

SMPCETS Open Day 2025 – Q/A Summary

Q: Is there a person specification for the SMPCETS to aid us writing our applications?

Should be available as part of the application pack online. [NHS Scotland | Jobs | Search here for your perfect career - Job Information | Apply for CK206572 - Medical Physics & Clinical Engineering Trainees](#). Scroll down to the bottom of the advert and look for the Supporting Documents link.

Q: For the two Medical Physicist trainee positions this year, has any decision been made on which department they will specialise in during their specialism years?

No decision made from the beginning, but each centre will look at their areas of shortage as you go through the FY and then you would have a conversation with the HoD to discuss your specialism area. You may be encouraged to go into a specific area when the time comes (probably because there is likely to be a job at the end of it), but you wouldn't be forced to work in a specific area that you didn't want to work in.

We try to take into account the preference of the trainee. However, we also need to take into account whether or not our departments can support training in a particular area.

Q: Would this specialism choice be similar for clinical engineering? since the job was listed as a Rehab Engineer I was wondering if this is the desired specialism within Grampian and Highlands?

For clinical engineering applications in 2025, these are both designated Rehab Engineering positions – one at NHS Highland and one at NHS Grampian.

Q: Is there a specialist area that tends to be the most popular amongst trainees?

It tends to vary, although probably Radiotherapy has the largest workforce overall. In the last few years in Dundee, we have taken on trainees in RT, DR/RP, and MRI, so a reasonable variation.

Q: In terms of specialisms, is there data on where the staff shortages are (or have previously been) within DCPB?

Right now, our main shortage area (DCPB) is Diagnostic Radiology and Radiation Protection. That can change quite quickly though - we're relatively small departments and if one or two members of staff retire or move to another department, that can cause shortages that we need to fill quite quickly.

We conduct national workforce plans every year, which is part of the bid to NES for training places. Speaking nationally, I would say DR/RP and NM are needing to recruit staff, but other areas such as MRI are needing to expand to fulfil demand. The pressure tends to be

related to whether the local health boards will release the funds to support the posts. This is an ongoing issue both in Scotland and elsewhere.

Q: Can Chemists be admitted into this program?

We don't tend to take on applicants with pure Chemistry, as the level of physics or engineering knowledge is not considered sufficient to cope with the complexities involved. If you have done chemistry with physics (chemical physics) then that would be ok though.

For the MSc programme, we have a requirement that you have an undergraduate degree in either physics or engineering. Unfortunately, I don't think a chemistry degree would have sufficient core physics modules for the Medical Physics MSc. There are other Scientist Training Programmes in the NHS which would admit someone with an undergraduate degree in chemistry - it's worth looking at the list of opportunities here [Applicants — Scientist Training Programme](#)

Q: For medical physics, is it known which hospitals the applicants will work?

At GGC, you would work in all of them. Our medical physics and clinical engineering department has a presence in all of the acute sites in NHS GGC - off the top of my head that's: Glasgow Royal Infirmary, Queen Elizabeth University Hospital, Gartnavel General Hospital, Stobhill Ambulatory Care Hospital, New Victoria Ambulatory Care Hospital, Royal Alexandra Hospital.

Similarly in Edinburgh it's both the Royal Infirmary and Western General.

Q: I am a Diagnostic Radiographer registered with HCPC but presently am in my 2nd Semester at university of Strathclyde studying Biomedical Engineering. My question from the last presentation is that do I need an additional experience or qualifications if am switching to apply for a Medical Physics position? Thanks.

We have recruited biomedical engineers onto the Medical Physics programme in the past.

I think you would need to explain clearly why you are wanting to move into MP after your Biomed Eng MSc. Also, if you can demonstrate practically that you have started to explore MP and gain some experience then that would help.

Q: NM Question to J McCormick - I was wondering if you could please explain the type of research work you have carried out in the Nuclear Medicine department presently. What are the research areas the department is focussed on for the future?

I have recently been involved with projects into radiomics as a predictive tool in lung cancer imaging and in patient dosimetry estimations for a radiopharmaceutical produced using a novel technique. My colleagues have a variety of research interests including image processing applications, neuro imaging techniques, cardiac imaging etc.

Q: I'm currently in my 4th year of Product Design Engineering. I don't have any background in biology; however I have been tailoring all my folios/projects to patient care equipment and improving them. Is it recommend to have biology for clinical engineering as this is what I am interested in?

If you want to focus on the biological side of your education then it might be better to focus on the life sciences training schemes - e.g., cardiac physiology, genetics etc. The MP&CE scheme requires a physical sciences background and an interest in physics and engineering.

We don't require any background in biology for either the medical physics or clinical engineering schemes. That would be covered via the MSc. As Steve says, we do have a requirement for a background in physics or engineering.

Q: I am doing my MSc in medical physics and how I can get in?

The application process is open just now - take a look on NHS Scotland Jobs for details. We also have details on our website. You can apply via the NHS Scotland website: <https://apply.jobs.scot.nhs.uk/Job/JobDetail?JobId=206960>.

Q: How is research funded? Do you have time reserved to explore your research interests or do you need the time covered under a successful/funded research proposal?

Research is funded via grants normally. Service development is a part of our job description; the time for service development is made a part of our routine job plan.

In MRI Physics, you are likely to have some of your time in post allocated to support R&D activity. It generally tends to be to support the R&D interests of academic colleagues mainly. Remember that the posts are NHS positions, and clinical services are likely to be priority. Funding for R&D and innovation does come up from time to time though, and it would require you to apply for it with a grant application to explain what you want to do and how it would benefit patients.

This varies dependant on the department you work in, the scale of the research and the level of your contribution. Small-scale research projects are undertaken continuously in all of our departments. These types of research projects are integrated into our daily work. As Jennifer says, this is sometimes under the umbrella of "service development". Some of our colleagues do have substantive research grants from the Chief Scientist Office, a Research Council, or a Charitable body where their time is 'bought out' for one or more sessions per week. We might be the PI on the grant or a supporting team member.

Throughout the NHS there are large scale commercial clinical trials ongoing (e.g., for pharmaceutical products), we would often provide support to those trials, and our time would be funded.

In addition, there is a component of 'service development' that is different from pure R&D but it is still very interesting. This is basically where one of the major vendors (GE, Philips, Siemens etc) develops a new technique - and your role would then be to take receipt of it locally and develop it, test it on healthy volunteers, and introduce it to the clinical service. I personally find this a very interesting part of the job - taking something brand new from the vendor and delivering it to the patient.

Q: Please, I would very much appreciate it if the link for the Scientist Training Program is email to me.

Details of STP are available from the National School for Healthcare Science website. If you want to apply for our training scheme, then please look at the website or NHS Scotland Jobs.

Q: For NM and MRI presenters - I'd like to ask you both, which part of your positions do you find the most rewarding, if you don't mind me asking? Thanks!

I find helping out with difficult implants and helping to get the best images possible the most rewarding. For example, if I'm able to attend a scan and help reduce a metal artefact so that the Radiologist can see the area they need. Or if we have a complex implant and we find the conditions in which it can be scanned safely. I certainly like the patient side of the job and helping patients to get the best images possible for their care. Those examples are can also be quite challenging and we both get to use our physics knowledge and get work with other staff groups in a multidisciplinary effort.

I really enjoy working with patients giving iodine therapies or providing physics support in complex/unusual cases. For example, we have had paediatric patients undergoing MIBG imaging who then went straight to theatres for surgery of a malignant site. This would not normally happen so quickly after imaging, but it meant that the biopsy could be completed under the same general anaesthetic as the imaging procedure. Saving stress to the child and their family and saving NHS resources so that an anaesthetics team was only required once. Prior to this we undertook a risk assessment to assess the predicted activity in the biopsy site as the uptake on previous imaging was very high. On the day of imaging, I went with the patient to theatres to reassure staff, explain to them the radiation risks involved in the procedure, to check the theatre for contamination after surgery, to check contamination monitor the waste and ensure the biopsy samples were all handled appropriately given the activities involved. We have then used my measurements from that day to inform future risk assessments.

Q: What sort of research is involved in DR/RP?

I hope I answered this in the presentation: driven by technology changes in DR particularly in CT and Digital Mammography which have undergone significant developments in last 10 years. For RP, driven by regulatory change and international radiation protection community for radiation dose and risk factors for cancer induction. Participation in Scottish wide and

national working parties leading to publication in scientific journals or national guidance for peers is encouraged.

Q: Would it be advantageous to write the Medical Physics application with a focus on a specific specialism? (e.g., due to relevant experience and interest) Or is it more important to show enthusiasm for all fields within Medical Physics as trainees will be covering all specialisms in their foundation year?

Broadly speaking, we want you to tell us why you want the job and why your existing skills and experience make you a good match for the job.

If you have relevant experience or interest in a specific area of MP then I would definitely suggest telling us about it. If you have previous experience in a particular area but are interested in all areas of MP, then that's fine - easy to explain this in a few words.

Q: Great overview of the rehab engineering. My background is physiotherapy therefore, I have no experience on using CNC etc. If I am chosen as trainee, is this included to the training or you were looking for people that they know every device you are using.

As with some of the other questions, an engineering background is required for the training scheme. The Biomedical Engineering MSc will help with this as you tend to cover the side of the field you are less experienced in (i.e., a physio would learn engineering theory, an engineer would learn medical theory). As the role is very patient-focused, your clinical experience is valuable in practice, but the engineering background is essential. As for specific devices, it is not expected you have experience of using all of these, as you will get hands on experience throughout the training scheme, but an understanding of the theory would be helpful. Hope this helps.

Q: Are you expecting applicants to achieve a specific grade in the MSc?

We'd expect the MSc to be passed - equivalent of 2ii or better - to progress to the FY. In practice we have never had an issue with this though, all of our trainees have done well on the MSc.

Q: Is the first year MSc funded the same way as the rotations if you do the 3.5 years vs if you do 2.5?

Successful applicants will be paid at Agenda for Change band 6 throughout the MSc year

Yes it is - fully funded, whether the 2.5 or 3.5 year. I will cover this in some chat later, but we take on trainees with varying levels of experience.

Q: During the course at the University of Glasgow will successful applicants be able to apply for a room in the university's postgraduate halls of residence?

Yes, I believe so. However, I think most of our previous trainees have found private accommodation

Q: About a postgraduate Msc. Biomed. Eng. from Strathclyde Uni in relation to the Clinical engineering interest, where would this fit in this program? Would there require to go through the whole training, start from year 1 or can carry on or instead look for a position instead?

If you already have a qualifying MSc in Biomed Eng, then you wouldn't need to do it again - you would go straight into the training rotations at the hospital. However, if you haven't got the MSc yet then you would need to do the Strathclyde one.

Yes, from a qualified Msc Biomed. Eng. from Strathclyde. So, would this be starting in year 2 to 3? About the training application, would the process still be similar to that of training if can start in rotation categories? Kindly assist on how best could an application be made once already qualified from Msc. Biomed. Eng. from Strathclyde.

Best for you to apply using the standard portal, as has previously been publicised. We will make sure that you end up on the correct training programme - provided that you tell us clearly in your application that you already have the MSc. If you already have the Strathclyde MSc then you would be required to do 2.5 years of training - all based in the hospital, starting with the rotations.

Q: I have a short experience in DR/RP but would also like to get taste of other specialisms as well. Because of the background I have would that stop me from pursuing a different specialism if by the end of the training I want to change to a different specialism?

You would still get a full choice, and the purpose of the FY is to give you knowledge and experience of everything. If you already have some DR/RP it would not stop you pursuing another specialism when the time comes.

Just to clarify - DR/RP training is delivered as part of our Medical Physics Training scheme. Trainees undertaking the Clinical Engineering scheme may undertake a short (a few days) placement in DRRP, Radiotherapy, Nuclear Medicine, or Non-ionising radiation. However, they would not specialise in those areas. Trainees undertaking the Clinical Engineering scheme, will gain experience in Clinical Measurement, Device Risk Management and Governance / Equipment Management, Design and Development of Medical Devices, and Rehabilitation Engineering.

Q: I had a MSc in Biomedical Engineering from university of Dundee previously. dose this meet the requirement on the 1st year?

Unfortunately, the Dundee MSc is not IPEM accredited, so you would still need to do the Strathclyde MSc.

Q: Is the Strathclyde MEng In Biomedical Engineering IPEM accredited?

Yes, the Strathclyde MEng in Biomedical Engineering is IPEM accredited.

Q: Where would MSc Applied Instrumentation and Control from Glasgow Caledonian University best fit? Medical Physics or Rehabilitation Engineering?

On the face of it, that would suggest to me that your background would probably be towards the engineering side. However, if you can demonstrate some practical knowledge/experience of MP and write a convincing supporting statement then you may be able to build a case for entry into MP.

Q: If you have a CAMPEP accredited MSc in Medical Physics would you still have to do the 3.5-year programme, or would this meet the requirements to enter the 2.5 year programme?

Clarification - Degree Requirements to Progress directly to year 2

Point of clarification on the degree requirements for entry into the second year of SMPCETS:

- *If you're applying for the **Medical Physics** training scheme, and you have an **IPEM-accredited MSc in Medical Physics**, you would be admitted directly to year 2. If you have an MSc in Medical Physics which is not IPEM-accredited but might be CAMPEP accredited, we would look at your degree on a case-by-case basis. The **MSc in Medical Physics at Glasgow and Aberdeen** provide you with the knowledge and understanding that trainees need to enter into the Foundation Year work-based rotations. We would need to confirm that the MSc in Medical Physics that you have would prepare you in the same way.*
- *If you're applying for the **Clinical Engineering** training scheme and you have the **IPEM-accredited MSc or MEng in Biomedical Engineering from STrathclyde**, you would be admitted directly to year 2. If you have an MSc or MEng in Biomedical Engineering from any other institution, we would **look at your degree on a case-by-case basis**, to ensure it contained appropriate modules to prepare you for the Foundation Year work-based training. **We would make that decision after you were offered the post.***

Q: I am in my 2nd Semester of my program, MSc Biomedical Engineering, my program is ending in September 2025, I am an International Student, am I eligible to apply for the job openings or I have to wait for my program to end?

If you are finishing in September, then you could apply this year but make it clear that your expected grade will be 'predicted'.

Q: It was mentioned that image quality is impacted by several factors. For fMRI artefact reduction & SAR minimisation was mentioned. What are the biggest challenges in image processing & what research is being done in this area?

In DR we do not generally input to image processing for clinical images. We perform optimisation of radiation dose and image quality using test tools and phantoms. Our objective is to minimise the radiation dose whilst ensuring we have not impacted the image quality - QC.

R&D and innovation is encouraged in MP and CE, although a key aspect of the work is the delivery of a clinical service for the NHS. In this respect, research time may not, in practice, be as much as you would experience as an academic in a university environment. There is a lot of service development though, which tends to be translation of newly developing techniques into clinical practice. This is very interesting/rewarding and requires a good understanding of skills that would relate to R&D (data processing, stats, presentations etc).

Q: Which website will the slides be uploaded to, and how do we access this?

<https://www.smpcets.scot.nhs.uk/>

Q: Would SMPCETS trainees be favoured for Clinical Scientist jobs in Scotland over STP trainees after getting registered as a Clinical Scientist?

Trainees who exit SMPCETS and STP hold equivalent qualifications (HCPC registration as a Clinical Scientist). Both would be considered equally in the application process

Q: Pls what is the duration of the training

2.5 years if you hold a qualifying MSc, or 3.5 years if you still need to do the MSc first.

Q: When application will be open?

The applications are currently open. Please see the job advert linked earlier in the chat

Q: My student Visa is ending in January 2026, will I be given a sponsorship to get another visa?

A: The NHS will be able to provide sponsorship, but it will be up to the individual to apply for the visa, pay the fees, and ensure that they have all of the paperwork done correctly. Due to difficulties with the UK visas and immigration service, we may not be physically able to recruit from international applications where the individual is not already based in the UK. We will deal with all applications fairly and equitably though, and all applications will be anonymous to the reviewers involved in the shortlisting.