

# **IPEM**

Institute of Physics and  
Engineering in Medicine

# **Trainee Prospectus**

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**Clinical Technologist  
Training Scheme**





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# Preface

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Clinical Technologists, also known as Healthcare Science Practitioners, work in defined craft groups with associated scopes of practice, including but not exclusively:

- Medical Physics
- Nuclear Medicine
- Radiotherapy Physics
- Radiation Physics
- Clinical Engineering
- Medical Engineering
- Radiation Engineering
- Rehabilitation Engineering

Roles range from the manufacture and administration of radiopharmaceuticals to patients for diagnostic or therapeutic purpose; the use of single photon emission computed tomography (SPECT) or Positron Emission Tomography (PET) coupled with multislice Computed Tomography (CT); performing and reporting of sonograms for diagnostic, screening or interventional purposes; maintaining and monitoring a range of sophisticated medical equipment and instruments used to diagnose illness and to treat patients.

IPEM promotes registration for Clinical Technologists. Completion of the IPEM Diploma of Clinical Technology is a primary route to the Professional Standards Authority accredited Register of Clinical Technologists (RCT).

This document provides guidance on IPEM's Clinical Technologist Training Scheme and how it operates.



## Keywords and Link

Accreditation	Certification of competence to deliver training in a specified subject or area of expertise
DOPS	Direct Observation of Practical Skills – an assessment method assessing trainee practical skills
HCPC	<a href="http://hcpc-uk.org">The Health and Care Professions Council (HCPC)   (hcpc-uk.org)</a>
PTP	<a href="http://hee.nhs.uk">Curriculum documents for PTP – Practitioner Training Programme (hee.nhs.uk)</a>
PSA	<a href="http://www.professionalstandards.org.uk">Healthcare Regulation   Professional Standards Authority</a>
RCT	<a href="http://therct.org.uk">The Register of Clinical Technologists (therct.org.uk)</a>
AHCS	<a href="http://ahcs.ac.uk">Home – The Academy For Healthcare Science (ahcs.ac.uk)</a>



# The Training Scheme



## 1.1 Introduction

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IPEM's Clinical Technologist Training Scheme ensures that you develop the appropriate knowledge and skills to practice competently in your chosen Scope of Practice. It promotes good practice and aims to ensure the protection of the public. Whilst the training scheme will provide you with structure and support via harmonised national training plans for each craft group, it will also provide flexibility through the ability to tailor these plans with your Training Supervisor, allowing your specific training needs to be met as well as allowing you to make an impact in your department. This flexibility makes the training scheme suitable to those who are new to the profession but also to those who bring existing knowledge and skills.

In addition to the experience and guidance which your Training Supervisor will offer you, IPEM will appoint an External Moderator to you who is individually selected based on their expertise in your scope of practice.

Additional benefits of the scheme include:

- **Associate Membership of IPEM for the duration of the training scheme (see member benefits)**
- **An online Induction Day and opportunities to network throughout the scheme**
- **An online workshop supporting Continuing Professional Development (CPD)**



## 1.2 Registration

Clinical Technologists possess a unique body of scientific knowledge enabling direct and indirect patient care through the use of technology to deliver safe and effective healthcare. IPEM strongly promotes registration and continuing professional development as a highly desirable recognition of professionalism, public and patient protection, and demonstration of commitment to lifelong learning.

The Register of Clinical Technologists (RCT) sets the required standards for Clinical Technologist training and conduct, registering individuals who have met these standards.

[Please click here to see more information about the RCT.](#)

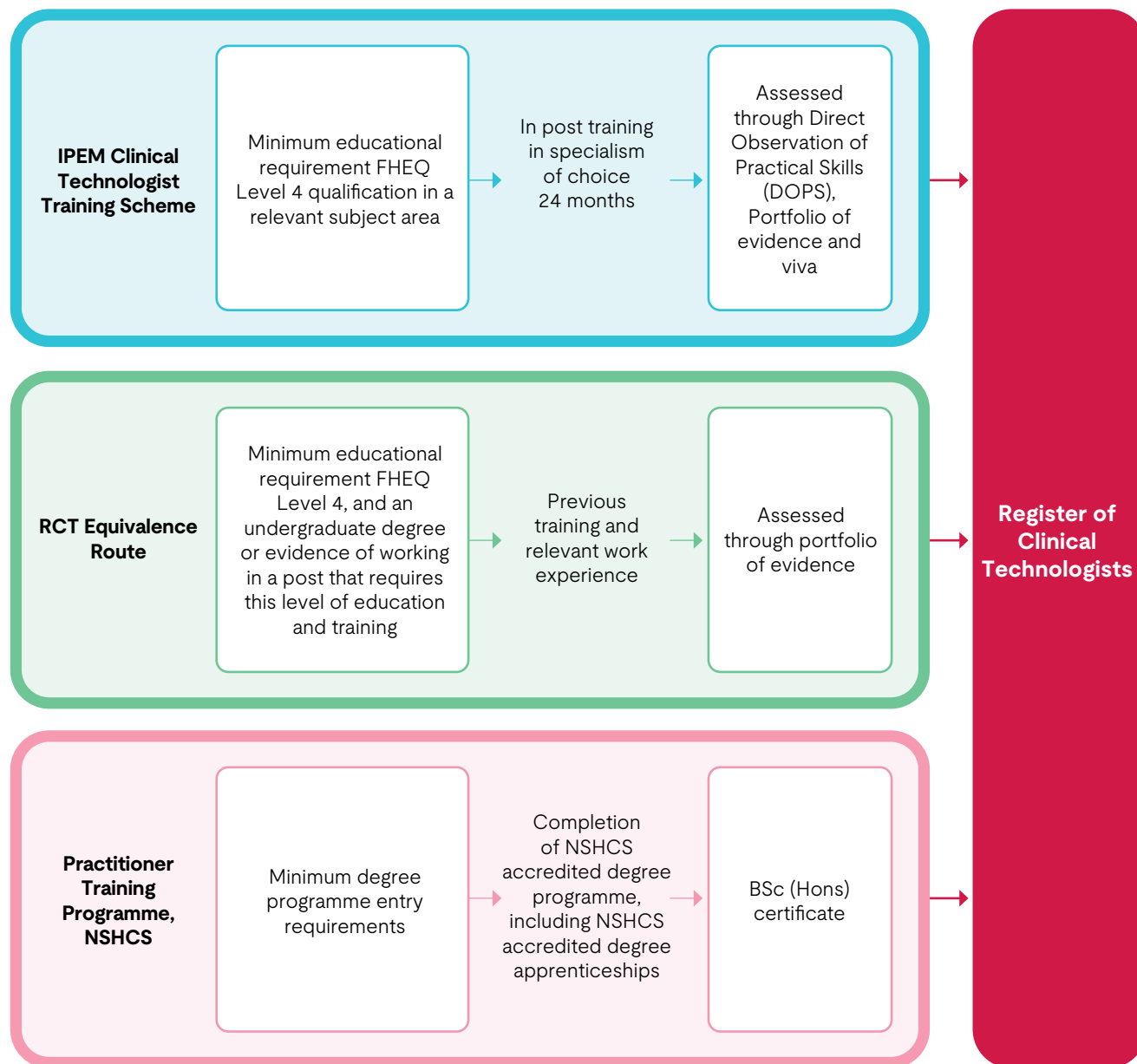
There are currently several routes to registration as a Clinical Technologist. These include: IPEM's Clinical Technologist Training Scheme, the Practitioner Training Programme (PTP) operated by the National School of Healthcare Science, and the Equivalence Route operated by The RCT.







## 1.3 Routes to RCT Registration





# 2

## Application Process



## 2.1 Entry Requirements

We welcome applications from those who have:

- Suitable employment in an IPEM accredited Training Centre
- At least two A Levels (preferably three) or equivalent, including a science subject
- A minimum of a complete Framework for Higher Education Qualification (FHEQ) Level 4 (or higher) in a relevant subject. Your training plan should demonstrate equivalence to FHEQ Level 6 by the end of training.

The ability to communicate effectively in English is critical to working effectively as a health professional in the UK.

Therefore, we can ask for information about your ability to use English.

For entry onto the training scheme, the following will apply:

- **Any trainee whose first language is English requires an FHEQ Level 2 qualification (For example, GCSE at grade C/4 or above) or equivalent**
- **Any trainee whose first language is not English will be required to obtain an International English Language Testing System (IELTS) certificate. A minimum score of 7.0 with no element below 6.5 is required. If any other testing system is used, you must be able to provide equivalence with IELTS.**

- **Any overseas (non-UK) qualifications must demonstrate equivalence comparison using the UK ENIC (UK National Information Centre for the recognition and evaluation of international qualifications and skills) service.**





## 2.2 Application Process

### Application Form

When you are ready to apply to join the training scheme, you will be able to find the electronic application form on the IPEM website, and you will have the support of your Training Supervisor in completing this. Along with the application form, we require:

- **A copy of all relevant academic qualification certificates**
- **List of work-based competencies that will be achieved during the training programme. (These must be aligned to the Practitioner Training Programme Curriculum documents and cover the whole relevant RCT Scope of Practice)**
- **Training Plan**
- **An Employer Purchase Order covering the whole amount of the fee**

Your application should be a demonstration of the qualifications, skills and experience which you have acquired to date which will support you with meeting the required competencies and how your current job role and planned training will support you with fulfilling any gaps.

Any trainees requiring reasonable adjustments can also indicate this on their application form. IPEM will review each case and how it can best support the trainee whilst on the training scheme. There is also a Reasonable Adjustments form which can be requested from the IPEM Training team during the scheme should any new or further adjustments be required during the training scheme.

### 1.1 Enrolment and Induction Day

Enrolment onto the training scheme is limited to two intakes per year:

#### **April October**

The expected duration of the training scheme is two years.

As soon as your application form is ready, this should be submitted via the IPEM website. Your application form will then be reviewed, and you will be enrolled at the next intake.

An online Induction Day will be held in the month following enrolment in order to provide guidance to you on your responsibilities. Information relating to the training scheme and a soft skills workshop will be given in:

#### **May November**

This is an opportunity to ensure all trainees are given consistent information regarding the requirements of the scheme and for you to network with your peers.



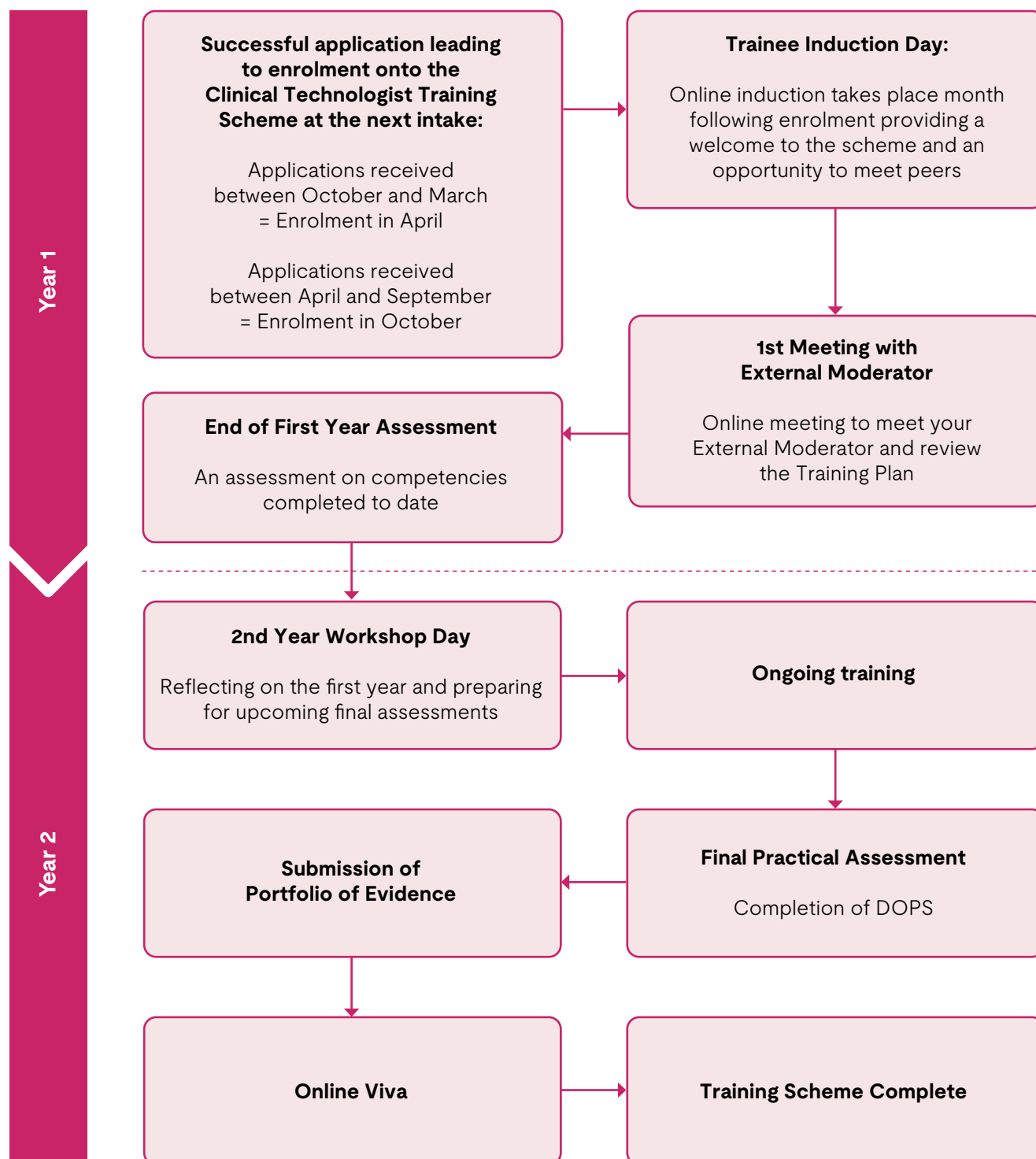


# 3

## Organisation of Training



## 3.1 Training Scheme Timeline





## 3.2 Training Process



We recommend that you begin training as soon as you are enrolled onto the Training Scheme with the support of your Training Supervisor. Training will predominantly take place in the workplace, and we encourage

you to take responsibility for completing the agreed programme of training and ensure that all competencies are met by the end of the training scheme.

## 3.3 Role of the Trainee



Your role as a trainee is to fully engage in the development of your training plan and the onus of completing this agreed programme of training rests with you. A suitable record of training progress must be maintained by you through the training portfolio.

You will communicate with your External Moderator to discuss your ongoing training. They will be available for advice and guidance throughout the training, it will be your

responsibility to seek this additional support if required. It will also be your responsibility to keep IPEM informed of any changes to your circumstances whilst on the training scheme, for example, of any changes in your personal details, Training Supervisor or changes in employment. It will also be your responsibility to apply for RCT registration following the completion of the training scheme.

## 3.4 Role of the Training Co-ordinator



The Training Co-ordinator is responsible for the accreditation of the training scheme at your organisation. This person will be based in the training centre/consortia and they will be the main contact for the training scheme. The Training Co-ordinator is expected to have the knowledge, skills and experience to resolve any problems or enquiries that trainees have regarding the scheme. For small training centres, the Training Supervisor may take on the duties of the Training Co-ordinator.

The Training Co-ordinator should be contacted to deal with any problems over the operation of the training scheme. Any unresolved problems should be brought to the attention of the External Moderator and the IPEM Training team.





## 3.5 Role of the Training Supervisor



The role of the Training Supervisor is fundamental in ensuring that you are developing and that the training plan is progressing.

The Training Supervisor will oversee your training and the allocation of relevant trainers. It is essential that throughout the duration of the scheme, regular (at least once per month) formal, documented meetings take place between you to plan and review training. This must be documented using the Supervisor's Review Form and the Supervisor's Direct Observation of Practical Skills (DOPS) and log. These forms can be obtained from the IPEM office. The DOPS log will form part of your final mark and is therefore essential.

The Training Supervisor will ensure the training is assessed periodically throughout your training and will, where applicable, report training progress to the Training Co-ordinator. These reports form part of your portfolio.

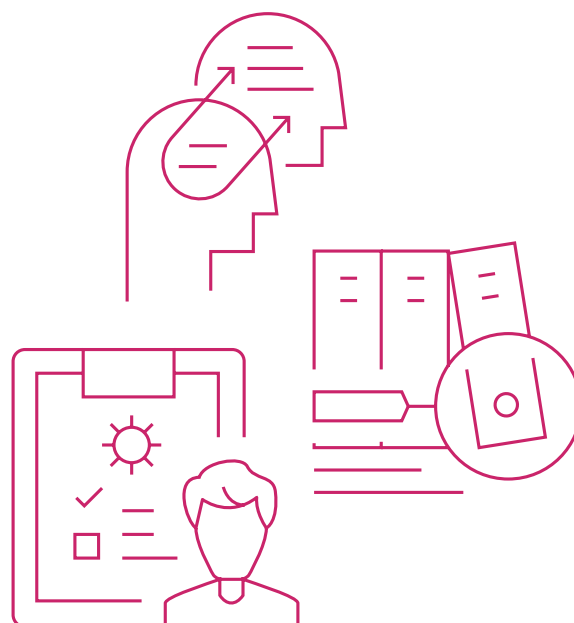
## 3.6 Role of the External Moderator



The External Moderator ensures that the professional standards required by IPEM are fulfilled. In this respect:

- **They will consult with the Training Co-ordinator, the Training Supervisor and the Trainee, and will advise on any problems associated with the training scheme, both from the viewpoint of the Training Centre and the trainee. Any unresolved issues will be reported to the IPEM office.**
- **They will assess and monitor the progress of the training and act as an IPEM appointed Moderator for assessments carried out locally by the Training Centre.**
- **Moderators will be asked to perform the viva examination.**

A Supporting Moderator will be appointed for the Final Assessment. This individual will be independent from the trainee and External Moderator and will not have had involvement in their training prior to marking the assessment.





# 4

## Assessment Process



## 4.1 End of First Year Assessment

An assessment will take place at the end of the first year of training. This is an opportunity to reflect on the competencies and skills gained so far. You will be required to pass the End of First Year Assessment in order to progress into the second year, but this will not count towards your final mark.

This assessment includes:

- **External Moderator DOPS**
  - Indicative only. It will not count towards your final mark, but prepares your expectations of the process
- **Confirmation of no documented patient safety concerns**
- **A minimum of 30% of competencies completed; each of which is signed and dated by your Training Supervisor**
- **A minimum of 6 Supervisor Review Forms and DOPS submitted to IPEM by your Training Supervisor**
- **A minimum of one 1500 word, in progress long case study you intend to complete**
- **A minimum of 10 Reflective Practice pieces submitted to IPEM**

## 4.2 Final Assessment



There are three stages to the final assessment: Practical Assessment, Portfolio and Viva. Each of these stages must be passed in order to proceed to the next stage and pass the training scheme. A brief overview of the stages is provided below, and more detailed guidance is provided upon enrolment to the scheme.

### Practical Assessment

Throughout your training, your Training Supervisor, or a suitable person, will regularly assess your practical competency. The format and documentation of which are DOPS.

Your appointed External Moderator will also complete a review once per year. The final External Moderator DOPS will be combined with your Training Supervisor's DOPS to create a Final Practical Assessment score.

### Portfolio Assessment

Trainees are required to submit a portfolio of no more than 500 pages (less is encouraged), including evidence demonstrating that all competencies have been met and a thorough understanding of the scope of practice to an equivalence of FHEQ Level 6.

### Viva

Trainees will undertake a viva, which will include questions based on the portfolio submitted and case-based discussions.



# 5

## Post Training

## 5.1 Registration with the RCT



Following successful completion of the IPEM Clinical Technologist Training Scheme, trainees will be eligible to apply to join The RCT through the Primary Route. They will be required to submit directly to the RCT:

- **A completed copy of the Primary Route application form**
- **A PDF copy of all educational and training certificates, including your IPEM Diploma of Clinical Technology**
- **A PDF copy of a detailed CV which describes your education and work experience**
- **A PDF copy of your departmental organisation chart showing the position of your current post**

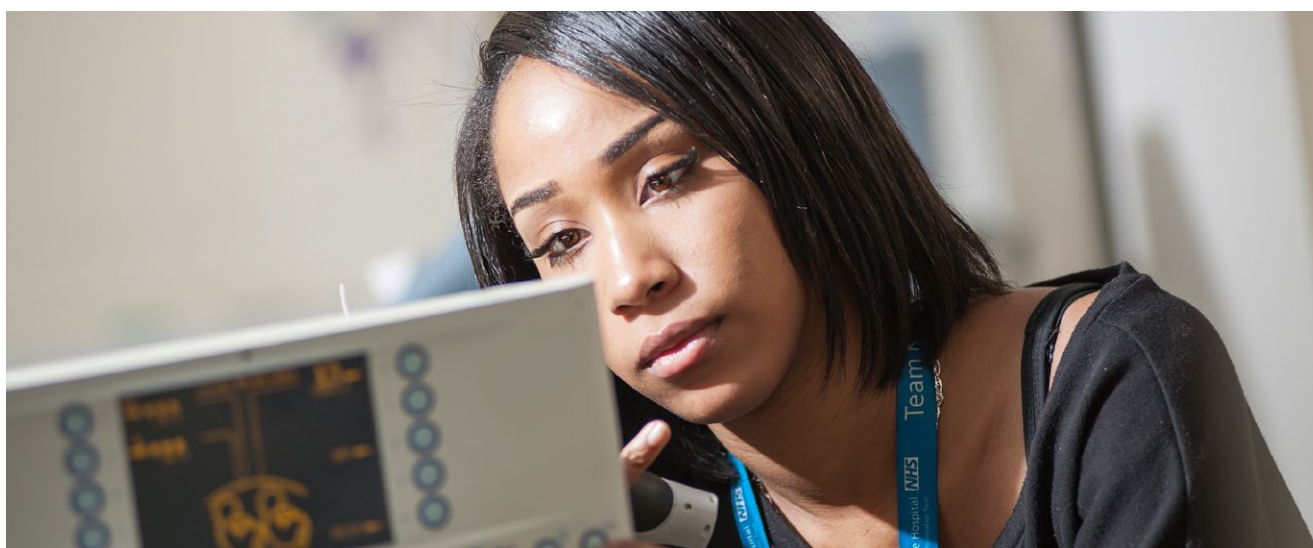
## 5.2 Continuing Professional Development



Continuing Professional Development (CPD) is a process used to help Clinical Technologists achieve a deeper understanding of their chosen specialised area and to be able to demonstrate progress in their profession. CPD requires the ongoing recording of evidence.

As part of their registration The RCT, Clinical Technologists are required to complete CPD to meet the standards and this CPD will be based on critical reflection.

It is hoped and anticipated that Clinical Technologists will use the IPEM CPD Scheme which has been designed to fit the requirements of these regulatory and registration bodies. Further information on the scheme can be found on the IPEM website or by getting in touch with IPEM office for details.





## 5.3 Professional Registration

IPEM is licensed by the Engineering Council to assess applicants for registration as Engineering Technician (EngTech), Incorporated Engineer (IEng) and Chartered Engineer (CEng). The assessment of education and professional development is made against the standards set out in UK-SPEC.

Those interested in becoming registered as EngTech, IEng or CEng may obtain general information from the Engineering Council.

IPEM is also licensed by the Science Council to assess applicants for registration as a Science Technician (RSciTech), Registered Scientist (RSci) and Chartered Scientist (CSci). The assessment of education and professional development is made against the standards set out by the Science Council and further information can be provided by contacting the IPEM office for details by emailing [\*\*profdev@ipem.ac.uk\*\*](mailto:profdev@ipem.ac.uk).





## 5.4 IPEM Membership

Whilst on the Training Scheme, Associate Membership of IPEM is included for the duration of the training period.

There are lots of benefits to IPEM membership which you can utilise to support with meeting the required competencies, build your professional network and gain valuable skills and knowledge to progress in your career:

- **IPEM Short Courses – IPEM regularly delivers relevant courses, as well as approving short courses which are relevant to its membership, and these can be found on the website.**
- **Discounts – Members can receive discounts on conference attendance, books and journals.**
- **Volunteering – Trainees are encouraged to get involved with outreach or join one of our Special Interest Groups (SIGs). This is an excellent way to grow your network as well as increase your skills and knowledge to progress in your career.**
- **SCOPE – IPEM members also receive our quarterly member's magazine filled with interesting, informative and valuable material. It relies on submissions by members and non-members from all levels, so why not have a go at writing an article for our magazine?**
- **Communities of Interest – Join a Community of Interest to grow your network and join discussions/ask questions of peers.**
- **Apply for prizes and bursaries such as the Innovation Early Career Award, Conference and Course Grant, and the Healthcare Early Career Award.**

Please do get in touch at [training@ipem.ac.uk](mailto:training@ipem.ac.uk) for recommendations on professional development activities which are relevant to your specialism.

Successful registration with The RCT provides you with the opportunity to become a Full Member of IPEM. This means that you can continue to use the benefits IPEM Membership brings to continue to foster your career and demonstrate your commitment to pursuing the very best in professional achievement in practice, standards, research and development.



[ipem.ac.uk](http://ipem.ac.uk)

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