able to pass the entry assessment which is: 4km march carrying 40kg in under 44 minutes, followed by 4km march carrying 25kg in less than 28 minutes.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
2nd Lieutenant to Captain	IELTS level 6. Students must have undergone basic training in navigation and first aid. They should have an understanding of British laws of armed combat. Students MUST have a high level of physical fitness.	10 weeks	Comprehensive written reports will be sent to the appropriate authorities. Students will be Qualified or Not Qualified. In addition a Pass with Distinction may be given. Live Firing Qualifications may be awarded.	3 courses per year

# Infantry Courses

## PLATOON COMMANDER BATTLE COURSE

**Course No: 478/034**

**IBS Brecon**

Aim of Course	Outline of Syllabus	Remarks
To train Non Commissioned Officers in the operational and administrative duties of an Infantry Platoon Sergeant in order to meet the operational requirements of the Infantry, Army and Defence.	<p>The course has 5 weeks Live Firing Tactical Training and 7 weeks tactics arranged as follows:</p> <ul style="list-style-type: none"> <li>Phase 1 Tactics with a Battle Camp (7 weeks)</li> <li>Phase 2 Live Firing Tactical Training (5 weeks).</li> </ul> <p>Key Training Themes:</p> <ul style="list-style-type: none"> <li>Support the Platoon Commander and be prepared to command and control a Dismounted Close Combat (CC) rifle platoon on major combat operation</li> <li>Administer a DCC rifle platoon</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Corporal to Sergeant	<p>IELTS level 6. Have had at least 4 years experience as an Infantry soldier.</p> <p>Have been a Section Commander for at least 6 months in the rank of Corporal.</p> <p>Be experienced in the use of Infantry small arms. Be qualified to conduct field firing.</p> <p>Be physically fit.</p>	12 weeks	A written report will be produced at the end of the course. Students will be graded Distinction, Qualified or Not Qualified.	3 course per year

# Infantry Courses

## 81mm MORTAR PLATOON COMMANDER COURSE

**Course No: 477/007**

**SWS Warminster**

Aim of Course	Outline of Syllabus	Remarks
To train students to command a mortar platoon and act as a Mortar Fire Controller (MFC) in all phases of war. Plan, Conduct and Supervise 81mm Live Firing.	<p>To qualify officers and Warrant officers in the Operational and administrative duties of a 81mm platoon commander and second in command in Order to meet the Operational requirements of the Field Army.</p> <ul style="list-style-type: none"> <li>• Operate the 81mm and 60mm mortars</li> <li>• Apply battle procedure at Platoon and Battle Group Level</li> <li>• Apply Security and protection measures</li> <li>• Command an 81mm and 60mm mortar platoon during offensive operations</li> <li>• Command an 81mm and 60mm mortar platoon during defensive operations</li> <li>• Command an 81mm and 60mm mortar platoon during an advance to contact</li> <li>• Administer a mortar platoon in all phases of war.</li> </ul>	Limited availability 1 per course

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Warrant Officer to Captain	IELTS level 6 Students must be experienced in handling the 81 mm weapon system. They must have extensive experience in live firing. They must have experience in Fire Control and its associated equipments. Students will be tested in a number of areas which include general knowledge and map reading, officers must have experience in operating as a rifle platoon commander for at least two years, second in command must have extensive experience of operating as an AMFC and Section commander for at least two years before attending the platoon commanders course. They must also be competent in the use of Bowman along with a high level of physical fitness.	10 Weeks	Mor PI Comd/2I/C - 1363 Mor (A) (07) - 2592 Mor (B) (07) - 2593 Mor (C) (07) - 2594 Mor (D) (07) - 2815 Mor (E) (07) - 2595 Mor (F) 07	3 course per year



# Infantry Courses

## JAVELIN PLATOON COMMANDER/2 IC

**Course No: 477/027**

**SWS Warminster**

Aim of Course	Outline of Syllabus	Remarks
To train students to command a JAVELIN Platoon in all operations of war. Plan, Conduct and supervise JAVELIN live firing. Monitor the planning and conduct of Anti- Tank PI training.	<ul style="list-style-type: none"> <li>• Operate JAVELIN equipment.</li> <li>• Manage the delivery of training</li> <li>• Apply battle procedure at Battle Group level</li> <li>• Conduct Anti-Armour planning</li> <li>• Engage in high intensity operations as part of a Combined Arms Battle Group</li> <li>• Command on Combat Operations</li> <li>• Administer an Anti-Tank Platoon in the field and in barracks</li> <li>• Plan Javelin Live Firing.</li> </ul>	Limited availability 1 per course

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Officers and SNCOs	<p>IELTS level 6. Students must have had some experience of live firing.</p> <p>Students must have undergone basic training in Map Reading, First Aid and Signals.</p> <p>Students must have a high level of physical fitness.</p>	8 weeks	<p>Comprehensive written reports will be sent to the appropriate authorities Students will be Qualified or Not Qualified. In addition a Pass with Distinction may be given.</p> <p>Live Firing Qualifications may be awarded.</p>	3 course per year

# Infantry Courses

## INTERNATIONAL SNIPER SECTION COMMANDER COURSE (ISSCC)

### Course No:

### SWS Warminster

Aim of Course	Outline of Syllabus	Remarks
<p>To expose and train international Officers and NC's in British Army military skills and instructional technique's in order to develop their ability to plan and conduct training and operations in command of a sniper section or platoon.</p> <p>To give all students the opportunity to practice and test their military skills, both in camp and on field exercises. To improve their marksmanship skills with the .338 L115A3 Sniper Rifle.</p>	<p>The course is designed to demonstrate and teach methods of command and management of a sniper section or platoon in the land environment in conjunction with current UK tactics and doctrine. Students will leave the course with the ability to train snipers in basic and advanced marksmanship skills and fieldcraft as well as command at section and platoon level on operations.</p>	<p>Candidates need to have completed British Army Sniper Operator Course</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR4 - OR6	IELTS level 5.5.	4 weeks		

# Infantry Courses

## SNIPER PLATOON COMMANDER COURSE (SPCC)

**Course No:**

**SWS Warminster**

Aim of Course	Outline of Syllabus	Remarks
<p>To expose and train international Officers and NC's in British Army military skills and instructional technique's in order to develop their ability to plan and conduct training and operations in command of a sniper section or platoon.</p> <p>To give all students the opportunity to practice and test their military skills, both in camp and on field exercises. To improve their marksmanship skills with the.338 [115A3 Sniper Rifle.</p>	<p>The course is designed to demonstrate and teach methods of command and management of a sniper section or platoon in the land environment in conjunction with current UK tactics and doctrine. Students will leave the course with the ability to plan the training for snipers in basic and advanced marksmanship skills and fieldcraft. They will also be able to command a sniper platoon on operations.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR5 - OR2	IELTS level 5.5.	4 weeks		

# Infantry Courses

## SNIPER SECTION COMMANDER'S COURSE

**Course No: -**

Aim of Course	Outline of Syllabus	Remarks
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Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	NATO only			

# Infantry Courses

## SNIPER PLATOON COMMANDER'S COURSE

Course No: -

Aim of Course	Outline of Syllabus	Remarks
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Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	NATO only			



# Infantry Courses

## URBAN OPERATIONS INSTRUCTORS' COURSE (UOIC)

**Course No: 491/007**

**IBS Brecon**

Aim of Course	Outline of Syllabus	Remarks
To train international Officers and NCO's in the application of British Army Military Skills, Tactics, Techniques and Procedures when conducting defensive and offensive operations in the Urban Environment at section and platoon level. Upon completing the course students will be qualified as Urban Operations Instructors.	<p>Week 1 – Preparation week. Weapon handling, kit issue and familiarisation</p> <p>Week 2 – CQB training utilising marker round training system. Includes Subterranean operations.</p> <p>Week 3 – Platoon Offensive and Defensive operations, including section building assault and explosive breaching.</p> <p>Week 4 – Combined Arms. Offensive actions utilising Engineers, Military Working Dogs, Main Battle Tanks, Infantry Fighting Vehicles &amp; battle simulation.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance Corporal to Corporal.	IELTS level 6 Students should be experienced in methods of instruction, Infantry small arms, and use of radios.	4 Weeks	Students will be given an “attended” or “Passed” certificate on completion of the course.	3 courses per year

# Infantry Courses

## JUNGLE WARFARE INSTRUCTORS COURSE (JWIC)

**Course No: 492/001**

**IBS JWD Brunei**

Aim of Course	Outline of Syllabus	Remarks
To train selected officers and NCOs to act as sub-unit advisors in the planning, conduct and training for operations in close country tropical environment.	Students will spend most of the course under the jungle canopy. After an acclimatisation period they will progress to the individual and section skills phase of the course. They will learn to instruct in subjects such as jungle navigation, jungle patrolling and contact drills. In the second phase of the course students will practise platoon level operations and learn to conduct offensive and defensive operations in the jungle environment, including live firing and riverine operations. The final exercise lasts for 7 days and tests all the skills learned on the course.	Additional vaccinations required:  Japanese Encephalitis  Rabies  Typhoid

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Corporal to Captain	IELTS level 6. Students should be fully fit on arrival as the course is physically demanding and students should be prepared to live in the field. Students will be required to pass a military swim test.	9 weeks including a 4	Students will be given an “attended” or “Passed” certificate on completion of the course.	2 courses per year

# Infantry Courses

## OPERATIONAL TRACKING INSTRUCTORS' COURSE (OTIC)

**Course No: 492/001**

**IBS JWD Brunei**

Aim of Course	Outline of Syllabus	Remarks
To train selected officers and NCOs in the skills of military tracking in order that they can train others to identify, interpret and follow signs in most environments.	The course is divided into three phases. In the first phase of the course, students learn how to identify and follow sign as an individual tracker. The next phase is tactical: students learn how to work as a military tracking team, providing interpretations of identified facts to an intelligence cell. In the final phase, students act on intelligence and use helicopter assets to insert and conduct a simulated tracking operation.	Additional vaccinations required:  Japanese Encephalitis  Rabies  Typhoid

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance Corporal to Captain	IELTS level 6. Students should be fully fit on arrival as the course is physically demanding and students should be prepared to live in the field. Students will be required to pass a military swim test.	5½ weeks	Students will be given an "attended" or "Passed" certificate on completion of the course.	2 courses per year

# Infantry Courses

## PLATOON SERGEANTS BATTLE COURSE (PSBC TAC)

**Course No: -**

**IBS Brecon**

Aim of Course	Outline of Syllabus	Remarks
To train non commissioned officers in the operational and administrative duties of a rifle platoon sergeant in order to meet the operational requirements of the Infantry, the Army and Defence	<p>The course includes 9 weeks Tactical training. 1 week foundation and basic skills, 1 week combined arms training, 4 weeks tactical training in different environments, 3 weeks assessment module.</p> <p>Key Training Themes:</p> <ul style="list-style-type: none"> <li>• Conduct Platoon offensive ops</li> <li>• Command the Infantry Platoon</li> <li>• Inform the Infantry Platoon</li> <li>• Protect the Infantry Platoon</li> <li>• Sustain the Infantry Platoon</li> </ul>	Students must arrive with a high level of physical fitness to be able to complete the course. They must be able to pass the entry assessment which is: 4km march carrying 40kg in under 44 minutes, followed by 4km march carrying 25kg in less than 28 minutes.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Corporal to Sergeant.	IELTS level 6. Students must have undergone basic training in navigation and first aid. They should have an understanding of British laws of armed combat. Students MUST have a high level of physical fitness.	9 weeks	Students will be given an “attended” or “Passed” certificate on completion of the course.	3 courses per year

# Infantry Courses

## SECTION COMMANDERS BATTLE COURSE (SCBC TAC)

**Course No: -**

**IBS Brecon**

Aim of Course	Outline of Syllabus	Remarks
To train junior non commissioned officers in the operational and administrative duties of a rifle section commander in order to meet the operational requirements of the Infantry, the Army and Defence	<p>The course includes 8 weeks Tactical training. 1 week combined arms training, 4 weeks tactical training in different environments, 3 weeks assessment module.</p> <p>Key Training Themes:</p> <ul style="list-style-type: none"> <li>• Conduct Infantry Section Ops</li> <li>• Command the Infantry Section</li> <li>• Protect the Infantry Section</li> <li>• Sustain the Infantry Section</li> </ul>	<p>Comprehensive written reports will be sent to the appropriate authorities. Students will be Qualified or Not Qualified. In New a Pass with Distinction may be given.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance Corporal to Corporal.	IELTS level 6. Students must have undergone basic training in navigation and first aid. They should have an understanding of British laws of armed combat. Students must have a high level of physical fitness.	8 weeks		3 courses per year



# Infantry Courses

## INTERNATIONAL URBAN OPERATORS INSTRUCTORS COURSE (IUOIC)

**Course No: -**

**IBS Brecon**

Aim of Course	Outline of Syllabus	Remarks
To train urban operator instructors that have not completed PCBC or SCBC Tactics.	The course includes 1 week International Preparation week and 3 weeks Urban Operations	Comprehensive written reports will be sent to the appropriate authorities. Students will be Qualified or Not Qualified. In New a Pass with Distinction may be given.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance Corporal to Corporal.	IELTS level 6. Students must have undergone basic training in navigation and first aid. They should have an understanding of British laws of armed combat. Students must have a high level of physical fitness.	4 weeks		2 courses per year

# Infantry Courses

## PLATOON TACTICS COURSE (PTC SHORT)

**Course No: -**

**IBS Brecon**

Aim of Course	Outline of Syllabus	Remarks
To train officers and non-commissioned officers in the operational and administrative duties in role in order to meet the operational requirements of the Infantry, the Army and Defence	<p>The course includes 2 weeks Tactical training, role specific.</p> <p>Key Training Themes:</p> <ul style="list-style-type: none"> <li>• Conduct Infantry Platoon/ Section Ops</li> <li>• Command the Infantry Platoon/ Section</li> <li>• Protect the Infantry Platoon/ Section</li> <li>• Sustain the Infantry Platoon/ Section</li> <li>• Inform the Infantry Platoon</li> </ul>	Comprehensive written reports will be sent to the appropriate authorities. Students will be Qualified or Not Qualified. In New a Pass with Distinction may be given.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance Corporal to Captain	IELTS level 6. Students must have undergone basic training in navigation and first aid. They should have an understanding of British laws of armed combat. Students must have a high level of physical fitness.	2 weeks		3 courses per year

# Infantry Courses

## SECTION COMMANDERS BATTLE COURSE (SCBC TAC)

**Course No: -**

**IBS Brecon**

Aim of Course	Outline of Syllabus	Remarks
To train junior non commissioned officers in the operational and administrative duties of a rifle section commander in order to meet the operational requirements of the Infantry, the Army and Defence	<p>The course includes 8 weeks Tactical training. 1 week combined arms training, 4 weeks tactical training in different environments, 3 weeks assessment module.</p> <p>Key Training Themes:</p> <ul style="list-style-type: none"> <li>• Conduct Infantry Section Ops</li> <li>• Command the Infantry Section</li> <li>• Protect the Infantry Section</li> <li>• Sustain the Infantry Section</li> </ul>	Students must arrive with a high level of physical fitness to be able to complete the course. They must be able to pass the entry assessment which is: 4km march carrying 40kg in under 44 minutes, followed by 4km march carrying 25kg in less than 28 minutes.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance Corporal to Corporal.	IELTS level 6. Students must have undergone basic training in navigation and first aid. They should have an understanding of British laws of armed combat. Students MUST have a high level of physical fitness.	8 weeks	Students will be given an “attended” or “Passed” certificate on completion of the course.	3 courses per year

# Intelligence & Security Courses

## INTERNATIONAL IMAGERY ANALYSIS COURSE (IIAC)

**Course No: JITG/I/0003**

**DITG Chicksands**

Aim of Course	Outline of Syllabus	Remarks		
<p>To teach the principles, procedures and practices of Imagery Analysis, and its application within the defence community.</p> <p>Students do not need previous experience in this area as the course covers the first principles. The course uses a variety of soft-copy imagery types and all theory taught on the course is supported by practical and exercise periods.</p>	<p>Fundamentals of Imagery Analysis</p> <ul style="list-style-type: none"><li>• Information Technology<ul style="list-style-type: none"><li>» Overview and application of Image Enhancement software (ERDAS Imagine) and training in generic soft-copy image processing skills</li><li>» Preparing imagery for presentations (Powerpoint) Principles of Sensors Comparative advantage and uses of each imagery type</li><li>» Electro-Optical</li><li>» Infra-Red</li><li>» RADAR</li></ul></li><li>• Scaling and Measurement</li><li>• Image-Map Comparison<ul style="list-style-type: none"><li>» Basic map reading / symbology and imagery to map relationship</li></ul></li><li>• Target Location<ul style="list-style-type: none"><li>» Coordinate systems and relationship / transformation between systems</li><li>» Datum Systems</li><li>» Geographical Information on Imagery</li></ul></li><li>• Imagery Analyst Technique<ul style="list-style-type: none"><li>» Teaches the skill of identifying common objects on imagery across the full range of imagery types Applied</li></ul></li></ul> <p>Imagery Analysis - Identification and Analysis of:</p> <ul style="list-style-type: none"><li>• Industries and Infrastructure<ul style="list-style-type: none"><li>» Common Industrial Utilities</li><li>» Water Treatment Power Generation and Distribution</li><li>» Coke, Iron and Steel</li><li>» Aluminium</li></ul></li><li>• Ground Forces<ul style="list-style-type: none"><li>» Military Vehicles. Recognition and reporting of military equipment by role</li><li>» Orders of Battle (ORBAT)</li><li>» Tables of Organisation and Equipment (TO&amp;E)</li><li>» Military Infrastructure / Barracks Layout</li><li>» Using Imagery for Route Reconnaissance (Transportation infrastructure and terrain from a military perspective as a method of assessing the viability of a route)</li></ul></li><li>• Naval Forces<ul style="list-style-type: none"><li>» Naval Infrastructure and Equipment</li><li>» Ports and Harbours</li><li>» Warship and Merchant Vessel Basic Systematic Description</li></ul></li><li>• Air Forces<ul style="list-style-type: none"><li>» Basic missile components and associated systems and equipment</li><li>» Radar installation and application</li><li>» Airfields layout and significance of functional areas</li><li>» Aircraft description from first principles and recognition</li></ul></li></ul>			
Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR-6 to OF-3. The course is open to experienced (minimum 3 years) Intelligence Analysts and Managers of Analysts from Defence organisations. Whilst applications from the 5 eyes community are welcome other arrangements eastom their needs.	IELTS level 6. Selected overseas personnel. Competent PC user with good English language skills	45 Working Days	Progressive testing throughout the course to qualify for their attendance certificate and course report.	Once a year

# Intelligence & Security Courses

## INTERNATIONAL INTELLIGENCE DIRECTOR COURSE (IIDC)

**Course No: 490/003**

**DITG Chicksands**

Aim of Course	Outline of Syllabus	Remarks
Increase understanding of the UK Intelligence community and processes. Provide a forum to discuss and analyse the conduct and management of intelligence. Forge personal and professional relationships.	<p>The course is based primarily at Chicksands site but includes outings to London.</p> <p>It features lectures by: Chief Defence Intelligence (CDI), Deputy CD and Director General Intelligence Collection (DGIC).</p> <p>A raft of the UK's most eminent academics. Senior Officials from:</p> <ul style="list-style-type: none"> <li>• Police</li> <li>• Security Service (MI5)</li> <li>• Secret Intelligence Service (MI6)</li> <li>• Joint Terrorist Assessment Centre</li> <li>• MOD</li> <li>• The House of Lords</li> <li>• House of Commons.</li> </ul> <p>The course is divided into six modules:</p> <ul style="list-style-type: none"> <li>• The contemporary strategic landscape</li> <li>• The challenges of intelligence sharing</li> <li>• Terrorism and non-state violence</li> <li>• Security Policy</li> <li>• The role of the media</li> <li>• Perspectives of future security.</li> </ul>	Maximum 1 student per country. Bids are invited but places only offered following an allocation meeting.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Senior Officers at Colonel/1 star level and above from NATO and non-NATO countries serving or about to serve in senior intelligence appointments	IELTS level 6 minimum	11 Days including one non- working weekend	Not examined. Certificate of attendance issued on completion	1 course per year



# Intelligence & Security Courses

## INTERNATIONAL INTELLIGENCE ANALYSIS TRAINING COURSE (IIATC)

**Course No: JITG/I/0003**

**DITG Chicksands**

Aim of Course	Outline of Syllabus	Remarks
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To provide, through a programme of lectures and syndicate exercises, training in a selected range of analytical methods and techniques that are employed within the UK DIAS.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR-6 to OF-3. The course is open to experienced (minimum 3 years) Intelligence Analysts and Managers of Analysts from Defence organisations. Whilst applications from the 5 eyes community are welcome, other arrangements exist to meet their needs.	IELTS level 6. Nominees must have an underpinning knowledge of analytical techniques and be fluent English speakers	10 Working Days		1 iteration per TY

# Intelligence & Security Courses

## MSc IN GEOSPATIAL INTELLIGENCE (RE (GEO) OFFICERS COURSE)

**Course No: JITGIJ/0001**

**DITG Chicksands**

Aim of Course	Outline of Syllabus	Remarks
<p>The principal aim of the course is to prepare staff from all three Services and the Civil Service for a career in the provision of GEOINT so that they can provide advice, analysis and support in its component disciplines of Imagery Analysis, Geospatial Analysis and Geospatial Information.</p> <ul style="list-style-type: none"> <li>Assess how current and developing technologies can meet Defence GEOINT requirements.</li> <li>Provide professional advice on the provision of GEOINT support to Defence.</li> <li>Apply their knowledge of the technology, systems and techniques needed to collect, manipulate and display imagery and geospatial information.</li> <li>Plan, organise and co-ordinate GEOINT support to operations.</li> <li>Carry out technical evaluations of data, systems, and processes related to GEOINT activities.</li> <li>Demonstrate critical ability, originality of thought and to understand and employ current ideas and criticise and evaluate new ones.</li> <li>Provide GEOINT advice to the Defence community through effective communications.</li> <li>Keep up to date with state of the art techniques and methods, both in management and technology, as they relate to GEOINT requirements.</li> <li>Demonstrate skills in planning, organising and executing a significant piece of research related to GEOINT requirements using appropriate techniques and principles.</li> <li>Develop communication skills by delivering the results in the form of interim reports, a written dissertation, a poster presentation to an invited audience and informal discussions.</li> <li>Take a full and active part in Defence GEOINT projects that require in depth study and analysis.</li> </ul>	<p>The course covers the following taught modules, plus a research project and written dissertation:</p> <ul style="list-style-type: none"> <li>Geospatial Intelligence Requirements 1</li> <li>Fundamentals of Geospatial Science</li> <li>Geospatial Intelligence Product Design and Generation</li> <li>Spatial Analysis 1</li> <li>Remotely Sensed Imagery</li> <li>Spatial Analysis 2</li> <li>Geospatial Information Systems Management</li> <li>Imagery Exploitation</li> <li>Geospatial Web Services</li> <li>Military Geography</li> <li>Geospatial Intelligence Requirements 2</li> </ul>	<p>Initially Students will be taught the advanced principles of geospatial analysis as a means of underpinning the use of processes, which identify solutions to real world military problems. The course will also focus on the development of analytical skills in spatial and network modelling to help you to become familiar with key technologies, processes and toolsets. The course will be largely hands on with the use of ESRI's ArcGIS and various Microsoft Office programs. The course is designed to meet the advanced education requirements for Royal Engineer (RE) officers entering the RE Geo specialisation. It is also open to students from other parts of the MOD and overseas. There is an additional taught module that is only open to citizens of the United Kingdom, Australia, Canada, New Zealand and United States who hold appropriate security clearances but this does not form part of the assessed MSc course.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lieutenant to Lieutenant Colonel or civilian equivalent.	<p>IELTS Level 7 (academic test)</p> <p>Qualified to First Degree (BSc) or equivalent level, ideally in Engineering, Natural sciences or Geography</p> <p>Qualified to a UK Advanced Level or equivalent in Mathematics</p>	270 Working Days (3 weeks pre-course and 1 year for MSc syllabus).	Canfield University will award successful candidates a MSc in Geospatial Intelligence.	One course per year (pre-course commences in August/September)

# Intelligence & Security Courses

## DEFENCE GEOGRAPHIC INFORMATION SYSTEMS (GIS) USER

**Course No: JITGIJ/0031**

**JITG Hermitage**

Aim of Course	Outline of Syllabus	Remarks
<p>To provide users with basic knowledge and practical experience of using GIS in a defence capacity.</p>	<p>The course takes the student through the various digital geographic data structures, and explains the military data sets and the appropriate use and limitations of each type. Students will then gain a theoretical and practical understanding of basic GIS functionality using military datasets.</p> <p>Learning Outcomes. On successful completion of this course, students will:</p> <ul style="list-style-type: none"> <li>• Be able to perform basic spatial queries using created datasets from various sources.</li> <li>• Have an understanding of the use of GIS in the wider defence community.</li> </ul> <p>Indicative content:</p> <ul style="list-style-type: none"> <li>• Have an understanding of digital data types, collection processes and copyright limitations.</li> <li>• Have a practical awareness of geo processing techniques such as: view-sheds, weighted overlays, least cost path analysis and data re-projection.</li> <li>• Import, combine and manage data from various sources.</li> <li>• Produce specifically derived data sets from newly created vector data.</li> <li>• Create and edit vector data to create a basic map product.</li> <li>• Have an understanding of Datums and Projections and their importance within GIS.</li> <li>• Have an awareness of visualisation and digital terrain modeling techniques.</li> <li>• Students will be able to perform basic spatial analysis to answer basic spatial queries.</li> </ul>	<p>Initially students will be taught the principles of geospatial analysis as a means of underpinning the use of processes, which identify solutions to real world military problems. The course will also focus on the key technologies, processes and toolsets. The course will be largely hands on with the use of ESRI's ArcGIS and various Microsoft Office programs. The course will be delivered using a variety of means, including:</p> <ul style="list-style-type: none"> <li>• Presentations, demonstrations and lectures.</li> <li>• Individual activities and tutorials.</li> <li>• Practical exercises.</li> <li>• Enquiry based learning.</li> <li>• Self-directed learning.</li> <li>• Group based activities and discussions.</li> <li>• Use of online resources: and the Virtual Learning Environment.</li> </ul>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Any rank or grade Military or Civilian personnel with responsibility for operating Geographic Information Systems.	IELTS level 6. ECDL Module 1 - Basic concepts of IT ECDL Module 2 - Using the computer and managing files ECDL Module 5 - Database or equivalent experience	5 days		Approximately 8 courses per year (exact number from year to year)

# Intelligence & Security Courses

## DEFENCE HUMAN SECURITY ADVISOR

**Course No: JITGIJ/0031**

**Defence Academy of the United Kingdom**

Aim of Course	Outline of Syllabus	Remarks
To understand how to incorporate a Human Ssecurity (HS) approach into the way we train, understand, plan and operate / fight, by teaching students the tools to view multidimensional conflict environments	The course will commence by introducing HS in Defence more broadly together with the overarching factors and cross-cutting themes of the human security environment. It will build on foundational learning to develop and test the students ability to integrate human security considerations into all stages of the military planning process (Q0-7). Beyond the planning stage, students will be given the tools to advise commanders throughout an operation. The final module explores single service updates, policy and doctrine with wider strategic input and influence.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 6. Completion of designated e-learning modules defined in the DIN and a short essay to be written entitled 'What is Human Security?' (max word count 500)	2- weeks	Defence Human Security Advisor (valid for 5 years)	2 courses per year in May and November

# Intelligence & Security Courses

## DEFENCE GEOGRAPHIC INFORMATION SYSTEMS (GIS) ADVANCED USER

**Course No: JITG/J/0032**

**JITG Hermitage**

Aim of Course	Outline of Syllabus		Remarks	
To provide users, already familiar with the basics of GIS, practical experience of the advanced functionality available.	<p>The course expands upon the theory and practical experience gained on the Defence GIS Us.er Course and will include network analysis, 3D modelling, temporal analysis, site selection, least cost path analysis, and the collection of data using GIS. The course will involve the use of ESRI ArcGIS within a defence environment, with both taught and practical components. All practical exercises will be based on a defence scenario, which will include components applicable for personnel from all armed services, whether land, sea or air based in addition to MOD civilians.</p> <p>Learning Outcomes. On successful completion of this course, students will:</p> <ul style="list-style-type: none"><li>• Be able to perform complex spatial analysis to answer complex geospatial questions.</li><li>• Have an in depth understanding of the use of GIS-in the wider detence community.</li></ul> <p>Indicative content:</p> <ul style="list-style-type: none"><li>• Have an understanding of data input options and techniques including the use of GPS data, including the different data types and collection methods.</li><li>• Have an awareness of Web publishing using GIS Maps and data, from correctly managed geospatial databases.</li><li>• Import, combine and interrogate data from various sources.</li><li>• Produce specifically derived data sets from newly created raster and vector data from paper sources.</li><li>• Analysis data within a 2D, 3D and 4D (temporal) environments.</li><li>• Interrogate and gain a wider understanding of network geospatial data.</li><li>• Students will be able to perform complex spatial analysis to answer complex spatial queries.</li></ul>		<p>Initially students will be taught the advanced principles of geospatial analysis as a means of underpinning the use of processes, which identify solutions to real world military problems. The course will also focus on the development of analytical skills in spatial and network modelling to help you to become familiar with key technologies, processes and toolsets. The course will be largely hands on with the use of ESRI's ArcGIS and various Microsoft Office programs. The course will be delivered using a variety of means, including:</p> <ul style="list-style-type: none"><li>• Presentations, demonstrations and lectures.</li><li>• Individual activities and tutorials.</li><li>• Practical exercises.</li><li>• Enquiry based learning.</li><li>• Self-directed learning.</li><li>• Group based activities and discussions.</li><li>• Use of online resources, and the Virtual Learning Environment</li></ul>	
Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Any rank or grade Military or Civilian personnel with responsibility for operating Geographic Information Systems	IELTS level 6. Must have attended the Defence GIS User Course at the Royal School of military Survey or have suitable qualifications or experience.	5 days		Approximately 6 courses per year (exact number vary from year to year)



# JSCSC Courses

## ADVANCED COMMAND & STAFF COURSE (ACSC)

**Course No: 706/010**

**DEFAC Shrivenham**

Aim of Course	Outline of Syllabus			Remarks
<p>To prepare invited Officers for high-grade joint and single-Service appointments, by developing their command, analytical and communications skills and by providing a broad understanding and knowledge of joint, single-Service and combined operations and of defence as a whole.</p> <p>Student End State</p> <p>To have developed a mind that is flexible and can analyse and conceptualise in a military context in order to make timely and logical decisions in all types of subsequent appointments.</p>	<p>The syllabus is designed to ensure that students are able to:</p> <ul style="list-style-type: none"><li>• Understand the functions of and apply the principles of command, leadership and management in single. Service, joint and combined environments</li><li>• Develop and apply the communication, cognitive, analytical and judgement abilities of a commander and staff officer in their own Service, joint and combined environments</li><li>• Understand the key factors which shape the international strategic environment and how they influence national and UK Foreign, Security and Defence policies</li><li>• Understand how the MOD develops, acquires, employs, maintains and sustains the military capability needed to deliver UK Defence Policy</li><li>• Develop expertise in operational planning</li></ul>			<ul style="list-style-type: none"><li>• Substantial revision of Course implemented from Sep 06</li><li>• ACSC (Main Course) begins in September each year and places will be allocated by invitation only. There is no requirement to bid; invitations will be issued by IDT(A) for all three Services.</li><li>• Main course is preceded by mandatory pre-course training consisting of 3 week orientation. Beginning mid-Aug.</li><li>• Where required, English Language Training (ELT) provided at the Defence School of Languages, Beaconsfield over a period of 6 or 12 weeks. Respective minimum entry standards of IELTS 6.5 or 6</li><li>• Married students should be accompanied for all course components following language training.</li><li>• Students eligible will have an opportunity to study for an MA whilst attending the Course.</li></ul>
Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lieutenant Colonel or equivalent, ideally on or within 2 years of appointment. Major or equivalent selected for promotion.	IELTS level 7. Eight to 10 years of military experience.	12 months (including pre-course training but not language training)		1 course per year

# Language Courses

## ENGLISH FOR THE ADVANCED COMMAND AND STAFF COLLEGE (EACSC) - PHASE A

**Course No: 419/086**

**DCLC Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>To raise the language proficiency of students to IELTS level 6.5 or NATO SP 4 in Listening, Speaking, Reading and Writing to prepare them for Phase B of the English for the Advanced Command and Staff Course. Ideally on completion of Phase A students should attend Phase B of the EACSC.</p> <p>To provide a background in the politics, Armed Forces, culture and society of Great Britain to enable the students to integrate socially in the ACSC course and to contribute knowledgeably to the discussion groups.</p>	<p>The programme is integrated with that of Phase B and is designed to prepare the student to the output standard as follows:</p> <ul style="list-style-type: none"> <li>• Listen to and comprehend spoken English at IELTS level 6.5, in particular to lectures by native-speakers and in discussion groups.</li> <li>• Speak English at a minimum of IELTS level 6.5.</li> <li>• Read and comprehend English texts to a minimum standard of IELTS 6.5.</li> <li>• Write in English to the level of producing a Service paper on a general military topic and take notes of lectures and discussions. Effectively this equates to IELTS level 6.5.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Major to Lieutenant Colonel	Prospective students must already have been selected to attend the ACSC. They must possess a minimum level of English Language proficiency of IELTS level 6 in all 4 skills - listening, speaking, reading and writing. Candidates should be tested in their country prior to acceptance.	6 weeks		1 course per year starting in May, followed immediately by the English for the Advanced Command Staff Course - Phase B

# Language Courses

## ENGLISH FOR THE ADVANCED COMMAND AND STAFF COLLEGE (EACSC) - PHASE B

**Course No: 419/087**

**DCLC Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>To prepare students for attendance on the Advanced Command and Staff Course (ACSC) at the Joint Services Command and Staff College (JSCSC) Shrivenham.</p> <p>To raise students' language proficiency in all four language skills to IELTS level 7.0 or NATO SLP 4+ in order to meet the ACSC mandatory English language standard.</p> <p>To provide students with background information on British history and culture and an understanding of both the organisation and role of the British Armed Forces.</p>	<p>The course covers both general English and specialised military English subject matter. Specialist instruction is also given in the design and delivery of military presentations and briefings.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Major to Lieutenant Colonel	Prospective students must already have been selected to attend the ACSC at the JSCSC. They must possess a minimum level of English Language proficiency of IELTS level 6.5.	6 weeks		1 course per year, immediately following the English for the Advanced Command and Staff College Course - Phase A and immediately preceding the ACSC at the JSCSC

# Language Courses

## PRE-ROYAL MILITARY ACADEMY SANDHURST (RMAS) ENG LANG TRG (ELT). PHASE A

**Course No: 419/076**

**DCLC Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
<p>To develop the English Language skills (listening, speaking, reading and writing) of overseas cadets to the level required by RMAS. This includes the specific language required for officer training.</p> <p>To develop an understanding of British culture and society.</p> <p>To develop a broad knowledge of the British Armed Forces and specifically, the culture of the British Army.</p>	<ul style="list-style-type: none"> <li>• Development of general English language skills including presentation skills</li> <li>• Introduction of military English</li> <li>• External learning events at places of military and cultural interest (including RMAS Sovereign's Parade)</li> <li>• Physical training, adventure training, sport including swimming</li> <li>• Drill.</li> </ul>	<p>Related Courses Pre- RMAS ELT. Phase B</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Officer Cadets	English Language ability IELTS level 4.5 to 5.0, with no less than 4.0 in any one language skill. Fitness. Candidates are required to be physically fit. See RMS Commissioning Course for standards.	10 weeks	Continuous monitoring of progress. Final in-house examination equivalent to NATO STANAG 6001 SLP 2 or IELTS level 5.5	3 per year, starting in February, June and September

# Language Courses

## PRE-ROYAL MILITARY ACADEMY

### SANDHURST (RMS) PREPARATORY COURSE. PHASE B

**Course No: 419/079**

**DCLC Shrivenham**

Aim of Course	Outline of Syllabus	Remarks
To develop the English language skills and to introduce the specific language and common military skills required for their Commissioning Course at the Royal Military Academy Sandhurst.	<p>The syllabus covers specialist Army topics which will provide a basic grounding in the study areas cadets will encounter during Officer Training at RMAS. The topics will include:</p> <ul style="list-style-type: none"> <li>• Introduction to the British Army</li> <li>• Development of British Army terminology</li> <li>• 72-hour field Exercise</li> <li>• Physical training and sport</li> <li>• Drill, weapon handling and map reading</li> <li>• External learning events at British Army units and military museums.</li> </ul>	The course officer is a British Army Captain.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Officer Cadets	See RMAS Commissioning Course Entry Requirements. IELTS level 5.5 with no less than 5 in any individual skill. Fitness: Candidates are required to be physically fit. The minimum standard is to be able to run 1.5 miles (2.5 kilometres) in less than 10 minutes 30 seconds.	3 weeks	Final proficiency tests in drill and weapon handling. Continuous monitoring of progress	3 courses per year scheduled prior to the RMAS Commissioning Courses



# Language Courses

## BESPOKE MILITARY ENGLISH COURSES (ARMY)

### Course No: 419/124

### DCLC Shrivenham

Aim of Course	Outline of Syllabus			Remarks	
<p>Military English Language courses can be designed by the Defence Centre for Language &amp; Culture (DCLC) to meet specific requirements. The syllabus and content of these courses will be tailored to meet the needs of potential customers.</p> <p>All English Language Wing (ELW) courses at DCLC profit from the provision of intensive military English Language Training (MELT), delivered by instructors with military experience. Foreign students train alongside their British counterparts in a military training environment.</p> <p>It should be noted that all our training is tailored to the need of the client; therefore, we are able to offer training of any length for any purpose.</p>	<p>Examples of courses successfully delivered in the recent past include the following:</p> <ul style="list-style-type: none"><li>• Military English Language Training for Aircrew (Pre Flight Training/ Consolidation for experienced aircrew)</li><li>• Preparation for Royal Military Academy Sandhurst Phase A</li><li>• Preparation for Royal Military Academy Sandhurst Phase B</li><li>• English for Advanced Command Staff Course (Shrivenham) Phase A</li><li>• English for Advanced Command Staff Course (Shrivenham) Phase B</li><li>• Pre Technical Language Training (Officers)</li><li>• Technical Language Training (Officers)</li><li>• Technical Language Training (WO/SNCO)</li><li>• English for Military Interpreters</li><li>• SLP 2 Preparation Course</li><li>• SLP 3 Preparation Course</li><li>• SLP 4 Preparation Course</li><li>• Pre Signals Training Course</li><li>• Pre Armour Training Course</li><li>• Pre Infantry Training Course</li><li>• Train The Trainer</li><li>• Remedial English Packages</li><li>• Individual 1:1 Training Packages</li><li>• General English Training</li><li>• General Military English Training</li><li>• Embassy Staff Interpreters’ Course</li><li>• Language for Procurement</li><li>• British Military English Course (BMEC)</li><li>• Advanced Military English Course (AMEC)</li><li>• English for U Peacekeeping</li><li>• Certificate of English Language Teaching for Adults (CELTA)</li></ul>			<p>Training can be delivered either at DCLC or our Mobile Teams can train students in their native country.</p>	
Rank Range	Entry Standards	Duration	Qualifications gained	Frequency	
<p>Courses can be designed to meet the needs of any rank, from Officer Cadet to General. The school has recent experience at all levels.</p>	<p>Teaching is not provided for students with no English Language ability whatsoever. The minimum entry standard is usually IELTS level 4.5.</p>	<p>From 1 week onwards</p>			

# Logistics Courses

## ROYAL LOGISTICS CORPS TROOP COMMANDERS COURSE (LAND DOMAIN LOGISTICS OFFICERS COURSE)

**Course No: 10WBA01**

**Defence College of Support, Worthy Down, Winchester**

Aim of Course	Outline of Syllabus			
To prepare Royal Logistic Corps Troop Commanders for all aspects of their first command, both in Barracks and on Operations.	<p>The Royal Logistic Corps Troop Commanders Course (RLC TCC) is a 14- week course attended by all Officers who have been selected to join the RLC, after completing a year of officer training at the Royal Military Academy Sandhurst.</p> <p>Phase 1 - Intro to Land Logistics and the RLC-(4 Weeks).</p> <p>Covering an introduction to the Theatre Logistic Laydown, the RLC, and Theatre Enablement and Entry, this phase provides a baseline understanding on how the British Army conducts logistics from the Strategic to Operational, covering everything from the Home- Bank to the Theatre, anywhere around the world. With visits to key Theatre Enablers (104 Bde, 17 &amp; 29 Regts RLC, etc) it sets the foundation for our Jnr Offrs on how logistics is delivered by the Army.</p> <p>Phase 2 – Communication &amp; Motor Transport – (3 Weeks).</p> <p>This part of the Cse sees all Trainees heading to the Defence School of Transport (DST) in Yorkshire. Here they gain qualifications in MT Management, Mounted Communications, and the driving of Military Vehicles. International Students may be able to gain these with a valid driving license.</p> <p>Phase 3 – Close Support Tactical Logistics – (4 Weeks).</p> <p>Focused on the Orders and Estimate process, this phase moves the understanding of military logistics from the Strategic to the Tactical. Following a revise of the 7 Questions - Orders and Estimate process, trainees will go into tactical planning cycles with a logistical focus. This prepares them for the summative event of the Cse, Ex TIMBER TRUSS. This 6-day field deployment will see each trainee in command of a Tpt Tp, delivering logistic effect in a tactical setting; with vehicles, soldiers, and an Enemy threat. This confirms their understanding of logistical effect, and how it is delivered in a current Combined Arms Warfare setting.</p> <p>Phase 4 – In Barracks Officers Duties and Responsibilities – (3 Weeks).</p> <p>Following the completion of the tactical element of the Cse, the Trainees move into education focused on one of their other key Offr roles. The management and leadership of their soldiers in barracks. From report writing to discipline, welfare to equipment assurance, this phase ensures they are prepared to lead as well in barracks as they are in the field.</p> <p>Throughout all these Phases there are guest speaks and social events. With visiting Jnr Offrs and COs with recent Operations experience, trainees get current examples of deploy logistics.</p>			
<p>Main Training Objectives:</p> <ul style="list-style-type: none"><li>Analyse the doctrinal theatre logistic laydown at the Strategic to Tactical level.</li><li>Learn and apply logistics principles to a Logistic plan.</li><li>Provide command and control of Logistic force elements.</li><li>Discuss and analyse Logistic Services.</li><li>Evaluate Command procedures for Logistic Support Detachment.</li><li>Deploy and Command the Troop (Log Sup Detachment) on Exercise in a tactical logistic scenario.</li><li>Understand and support Military Transport Management.</li><li>Carry out soldier wellbeing management procedures.</li><li>Carry out and support Troop discipline procedures.</li><li>Brief the Chain of Command in tactical and formal settings.</li></ul>				
Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level: 6 (Minimum 5.5 across all 4 skills)	Course Duration: 14 weeks (Mon - Fri with 2 working weekends)		Courses per year: 3

# Logistics Courses

## EQUIPMENT REPAIR COURSE

**Course No: 10W/AA12**

**Defence College of Support, Worthy Down, Winchester**

Aim of Course	Outline of Syllabus	Remarks
<p>The course enables students to repair all cordage work, vehicle canopies, tentage, sleeping systems, Goretex, patrol packs, leather work and VERITAS.</p>	<p>The course is designed to ensure that the student is suitably qualified to work within a Quartermasters Department and be able to use sound equipment repair techniques to refurbish all heavy-duty repairs. The course encourages full participation by the students, with workshop instruction and practical work using heavy and light industrial machinery and hand sewing techniques by effecting repairs to stock and miscellaneous items, with input and instruction from course instructors.</p> <p>The course comprises of practical summative assessments.</p> <p>Main Training Objectives</p> <ul style="list-style-type: none"> <li>• Operate Machinery.</li> <li>• Construct Personal Load Carrying Equipment (PLCE).</li> <li>• Maintain and repair clothing.</li> <li>• Maintain and repair issued equipment.</li> <li>• Construct and repair tentage.</li> <li>• Construct and repair Vehicle canopies.</li> <li>• Construct and repair leather equipment.</li> <li>• Explain ropes and cordage maintenance procedures.</li> <li>• Maintain Equipment.</li> <li>• Carry out workshop administration.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level: 5	Course Duration: 4 Weeks		6 Per Year

# Logistics Courses

## TAILORING COURSES

**Course No: -**

**Defence College of Support, Worthy Down, Winchester**

Aim of Course	Outline of Syllabus
The Tailoring Department teaches three courses - Basic Tailoring, Advanced Tailoring and Highland Tailoring.	<p>The courses are designed to ensure that the student is suitably qualified to work within a Regimental Tailors Shop, using sound Tailoring Techniques and being able to substitute for the Master Tailor as necessary. The courses encourage full participation by the students, with workshop instruction and practical work using Lockstitch, Blindstitch and Overedge sewing machines and hand sewing techniques, by effecting repairs and alterations to stock issue uniforms and miscellaneous items, with input and instruction from course instructors. In addition, ceremonial dress is taught as well as Highland Dress uniform.</p> <p>All courses include formative and summative assessments throughout in order to progress to the next module.</p> <p>Main Training Objectives</p> <p><b>Basic Tailoring</b></p> <ul style="list-style-type: none"> <li>• Apply Health &amp; Safety at Work Procedures.</li> <li>• Carry out tailoring procedures relating to gender.</li> <li>• Produce articles of clothing by hand using various methods.</li> <li>• Carry out the construction of various pockets and trousers/slacks.</li> <li>• Operate Service Tailoring machinery.</li> <li>• Conduct alterations on garments.</li> <li>• Carry out minor repairs on garments.</li> <li>• Conduct maintenance of Regimental Headdress.</li> <li>• Conduct maintenance of tailored Items.</li> <li>• Conduct medal mounting.</li> </ul> <p><b>Advanced Tailoring</b></p> <ul style="list-style-type: none"> <li>• Perform as a Subject Matter Expert (SME) giving advice on Local Purchase.</li> <li>• Produce nether garments.</li> <li>• Alter nether garments.</li> <li>• Repair nether garments.</li> <li>• Produce upper garments.</li> <li>• Alter upper garments.</li> <li>• Repair upper garments.</li> </ul> <p><b>Highland Dress Tailoring</b></p> <ul style="list-style-type: none"> <li>• Draft a Pattern for Highland Garments.</li> <li>• Produce Highland Garments.</li> <li>• Repair Highland Garments.</li> <li>• Alter Highland Garments.</li> </ul>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level: 5	Basic Course: 8 weeks.  Advance Course: 11 weeks.  Highland Course: 7 weeks		Basic courses per year: 1.  Advanced courses per year: 1.  Highland courses per year: 1.

# Logistics Courses

## PORT AND MARITIME OPERATIONS OFFICER COURSE

**Course No: CG10RLCPMOOC. 10M/CG10/23/001/3**

**Southampton**

Aim of Course	Outline of Syllabus	Remarks
<p>The Port &amp; Maritime Operation Officers Course (PMOC) is designed to train the Royal Logistics Corps (RLC) and International Officers with the ability to work at staff level in the port and maritime environment. Following the course these officers will be able to plan, manage, recce (austere, bare back and well-founded ports) around the world. Students will also understand the role of 17 Port and Maritime Regiment (P&amp;M Regt) RLC and their roles as Operations Officer to be able to fulfil deployments within the UK (home bank) and overseas (far bank) on Port Task Groups (PTGs) and the role of 165 Regt RLC. In addition, they will understand the various tasks issued from LOC via 104 BDE, the Naval LITTORAL strike group.</p>	<p>The PMOC is delivered in both classroom and outdoor environments, combining theory and practical training. The course is initially conducted at DCSp LSTW 73 Sqn located in Marchwood Southampton. There are elements that require the conduct of a Port recce within the UK and a beach recce enabling the understanding of the Logistic Beach Unit. The course is designed for OF2s, typically on a first appointment to 17 P&amp;M Regt RLC, and OR7s Port Operator and Mariner Senior Non-Commissioned Officers. It enables them both to conduct the role of Squadron or Regimental Operations Officers working at 17 P&amp;M Regt RLC, it also supports subsequent staff appointments at Bde or Army HQ. All trainees must be Medically Fully Deployable (MFD) owing to the practical elements of the course.</p> <p>There are several formative and summative assessments throughout the course.</p> <ul style="list-style-type: none"> <li>• Explain the management of Port Operations.</li> <li>• Describe the management of loading, stowage and unloading of cargo.</li> <li>• Summarise the management obligations for Subunit Port Equipment Care.</li> <li>• Define Vehicle Support Specialist (VSS) Operations.</li> <li>• Define Operational Hygiene Operations.</li> <li>• Summarise the management operations in a SPOD and a SPOE.</li> <li>• Describe the role of a Port &amp; Maritime Operations room.</li> <li>• Explain the management of a marine pollutant Incident.</li> <li>• Conduct Port reconnaissance (Recce).</li> <li>• Conduct Beach reconnaissance (Recce).</li> <li>• Manage Maritime Operations.</li> <li>• Summarise the management obligations for Maritime Equipment Care.</li> <li>• Manage Mexeflote Operations.</li> <li>• Describe the Maritime elements of Ship to Shore Pipeline Operations.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level: 7	8 Weeks	<ul style="list-style-type: none"> <li>• RLC-PMO_OFFR-ARMY.</li> <li>• MARPOL 1st Responder.</li> </ul>	1 Per Year



# Logistics Courses

## JOINT LOGISTIC OPERATIONS COURSE

**Course No: 10w/0035**

**Defence College of Support, Worthy Down, Winchester**

Aim of Course	Outline of Syllabus
<p>To prepare officers for designated appointments in logistic planning and execution of joint and combined operations</p>	<p>Joint Logistics Operations (JLOC) is a 2-week course attended by Officers and Warrant Officers from all three services as well as Officers from NATO member states and nations within the Mutual Logistic Program (MLP). The focus of the course is understanding the roles and responsibilities of the organisations that influence the Joint and multinational Operational environment, coupled with the planning and execution of Joint Logistics at the operational level (6- Step Estimate). The course will cover UK logistics doctrine and policy, multinational and coalition logistics, but viewed from a UK Doctrine perspective. External speakers deliver their briefs on the planning considerations, factors and operational execution relevant to their organisations. Emphasis is placed upon current operational issues and themes to highlight freedoms and constraints placed upon a commander at the Joint Operational Level. Naturally, students will need to be mindful of the associated J3 picture, however the main focus will be with the analysis of logistic factors in support of operations. The course does not cover the detailed tactics and execution of the plan and students are expected to have knowledge of their own Service/Arm.</p> <p>Phase 1. To ensure a common level of understanding, students will receive a range of external briefs and updates regarding Logistic Support at the operational/strategic level, including a visit to the Permanent Joint Headquarters. Importantly, students will receive an overview of Joint Logistic Planning (JDP 4-00) and gain an understanding as to the linkages which feed Campaign Planning. Students will conduct some syndicate work during this phase. It would be useful for students to have a working knowledge of the Operational/Logistic Estimates and some pre-reading of JDP 4-00 would be beneficial. These documents can be viewed within the DCDC website: Doctrine Publications Link.</p> <p>Phase 2. Deploy to Budapest, Hungary to conduct Ex MAGLITE to practice Logistic Planning at the Operational level. Students will leave with a better understanding of the challenges associated with the Comprehensive Approach (CA) (Joint and multinational) within the context of a Contemporary Operating Environment (COE). Students will work in syndicate groups with Subject Matter Expert (SME) advisors assisting throughout. Syndicates will be responsible for the management of their own time, and all should expect to work long days. Syndicates will provide a back brief on their given Course of Action (COA) to a number of visiting UK 1*/2* and Hungarian Army dignitaries.</p> <ul style="list-style-type: none"> <li>• Evaluate the roles and responsibilities of organisations that influence the Joint Operational environment.</li> <li>• Evaluate the Logistic Planning Framework and decision-making process at Joint Operational level.</li> <li>• Carry out the Logistic Estimate.</li> <li>• Conduct the development of the Logistic Plan in a Joint context.</li> <li>• Plan the Logistic preparation of the Joint Operations Area (JOA).</li> <li>• Plan the Projection of Force Elements (FEs), using LogFAS as a planning aid.</li> <li>• Plan sustainment of Force Elements using military, contracted and civilian capability.</li> <li>• Plan the Recovery of Force Elements.</li> <li>• Deliver 1* COA Back Brief on the Logistic Plan.</li> </ul>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level: 6.5	10 working days		2 courses per year

# Logistics Courses

## INTERNATIONAL LOGISTICS OFFICER COURSE

**Course No: 10W0066**

**Defence College of Support, Worthy Down, Winchester**

Aim of Course	Outline of Syllabus	Remarks
To train overseas Logistic Officers in British Joint Logistic Operations, responsibilities, and functions that may be considered useful for future logistics appointments.	<p>International Logistics Officers' Course (ILOC) is a 30-day course open to officers ranging from OF1 to OF4. It provides training for future logistics appointments.</p> <p>The course exposes trainees to joint logistic operations, planning and capabilities from factory to foxhole. Training is delivered through a combination of 3<sup>rd</sup> to Unit Commander briefs, Subject Matter Expert presentations, capability demonstrations and unit visits. Key visits include Defence Equipment and Support (Bristol), Team LEIDOS (Donnington), Navy Command (Portsmouth), and RAF Brize Norton (Oxford). The final phase of the course is a joint logistical planning exercise which draws on the knowledge developed throughout the course integrated with the trainee's own experience and knowledge.</p> <p>The course location in the south of England enables the students to obtain an understanding of UK culture through visits to London, Portsmouth and Windsor.</p> <p>Main Training Objectives</p> <ul style="list-style-type: none"> <li>• Gain Awareness of UK MOD and Armed Forces Structures</li> <li>• Gain Awareness of UK Fourth to First Line Logistics.</li> <li>• Gain Awareness of the role of Joint Logistic Enablers.</li> <li>• Experience UK culture.</li> <li>• Conduct UK Combat Estimate.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level: 5.5	Course Duration: 24 working days (Mon - Sat), 6 rest/travel days		Courses per year: 1 (July)

# Logistics Courses

## MOVEMENT CONTROL OFFICERS COURSE

**Course No: CB06**

**Defence Movements Training Squadron, RAF Brize Norton**

Aim of Course	Outline of Syllabus	Remarks
To introduce Army Junior Officers appointed to a HQ Movement Staff or Movement Control Officer post, to military movement in support of operations.	<p>The course is intended to give junior Officers assigned to a Formation Staff Appointment an insight and understanding in the complex world of Movements. The course introduces officers to collaborative planning, tactical movement analysis and management of resources to deliver movements across either single or multi-modal lines of communication. The course further aims to develop officers appointed to movement organisations to understand managing consignment process and personnel responsible for delivery of executive movement control at transshipment points in support of Operations.</p> <p>The course is open to UK military staff and international students involved in movement planning at Formation level and managing executive single and multi-modal logistic points.</p> <p>Main Training Objectives</p> <ul style="list-style-type: none"> <li>Defence Movements Organisation.</li> <li>Joint Service Movements Organisation.</li> <li>Strategic Planning and operational Movements procedures for:               <ol style="list-style-type: none"> <li>Air Transport.</li> <li>Sea Transport.</li> <li>Rail Transport.</li> <li>Road Transport.</li> </ol> </li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 7	22 working days (Mon-Fri).		2 courses per year

# Logistics Courses

## OFFICERS PETROLEUM COURSE

**Course No: 10H/CF01**

**Logistic Specialist Training Wing  
Defence School of Logistics and Administration, Southampton**

Aim of Course	Outline of Syllabus	Remarks
<p>The Officers Petroleum Course (OPC) is designed to train the Royal Logistics Corps (RLC), Royal Air Force (RAF), Royal Navy (through Cdo Logs Regt) and International Officers with the ability to work at staff level with any type of fuel. Following the course students will be able to plan, move, store, and distribute all fuel types through pipelines, Joint Operational Fuel System (JOFS), vehicles and other methods in accordance with legislation and regulations. Students will also understand the chemical makeup of fuel and its characteristics and know how to make fuel fit for purpose. Additionally, students will understand how to plan fuel as part of Bde+/ Air Group deployments and generate all health and safety, risk, fire, and spill paperwork required when using fuel.</p>	<p>The residential course is delivered in both classroom and outdoor environments, combining theory and practical training. The course is initially conducted at the Defence Academy at Shrivenham by Cranfield University, where the bulk of the academic theory is taught. The remaining military theory and practical elements are delivered at DCSp Worthy Down and by external units such as RSME Chatham, RAF Halton, RAF Cosford, Petroleum Inspectorate and Tactical Supply Wing. The course is open to OF1 - OF2 (Lt / Fg Off - Capt / Flt Lt). All students must be Medically Fully Deployable owing to the practical nature of the course. The course is aimed at developing the skills required to act as a fuel's specialist in a Joint environment as a Staff Officer.</p> <p>There are a number of formative and summative assessments throughout the course, in order to progress onto the next module.</p> <p>Main Training Objectives</p> <ul style="list-style-type: none"> <li>• Conduct Joint Fuel Specialist staff work planning at Unit &amp; Formation level.</li> <li>• Manage Deployed Bulk Fuel Installations.</li> <li>• Manage the construction, maintenance &amp; de-construction of an Enhanced Storage Module (ESM).</li> <li>• Manage the construction and maintenance of Bulk Fuel Carrying Vehicle (BFCV) Modules.</li> <li>• Demonstrate how the construction, maintenance and de-construction of the Light Forces Pumping Systems (LFPS) are directed.</li> <li>• Demonstrate how the Quality Control of Fuel &amp; Lubricants (F&amp;L), LPG, Specialist and Industrial Gases is managed, including the application of RAF Quality Assurance, Flight safety and Airworthiness Policy as applicable to Aviation Fuels.</li> <li>• Manage the Operating Authority (OA) of a Deployed Permanent Installation (DPI).</li> <li>• Manage Static Fuel Installations.</li> <li>• Conduct Petroleum Inspectorate duties.</li> </ul>	<p>This residential course is delivered Jan - Aug each year, in both classroom outdoor environments, with a mixture of theory and practical elements. The course is initially conducted at the Defence Academy at Shrivenham, for the bulk of the academic theory, with the practical elements currently delivered at MOD West Moors.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>IELTS Level: 7</p> <p>The course is open to OF1 - OF2 (Lt / Fg Off - Capt / Flt Lt). All students must be Medically Fully Deployable owing to the practical nature of the course.</p>	<p>Course Duration: 31 Weeks (Jan - Aug) (Jan - Aug)</p>	<p>RLC-PET OFFR-ARMY</p>	<p>1 course per year</p>

# Logistics Courses

## DEFENCE LOGISTICS STAFF COURSE (DLSC)

**Course No: DLSC/23/001, DLSC/23/002**

**Defence College of Support, Winchester**

Aim of Course	Outline of Syllabus	Remarks
<p>The Defence Logistics Staff Course (DLSC) provides an opportunity to Defence logisticians to study logistics to Masters level. The syllabus, delivered in a modular format, covers supply and support issues from both an 'effectiveness' and 'efficiency' perspective, equipping individuals to support the expeditionary 'battle space' from an, as lean as possible, 'business space'. The programme is aimed at logistics officers who have 6 to 10 years' experience at middle rank level. The middle rank level being equivalent to UK MOD of SO2 (OF 2) (i.e. UK Army Major). Applications from more senior and junior officers will also be considered.</p>	<p>The DLSC is a work (and home) based educational programme delivered in contracted partnership with the University of Lincoln (UoL).</p> <p>Pre DLSC-Entry Qualifications Successful applicants would normally have a good first degree. Other candidates are considered if they possess suitable managerial experience and are deemed by their respective command chain or career manager to be capable to undertake the course. Applicants not having English as their 1st language must attain English Language Testing Service (IELTS) score of 5.5.</p> <p>Main Training Objectives</p> <p>Compulsory Subjects (Students complete all of below):</p> <ul style="list-style-type: none"> <li>• Introductory Studies and Strategic Aspects of Logistics.</li> <li>• Fundamentals of Defence Logistics.</li> <li>• Management and Leadership in Defence Logistics.</li> <li>• Information Systems &amp; Decision Support in Logistics.</li> <li>• Logistics Business Acumen.</li> <li>• Application of Logistics Supply and Support Concepts (Capstone Module). Module will be the final to be delivered on the course.</li> </ul> <p>Elective Subjects (Students complete any 2 from below):</p> <ul style="list-style-type: none"> <li>• Project, Programme and portfolio Management.</li> <li>• Financing Defence Logistics.</li> <li>• Operations Management.</li> <li>• Humanitarian and Disaster Relief.</li> <li>• Logistics in Through Life Capability Management.</li> <li>• Logistics Information Management and Exploitation.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>IELTS level: 5.5 Reading, Writing, Speaking and Listening.</p> <p>Pre DLSC-Entry Qualifications Successful applicants would normally have a good first degree. Other candidates are considered if they possess suitable managerial experience and are deemed by their respective command chain or career manager to be capable to undertake the course. Applicants not having English as their 1st language must attain English Language Testing Service (IELTS) score of 5.5</p>	<p>Students are expected to attend 8 one – week residential (Module) weeks (6 Modules are compulsory and 2 are Elective from a pool of 6) over a 23-month period and submit after each week a 3000 to 5000-word academic paper assignment in answer to a question set and marked by the UoL (the assignment may for some residential weeks include presentations delivered during the week). To achieve the right training delivery &amp; balance, the academic logistics foundations provided by the UoL, are supported by lectures on the UK Defence 'approach' to logistics and exposure to industry and international best practice.</p>	<p>DLSC students who successfully complete all academic assignments are awarded a PG Dip in Logistics Management by the UoL. Students who gain a PG Dip are afforded the opportunity to complete their studies for the award of a Masters (MSc) in Logistics Management through the submission of a dissertation. The PGDip and/or MSc in Logistics Management has the professional accreditation of the UK Chartered Institute of Logistics and Transport (CILT); the Chartered Institute of Procurement and Supply (CIPS), and the Chartered Management Institute (CMI). The DLSC attracts a Training Return of Service (TRoS) of 18 months from completion for UK Service personnel.</p>	<p>Courses per year: 2</p> <p>Course start each year (April and September) with spaces for 25 students on each. The courses are delivered by Command Wing DCSp and Lincoln University using training facilities at RAF Cranwell and the Lincoln University Brayford Pool campus in Lincoln. In exceptional circumstances, students can join some modules remotely via MS Teams if they cannot physically attend.</p>



# Logistics Courses

## OFFICERS' MOVEMENTS TRAINING (OMT)

**Course No: 2500**

**Defence Movements Training Squadron, RAF Brize Norton**

Aim of Course	Outline of Syllabus	Remarks
<p>To provide Logistics Officers with the necessary skill and knowledge applicable to the duties of the Movement Officer, in order to enable the Officer to manage the movement of passengers, cargo and mail by air and service means under normal peacetime conditions and contingency operations.</p>	<p>This pre-deployment Training Course provides the student with the technical skill and knowledge required to fill any Junior Movements Officer post.</p> <p>There is a large practical element to the course, providing students with the skills required to restrain, plan and build aircraft loads, utilising the aircraft mock-ups within the practical training area. The course content is delivered via classroom lectures, guided study, practical demonstrations, a series of visits, and practical exercises both in the UK and Cyprus. The course is open to a minimum OF-1. Foreign and Commonwealth students who have been nominated by the FCO. International students are to have an International English Learning Testing System (ELTS) score of 7 and CP3 vision.</p> <p>Main Course Objectives</p> <ul style="list-style-type: none"> <li>• The course introduces the student to the Movements organisations and the Movements trade structure.</li> <li>• It goes on to comprehensively study regulations and procedures governing the movement of passengers and cargo in all types of Service and civilian transport aircraft and by Service means of transport.</li> <li>• It goes on to comprehensively study regulations and procedures governing the movement of passengers and cargo in all types of Service and civilian transport aircraft and by Service means of transport.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level: 9	17 weeks (Mon - Fri).	Course completion certificate	2 per year

# Logistics Courses

## SUPPLY BASIC TRAINING COURSE

**Course No: 1825**

**DCLPA Worthy Down**

Aim of Course	Outline of Syllabus	Remarks
To train selected Officers of the Logistics Branch, Warrant officers and Senior NCOs of Trade Group 18 and selected RL Pet Op SNCOs to fill specific posts directly associated with the operation of Petroleum Supply Depot Ocean Terminals.	<ul style="list-style-type: none"> <li>• Ocean Terminal Management</li> <li>• Ocean Tanker Design</li> <li>• Actions prior, during and after an Ocean Tanker Discharge</li> <li>• Accounting and Documentation</li> <li>• Practical Operations</li> <li>• Marine Pollution</li> </ul>	This residential course is delivered four times per year to a maximum 4 students who are directly employed in Ocean Tanker Receipts at air force Permanent Joint Operating Bases (PJOB) s around the world. The course runs for 2 weeks and covers the theory and practical elements of receipting fuel from ocean going tanker including the quality surveillance measures involved.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR-5 to OF-2 & Civilian Equivalent (Sgt - Flt Lt)	Must have completed Fuels & Lubricants Section Operator Course (10h/1900) Must have completed Fuels & Lubricants Section Manager & Supervisor Course (10h/1891) Be a minimum of A/Sat	2 Weeks (including travel to RAF Akrotiri)	Q-SUP-F(OT)-RAF	4 per year

# Medical Courses

## MILITARY PREHOSPITAL EMERGENCY CARE COURSE

### Course No:

### DMS Whittington

Aim of Course	Outline of Syllabus	Remarks
<p>The principle aim of MPHEC is to provide an introduction to pre-hospital care in the United Kingdom for DMS doctors, nurses and paramedics and as such the focus of all modules will be the skills, behaviours and knowledge required for PEC in the UK. Given that the whole purpose of gaining UK PHEC experience is to ensure effective delivery of PEC in the deployed environment reference to deployed PHEC will be made when appropriate throughout the course.</p> <p>Doctors: The course will aim to provide sufficient skills and knowledge for doctors to participate in non-clinical ride-along shifts with the NHS Ambulance Service or a Helicopter Emergency Medical Service (HEMS) and to start experience-appropriate PHEC work in the civilian environment such as NH Medical Emergency Response Incident Teams (MERIT), HEMS, or private event medicine such as music concerts. The skills learned in these roles are full transferable to military practice.</p> <p>Nurses: The course will aim to provide sufficient skills and knowledge to participate in non-clinical ride-along shifts, and to explore opportunities for PHEC nursing, as above. The course should also raise awareness of the requirements and options for nurse PHEC and the additional learning needs this might entail.</p> <p>Paramedics: The course will act as a standardisation of practice for clinically current paramedics and a refresher for those returning to clinical practice. It will allow paramedics the opportunity to develop other profession understanding of their role in PHEC and to improve their own awareness of multi-disciplinary pre-hospital emergency care.</p>	<p>The MPHEC course will utilise an online pre-course learning package coupled with a series of presentations and scenarios designed to develop and test the candidates in relation to situations they may find themselves in when undertaking a role within the PHEC environment specifically :-</p> <ol style="list-style-type: none"> <li>An introduction to pre-hospital safety and how to attain confidence in the PHEC environment.</li> <li>An introduction to, and a basic understanding of, conditions commonly encountered in PHEC.</li> <li>Equip candidates with the knowledge to deal with the most challenging or time-critical PHEC situations if they are unlucky enough to encounter them early in their PHEC career such as cardiac arrests in special circumstances or capacity issues.</li> <li>Gain an understanding of the principles of career and personnel development in PHEC. This will include translation of in-hospital knowledge to the PHEC environment, an awareness of relevant PHEC CPD and how to identify and address shortfalls in their PHEC knowledge.</li> <li>Ensure candidates' attitudes, behaviour and baseline knowledge are sufficient to protect the reputation of the DMS as they embark on UK or overseas PHEC experience. Assessment of competence consist of a moulage station and a written examination containing 25 questions with five true/false answers per question stem.</li> </ol>	<p>The course prepares, and is seen by prospective employers as preparing, doctors, nurses and paramedics for initial work in the UK or overseas PHEC environment appropriate to their qualifications and experience. The actual requirements to be met by the end of the course will be somewhat different for the three professions undertaking the course.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
All Ranks based on Professional Qualifications	International English Language Testing System IELTS 6	3 days		

# Medical Courses

## MILITARY MAJOR INCIDENT MEDICAL MANAGEMENT AND SUPPORT (MiLMIMMS)

**Course No:**

**DMS Whittington**

Aim of Course	Outline of Syllabus	Remarks
The aim of the course is to provide the functional knowledge and understanding of major incident management at Bronze and Silver levels of command and enable personnel to contribute to site specific major incident plans as well as undertake key roles within a major incident.	The course comprises of interactive lectures, table top and practical exercises. Personnel are introduced to the major incident algorithm and given numerous challenges and opportunities to apply knowledge and understanding to a range of major incident based scenarios. Competency of understanding is assessed at the end of the course through mostly scenario based assessments where the student is required to demonstrate effective use of the principles of major incident management.	The MiLMIMMS End State is to deliver personnel with appropriate levels of knowledge and understanding to fulfil the role of major incident planning and response.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR3 upwards who meet requirements listed above.		2.5 days		

# Medical Courses

## BATTLEFIELD ADVANCED TRAUMA LIFE SUPPORT (BATLS)

### Course No:

### DMS Whittington

Aim of Course	Outline of Syllabus	Remarks
<p>BATLS is a multi-disciplinary course developed to teach and assess competence of MS personnel to undertake the role of a BATLS practitioner who can manage a trauma casualty in a pre-hospital setting using agreed protocols and treatment when on Operations. The course covers a broad range of skills and scenarios designed to test the knowledge and competence of the BATLS practitioner in preparation for deploying on operations</p>	<p>The course comprises of 3 sections, Pre-course reading and assessment before application followed by a further two parts utilising the Blending Learning Approach to Teaching.</p> <p>Pre-course Reading and Assessment Material that is assed prior to applying for the BATLS course valid for up to 6 months once completed. The completion of this pre-course session should take no more than 6-7 hrs.</p> <p>Part A Online Distance Learning (DL) package hosted on the Defence Learning Environment (DLE). Student led comprising of theory based information and skills videos required in order to be successful in the summative test. This section will take approximately 4-6 hours to complete and will cover 20% of the BATLS training material, it must be completed before attending Part B. The information in this section will be tested during the scenarios and on the summative test but will not be covered during the residential training time.</p> <p>Part B Residential element which a 2 day residential package delivered at the Defence Medical Services Whittington (DMS(W)), where the students work in mixed career employment groups and are mentored through a number of advanced medical interventions. Students are subsequently assessed on practical skills and theoretical knowledge in summative assessments.</p>	<p>The BATLS End State is to deliver DMS Personne with the requisite theoretical understanding, clinical skill, and professional knowledge able to fulfil appointments at Role One within the Land, Sea and Air environment.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Enlisted OR 2 - 9, Commissioned OF 1 - 5	International English Language Testing System (IELTS) 6	2.5 days (Part A - 0.5 days Online Distance Learning (ODL). Part B - 2 day Residential)		



# Medical Courses

## ETHICAL ISSUES FOR MEDICAL PERSONNEL CAPTURED PERSONS (PERS)- AWARENESS

**Course No: 1013**

**DMS Whittington**

Aim of Course	Outline of Syllabus	Remarks
<p>These courses provide awareness of ethical issues surrounding the detention and medical treatment of CPERS. They highlight the roles and responsibilities of all medical personnel as detailed in Joint Doctrine Publication (JDP) 1-10.</p> <p>a. The Ethical Issues for Medical Personnel (CPERS) Awareness online course is mandatory pre-deployment, and/ or Very High Readiness (VHR), training for all DMS personnel. It is available via Defence Learning Environment (DLE). Recorded on JPA, it also serves as prerequisite learning for the Ethical Issues for Medical Personnel (PERS) Practitioner course.</p>	<p>Designed to assist the individual in conceptualising related doctrine and ethics, with the responsibilities and practicalities of PERS detention and treatment. a. The CPERS Awareness provides benchmarks for ethical and detention treatment considerations in accordance with JDP 1-10. There is an online exam to quantify Awareness/Level 1 understanding.</p>	<p>Defence Medical Services personnel will be prepared for their responsibilities surrounding PERS in accordance with Defence doctrine and international policy.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
All ranks/ members of Defence Medical Services.	International English Language Testing System (ELTS) 7.9	Online 1 hour		

# Medical Courses

## ETHICAL ISSUES FOR MEDICAL PERSONNEL CAPTURED PERSONS (CPERS)-PRACTITIONER

**Course No: 1013**

**DMS Whittington**

Aim of Course	Outline of Syllabus	Remarks
These courses provide awareness of ethical issues surrounding the detention and medical treatment of CPERS. They highlight the roles and responsibilities of all medical personnel as detailed in Joint Doctrine Publication (JDP) 1-10. a. The Ethical Issues for Medical Personnel (CPERS) Practitioner Course builds upon the Level 1 awareness with related doctrine and international policies.	Designed to assist the individual in conceptualising related doctrine and ethics, with the responsibilities and practicalities of PERS detention and treatment. a. The CPERS Practitioner builds upon the CPERS Awareness considerations with subject matter expert led sessions in: medico-legal, Military Provost, single Service considerations for detention facilities, Military Ethics and values, Medical Ethics. Furthermore, introducing policy from the United Nations, British Medical Association, International Red Cross and World Medical Association declarations. To quantify Practitioner/ Level 2 understanding there is a 30-minute multiple choice theory exam requiring a 75% pass mark.	Defence Medical Services personnel will be prepared for their responsibilities surrounding CPERS in accordance with Defence doctrine and international policy.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
MS Personnel in possession of Awareness competency, including Medical Officers, Nurses and senior ranking Medics. Junior ranking Medics are taken only by exception where operational job role dictates.	International English Language Testing System (IELTS) 8-9	2 days.		

# Medical Courses

## POST GRADUATE MEDICAL OFFICER PHASE 2B (PGMO)

### Course No:

### DMS Whittington

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of PGMO is to prepare a qualified doctor to deliver the capabilities of an Army MO on Operations and at Regimental Duty, both in the Firm base and worldwide. All students upon meeting the TOs will be awarded competencies for Major Incident Medical Management and Support (MIMMS), Battlefield Advance Trauma Life Support (BATLS), Military Pre-Hospital Emergency Care (mPHEC), Defence Medical Information Capability Programme (DMICP) and the Diploma in the Medical Care of Catastrophes (DMCC) from The Worshipful Society of Apothecaries.</p>	<p>The course comprises of 14 week terms. Throughout the primary focus is on exposing the students to a wide range of clinical areas and specialties to prepare them for deploying on operations and working at Regimental duty. The course includes visits to the Institute of Naval Medicine (INM), Middle Wallop and Winterbourne Gunner. The students will have the opportunity to interact with and learn from leading clinicians within their fields.</p> <p>There are several Summative Assessments and students receive an End of Course Report.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Capt	International English Language Testing System (EIT9) 6	14 weeks		

# Medical Courses

## JOINT MEDICAL OPERATIONS PLANNING COURSE (JMOP)

### Course No:

**DMS Whittington**

Aim of Course	Outline of Syllabus	Remarks
The aim of this training is to enable DMS Officers to undertake effective Medical Staff Officer duties in a Joint or single Service operational headquarters	<p>The course comprises of two, 1 week elements:</p> <p>WEEK 1: The first week mixes an overview of the theory and basis of Operational Planning with insight briefs from Defence, civilian and NATO subject matter experts ranging from environmental health, CBRN and the UK Surgeon General. The key analytical skills and tools common to the various Operational Level Planning Processes in AJP-5 are also introduced here, with students practicing then based around a common scenario.</p> <p>WEEK 2: The second week is based around practical group planning exercises, which use modern kinetic conflict and humanitarian intervention scenarios to develop student confidence with the planning process and tools. This is supported by 'real word experience' talks from UK and NATO Operational Level Medical Planning Practitioners. The course final exercise concludes with a summative assessment decision brief, presenting key medical factor analysis to a senior member of the department staff, acting in the role of Commander.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Tri Service OF2-3. "The course is primarily designed to prepare DMS Officers from the Command and Staff Cadre, as senior OF2s. Selected Medical Technical Officers and POO either OF2 or junior OF3s may be nominated to attend."	International English Language Testing System (IELTS) 6	2 weeks		Twice a year

# Medical Courses

## MEDICAL HUMANITARIAN AND STABILISATION OPERATIONS (MHSO)

### Course No:

**DMS Whittington**

Aim of Course	Outline of Syllabus	Remarks		
<p>The course introduces students to the necessary international, civilian, NATO and UK military theories and practical advice required to assist in the planning of a Humanitarian Assistance Operations, Stabilisation Operations, Reconstruction and Development Operations, Healthcare CIMIC activities and Defence Healthcare Engagement Activities (including Security Sector Reform and Disarmament, Demobilisation and Reintegration). Topics include and not limited to:</p> <ul style="list-style-type: none"><li>• Policy and Doctrine - HMG Department for International Development, Foreign and Commonwealth Office and Defence Policy, AJP 4.10(b), ISP 352 and Sharing the Space.</li><li>• International Policies - International Humanitarian Law, International Health Regulations, Oslo Guidelines, Tzwalu Protocols, Sphere Project, Minimum Standards, Sustainable Development Goals, International Classification of Diseases.</li><li>• Complex Environments - Health Needs Assessment, Blurring the Lines, The Role and Responsibilities of Medics in Conflict, Advanced Healthcare Ethics, The Epidemiology of Civilian Populations in HADRO, sustainability, suitability, appropriateness, Quick Impact Projects and MEDCAPs, Measurements of Performance and Measurements of Effect.</li><li>• 10s, GOs and NGOs - The International Response System, Inter-Agency Standing Committee, the Cluster System, Wilsonian vs Dunantist NGOs, Funding, Regulation of International Emergency Medical Teams, ICRC vs IFRC.</li><li>• Health Systems - Stewardship, WHO 6 Building Blocks, AMGOTs, Health Development Roadmap, the Determinants of Health, the symbiotic relationship between civilian and military healthcare, unintended consequences.</li></ul>	<p>The course will predominately be conducted in a classroom setting; the course is comprised of presentations by outside SME military and academic guest speakers and syndicate work. The students will have the opportunity to interact with and learn from these leading SMEs within their respective fields. It is pitched at the Master’s level of learning. There is a Summative Assessment at the end of the course</p>			
Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
<p>The course is targeted at the 502 level and is rank ranged OR8 to OF4.</p>		<p>1 weeks</p>		<p>Bi-Annually</p>



# Medical Courses

## FLUORIDE FOR DENTAL NURSES

**Course No:** -

Aim of Course	Outline of Syllabus	Remarks
To ensure that each student is competent to carry out extended duties with regards to fluoride application	To provide Dental Nurses with the skills/ competency to apply fluoride varnish to patients on the prescription of a dentist.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Mil- OR2- OR9 Civ- Band 3-4	General Dental Council <a href="http://www.gdc-uk.org">www.gdc-uk.org</a> registered and qualified Dental Nurses	2 Days  Following course a 3 Month portfolio is completed and signed off before the competency is awarded	Fluoride Varnish for Dental Nurse Application competency.	4x courses year

# Medical Courses

## ARMY TEAM MEDIC INSTRUCTOR

### Course No:

Aim of Course	Outline of Syllabus	Remarks
To produce an instructor capable of delivering the Army Team Medic course at Unit level. The training includes both theory and practical modules required to fulfil this role.	<p>Workshops reviewing teaching methods and styles to develop Instructors skills and understanding of how to create/deliver an effective TM lesson to non-medical personnel.</p> <p>Peer to peer formative lesson assessments to coach and mentor instructor in the styles and methods of conducting a student reviews and feedback of their deliver skills.</p> <p>DDT-Formative review of the Instructors teaching skills including all practical and theory elements. Formative assessment - the post student debrief is used as a coaching and mentoring, to help develop and improve a students' delivery styles and methods effectiveness.</p> <p>DDT-Summative assessment confirming that the instructor has met the trainer standard, as per JSP 822 and do not require a trainer development plan to be put in place.</p> <p>How to run a Team Medic Course, processes and procedures inline with policy, this includes the legal aspects of maintaining accurate documentation and the retention of information/ documentation for the appropriate period.</p>	-

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
LCpl or above	Must be CMT1 or equivalent with DTTT Level 3 or DWT qualification	3.5 Days	TM (Army) Instructor	every 3 years

# Medical Courses

## MATT 3 INSTRUCTOR

**Course No:** -

Aim of Course	Outline of Syllabus	Remarks
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The outline of the course is, to enable the instructor to deliver the battlefield casualty drill course. The main objective is for the soldier to be able to treat injuries at the point of wounding

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Minimum rank/grade is OR2.	must be Defence Trainer qualified	4 Days	BCDT, Battlefield Casualty Drill Training instructor	Frequency or duration of certification is 3 years

# Medical Courses

## COMBAT HEALTH DUTIES

### Course No:

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of the course is to provide Junior Ranks/Rates with the ability to contribute to the prevention of Disease and Non-Battle Injury (DNBI) at Unit level whilst deployed on Operations or Overseas Training Exercises (OTX).</p> <p>At the end of the course, personnel will have the ability to identify and control pests of medical importance, advise on operational sanitation and maintain Unit water supplies in the field environment.</p>	<p>The CHD course consists of classroom-based learning which covers Vector control, operational sanitation and water purification.</p> <p>The students will learn how to prevent Disease Non-Battle Injuries (DNBI's) in the deployed environment through understanding the Source, Route and Target of disease and what physical, biological and chemical controls are available to prevent their occurrence.</p> <p>A sound understanding of entomology is acquired allowing the CHD's to articulate to the deployed force how our actions can effect insect activity, and how we can protect ourselves. Identification, characteristics and control of Rodents is covered in depth to allow CHD's to efficiently control rodent populations in the deployed environment, thus lowering the incidence of disease.</p> <p>Students will have a thorough understanding of the Operational Sanitation appliances that are required when deployed overseas and how to maintain these to prevent/lower DNBI's. CHD's are at the forefront of the construction and maintenance of these appliances.</p> <p>Students on this course will become fully competent on the operation of pesticide application equipment including the Swingfog and compression sprayer, with an acute understanding of the effects of knockdown and residual insecticides.</p> <p>CHD's will learn to readily procure potable water through operation of the in-service Water Carriage Pack and ancillaries. Maintenance and daily assurance of this water supply will be conducted by the trained CHD through use of the Lovibond Checkit, testing for residual chlorine.</p>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
This course is for Corporals and below	Spaces are allocated to units in accordance with their Operational priorities and the annual statement for training need by the Single Services.	4 Days	No formal qualifications are awarded for this course but on successful completion, a record of the student's attendance should be recorded on individual JPA records. The JPA competency is valid for 3 years.	<p>Dependant on the Customer Agent requirements.</p> <p>The 2022-2023 Training year allocated 19 CHD courses for delivery.</p>

# Medical Courses

## BLOOD DONATION, STORAGE AND SUPPLY (BDSS)

### Course No:

Aim of Course	Outline of Syllabus	Remarks
For medical personnel requiring specialist knowledge in the setup and administration of an Emergency Donor Panel and the safe storage of blood, and blood products	<ul style="list-style-type: none"> <li>• Functions &amp; composition of Blood (PPT)</li> <li>• Blood Groups ABO and RH, Compatibility and Cross-matching (PPT)</li> <li>• Functions of a Transfusion Centre (PPT)</li> <li>• Good Manufacturing Practice (PPT)</li> <li>• Hazards of Blood Transfusions (PPT)</li> <li>• Temperature monitoring for blood in transit (PPT)</li> <li>• Transport Regulations and Standards (PPT)</li> <li>• Transfusion Transmitted Diseases (PPT)</li> <li>• Blood Storage, Transport and Disposal (PPT/Practical)</li> <li>• Blood Supply In War (PPT)</li> <li>• Blood Donor Selection (PPT)</li> <li>• Emergency donor panel (PPT/Exercise)</li> <li>• Haemoglobin estimation for EDP (PPT/Practical)</li> <li>• Ward Procedures (PPT)</li> <li>• Records (PPT)</li> <li>• Blood Receipt (PPT)</li> <li>• Assessment (Electronic)</li> <li>• Assessment (Written)</li> </ul>	-

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Not specified	This course will be loaded on a priority basis for those deploying with an Emergency Donor Panel (EDP)	5 Days	BBTS Certificate of practice	Every 2 years



# Medical Courses

## BLOOD STORAGE AND SUPPLY (BSS)

**Course No:** -

Aim of Course	Outline of Syllabus	Remarks
For personnel involved in blood/blood product storage and supply but with no clinical requirement for collection and use	<ul style="list-style-type: none"> <li>• Functions &amp; composition of Blood (PPT)</li> <li>• Good Manufacturing Practice (PPT)</li> <li>• Temperature monitoring for blood in transit (PPT)</li> <li>• Blood Storage, Transport and Disposal (PPT/Practical)</li> <li>• Blood Storage Unit (PPT/Practical)</li> <li>• Blood Supply In War (PPT)</li> <li>• Records (PPT)</li> <li>• Blood Receipt (PPT)</li> <li>• Assessment (Electronic)</li> <li>• Assessment (Written)</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Not specified	This course will be loaded on a priority basis for those deploying with blood without an Emergency Donor Panel (EDP)	3 Days	BSS Certificate of practice	Every 2 years

# Medical Courses

## TRAVEL MEDICINE

**Course No:** -

Aim of Course	Outline of Syllabus	Remarks
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The course will provide General Practitioners, General Duties Medical Officers, Practice Nurses and Pharmacists working in DMS practices with the knowledge they require to provide travel medicine advice to individuals and small groups travelling to overseas locations. Others, including (but not limited to) Environmental Health Personnel and Medical Support Officers may find the course to be of benefit.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Open to all ranks (OR2 – OF4) as required by deployment	General Practitioners, General Duties Medical Officers, Practice Nurses and Pharmacists working in DMS practices	3 Days	JPA Record/ Competency (Military Only) as per Master Cse Document	There are two courses planned for trg yr 22/23 as per the compendium of courses.

# Medical Courses

## MILITARY OPERATIONAL SPECIALIST TRAINING TEAM (MOSTT)

### Course No:

Aim of Course	Outline of Syllabus	Remarks
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The course will provide General Practitioners, General Duties Medical Officers, Practice Nurses and Pharmacists working in DMS practices with the knowledge they require to provide travel medicine advice to individuals and small groups travelling to overseas locations. Others, including (but not limited to) Environmental Health Personnel and Medical Support Officers may find the course to be of benefit.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	General Surgeons, Orthopaedic Surgeons, Plastic Surgeons, Anaesthetists, EM doctors, EM nurses, Theatre Nurses and Operating Department Practitioners	5 Days		2 Courses per year

# Music Courses

## MUSICIAN INITIAL TRADE TRAINING

**Course No: -**

**Royal Military School of Music, HMS Nelson Portsmouth**

Aim of Course	Outline of Syllabus	Remarks
To equip musicians of established bands with the necessary skills and knowledge to enable them to perform as instrumentalists.	The course includes: Performing in a concert band, small ensembles, marching bands. Instrument lessons. Music theory and aural. Sight reading. Technical skills including scales. Instrument/equipment care.	The course is unaccompanied. Musicians could gain a recommendation to return to the RMSM for the Music Direction Course.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private and above. There are no Officers' facilities available for officers attending the Musician Course.	IELTS level 5. Students should be at grade 4-5 on their instrument and have a working knowledge of music theory sufficient to meet requirements of playing in an ensemble. Students are subject to a programme of pre-course learning and assessment to confirm suitability this includes an assessment of 'inner musicality'.	12 months.	Subject to initial assessment potential accreditation could include Associated Board of Royal Schools of Music (ABRSM) Grade 6-8 performance and Grade 4-5 theory.	3 courses per year.

# Music Courses

## PIPER CLASS 1

**Course No: 456/029**

**ASBM&HD Edinburgh**

Aim of Course	Outline of Syllabus	Remarks
To improve instructional ability and playing standard of pipers to Class 1 standard and to train pipers in Piobaireachd in order to assess potential for Pipe Majors course.	<ul style="list-style-type: none"> <li>• Practical playing</li> <li>• Theory</li> <li>• Foot drill</li> <li>• Instructional techniques.</li> </ul>	12 students per course. International students accepted if there are places available.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private to Corporal	IEITS level 6 Recommended by Commanding Officer.	7 weeks	Piper Class 1 Certificate PDOB Level 4 Certificate DIT Certificate.	1 course per year - Jun



# Music Courses

## PIPER CLASS 2

**Course No: 456/027**

**ASBM&HD Edinburgh**

Aim of Course	Outline of Syllabus	Remarks
To train pipers to Class 2 standard.	<ul style="list-style-type: none"> <li>• Practical playing</li> <li>• Theory</li> <li>• Foot drill.</li> </ul>	12 students per course. International students accepted if there are places available.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private to Corporal	IELTS level 6. Recommended by Commanding Officer.	10 weeks	Piper Class 2 Certificate. PDQB Level 3 Certificate.	2 courses per year - Jul and Jan

# Music Courses

## PIPER CLASS 3

**Course No: 456/017**

**ASBM&HD Edinburgh**

Aim of Course	Outline of Syllabus	Remarks
To teach potential pipers to Class 3 standard in order to take their place within a unit Pipes and Drums.	<ul style="list-style-type: none"> <li>• Practical playing</li> <li>• Theory</li> <li>• Foot drill</li> <li>• Highland Dancing.</li> </ul>	19 students per course. International students accepted if there are places available.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private to Corporal	IELTS level 6. Recommended by Commanding Officer.	22 weeks	Piper Class 3 Certificate. PDOB Level 1 and 2 Certificate.	2 courses per year - Apr and Oct

# Music Courses

## PIPE MAJORS' COURSE

**Course No: 456/023**

**ASBM&HD Edinburgh**

Aim of Course	Outline of Syllabus	Remarks
To train potential Pipe Majors to the standard of the Pipe Majors' Certificate.	<ul style="list-style-type: none"> <li>• Practical playing</li> <li>• Theory, History, Music Writing</li> <li>• Foot drill.</li> </ul>	8 students per course. International students accepted if there are places available.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Substantive Lance Corporal to Sergeant	IELTS level 6. Recommended by Commanding Officer and by DABM.	28 weeks	Pipe Majors Certificate. PDQB Level 6 Certificate.	1 course per year - Sept

# Music Courses

## DRUMMER (HIGHLAND) CLASS 3

**Course No: 456/021**

**ASBM&HD Edinburgh**

Aim of Course	Outline of Syllabus	Remarks
To teach potential drummers to Class 3 standard in order to take their place within a unit Pipes and Drums.	<ul style="list-style-type: none"> <li>• Practical playing</li> <li>• Theory</li> <li>• Foot drill</li> <li>• Highland Dancing.</li> </ul>	12 students per course. International students accepted if there are places available.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Private to Corporal	IELTS level 6. Recommended by Commanding Officer.	22 weeks	Drummer Class 3 Certificate DOB Level 1 Certificate	2 courses per year - Apr and Oct

# Music Courses

## CLASS 1 DRUMMER/DRUM MAJOR

**Course No: 456/022**

**ASBM&HD Edinburgh**

Aim of Course	Outline of Syllabus	Remarks
<p>To improve the instructional ability of Class 2 Intermediate drummers to the standard of the RSPBA Instructors Certificate.</p> <p>To instruct Class 2 drummers in the skills required to gain the Army Class 1 Certificate and improve ability to the standard of the RSPBA Advanced Certificate. To instruct potential Drum Majors (Highland) in Mace Drill, Drill and formations required for Pipe Bands within the Army to Drum Major Certificate Standard.</p>	<ul style="list-style-type: none"> <li>• Dress, turnout and bearing</li> <li>• Foot and Mace drill</li> <li>• Pipe Band formations.</li> </ul> <p>The theory and writing of drum scores music writing software (advanced) the instruction of the bugle, bass, side and tenor drumthe management of a pipe band the instruction of drumming to beginners history of highland drumming in the army</p>	8 students per course

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Substantive Corporal to Sergeant	IELTS level 6. Recommended by Commanding Officers for the post of Drum Major.	2 weeks	Drum Major (Highland) Drill Certificate	1 course per year - Sept



# Music Courses

## BRITISH ARMY BANDMASTER COURSE (BABMC)

**Course No: -**

**Royal Military School of Music, Minley**

Aim of Course	Outline of Syllabus	Remarks
To equip experienced military musicians of established bands with enhanced academic, technical and musical leadership skills and knowledge to enable them to perform as conductors and musical leaders within their band.	The course includes: Conducting.Orchestration. Harmony.Aural perceptionMusic history. Musical analysis.Based on the role of the student, the course may include training in ceremonial conducting on parade.	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	An IELTS score of 5.5 Minimum required standard is the Associated Board of Royal Schools of Music (ABRSM) grade 5 standard theory, grade 7-8 standard instrument performance. Students should also have some experience and a competent level of conducting technique using a baton. Pre course assessments will include live conducting and written tests in analysis, harmony and orchestration.	92 weeks.	Level 6 Licentiate of the Royal Schools of Music (Music Direction) ((LRSM (MD))	1 course per year starting in September.

# Music Courses

## INTERNATIONAL BANDMASTER COURSE (IBMC)

**Course No: -**

**Royal Military School of Music, Minley.**

Aim of Course	Outline of Syllabus	Remarks
To equip experienced military musicians of established bands with the academic, technical and musical leadership skills and knowledge to enable them to perform as conductors and musical leaders within their band.	The course includes: Conducting. Orchestration. Harmony. Aural perception Music history. Musical analysis. Based on the role of the student, the course may include training in ceremonial conducting on parade.	Based on the role of the student, the course may include training in ceremonial conducting on parade. Students are subject to a programme of pre-course learning and assessment to confirm suitability.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	An IELTS score of 5.5 Minimum required standard is the Associated Board of Royal Schools of Music (ABRSM) is grade 5 standard theory, grade 6 standard instrument performance. Students should have some experience of conducting/ musical leadership using a baton. Pre course assessments will include live conducting and written tests in analysis, harmony and orchestration.	60 weeks.	Level 4 Diploma of the Royal Schools of Music (Music Direction) ((DRSM (MD))	1 course per year starting in April

# Photography Courses

## DEFENCE PHOTOGRAPHER COURSE

**Course No: 521/003**

**JITG Cosford**

Aim of Course	Outline of Syllabus	Remarks
The course is Phase 2 training designed to train Personnel in the trade of Defence Photographer.	<ul style="list-style-type: none"> <li>• Principles of photography</li> <li>• Operation of IT equipment</li> <li>• Operation of digital camera equipment</li> <li>• Operation of video equipment</li> <li>• Operation of lighting equipment</li> <li>• Maintenance of equipment</li> <li>• Digital workflow procedures</li> <li>• Color management</li> <li>• Image enhancement</li> <li>• Image output</li> <li>• Minilab printing</li> <li>• Quality control</li> <li>• Engineering support photography</li> <li>• Technical photography</li> <li>• Operational support photography</li> <li>• Corporate communications photography</li> <li>• Video production.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
(Minimum Rank) RN - Leading Hand. Army - Lance Corporal. RAF - Aircraftsman. MOD Civilian - D Grade	IELTS level 6. In all cases personnel should demonstrate an interest and aptitude for photography.	28 weeks		3 courses per year

# Photography Courses

## DEFENCE MEDIA OPERATIONS PHOTOGRAPHER COURSE

**Course No: 521/001**

**JITG Cosford**

Aim of Course	Outline of Syllabus	Remarks
The course is designed to train personnel in the knowledge and skills to undertake Media news duties as part of a Media News Team or Combat Camera Team.	<ul style="list-style-type: none"> <li>Principles of Photojournalism</li> <li>Media news outlets</li> <li>Image requirements for various news outlets</li> <li>Caption/story writing</li> <li>Use of satellite image transmission software and equipment</li> <li>Photographing controlled and uncontrolled action.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
All ranks	Applicants from the three Services must have successfully completed the Defence Photographer Course. MOD civilians and Reservists must have completed a recognised professional photographic course.	2 weeks		4 courses per year

# Photography Courses

## NON-SPECIALIST BASIC CAMERA HANDLING COURSE (ARMY)

**Course No: 521/007**

**JITG Cosford**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of this course is to train Army personnel who may have to use a digital camera to meet an operational requirement. This bespoke training course is tailored to the individual requirements of the customer. By using modular training objectives and instructional specifications a course can be put together with the minimum of time and documentation.</p>	<p>Dependant on the Requirement</p> <ul style="list-style-type: none"> <li>• Basic principles of photography</li> <li>• Operation of IT equipment</li> <li>• Operation of digital camera equipment</li> <li>• Operation of lighting equipment</li> <li>• Operation of image intensifier equipment for low light photography</li> <li>• Maintenance of equipment</li> <li>• Digital workflow procedures</li> <li>• Color management</li> <li>• Image enhancement</li> <li>• Image output</li> <li>• Practical photographic techniques to meet the operational requirement</li> <li>• Operation of camcorder video equipment</li> <li>• Basic video editing.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
All ranks	Entry to the course will be to meet an operational requirement. A pre-course knowledge of photography is not expected, however a working knowledge of IT equipment and its operation is desirable.	As required to meet the operational requirement		One-off targeted training course



# Physical Training Courses

## ALL ARMS PHYSICAL TRAINING INSTRUCTOR (AAPTI)

**Course No: 432/036**

**Army School of Physical Training (ASPT) Aldershot**

Aim of Course	Outline of Syllabus	Remarks
To teach students how to deliver safe, effective and progressive physical training (PT) to all soldiers. Operate independently, to a formalised Unit PT programme when directed.	Deliver physical training. Deliver recreational training. Conduct physical testing. Design a PT programme. Implement health and safety policy in relation to PT and recreational training. Conduct job related administrative tasks. Describe human anatomical components and exercise physiology	Must have attended the All Arms Physical Training Instructor within the last five years.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance Corporal to Sergeant	<p>IELTS Level 5 in all areas.</p> <p>A high standard of physical fitness, able to achieve the following standards:            Broad Jump 170cm,            Seated Med ball Throw 320cm, Hex Bar Deadlift 80kg, Heaves 3, Agility Sprints 23.2s, 2km Run 8 mins 30 secs. Complete an RFT (S) to the RAPTC Standard. Ability to swim 100 metres and tread water for 2 minutes then climb out of the pool unaided. Must have a full medical and dental examination and be certified, "Fit to attend course"</p>	8 Weeks		4 Courses a Year

# Physical Training Courses

## ROYAL ARMY PHYSICAL TRAINING CORPS INSTRUCTORS (RAPTCI) COURSE

**Course No: 432/002**

**Army School of Physical Training (ASPT) Aldershot**

Aim of Course	Outline of Syllabus	Remarks
Develop Senior Non Commissioned Officer qualities and personnel management skills. Further develop physical development related knowledge and skills taught during the All Arms Physical Training Instructor course. Coach and mentor students in the management and supervision of all physical development training. Mentor students in the management and supervision of physical and recreational training facilities	<ul style="list-style-type: none"> <li>Advise on physical development matters.</li> <li>Describe human anatomical components and exercise physiology.</li> <li>Conduct and demonstrate practical physical training.</li> <li>Conduct and demonstrate practical recreational training.</li> <li>Conduct and demonstrate practical adventurous training.</li> <li>Manage physical development training.</li> <li>Manage resource management policies.</li> <li>Manage personnel</li> </ul>	Must have attended the All Arms Physical Training Instructor within the last five years.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance Corporal to Sergeant	IELTS level 6. A high standard of physical fitness, able to achieve the following standards: Broad Jump 170cm, Seated Med ball Throw 320cm, Hex Bar Deadlift 80kg, Heaves 3, Agility Sprints 23.2s, 2km Run 8 mins 30 secs. Complete an RFT (S) to the RAPTC Standard. Ability to swim 100 metres and tread water for 2 minutes then climb out of the pool unaided. • Must have a full medical and dental examination and be certified, "Fit to attend course"	30 weeks	Adventurous Training Qualifications in Kayaking, MLT, Rock Climbing and mountain biking. Coaching Awards. Officiating/Refereeing Qualifications. Foundation Degree in Sports Coaching (course fees separate). Swimming Teacher Award.	4 courses per year

# Police Training Courses

## DEFENCE GUARDING SPECIALIST

**Course No: 13c/1078**

**Defence school of Policing and Security, Southwick**

Aim of Course	Outline of Syllabus	Remarks
<p>The aim of this course is to train personnel to perform to undertake security duties at defence establishments.</p> <p>Upon completion of this course personnel will be qualified to conduct armed guarding duties, vehicle searches, control room procedures and incident management.</p>	<p>This residential course is aimed at personnel with previous military experience to refresh or enhance their guarding skills. It encompasses both classroom and environmental training, with a mixture of theory and practical elements.</p> <p>The Dismounted Close Combat Trainer is utilised to conduct judgemental training. Person search, vehicle search, patrol techniques, and incident response drills are also carried out in a realistic manner.</p> <p>Students are summatively tested theoretically and practically. There are four assessments.</p> <ul style="list-style-type: none"> <li>• Judgement Assessment (JA).</li> <li>• Written Examination.</li> <li>• Exercise IRON CURTAIN.</li> <li>• Loading Bay Supervisors.</li> </ul> <p>Main Training Objectives</p> <ul style="list-style-type: none"> <li>• Judgemental training in order to understand the rules of engagement.</li> <li>• Comprehension and application of the powers of arrest in accordance with the local law.</li> <li>• Control Room procedures.</li> <li>• Conduct of armed and unarmed patrol techniques.</li> <li>• Reaction to Immediate Reaction Drills including Improvised Explosives Devices (IED), Armed intruders and Suspicious Vehicles.</li> <li>• Use of effective Voice Procedure including sending an initial and a full contact report.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level: 6	5 Days	Level 3 in Defence Guarding and Security	17 courses per year

# Police Training Courses

## CRIME SCENE INVESTIGATOR'S

**Course No: 13c/3105**

**Defence school of Policing and Security, Southwick**

Aim of Course	Outline of Syllabus			Remarks
This Crime Scene Investigation Course qualifies personnel to forensically examine volume and serious crime scenes in accordance with the UK national Occupational Standards.	This 8-week course provide all aspects of crime scene investigation, so that a scene can be recorded accurately together with identifying, interpreting and recovering evidence optimally. The course syllabus is delivered within the classroom and practically within a world class mock crime scene facility.			This course provides theoretical and practical teaching in all aspects of crime scene investigation, enabling the student to record a scene and identity, interpret and recover evidence in accordance with the United Kingdom's Occupational Standards. World Class forensic equipment and training facilities are used to provide this course.
	Students are formatively tested theoretically and practically throughout the course. The assessment covers a number of areas: <ul style="list-style-type: none"><li>• Photography.</li><li>• Trace Evidence.</li><li>• Fingerprints.</li><li>• 4 x Practical Crime Scene assessments.</li></ul> Main Training Objectives <ul style="list-style-type: none"><li>• Crime Scene Photography.</li><li>• Forensic Science.</li><li>• Crime Scene Management.</li><li>• Search Methods and Techniques.</li><li>• Alternative Lights Sources.</li><li>• Anti-contamination.</li><li>• Trace Evidence Recovery.</li><li>• Recovery of Cyber Crime exhibits.</li><li>• Identification and recovery of deceased.</li><li>• Forensic Strategies.</li><li>• Sexual Offence evidence.</li><li>• Crime Scene Logs.</li><li>• Fire and Arson Investigations.</li><li>• Forensic Post-Mortem.</li><li>• Vehicle Examination.</li><li>• Forensic Odontology.</li><li>• Fingerprints.</li><li>• Presenting Evidence.</li></ul>			
Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level 8	8 Weeks	CSA National Occupancy Standard Certificate.	3 course per year

# Police Training Courses

## AVIATION & VENUE SECURITY

**Course No: 13c1457**

**Defence school of Policing and Security, Southwick**

Aim of Course	Outline of Syllabus	Remarks
<p>The Aviation and Venue Security Course teaches students to utilise screening equipment to identify multiple threats to security. Students will be trained to screen personnel, baggage and freight in order to create sanitised, secure areas within Airports, VIP areas, concerts and seminars. The screening equipment includes training on X-Ray Machines, Metal Detectors, Explosive Trace Detector and Liquid Explosive Bottle Scanner</p>	<p>This course is designed to make students aware of how to recognise and manage possible threats to aviation through methods of screening and application of Defence security policies.</p> <p>Students will be assessed on ability to identify threats using X-Ray detection on Quadratica training software. Students will also be assessed on theoretical knowledge to allow successful completion of the course.</p> <p>Main Training Objectives</p> <ul style="list-style-type: none"> <li>• Threats to security to Airports Terminals, VIP Areas, concerts and Seminars.</li> <li>• Recognition of dangerous goods and prohibited items.</li> <li>• Recognition of explosive materials, firearms and components parts.</li> <li>• Person search.</li> <li>• Baggage search.</li> <li>• Aircraft/Area search.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level 7	7 days	Level 1 Aviation Security Operators Course (not civilian accredited).	10 courses per year



# Police Training Courses

## INTERNATIONAL SECURITY SUPERVISORS COURSE

**Course No:**

**Defence school of Policing and Security, Southwick**

Aim of Course	Outline of Syllabus	Remarks
<p>The International Security Supervisors Course aims to provide the International community a standardised and co-ordinated model to respond to any incident in any theatre of Operation. The purpose is to cultivate and foster future working relationships and streamline working practices regardless of nationality, trade or mission.</p>	<p>This course provides theoretical and practical applications of Basic First Response. Attendees will be taught the basics of the Code of Conduct, First Response, scene capture, treatment of victims and evidence collation. Furthermore, they will gain a foundation knowledge on the Response to Road Traffic Collision incidents, Basic First Aid and Personal Safety Instructions.</p> <p>Students will undertake formal practical assessments over 2 days which will test their abilities to respond to varying scenarios based on operational incidents e.g. Responding to Sexual Offences, Road Traffic Collision, Public Order, Robbery and Theft Offences etc.</p> <p>Main Training Objectives</p> <ul style="list-style-type: none"> <li>• Code of Conduct.</li> <li>• Principles of First Response.</li> <li>• Use of Incident Logbooks.</li> <li>• Evidence Recording Process.</li> <li>• Detention and search of Suspects of Crime.</li> <li>• Principles of Sexual Crime and Victim safeguarding.</li> <li>• Basic First Aid.</li> <li>• Personal Safety Training Techniques.</li> <li>• Responding to Road Traffic Accidents and incidents.</li> <li>• Incident Photography and Sketch Plan Recording.</li> <li>• Forensic Awareness.</li> <li>• Crime Reduction Principles.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS level 6	2 Weeks	UK Military Police Certificate of Competence	2 courses per year

# Police Training Courses

## MILITARY POLICE OFFICERS

**Course No: 13c/3106**

**Defence school of Policing and Security, Southwick**

Aim of Course	Outline of Syllabus	Remarks
<p>The Military Police Officers' Course teaches commissioned military personnel how to lead and manage investigations procedures to incidents or crimes committed in both the UK and in international theatres of operations, inclusive of custody and detention, support to security, stability policing and mobility support. Additionally the skills and knowledge required from the management of personnel regarding both career and welfare</p>	<p>This course aims to produce a Royal Military Police Officer able to lead and manage Provost Operations and further manage Police Enquiries to Level 2.</p> <p>The course is open to junior officers with International English Learning Testing System (IELTS) Level 6, are physically fit. Students are formatively tested in the Management and Leadership of Policing Operations and investigative Management.</p> <p>Main Training Objectives</p> <ul style="list-style-type: none"> <li>• Crime Scene Photography.</li> <li>• Core Investigative Legislation.</li> <li>• Service Justice System.</li> <li>• Civil and Common Law.</li> <li>• Use of Incident Logbooks.</li> <li>• Evidence Recording Processes.</li> <li>• Detention and search of Suspects of Crime.</li> <li>• Principles of Sexual Crime and Victims Safeguarding.</li> <li>• Collating biometric evidence (fingerprints and DNA).</li> <li>• Personal Safety Training Techniques.</li> <li>• Responding to Road Traffic Accidents and Incidents.</li> <li>• Incident Photography and Sketch Plan Recording.</li> <li>• Forensic Awareness.</li> <li>• Use of Service Police Computer Systems.</li> <li>• Management of Investigations.</li> <li>• Interview Techniques.</li> <li>• Battle Craft Syllabus.</li> <li>• Personnel management – welfare processes, reporting, responsibilities, career development</li> </ul>	<p>This course aims to produce a Royal Military Police Officer able to lead and manage Provost Operations and further manage Police Enquires to Level 2.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>IELTS level 8</p> <p>The course is open to junior officers with International English Learning Testing System (IELTS) Level 6, are physically fit.</p>	17 weeks (Mon - Fri).	Certificate of Completion	2 courses per year

# Police Training Courses

## PERSONAL SAFETY TRAINING INSTRUCTORS COURSE

**Course No: 13c/1461**

**Defence school of Policing and Security, Southwick**

Aim of Course	Outline of Syllabus	Remarks
The Personal Safety Training Unit Instructor Course is designed to train personnel, enabling them to deliver mandated personal safety refresher training at Unit Level	<p>The Personal Safety Training Basic UI Course is designed to qualify Service Police Officers to conduct on the job personal safety refresher training at Unit Level. Enabling all Service Police Officers to maintain personal safety training requirements and competency at their Unit. Students should have a minimum of 2 years' experience as a Personal Safety Practitioner.</p> <p>Instructors are formatively tested in legislation knowledge and instructional practical Personal Safety Techniques.</p> <p>Main Training Objectives</p> <ul style="list-style-type: none"> <li>• Carry out Lesson Administration.</li> <li>• Carry out Instruction into communication.</li> <li>• Carry out instruction on the mechanics and use of rigid handcuffs.</li> <li>• Carry out instruction on the mechanics and use of the Baton.</li> <li>• Carry out instruction on the use of unarmed tactics.</li> <li>• Provide advice on Training requirements.</li> <li>• Carry out instruction into the use of limb restraints.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level: 6 Students should have a minimum of 2 years' experience as a Personal Safety Practitioner. Applicant must be physically fit and free of any injury.	5 days	DSPS Training delivered to College of Policing standards	6 courses per year

# Police Training Courses

## PERSONAL SAFETY TRAINING COURSE

**Course No: 13c/1462**

**Defence school of Policing and Security, Southwick**

Aim of Course	Outline of Syllabus	Remarks
<p>Personal Safety Training course is designed to support and inform operational decision making, provide personnel with de-escalation techniques to manage conflicts, and use safe application of reasonable force in violent situations.</p>	<p>Personal Safety Training Basic User Course gives the Service Police Officer the base level of assurance required to be able to operate competently as a Service Police Officer when faced with a kinetic or potentially kinetic situation. Upon the successful completion of the course the Service Police Officer is qualified in the use of rigid Hand Cuffs and Batons and is authorised to utilise this equipment in the discharge of their duties.</p> <p>Students are formatively tested in legislative knowledge and practical personal safety principals and techniques</p> <p>Applicant must be physically fit and free of any injury.</p> <p>Main Training Objectives:</p> <ul style="list-style-type: none"> <li>• Components of communication.</li> <li>• Tactical communication.</li> <li>• Use of force.</li> <li>• Explain legislation covering the Use of Force.</li> <li>• The Rules of Engagement.</li> <li>• Explain the Tri-Service Policy for the use of Defensive tactics equipment.</li> <li>• Explain the National Decision Making Model.</li> <li>• Explain the hazards the risks associated with Personal Management.</li> <li>• Carry out proficient use of Baton techniques.</li> <li>• Carry out Post Use Procedures.</li> <li>• Use of unarmed Defensive Tactics.</li> <li>• Carry out the correct application of Limb Restraints.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	<p>IELTS Level: 6</p> <p>Applicant must be physically fit and free of any injury.</p>	1 Week	DSPS Training delivered to College of Policing standards	6 courses per year

# RMAS Courses

## REGULAR ARMY COMMISSIONING

**Course No: 403/009**

**RMAS Gp Sandhurst**

Aim of Course	Outline of Syllabus	Remarks
<p>Through military training and education to develop leadership in cadets by expanding their character, intellect and professional competencies to a level demanded of an Army Officer on first appointment.</p> <p>Entry Standards</p> <ul style="list-style-type: none"> <li>18 - 28 years of age.</li> <li>IELTS level 5.5.</li> <li>Not less than 1.5m high and 50 kilos in weight.</li> <li>Body Mass Index (BMI) must be between 18 to 28 (Males) and 18 to 27 (Females)</li> <li>Be medically fit. Asthma, lung or heart conditions, and back or limb injuries or abnormalities will preclude entry.</li> <li>Be physically fit and robust, and be able to carry weight (web equipment and backpack).</li> </ul> <p>On arrival able to:</p> <ul style="list-style-type: none"> <li>Run 2.4 kilometres in 10 minutes 30 seconds (males) (13 minutes for females), after a warm up of 800 metres in 4 minutes 50 seconds.</li> <li>Complete 50 sit ups in 2 minutes (male &amp; female)</li> <li>Complete 44 press ups in 2 minutes (21 for females)</li> <li>Swim 100 metres any stroke</li> <li>A working knowledge of IT up to European Computer Driving Licence (ECDL) Modules 1,2,3 and 7.</li> <li>Have the will and determination to succeed on a challenging course.</li> </ul>	<p>Junior Officer Qualities</p> <ul style="list-style-type: none"> <li>Leadership and Management on the battlefield and in barracks, including:           <ul style="list-style-type: none"> <li>» How to analyse, plan and communicate effectively</li> <li>» How to control and complete tasks, and evaluate progress and outcomes</li> <li>» Application of the Values and Standards expected of an Army Officer</li> <li>» Application of communication and behavioural science techniques.</li> </ul> </li> </ul> <p>Basic Military Competencies</p> <ul style="list-style-type: none"> <li>Teamwork</li> <li>Combat fitness</li> <li>Weapon handling (Platoon level)</li> <li>Operate communications equipment (Platoon / Company Level)</li> <li>Navigation</li> <li>Battlefield First Aid</li> <li>Basic Fieldcraft</li> <li>Application of basic tactics (Platoon / Company Level)</li> </ul> <p>Broader Academic Development</p> <ul style="list-style-type: none"> <li>War studies - analysis of previous conflicts</li> <li>Analysis of current British Military Doctrine</li> <li>Analysis of conflict, and the current political and strategic context</li> </ul>	<p>Places will be allocated by invitation only. There is no requirement to bid for places. Cadets should be aware this is a physically &amp; mentally demanding course.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Candidates for an Initial Commission	Please see column above	Each course is of 11 months duration, comprising three terms each of 14 weeks.		3 courses per year commencing in January, May and September.



# RMAS Courses

## POTENTIAL OFFICERS DEVELOPMENT COURSE

**Course No: 13A/PO DP**

**Defence College of Support  
Worthy Down, Winchester, Hampshire, SO21 2RG**

Aim of Course	Outline of Syllabus	Remarks
Though always tailored toward the individual, the PODP looks to develop a potential Officer's: self-confidence, cultural interests, communication skills. Interpersonal skills, analysis, planning and problem-solving. This will ultimately improve their chances of officer selection.	<p>The PODP is a 12-week residential course featuring: essay writing, formal presentations, discussions, and debates alongside a rigorous PT program. This is designed to address likely areas for development. However, PO's will also identify personal goals and create an individual learning plan which the programme with flexibly facilitate.</p> <p>Formative assessment throughout as part of developmental feedback</p> <p>Main Training Objectives</p> <ul style="list-style-type: none"> <li>• Demonstrate group influence.</li> <li>• Demonstrate aerobic fitness and muscular endurance.</li> <li>• Analyse current political, defence and cultural issues.</li> <li>• Perform arithmetic calculations.</li> <li>• Communicate effectively.</li> <li>• Display the values and standards of an officer cadet.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	IELTS Level: 6.5	12 Weeks		3 per year

# Survey Courses

## MASTER OF SCIENCE (MSc) IN GEO SPATIAL INTELLIGENCE

**Course No: 411/024**

**JIG Hermitage**

Aim of Course	Outline of Syllabus	Remarks
<p>To provide students with the knowledge and skills, both technical and managerial, required by Professional Geographic Officers in support of the defence community.</p> <p>It is specifically aimed at those responsible for the specification, design and operation of geographic systems in defence.</p>	<p>A taught phase consisting of ten modules as follows:</p> <ul style="list-style-type: none"> <li>Analytical Techniques</li> <li>Reference Systems</li> <li>Information Systems</li> <li>Positioning</li> <li>Image Processing</li> <li>Spatial Analysis</li> <li>Imagery Exploitation</li> <li>Spatial Data Presentation</li> <li>Spatial Software Systems</li> <li>Defence Geographic Requirements</li> <li>A group project that is designed to consolidate much of the taught phase of the DGI MSc and to give students a practical exercise in operational support</li> <li>For MSc students an extended research project</li> <li>A dissertation for an extended research project related to the syllabus.</li> </ul>	<p>This is a highly demanding MSc programme and candidates should be aware that great emphasis is placed on individual responsibility for studying, teamwork and research. All candidates attending should be nominated by 31 January each year in order that pre- course study in either Mathematics or English can be advised if appropriate.</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lieutenant to Lieutenant Colonel or civilian equivalent.	<p>IELTS level 7. (Academic test)</p> <p>Qualified to First Degree (BS) or equivalent level, ideally in Engineering or Geography.</p> <p>Qualified to UK Advanced level or equivalent in Mathematics.</p>	Pre-Course: 5 weeks. Survey Course (The MSc): 1 year.	Canfield University will award successful candidates a Master of Science Degree. Successful candidates will be eligible for exemption from the final examinations of the Royal Institution of Chartered Surveyors.	1 course per year. (The Pre-Course will always commence in September)

# Survey Courses

## DEFENCE GEOGRAPHIC INFORMATION SYSTEMS (GIS) ADVANCED USER

**Course No: 411/041**

**JIG Hermitage**

Aim of Course	Outline of Syllabus	Remarks
To provide users, already familiar with the basics of GIS, practical experience of the advanced functionality available.	<p>The course expands upon the theory and practical experience gained on the Defence GIS Users Course and will include network analysis, 3D modelling, temporal analysis, site selection, least cost path analysis and the collection of data using GIS. The course will involve the use of ESRI ArcGIS within a defence environment, with both taught and practical components. All practical exercises will be based on a defence scenario, which will include components applicable for personnel from all armed services, whether land, sea or air based in addition to MOD civilians.</p> <p>The course covers:</p> <ul style="list-style-type: none"> <li>• Data input options and techniques including GPS</li> <li>• The issues of data types and collection</li> <li>• A wider understanding of the complex questions GIS can answer</li> <li>• Web Publishing of GIS maps and data</li> <li>• Management of geospatial databases</li> <li>• Creation of new raster and vector data sets from paper sources</li> <li>• Analysis of data within 2D, 3D and 4D (temporal) environments</li> <li>• Production of derived data sets</li> <li>• Complex spatial analysis</li> <li>• Combination of data from many sources</li> <li>• Interrogation of network geospatial data.</li> </ul>	The course is aimed at Defence personnel who have a responsibility for operating GIS.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance Corporal to Major or civilian equivalent	IELTS level 6. Must have attended the Defence GIS User course at RMS or have suitable qualifications or experience.	5 Days		5 course per ear.

# Survey Courses

## DEFENCE GEOGRAPHIC INFORMATION SYSTEMS (GIS) USER

**Course No: 411/040**

**JIG Hermitage**

Aim of Course	Outline of Syllabus	Remarks
To provide an understanding of military digital geographic data and teach students to use GIS to import, create, manipulate, query, display and analyse that data.	<p>The course takes the student through the various digital geographic data structures and explains the military data sets and the appropriate use and limitations of each type.</p> <p>Students will then gain a theoretical and practical understanding of basic GIS functionality using military datasets.</p> <p>Teaching methods include instructor-led lectures, demonstrations and practical confirmation exercises. Tuition is split approximately 40% theory and 60% practical with all practical exercises based on a Defence scenario with an Air, Land and Sea component.</p> <p>The course includes:</p> <ul style="list-style-type: none"> <li>Digital Data types, sources and copyright issues relating to digital data.</li> </ul> <p>The course includes:</p> <ul style="list-style-type: none"> <li>Digital Data types, sources and copyright issues relating to digital data.</li> <li>Datums and Projections</li> </ul> <p>Use of GIS to:</p> <ul style="list-style-type: none"> <li>Identify, import and manage data</li> <li>Create and edit vector data</li> <li>Produce derived data sets</li> <li>Answer basic spatial queries</li> <li>Create a basic map product</li> </ul> <p>Geo processing - Data Re-Projection Analysis techniques (view-sheds, weighted overlays, least cost path) Visualisation and digital terrain modelling.</p>	The course is aimed at Defence personnel who have a responsibility for operating GIS.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lance Corporal to Major or civilian equivalent	<p>IELTS level 6. ECDL Module 1 - Basic Concepts of IT.</p> <p>ECDL Module 2 - Using the Computer and managing files.</p> <p>ECDL Module 5 - Database or equivalent experience.</p>	5 Days		10 course per ear.



# Close Protection Courses

## CLOSE PROTECTION COURSE (CPC)

### Course No:

### Longmoor Camp

Aim of Course	Outline of Syllabus	Remarks
To train students in the preventative and reactive measures to be taken by Close Protection personnel to protect a person who is specifically or generally under threat of assassination, kidnapping or other illegal acts committed by terrorists or criminals.	<p>The Training and Enabling Objectives of this course will include theoretical and practical instruction on the following areas:</p> <ul style="list-style-type: none"> <li>• The Threat</li> <li>• Containment</li> <li>• Planning</li> <li>• Personal Security</li> <li>• Search</li> <li>• Weapon Training</li> <li>• Vehicle Anti Ambush</li> <li>• CP Team Organisation</li> <li>• Tactical Walking Drills</li> <li>• Reaction to Attack</li> <li>• Situational Awareness</li> <li>• Embus / Debus</li> <li>• Individual Bodyguard</li> <li>• Personal Escort Section</li> <li>• Security Advance Party</li> <li>• Close Quarter Combat</li> <li>• Physical Training</li> <li>• Protocol</li> <li>• Licensing Exercise</li> </ul>	Applicants should be physically and mentally prepared to undertake arduous training. Applicants are required to be fluent in verbal and written English (if not the applicant's host nation are required to provide interpreters). Applicants are required to be in possession of a category B driving license and EU driving license, if not driving will be limited to MOD estates.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR3 - OF3 (LCpl - Mai)	Fluent in verbal and written English (if not the applicant's host nation are required to provide interpreters). Category B driving license and EU driving license.	8 working weeks, inclusive of weekends if required	MP CPC 'Pass' certificate - If all Training Objectives are achieved. RMP CPC 'Attend' certificate - If course is completed but not all Training Objectives are achieved.	3 courses per year (Mar -Apr, Jun - Jul, Sep - Oct).



# Close Protection Courses

## BESPOKE CLOSE PROTECTION COURSE (BCPC)

### Course No:

### Longmoor Camp

Aim of Course	Outline of Syllabus	Remarks
To train students in the preventative and reactive measures to be taken by Close Protection personnel to protect a person who is specifically or generally under threat of assassination, kidnapping or other illegal acts committed by terrorists or criminals.	<p>Due to the reduced duration of the course, the Training Objectives delivered will be at the request of the customer, the available options are:</p> <ul style="list-style-type: none"> <li>• The Threat</li> <li>• Containment</li> <li>• Planning</li> <li>• Personal Security</li> <li>• Search</li> <li>• Weapon Training</li> <li>• Vehicle Anti Ambush</li> <li>• CP Team Organisation</li> <li>• Tactical Walking Drills</li> <li>• Reaction to Attack</li> <li>• Situational Awareness</li> <li>• Embus / Debus</li> <li>• Individual Bodyguard</li> <li>• Personal Escort Section</li> <li>• Security Advance Party</li> <li>• Close Quarter Combat</li> <li>• Physical Training</li> <li>• Protocol</li> <li>• Licensing Exercise</li> </ul>	Applicants should be physically and mentally prepared to undertake arduous training. Applicants are required to be fluent in verbal and written English (if not the applicant's host nation are required to provide interpreters). Applicants are required to be in possession of a category B driving license and EU driving license, if not driving will be limited to MOD estates.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR3 - OF5 (1Col = Col)	Eluent in verbal and written English (if not the applicant's host nation are required to provide interpreters). Category B driving license and U driving license.	4 - 6 working weeks, inclusive of weekends if required.	MP CPC "Pass" certificate - If all Training Objectives are achieved. RMP (PC 'Attend' certificate - If course is completed but not all Training Objectives are achieved.	As requested.

# Close Protection Courses

## CLOSE PROTECTION EVASIVE DRIVING COURSE - BASIC (CPEDC-B)

### Course No:

### Longmoor Camp

Aim of Course	Outline of Syllabus	Remarks
To train students in the preventative and reactive measures to be taken by a designated driver of a soft skin vehicle to protect a person who is specifically or generally under threat of assassination, kidnapping or other illegal acts committed by terrorists or criminals.	<p>The Training and Enabling Objectives of this course will include theoretical and practical instruction on the following areas</p> <ul style="list-style-type: none"> <li>• First Parade</li> <li>• Embus / Debus</li> <li>• Failed Accent / Decent</li> <li>• Personal Security</li> <li>• The Threat</li> <li>• Vehicle Search</li> <li>• Vehicle Dynamics</li> <li>• Vehicle Anti Ambush</li> <li>• Protocol</li> <li>• Cross-Country Driving</li> <li>• One Car Tactical Driving</li> <li>• Confirmation Exercise</li> </ul>	Applicants should be physically and mentally prepared to undertake training. Applicants are required to have a good understanding of the English language. Applicants are required to be in possession of an equivalent UK category B driving license, if not driving will not be permitted.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR3 - OF3 (LCDI - Mai) Civilian equivalent.	Good understanding of the English language. Equivalent UK category B driving license.	5 working days	MP EDC-B 'Pass' certificate - If all Training Objectives are achieved. MP EDC-B 'Attend' certificate - If course is completed but not all Training Objectives are achieved.	4 courses per year or as required

# Close Protection Courses

## CLOSE PROTECTION EVASIVE DRIVING COURSE - ADVANCED (CPEDC-A)

### Course No:

### Longmoor Camp

Aim of Course	Outline of Syllabus	Remarks
To train students in the preventative and reactive measures to be taken by a designated driver of a soft skin vehicle and a civilian armoured vehicle (CAV) to protect a person who is specifically or generally under threat of assassination, kidnapping or other illegal acts committed by terrorists or criminals.	<ul style="list-style-type: none"> <li>• First Parade</li> <li>• Embus / Debus</li> <li>• Failed Accent / Decent</li> <li>• Personal Security</li> <li>• The Threat</li> <li>• Vehicle Search</li> <li>• Vehicle Dynamics</li> <li>• Venice Anti Ambush</li> <li>• Protocol</li> <li>• X-Country Driving</li> <li>• One Car Tactical Driving</li> <li>• Two Vehicle Anti Ambush</li> <li>• CAV Dynamics</li> <li>• CAV X-Country Driving</li> <li>• Two Car Tactical Driving</li> <li>• Confirmation Exercise.</li> </ul>	Applicants should be physically and mentally prepared to undertake training. Applicants are required to have a good understanding of the English language. Applicants are required to be in possession of an equivalent UK category B and C driving licenses, if not driving will not be permitted.

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
OR3 - 0F3 (LCpl - Mai) Civilian equivalent	Good understanding of the English language. Equivalent UK category B and C driving license.	10 working days	MP EDC-A 'Pass' certificate - If all Training Objectives are achieved. MP EDC-A 'Attend' certificate - If course is completed but not all Training Objectives are achieved.	4 courses per year or as required



# IDT (A)

## INTERNATIONAL URBAN OPERATIONS INSTRUCTORS' COURSE (UOIC)

**Course No: -**

**Warminster and Internationally**

Aim of Course	Outline of Syllabus	Remarks
<ul style="list-style-type: none"> <li>To deliver an Urban Operations Instructors course.</li> <li>Support the Command functions during urban operations.</li> <li>Support the manoeuvre functions during urban operations.</li> <li>Support the combat service support function during urban operations.</li> <li>Manage urban operations training.</li> </ul>	<ul style="list-style-type: none"> <li>Key characteristics and challenges of operating in the urban environment.</li> <li>Patrolling in the urban environment.</li> <li>Entry Techniques, including opportunity and manual.</li> <li>Clearance techniques, including (CQB) of rooms and houses.</li> <li>Marking systems in the urban environment.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Pte - OR1 to Maj - OF3.	A bespoke course can be delivered directly in Arabic, French and English.	2 Weeks.	Urban Operations Instructors certificate.	Multiple courses are offered annually. For further information, please contact IDT(A).



# IDT (A)

## INTERNATIONAL PLANNER COURSE

**Course No: -**

**Warminster and Internationally**

Aim of Course	Outline of Syllabus	Remarks
UK military doctrine Orders process Analysis and thinking skills The combat estimate Presentations and backbriefs	<ul style="list-style-type: none"> <li>• Doctrine</li> <li>• Leadership</li> <li>• Analysis</li> <li>• Orders process</li> <li>• Combat estimate</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
Lt - OF1 to Maj - OF3.	A bespoke course can be delivered directly in Arabic, French and English.	2 Weeks.	International Planner Course certificate.	Multiple courses are offered annually. For further information, please contact IDT(A).





# IDT(A)

## TRAINING INTERNATIONAL LEARNERS/TRAINEES (TILT) COURSE

**Course No: -**

**RSA, Larkhill**

Aim of Course	Outline of Syllabus	Remarks
<p>To enhance the international student experience and thereby strengthen Defence Engagement (DE), IDT(A) will deliver a three-day Training the International Learner and Trainee (TILT) course at RSA Larkhill. This course is designed for trainers who instruct the numerous international students attending IDT(A)-loaded courses. The TILT course is a bespoke programme delivered by a civilian contractor (<a href="http://www.sterlingtraining.org.uk">www.sterlingtraining.org.uk</a>) and addresses an identified training gap. Its purpose is to refresh existing knowledge and introduce practical techniques and teaching methodologies that military instructors can apply when working with international students.</p>	<ul style="list-style-type: none"> <li>• Characteristics of an effective international student/learner trainer.</li> <li>• Barriers to learning for international learners/trainees.</li> <li>• The importance of International Defence Training (IDT).</li> <li>• The elements of effective international learner training.</li> <li>• Feedback techniques for international learners.</li> <li>• Trainer self-awareness and reflection.</li> <li>• Using an interpreter.</li> <li>• Impact of culture on learning.</li> </ul>	

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
	Defence train the trainer.	3 Days.	Training International Learners/Trainees JPA competency.	5 courses a year.

# Defence Academy

## DEFENCE HIGHER EDUCATION TRAINER (INTERNATIONAL)

### Course No: 1

### Defence Academy, Shrivenham, UK

Aim of Course	Outline of Syllabus	Remarks
<p>The DHET (I) course is designed for international Directing Staff (DS) and will train you to facilitate adult learning in the military Higher Education and Further Education environments, for example in Defence Colleges for Officer Training and Education. The course focuses primarily on the delivery of Professional Military Education (PME) to a course, class or syndicate in command and staff colleges. The course offers practical guidance on adult teaching techniques including facilitation, the management of syndicate room discussions, engaging adult learners, the planning and designing of learning activities and managing student welfare. The course will give you the opportunity to apply the material covered in a teaching context.</p>	<p>To maximise your time in the UK, the 5- day international course is longer than the standard 3.5-day DHET course for UK DS. As such it is designed to encompass some of the CPD workshops and seminars DS complete throughout their time at the Defence Academy. This includes serials on coaching, facilitation and curriculum design in Higher Education. It also focuses on the increased use of reflective practice to support training and the use of training aides to scaffold learning. The DHET(I) course is adapted using shorter working days to address the cognitive strain of continually translating lessons into a first language or working through an interpreter.</p>	<p>Minimum number of students required is 12</p>

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
NATO equivalent OF2 - OF4	<p>IELTS 5.5</p> <p>The course is aimed at military personnel teaching in Defence Colleges worldwide. Usually, this will be ranks ranging between NATO OF3 (Lt Cdr/ Maj/Sqn Ldr) and OF4 (Cdr/Lt Col/Wg Cdr) but can include ranks above and below that if you are delivering training or education to a course, class or syndicate. Critically, it is for course directing staff rather than College senior managers and senior commanders.</p>	5 days	Certificate in Defence Higher Education Training	Once per year, 2026 dates are 7-9 (with personal study on 10 Jul and weekend break) and 13 - 14 Jul 2026 (one course spread over 5 dates)

# Defence Academy

## DEFENCE SYSTEMS APPROACH TO TRAINING (INTERNATIONAL)

### Course No: 1

### Defence Academy, Shrivenham, UK

Aim of Course	Outline of Syllabus	Remarks
The SAT (I) course is designed for international staff and will train you to understand how the UK analyses, designs, delivers, assures and manages training in the military environment. The course introduces the Systems Approach to Training to explain how the UK ensures military training is appropriate, accountable, safe and value for money. The course offers practical guidance on using a Systems Approach to Training, offering a framework through which students can assess and potentially enhance training systems in their home countries.	To maximise your time in the UK, the 5- day international course is designed to encompass examples of each of the SAT courses UK MOD staff attend. This includes serials on a SAT overview, analysis, design, delivery and assurance. The DSAT(I) course is adapted using shorter working days to address the cognitive strain of continually translating lessons into a first language.	Minimum number of students required is 12

Rank Range	Entry Standards	Duration	Qualifications gained	Frequency
NATO equivalent OR8 - OF5	IELTS 5.5  The course is aimed at military personnel worldwide. Usually, this will be ranks ranging between NATO OR8 (WO2 / CPO / Flt Sgt) and OF5 (Capt/ Col/Gp Capt) but can include ranks above and below that if you are supporting the governance of training or education for a course.	5 days	Certificate in Defence Higher Education Training	Once per year, 2027 dates are 5-7 Jan 27 (with personal study on 8 Jan and weekend break) and 11 - 12 Jan 2027 (one course spread over 5 dates)