Science & Technology
Facilities Council

Graduate
Training Scheme

Contents

Welcome letter from John Womersley

Welcome Letter

Dear Colleague

Congratulations on your success at the assessment centre - I am delighted to welcome you back to STFC as a graduate trainee.

I believe that STFC is a great place to work - combining leading edge challenges with a friendly, informal working environment. Despite the challenging economic situation, the government's continued support for investment in science facilities and programmes point to an exciting future for us.

We are and intend to remain an international organisation undertaking world class science. To be successful we need to move forward together, each of us taking responsibility for finding better ways of doing what we do - from our front line research to the range of important support activities that help us to meet our objectives. As a newcomer you are in a special position to help us with this by viewing our activities with fresh eyes and suggesting how we can improve our processes and the way we approach our work. Please feel empowered to put forward your ideas and suggestions - either to me or to one of my directors.

Our graduate trainee scheme offers you an excellent start to your working life in Science or Engineering, with opportunities for your personal and professional development that will provide a sound foundation for your future career.

I hope that you enjoy your time here and I wish you every success.

Best wishes,

John Womersley
Chief Executive

Section 1
The Training Scheme

About the scheme

STFC's graduate training scheme is aimed at first degree level graduates recruited into posts at STFC 'band C' level. They are usually, but not always, recruited following successful participation in our annual assessment centre. Graduate trainees are paid for by our technical departments to do 'real' jobs that need doing – which means that they are expected to deliver against real objectives – often for paying customers. We are therefore looking for graduates who can make a real contribution from day one – people with ability, ideas and initiative who can work effectively as part of a team.

However the jobs that graduate trainees are recruited into will allow them to follow a structured development programme during their first two years with us. You will have a personal development plan, which will be agreed with your manager and mentor, and which will identify the key technical and non technical competencies that you need to develop during your first two years. You will then be supported in your development – by a combination of on the job experience supported by coaching, and formal off the job training events.

Professional Institution Accredited Schemes

The STFC recognises the value of having a professionally qualified workforce in all areas of its operation. Chartered membership of a recognised institution sends an important signal to stakeholders that our people have the skills and experience necessary to deliver to the highest standards. We are therefore keen to support individuals to achieve chartered status wherever possible, and if appropriate, you will follow one of our company accredited training schemes that allows you to work towards chartered membership of your professional institution. STFC currently has accredited training schemes with the Institution of Mechanical Engineers (I Mech E), the Institution of Engineering and Technology (IET), and the Institute of Physics (IoP). Graduates registering on these schemes will complete the log books and other records provided by the institutions which may be inserted into section 10 of this binder. Where trainees wish to pursue membership of other institutions, for which we do not have a company accredited scheme, they should discuss this with their manager and/or mentor, and where possible support will be given

to help them gain the experience and training necessary to gain membership.

STFC's graduate scheme will reimburse the Institution registration and membership fees for graduates who are actively working towards chartered membership for up to 5 years from the date of recruitment. It is normally expected that graduates will achieve their chartered membership within this timescale. Reimbursement of fees can be claimed in the same way as other expenses, using Oracle i-expenses.

All other trainees should work with their manager and mentor, using the documents in sections 3, 5 and 7 of this binder, to develop their own personal development plan. Although this will not result in training that is externally accredited they will gain a great deal by planning their learning and reviewing it regularly. A well completed personal development folder will provide a worthwhile achievement record which may be of help in future career moves.

STFC has a variety of resources available to help you – including an excellent library, open learning resource collection, programme of training courses and events, and of course lots of people with experience and expertise who will be happy to help you!

The graduate trainee scheme is managed by the Head of People Development, and monitored by a panel of representatives from the departments employing trainees. This panel checks that trainees are making satisfactory progress, and reviews trainees' nominations for regrading to band D. If you have any concerns about your progress during your first two years with us, which you are unable to resolve with your manager or mentor, please contact the Head of Learning and Development.

About your development

We expect our graduate trainees to progress to key positions in the organisation. Progress may be to specialist, technical roles with little or no management responsibility, or to roles that require significant people or project management skills in addition to technical contribution.

Graduate trainees can normally expect to be regraded to band D about two years after joining. In some cases regrading may be approved earlier than this – for example where trainees have had significant relevant work experience before joining us. Regrading is at the recommendation of the trainee's manager and must be approved by their department director, and the trainee monitoring panel.

The regrading process involves the graduate and their manager completing a nomination form. Managers and mentors are asked to comment on the trainee's technical progress, and also on their progress against 7 key non technical competencies – which are included in the training plan in this binder.

The nomination form is included in the last section of this binder. This is available on the HR forms web page, so that it can be completed electronically when the time comes.

To help you to understand our grading structure a description of the different bands is included in section 9 of this binder.

Second Year Placement

STFC departments cover a diverse range of work and are located on different sites. As part of your career development it is important that you begin to understand our organisation during your initial training period. We will therefore expect you to complete a work placement of up to 3 months in a department other than your home department during your second year with us. Available placements are advertised exclusively to graduate trainees via our InFocus staff intranet and you will be given access to these adverts. You will also be able to post details of work experience that you are seeking, either to help you to complete your training plan or just because you are interested in trying something new. Your mentor and manager will help to ensure that you have the opportunity to complete a placement that meets your needs. Further information about the placement scheme will be provided to you at the start of your second year with us.

Support available to you

Your manager

Your manager will be responsible for supporting you on a day to day basis. He or she will be responsible for managing your performance and supporting your development through our appraisal process. This involves agreeing your job plan with you – which will provide you with SMART (specific, measurable, achievable and agreed, results focused and realistic, time bound) objectives to work towards, and also agreeing your learning and development plan with you – and this plan should take account of both your technical and non-technical development needs.

Your job plan and your learning and development plan will be formally recorded at the start of each reporting year – which is in March/April. Both should be regularly reviewed with you throughout the year – at least every 3 months. Your development is primarily your own responsibility and although you can expect the support outlined here, you will be expected to be proactive in implementing your learning and development plan.

You should expect regular meetings with your manager throughout your time in STFC, but especially during your first two years. If these do not happen you should take the initiative and book a regular slot in your manager's diary – every week or two, and use the time to review your progress and plan your next steps.

If your learning and development plan has identified development needs which cannot be met in your immediate work area your manager should help you to identify a suitable opportunity such as a special project, a work placement, or a formal off the job training event which enables you to meet your learning need.

Your manager should also give you regular feedback on how you are doing. Feedback is important for everyone – but especially so during the first months in a new job. Don't be afraid to ask for feedback if it is not forthcoming, or if it is not clear to you how you are doing. Invite specific feedback on particular pieces of work that you have completed – and act on any improvement suggestions that you are given.

Your mentor

As a graduate trainee you are required to have a mentor – someone who is outside of your management chain and can help you to settle into STFC and progress in your professional and personal development. Your manager should help you to find a suitable mentor but if you have not been allocated a mentor by the end of your first month with us please let someone in the Learning and Development team know. Also if you are allocated a mentor who for any reason is not providing you with the support you need please tell someone – ideally explain the situation to your mentor or manager, or if necessary contact someone in the Learning and Development team – don't persist with a mentor if the relationship is not working for you.

The mentoring scheme and your role as a mentee will be explained to you during your graduation induction course.

Details of STFC's mentoring scheme are included in section 2 of this binder.

The Learning and Development team

The UK Shared Business Services (UK SBS) Learning and Development team arranges a catalogue of courses which can be run on STFC sites subject to demand. These provide training in management and personal development skills and basic office computer applications. Please look at the catalogues on Oracle Learning self-service.

Health and safety training courses are also run regularly on site and details are available on the Safety, Health and Environment web site.

The Library

There are excellent libraries at both RAL and DL which have well stocked collections of technical and management books and journals. Details are available on the staff intranet - Infocus

Section 2
The Mentoring Scheme

Scheme Guidelines

What is mentoring and how is it used?

Mentoring is a relationship between 2 individuals – a 'mentor', defined as 'an experienced and trusted advisor, friend and counsellor'; and a learner or 'mentee' who is seeking to develop in some way. The relationship is characterised by being protected and non-judgemental, and has the objective of facilitating the learning and development of the mentee – although in practice mentoring also provides valuable learning and skill development for mentors.

Mentoring can be a very effective complement to other strategies and interventions for developing individuals and many organisations use it as an integral part of their staff development programmes. Groups of employees most commonly provided with mentors include people on study programmes, new recruits – particularly graduates, high potential employees and minority groups.

A mentor's role differs significantly from those of other key people involved in the development of people in the workplace such as managers and coaches or trainers. The definitions below explain the main differences:

- The manager – is task focused, mainly concerned with developing the department to achieve its objectives, accountable to the organisation

- The coach or trainer – is skill focused, mainly concerned with improving performance in a particular situation, accountable to the manager

- The mentor – is person focused, mainly concerned with developing the individual to achieve their potential / develop their career, accountable to the individual

Who can have a mentor in STFC?

Anyone in STFC will be able to request a mentor, but in the event of a shortage of mentors priority will be given, and proactive efforts made, to identify mentors for staff in the following groups:

- Graduate trainees

- Staff in minority groups – specifically women in SET posts, staff from ethnic minorities, staff with significant disabilities

- Staff following courses of study

What are the aims of the STFC scheme?

The objectives of the STFC scheme are to improve staff morale and organisational performance by:

- providing staff with support in working towards their personal career goals

- helping new recruits to settle quickly into the organisation and their roles

- improving corporateness – by encouraging understanding beyond an individuals immediate work area and facilitating networking across departments/sites

- increasing the numbers of staff from minority groups in senior positions in the organisation in the longer term

What are the mentor's role and qualities?

A mentor's role is to support individuals in reaching their own decisions and moving towards their own goals. They do this by listening, questioning, sharing their own experiences and expertise, and offering ideas and advice. A mentor's role is not to tell people what to do, or to do it for them. Mentors will normally be at a more senior level in the organisation than

their mentee. Mentors should definitely not be in the line management chain of the mentee, and ideally should be removed from the everyday work of the mentee, in order to provide the mentee with a new perspective.

The qualities needed by a mentor will vary depending on the precise purpose of the particular mentoring relationship, and the strengths and development needs of the partners. A mentor who is assigned to help an individual to achieve a specific qualification will need different qualities and a different approach to a mentor assigned to help an individual to identify and progress towards their career goals. However the following qualities are likely to be critical to the success of any relationship:

- Mentors need to be enthusiastic about the mentoring role, and able to make time for it

- They need to be able to listen actively and show the mentee that they are giving them their full attention during meetings

- They must be able to focus on the needs of the mentee

- They need to be reliable – to honour commitments

- They need to be approachable

- They need to be positive about STFC and their own discipline/work area

- They need to have experience, ideas and contacts that will be useful to the mentee

- They need to be honest and able to give effective feedback

- They need to be able to ask appropriate questions to help the mentee to move forward

- They need to be able to challenge the mentee's thinking

- They need to be able to encourage the mentee to try new things

- They need to be able to help the mentee to analyse options and make informed decisions

What are the mentee's role and qualities?

The mentee's role is to be proactively committed to, and take responsibility for their own development by defining the objectives for the mentoring relationship, preparing for meetings, and following through on actions.

- Mentees need to be self motivated, and keen to achieve their goals

- They need to be proactive in progressing actions

- They need to be good listeners, and receptive to feedback and ideas

- They need to be reliable and to honour commitments

- They need to be prepared to be open and honest with their mentor

What are the keys to a successful partnership?

The mentor and mentee need to get on with each other. Whilst they do not have to become great friends there needs to be something in common between them to allow them to build rapport and feel at ease with each other. They also need to like and respect each other. It is better to abort a relationship and start again than to soldier on in a relationship that is uncomfortable for either party.

Good mentoring relationships require thought and preparation. There needs to be a clear overall objective for the relationship, and objectives for each meeting. Outputs from the relationship should be observable and measurable, for example a qualification obtained, a new circle of professional contacts, achievement of a promotion or new opportunity, achievement

of a goal such as presenting a paper at conference, increased profile within the organisation, or a clear plan of where the individual wants his or her career to be in 5 years time.

Mentoring relationships need clear boundaries to avoid frustration and misunderstandings between the partners. A simple contract should be drawn up between mentor and mentee at the start of the relationship which defines what each party expects of the other, and what is and is not acceptable. A recommended simple way of doing this is for both parties to complete a grid at their first meeting, example as follows:

Mentor's undertaking:

what I will do	what I will not do
• meet with you at agreed times • reply to your e-mails quickly • keep discussions confidential	• chase your actions • complete your assignments for you
what I can do	**what I can't do**
• give you honest feedback • critique your assignments • lend you reading materials	• be available at weekends • intervene between you your manager

Alternatively a written contract can be agreed, an example is included at the end of this section.

The frequency and duration of meetings should be agreed. Both of these may vary at different stages in the relationship. In the early stages meetings may need to be more frequent but shorter. Later on less frequent but longer meetings might be more appropriate. Meeting frequency should be somewhere between fortnightly and 6 weekly – probably monthly is about right for most relationships. The duration of meetings needs to be controlled – an hour is probably optimum, and 2 hours maximum.

Successful mentoring relationships require openness and honesty. Trust and confidentiality are therefore essential, and neither party should disclose details of discussions without the agreement of the other person.

How might a mentoring relationship progress?

Mentoring relationships should have a defined beginning and end. The duration of the relationship will depend on its purpose and on the value that both parties derive from the relationship. Some mentoring relationships last a year or two, some continue for much longer. It is important that the parties feel able to end the relationship when the time is right to do so – that is once little or no progress is being made.

Most mentoring relationships develop in 4 stages:

At the first meeting:

Stage 1 – Establishing Rapport

- Sharing experiences – work and personal – to a degree that both are comfortable with

- Sharing expectations and agreeing a contract to define expectations and ground rules

Stage 2 – Direction Setting

- Determining the mentee's goals – short and long term

- Setting priorities

- Agreeing objective measures – how will you know when you have 'arrived'

- Agreeing duration and frequency of meetings

At future meetings:

Stage 3 – Making Progress

- Establishing and following a structure for meetings to ensure that discussions are focused and lead to an action plan

Stage 4 – Maturation and moving on

- Review what has been achieved and what needs to happen next

- If appropriate allow the relationship to end or move to maintenance

How will mentors be selected and matched with mentees?

The STFC scheme is administered by the Learning and Development Team. Staff are asked periodically, via a staff notice, to volunteer to be mentors. Volunteers are required to complete a simple pro-forma giving information about what they can offer as a mentor. All volunteers will attend a one day mentoring course which explains the scheme and provides some basic skills training – based on the qualities listed at paragraph 7. It is important for the success of the scheme that mentors possess most, if not all, of the qualities listed. Where there are concerns that individuals might not be suitable they will be given feedback explaining why they are not considered ready to be a mentor and what support or further training is available to help them develop further.

Applications to have a mentor are also invited periodically, and applicants are asked to complete a simple form indicating why they want a mentor and what sort of person they would ideally like to be paired with.

The details of available mentors are held by the Learning and Development team who broker introductions between suitable mentors and staff who have requested a mentor.

Anyone can volunteer to be a mentor, irrespective of their band. However suitable staff at senior levels (band F and above) will be strongly encouraged to be mentors.

For trainees on IMechE, IET, or IoP schemes mentors need to be members of a relevant professional institution and to have an up to date knowledge of the institution's membership requirements. These mentors are advised to attend their institution's mentoring training instead of or in addition to the STFC mentoring course. STFC reimburses the institution membership fees for individuals acting as mentors to graduate trainees.

How will the success of the scheme be measured?

The success of the scheme will be monitored annually by a feedback questionnaire issued by Learning and Development to both mentors and mentees.

Short term measures of the success of the scheme will include:

- the number and frequency of meetings

- the rate of progress towards the achievement of the mentee's goals

- the satisfaction of both mentor and mentee with the partnership

Longer term measures will also need to be agreed but these might include:

- promotion success rates for staff with mentors

- numbers of staff from minority groups reaching senior positions

How will mentors be supported in their role?

As mentioned above all mentors will be required to complete training before taking on the role.

All mentors should have their mentoring role recorded in their job plan, so that it is recognised by their managers when reviewing and planning their work. However no details of the partnership – including the name of the mentee – should be recorded or discussed.

Learning Lunches will be arranged periodically to provide a support network for mentors and mentees – to enable them to share good practice and discuss problems, again without reference to individual mentees.

The Learning and Development team will be available to advise on any specific problems that arise in partnerships.

What about confidentiality?

Discussions which take place as part of mentoring relationships must remain confidential between the mentor and mentee unless both parties agree that information can be disclosed. Managers have no right to receive information from the mentors of their staff without the agreement of the mentee.

Care must be taken not to disclose any information about a mentoring partner. The only exception to this is where either party discovers information to suggest that the other party is or has been engaged in any illegal activity, any activity which contravenes STFC's code of conduct, or is committing a serious breach of discipline under STFC's disciplinary code as set out in CEMs.

Mentors should take care to protect any written data they receive from mentees or any notes made of mentoring meetings which identify the mentee.

If either party is concerned about information learned as a result of the mentoring partnership they should seek advice from their Human Resources Adviser.

What happens if the partnership does not work out?

Most mentoring relationships are terminated by mutual agreement once the mentee has achieved his or her goals and there is no further benefit to be gained from the relationship.

If either partner is unhappy about the mentoring relationship at any stage or for any reason they should ideally discuss their concerns honestly with the other partner, and if necessary

agree to terminate the relationship. If either party feels unable to initiate such a discussion they can ask for help from a member of the Learning and Development team.

As a rule of thumb, if, after 3 meetings, there is no rapport between the partners or either partner feels that the relationship will not work well, they should share their concerns with the other partner and terminate the relationship. It is much better to do this at an early stage to enable the mentee to find a more suitable mentor and to avoid too much time being wasted.

Mentoring Scheme – Contract between mentor and mentee

THE CONTRACT

Undertaking by the mentor

As mentor I undertake to:

1   Help the mentee to identify the skills and competencies he/she needs to meet his/her objectives.
2   Help the mentee identify and plan a career development path for the future.
3   Meet with the mentee by mutual agreement.
4   Listen and support the mentee when he/she is right.
5   Ask challenging questions in order to help the mentee learn.
6   Provide the information that is promised.
7   Give constructive feedback.
8   Keep the content of all these discussions confidential, even after the termination of the partnership.
9   Review and evaluate the partnership regularly.
10 End the partnership by mutual agreement when the time is right to do so.

Undertaking by the mentee

As mentee I undertake to:

11   Meet with the mentor by mutual agreement.
12   Listen and respect the mentor's advice.
13   Discuss the challenges that lie ahead in my work and
       career.
14   Agree and implement a Personal Development Plan.
15   End the partnership by mutual agreement when the time
       is right to do so.
16   Review and evaluate the partnership regularly.

As mentee I accept that the mentor will not:

17   Do my work for me or chase after me for actions.
18   Support me when I am wrong.
19   Always give me the feedback I like or agree with.
20   Intervene between me and my line manager.

Mentor:

Mentee:

Dated:

Section 3
Your Learning and Development Plan

All STFC staff complete learning and development plans as part of the appraisal process, which should be reviewed with managers regularly throughout the year.

As a graduate trainee you need to have a more detailed and longer term plan, which takes account of your technical and personal learning and development needs during your first two years with us. Your plan should follow the format shown on the following pages. It is available on the Learning and Development web site, so that you can print off additional pages as you need them.

The plan consists of 2 sections – technical and/or professional development and personal development. Don't worry if you are unsure where to record something – sometimes learning needs will fit equally well into either section. It doesn't matter as long as you have recorded everything that is important to your development.

What is important is that you discuss and develop the plan with your manager. You should carefully identify your learning needs before looking at opportunities for meeting them – don't simply identify a course that you want to attend without first having a clear idea of what you need to learn from it. You should also review your progress with your manager or mentor on a regular basis – this is a key element in the successful transfer of learning from classroom to workplace. By following the process described in the plan you will help to ensure that you end up with a plan that really focuses on your specific learning needs and gets results.

- When completing the **competence** column set yourself clear learning goals – so that you will know when you have achieved them

- When identifying **development opportunities** think about your preferred learning style. Ask yourself how you have learned most effectively in the past – by face to face interaction with others – listening, discussing, questioning; by quiet reflection – maybe reading a book or manual and working things out for

yourself; or by trial and error – having a go and learning from the experience. Try to ensure that the opportunities you identify will meet your needs and give you the best chance of success.

- When **reviewing your progress** ask yourself critically whether you have acquired the skill or knowledge that you intended to acquire. If 'yes' ask how are you using it. If 'no' decide what more do you need to do to acquire it?

For help in identifying opportunities to enable you to meet your technical or professional learning needs your manager or mentor is likely to be the best source of advice. Alternatively you can contact the L&D team who will help you to source external providers of the training you need.

For help with meeting your personal learning needs the best source of help is our management competency framework – CRISTAL which defines the behaviours that STFC expects of its managers. Although you are unlikely to be managing others during your first 2 years the framework includes a number of competencies that are important for all staff. The complete framework is included in section 4 of this binder. The competencies that are most likely to be important development areas for you in your early career are listed in the sample plan on the following pages. More information about CRISTAL, including details of courses and learning resources, is available on the Learning and Development page of our staff intranet – InFocus.

MANDATORY TRAINING:

There are some core training sessions and events that you are expected to attend and which should be built into your plan. These include:

Induction

Your manager will help you to settle in and during your first days and weeks will complete an induction process with you to ensure that you are introduced to the people, processes and places that you need to know. This process requires completion of an induction checklist, and you should work with your manager to ensure that this is properly completed, and that you are satisfied that you have been given all the support and information you need in your first weeks with us. You should keep a copy of the completed checklist in section 7 of this binder.

We also have a comprehensive induction website, accessed from our staff intranet, InFocus. From here you can access all the information you need to complete your induction programme, including STFC's strategy and vision, details of our structure and the senior management team, the policies that you need to read and the mandatory training that you need to complete during your first five months with us. There are also some links to external sites that may be helpful if you have moved into the area to join us.

Graduate Welcome Meeting

This is a 3 hour session, with lunch, which you will be invited to attend shortly after joining us – during September or October. It will give you a chance to meet the other new graduate trainees and also to meet some of the trainees completing their first or second year with us. You will be given an introduction to the scheme and details of the training programme for your first year. There will also be a session which explains the mentoring scheme and your role as a mentee.

Safety Induction

This is a short session that will give you an introduction to

Health and Safety at work and our site procedures. It will emphasise you personal responsibility for your safety and that of others and it is essential that you attend.

Introduction to the Appraisal Process

This half day session explains our appraisal process and your role in it.

Graduate Trainee Development Programme (GTDP)

During your first 2 years with us you will be required to attend a one week development programme, with the other graduate trainees, which will help you to develop in a number of the CRISTAL competencies including communication, solutions focus, team working, awareness and leadership. The exact nature of this event may vary from year to year but it will be activity focussed, and probably out of doors. In recent years this event has been a week's voyage on a Tall Ship. The programme includes essential preliminary work on team roles, group project work, and a review session which includes a presentation to senior managers after the event.

Understanding Personality Types

This is a 2 day workshop usually held at our conference centre in Abingdon. It uses the Myers Briggs Type Indicator (MBTI) to develop an understanding of different personality types and preferred ways of working and provides an important foundation to working effectively with other people. It is an essential preliminary to the team roles work which you will do as part of the Graduate Trainee Development Programme described above.

Graduate Trainee Forum

This is a one day event, arranged by the graduate trainees themselves, and takes place each autumn at our conference centre in Abingdon. It provides an opportunity to hear speakers of interest, and to work together with other STFC employees during the day.

STRONGLY RECOMMENDED TRAINING:

During your second year with us you should attend a management programme such as our CRISTAL 2 course outlined below.
(In some cases attendance on these programmes takes place in years 3 or 4).

CRISTAL 2

This is a 3 day non-residential course which runs at off-site locations close to our sites. It gives an introduction to each of the 7 CRISTAL competencies, and requires you to get some feedback on your current skill level in each area before attending.

Presentation Skills

This is a one day course held at least once each year. It is an interactive and lively course which gives you a chance to practise your presentation skills with feedback from an expert tutor. Whatever your job you are likely to have to give presentations from time to time – and unless you are lucky enough to be a 'natural' presenter you are bound to gain some useful improvement tips from attending this course.

Introduction to Project Management

A one day introduction to project management principles and techniques.

OTHER POTENTIALLY USEFUL TRAINING:

A wide variety of courses are arranged for STFC and the other Research Councils by the UK Shared Business Services (UK SBS) Learning and Development team. These can be run at any site depending on demand. To view the available courses and book a place go to Oracle Learner Self Service.

Managing People in Projects

A one day course that looks at the people aspects of successful projects.

PRINCE 2

Foundation and Practitioner courses are arranged by the SSC Learning and Development team and bookable through the Oracle Learner catalogue.

Technical Report Writing

A short course which can be run on site subject to demand.

Dealing with Challenging Situations

A one day workshop that uses the principles of Transactional Analysis to examine difficult relationships and how to improve them.

Panel Interviewing

This 1 day course looks at best practice recruitment processes and relevant legislation. It also provides practice and feedback in interviewing skills. Attendance is mandatory before taking part in recruitment or promotion interviewing or observing at assessment centres.

Communication Skills

A one day course that looks at the fundamentals of effective interpersonal communication, focusing particularly on awareness of self and others and the importance of a flexible approach.

Assertiveness Skills

A one day course.

Negotiating Skills

A one day basic level course.

Time Management

A one day course.

GRADUATE TRAINEE LEARNING AND DEVELOPMENT PLAN

PART 1 TECHNICAL COMPETENCES
– to be completed with your manager

(Form available on the L&D web page (under Graduate Scheme) to print off as needed)

COMPETENCE What skills/knowledge/attitude do I need to acquire or improve to develop technically during my first two years? List them in priority order:	DEVELOPMENT OPPORTUNITIES IDENTIFIED – WITH DATES How do I learn best – what is my preferred learning style? What on the job opportunities or off the job learning events will help me to develop this competence? What exactly will I do and when?	REVIEW DATE When will I review progress with my manager or mentor?	REVIEW COMMENTS What progress have I made? What new skill or knowledge have I learned, and how am I showing that I have learned it? Do I need to do more – if so what?

TECHNICAL COMPETENCES
– some suggestions for likely improvement areas and opportunities

This list includes some generic technical competences – it is taken from the IET and IoP schemes. It is intended as a prompt for identifying your learning needs and is not intended to be either exhaustive or prescriptive. Your plan needs to reflect what is important to your job role and your own professional development. The project life cycle on the following page is also a useful reference document in helping you to identify your technical learning needs.

Competence	Possible 'on the job' opportunities	Possible 'off the job' opportunities
1 Sound theoretical approach 2 Conduct and document appropriate research and design possible solutions	• project meetings • discussions with manager and colleagues	• Technical courses, seminars, conferences etc • reading scientific and technical books and journals
3 Creative problem solving 4 Exploiting emerging technologies 5 Identify potential projects and opportunities 6 Creativity and synthesis of possible solutions 7 Evaluate solutions and make improvements 8 Collaborate with industry and the wider community	• Involvement in problem solving/decision making meetings • Discussions with managers and peers • Writing reports and papers that contain reasoned arguments and recommendations • Problem solving brainstorms • Discussions with colleagues from across STFC, and outside (eg CLIK) • Brainstorming meetings • Project review meetings	• CRISTAL 1 & 2 • Creative thinking workshops • Continuous improvement learning lunch • Books tapes and videos • Networking opportunities – conferences etc • Reading scientific and technical press
9 Manage and apply safe systems of work 10 Comply with codes of practice on risk and the environment	• Read STFC policies and procedures – on web • Talk to in-house experts	• SHE training courses • E-learning modules on web • Learning lunches
11 Effective use of Information Technology	• Coaching from manager and colleagues • Coaching ('Floor walking') from external tutors	• Range of in-house IT courses • External courses • Read manuals

Project life cycle applicable to all STFC projects
(Corporate Project Management Handbook)

Conception
1. Any new opportunities are identified and recorded.
2. The list of opportunities is regularly reviewed and where appropriate a project is started.

Feasibility
1. Investigate the feasibility of the project – the technology, timescale and resourcing.
2. Start development of the project strategy and management plan.
3. Develop version 1.0 of the project specification.
4. For commercial projects follow the ex-CCLRC bid management system.
5. Review the project specification and sign off with the customer at the preliminary review.
6. After preliminary review, changes to the project specification can only be made formally and have to be signed off with the customer.

Implementation – Initiation and Planning
1. Complete the project strategy and the project management plan.
2. Develop the detailed technical specification.

Implementation – Execution and Control
1. Design, development and prototyping.
2. Continue to develop the specifications and plans but formally control any changes.
3. Monitor progress as defined in the project strategy.
4. Undertake interim technical and project reviews as defined in the quality plan.
5. Undertake a detailed final review before production of the final deliverables.
6. Produce the final deliverables.

Implementation – Closure
1. Hold a close out review with the project team and customer to ensure that the project is completed and signed off.
2. Hold a post implementation review to look at the performance of the project.
3. Identify any changes required to the project management system.
4. Communicate any lessons learned during the project.

Operation and Termination
1. If continued support is to be included in the project then a system of plans and reviews for this stage need to be set up and agreed.

PART 2 PERSONAL COMPETENCES
– to be completed with your manager

(Form available on the L&D web page (under Graduate Scheme) to print off as needed)

| COMPETENCE

What skills/knowledge/attitude do I need to acquire or improve to develop technically during my first two years?

List them in priority order: | DEVELOPMENT OPPORTUNITIES IDENTIFIED – WITH DATES

How do I learn best – what is my preferred learning style?

What on the job opportunities or off the job learning events will help me to develop this competence?

What exactly will I do and when? | REVIEW DATE

When will I review progress with my manager or mentor? | REVIEW COMMENTS

What progress have I made?

What new skill or knowledge have I learned, and how am I showing that I have learned it?

Do I need to do more – if so what? |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

PERSONAL COMPETENCES
– some suggestions for likely improvement areas and opportunities

(For details of courses see following pages)

Competence	Possible 'on the job' opportunities	Possible 'off the job' opportunities
1 Communication Able to communicate effectively and influence people at all levels, both orally and in writing	• Presenting back to colleagues on work completed, conferences attended etc • Taking minutes/notes at meetings • Writing reports/papers with coaching/feedback • Membership of committees/working groups • Interviewing	• Presentation skills course • Communication skills course • CRISTAL 1 & 2 • GTDP* • Graduate trainees forum • Report writing course • Bite sized learning • Dealing with challenging situations • Panel Interveiwing Course • Appraisal courses • SEA scheme • Books, tapes & videos
2 Responsibility Takes responsibility for all aspects of their role in order to effectively manage performance and develop their staff	• Become a team/project leader • Take on responsibility for specific areas of work • Be a mentor	• CRISTAL 1 & 2 • GTDP* • Performance Management course • Appraisal training
3 Integrity Keeps promises and commitments. Is open, honest and fair in dealings with people. Shows respect for people at all levels	• Giving feedback • Completing actions on time	• Equality and diversity awareness • CRISTAL 1 & 2 • Books, tapes and videos
4 Solutions Focus Shows drive and determination and conveys enthusiasm. Demonstrates a proactive and positive approach to solving problems	• Involvement in challenging projects or committees with challenging tasks and tight timescales • Involvement in problem solving/decision making meetings • Discussions with managers and peers • Writing reports and papers that contain reasoned arguments and recommendations • Problem solving brainstorms	• CRISTAL 1 & 2 • GTDP* • Creative thinking workshops • Project practitioners course • Project Management CDrom – on web • Corporate Project Management Handbook – on web • Books, tapes and videos

(For details of courses see following pages)

Competence	Possible 'on the job' opportunities	Possible 'off the job' opportunities
5 Teamwork Demonstrates good team working capabilities both within their immediate team and across the wider organisation. Works cooperatively towards achieving common goals	• Involvement in work and project teams with feedback from other team members • Participation in team meetings • Arrange graduate forum • Arrange graduate social events	• GTDP* • CRISTAL 1 & 2 • Graduate Trainees Forum • MBTI and MTR-I team roles workshops • Membership of sports or social teams • Books tapes and videos
6 Awareness Is sufficiently aware of self, others and the working environment to achieve good results – both personally and for other people	• Seek feedback • Reading STFC communications • Attending staff talks • Attending team meetings	• Equality and diversity awareness • GTDP* • MBTI and MTR-I team roles workshops • Dealing with challenging situations course • Change management • Assertiveness course
7 Leadership Inspires and motivates others by providing a clear vision, sense of purpose and direction in a way that people understand and buy into	• Project and work planning • Resource/budget management • Undertaking team/project leader roles • Giving talks on project work • Chairing meetings	• CRISTAL 1 & 2 • GTDP* • Assertiveness skills course • SEA scheme • Communication skills course

* Graduate Trainee Development Programme held bi-annually

Section 4
CRISTAL

CRISTAL

STFC's People Management Standard

The What, Why, When, Who and How questions answered.....

What is CRISTAL?

- STFC's people management standard

- 7 competencies, each with 7 performance indicators

- Not intended to cover other aspects of management – e.g. Project, Safety or Financial

| **C** ommunication |
| **R** esponsibility |
| **I** ntegrity |
| **S** olution Focus |
| **T** eamwork |
| **A** wareness |
| **L** eadership |

Below are the definitions and performance criteria for STFC's seven management competencies. This framework relates mainly to the behaviours required for the effective management of people. It does not include detail specific to other areas of management such as management projects, finance or safety, and it assumes that managers have an appropriate level of specialist or technical knowledge relevant to their position and area of operation.

Communication

Able to communicate effectively and influence people at all levels, both orally and in writing

- Communicates information, instructions and expectations clearly and fully in speaking

- Adapts the style and timing of communications to suit the needs of different types of people

- Uses communication skills to influence and persuade others – takes people with them

- Demonstrates good presentation skills, projects voice powerfully and uses effective body language

- Produces written information that is clear, well structured, accurate and tailored to their audience

- Uses active listening skills, gives good attention and uses a wide range of effective questioning techniques

- Gives clear effective feedback and encourages it from others

Responsibility

Takes responsibility for all aspects of their role in order to effectively manage performance and develop their staff

- Takes personal responsibility for tackling difficult issues, making timely, well-considered decisions to move things forward

- Demonstrates 'cabinet responsibility'. Aligns themselves to key decisions and sells the positive benefits

- Accepts personal responsibility when things go wrong, even if caused by their staff

- Takes responsibility for finding appropriate development opportunities for their staff and supports them throughout the learning process

- Takes responsibility for keeping own professional and management skills up to date

- Takes responsibility for providing the resources people need to do their jobs

- Takes responsibility for continuous improvement – looks for better ways of doing things, and encourages others to do the same

Integrity

Keeps promises and commitments. Is open, honest and fair in dealings with people. Shows respect for people at all levels.

- Will honour promises and commitments – always do what they say they will do. Won't promise what they can't deliver

- Straight speaking, honest and consistent in what they say to everyone

- Prepared to admit if they don't know or understand something

- Gives credit to others when it is due - even to their own personal detriment

- Treats all people fairly and with respect, demonstrating awareness of STFC diversity policy by appreciating differences. Has no favourites

- Respects confidences and doesn't talk behind people's backs

- Will stand up for their decision and actions, even with people in positions of power

Solutions Focus

Shows drive and determination and conveys enthusiasm. Demonstrates a proactive and positive approach to solving problems

- Industrious, dynamic and committed to delivering results on time and to specification

- Perseveres in the face of obstacles and disappointments – gets things back on track

- Takes the initiative by exploring new positive ideas and solutions with customers and others

- Responds to challenges in meetings or discussions positively and appropriately

- Resilient in the face of change and pressure. Able to tolerate ambiguity and uncertainty and still operate effectively

- Adopts a clear, sensible approach to planning, prioritising and organising work when dealing with problems

- Uses logical thinking and has a systematic and rigorous approach to finding solutions

Teamwork

Demonstrates good team working capabilities both within their immediate team and across the wider organisation. Works cooperatively towards achieving common goals

- Identifies personally with their team and speaks positively about its contribution and achievements

- Builds and develops their team - assigns tasks and responsibilities that play to the strengths of individual team members, and takes action to fill any skill gaps within the team

- Is in tune with the team – responds flexibly and sensitively to their needs. Goes out of their way to build better cooperation in the team

- Interacts and engages with team members as individuals – taking a personal interest in them, e.g. remembering names, birthdays, interests etc

- Is actively involved with the team and participates in team activities

- Makes sure the team receive timely and appropriate updates so they are aware of changing circumstances

- Demonstrates commitment to 'the wider team' by extolling the values and ethos of STFC and supporting cross team and departmental initiatives

Awareness

Is sufficiently aware of self, others and the working environment to achieve good results – both personally and for other people

- Is aware of own style and behaviour and how this impacts on other people. Is able to adapt style to meet the needs of others

- Is aware of other people and their needs. Gets out and about and mixes with their staff to keep in touch. Keeps an 'ear to the ground'

- Is aware of individual needs and takes account of them when planning and allocating work

- Is aware of latest thinking and developments in their area of operation and ensures that relevant information is passed on to the team

- Is aware of organisational issues and politics relevant to area of operation and ensures that relevant information is passed on to the team

- Is aware of important forthcoming changes relevant to area of operation, communicates them to team at an appropriate time, and works with team to implement them

- Is aware of the impact of changes on other people and provides appropriate support through the changes

Leadership

Inspires and motivates others by providing a clear vision, sense of purpose and direction in a way that people understand and buy into.

- Communicates in a clear and inspiring way to their team the long term direction of their department and the organisation

- Creates a positive environment talking about the opportunities and benefits of change

- Is visible to their staff – walks the talk and provides a positive role model by demonstrating all of these behaviours

- Motivates others through projecting energy, enthusiasm, and the effective use of humour

- Is always approachable and accessible to their staff. Shows interest in others and finds time to talk, even when busy

- Provides genuine personal recognition and praise to their staff at all levels on a regular basis

- Is able to convert the corporate vision into a strategic plan of action which can be implemented within their team or department

Section 5
Personal Weekly Learning Log

PERSONAL WEEKLY LEARNING LOG

Spend 5 minutes at the end of each week thinking about what you have learned and note down the main learning points

Date	Main learning points this week

Section 6
Copies of your Performance Reviews and Job Plans

Section 7
Your Personal Training Record

YOUR PERSONAL TRAINING RECORD

(Keep your own record of any formal training events attended)

Date attended	Title of event	Brief details Learning objectives and qualification obtained (if appropriate)

Section 8
Graduate Trainee Re-Banding Nomination Form

NOMINATION FOR GRADUATE RE-BANDING FROM BAND C TO D

SECTION 1 - TO BE COMPETED BY NOMINEE

Name of nominee:	Department:
Name of Line Manager:	Start date with STFC:

1 Qualifications: (Degree and beyond)

Subject and place of study	Date	Result

2 Relevant work experience before joining STFC

Employer	Main responsibilities/achievements (brief bullet points)	Dates

3 Brief description of work experience since joining STFC:

Department	Main responsibilities / achievements (brief bullet points)	Dates

4 Continuing Professional Development:

Name of Institution and scheme Summary of progress to date (for IMechE, IET and IoP schemes please attach a report from your mentor, for other schemes include results of examinations and/or assignments)	Date you registered on the scheme

5 Formal Training:

Give details of any training courses that you have attended during your time at STFC - include course title, learning objectives, and dates attended

6 Corporate Involvement:

Give brief details of any corporate activities you have taken part in - special project teams, school visits, hosting site tours, graduate trainees forum, etc.

SECTION 2 - TO BE COMPLETED BY LINE MANAGER

7 Performance: Please attach copy of latest appraisal form

Please assess the nominee against the following competencies:

	Comments	Rating (1-4: 1=poor, 2=average, 3=good, 4=excellent)
Communication Able to communicate effectively and influence people at all levels, both orally and in writing		
Responsibility Takes responsibility for all aspects of their role in order to effectively manage their performance and development		
Integrity Keeps promises and commitments. Is open honest and fair in dealings with people. Shows respect for people at all levels		
Solutions Focus Shows drive and determination and conveys enthusiasm. Demonstrates a proactive and positive approach to solving problems.		
Teamwork Demonstrates good team-working capabilities both within their immediate team and across the wider organisation. Works cooperatively towards achieving common goals		
Awareness Is sufficiently aware of self, others and the working environment to achieve good results – both personally and through other people		
Leadership Within the scope of their current role has shown potential to motivate and inspire other people to follow their lead		

8 Conduct and Attendance

Do you have any concerns at all about the nominee's conduct or attendance? If yes please give brief details:	Yes/No

Attendance record since start date: (to be completed by HR)

Total number of days absent	Number of episodes

SECTION 3 - to be completed by Division Head

SECTION 4 - to be completed by Department Head

I support this nomination for promotion to band D. Name (please print):	Signature: Date:

Section 9
Band Descriptions

The following descriptions outline the characteristics typical of the given band. They are not exhaustive. Posts are not expected to meet all criteria listed. The descriptions only serve as a general guide, not as a means of assessing the band of any individual post (which if required will be formally established by job evaluation).

BAND F

Key tasks:

- Leadership of a significant discrete group, discipline or activity. Setting, controlling and reviewing direction of its work, allocation and development of its staff, and planning and control of its financial and other resources. Management of large blocks of work and/or major projects to timescale, co-ordination of a range of work or resources across a specific field, or overall provision of specific services.

- Responsibility for the effective management of risk and safety requirements.

- Authoritative advisory or consultancy work (often as a long-term specialist in a field) on highly complex, large, expensive, unusual or novel issues. Considerable scope for discretion and creativity, often with little precedent and only broad guidance.

- Resolution of complex or difficult problems, frequently in the absence of precedent, requiring originality or departure from established patterns or the satisfaction of disparate groups.

- High level communication with senior staff and external organisations. Contributing to senior level decisions and policy-making. Representing significant areas of the Council, building commercial interests or negotiating at a significant level.

- Productive individual research, often on pioneering concepts, or sole research and policy creation, with a significant contribution to STFC's overall capability in the relevant field of expertise.

Key attributes:

- High level of creativity and adaptive thought. Ability to operate and think beyond the status quo, to innovate and to develop opportunities and to champion change and continuous improvement.

- High degree of professional expertise and competence, including in appropriate fields national or international recognition.

- High level of drive, enthusiasm and focus on the achievement of goals. Ability to utilise organisational systems effectively.

- Highly developed inter-personal skills, particularly in communication, negotiating, networking and leadership of team building, motivation and problem-solving.

- Proven people management and leadership skills.

- Ability to attract funding and to champion the commercial interest to the organisation.

- The ability to see the corporate implications of actions and strong self-identification with the organisation. The ability to represent STFC effectively in important external fora. Reflection and embodiment of STFC values in behaviour and attitude.

BAND E

Key tasks:

- Responsibility for significant area of specific work, usually within broader remit of a more senior person. Planning and controlling the work processes of the team, often overseeing direct staff and financial resource allocation, staff development and workplace safety issues. Setting out and reviewing operational frameworks.

- Responsibility for the effective management of risk and safety measures.

- Advisory or consultancy role, often concerning professional/technical/policy issues, requiring thorough and up to date knowledge of fundamental principles and/or a broad-based experience across a range of issues in a given field.

- Key project team roles, particularly co-ordination of groups/resources to deadline, or project manager of medium-sized projects.

- Managing specialist functions, dealing with specific, complex areas of work or policy.

- Resolution of complex/difficult problems from a broad range of options, often requiring creative thought and interpretation. Detailed specification and design of complete schemes or complex systems and their modification. Maintenance, operation and development of experimental facilities. Pro-active approach to quality management and process improvement.

- High quality scientific and experimental work with scope for creativity and adaptive thinking in applying accepted methods and techniques. Productive individual research.

- Representation of Council with other organisations and negotiating at operational level. Chairing small committees.

Key attributes:

- Strong ability to think creatively, to seek and accept change and continuous improvement.

- Very high level of drive, enthusiasm and focus on the achievement of goals. Ability to utilise organisational systems effectively.

- Advanced inter-personal skills, particularly in communication, negotiating networking and team building, motivation and problem-solving.

- Proven people management skills.

- Ability to attract funding and commercial interest to the organisation.

- The ability to see the corporate implications of actions and self-identification with the organisation. The reflection of STFC values in behaviour and attitude.

BAND D

Key tasks:

- First significant management level (often 2nd level supervisor). Short-term line management of junior bands and safe working practices, planning of work activity and staff development and guidance within broader remit of more senior person. Commitment of staff and financial resources within defined limits.

- Interpretation of regulations/policies or data analysis, often in novel situations. Requires specific knowledge or broad-based experience of a principle branch of a subject.

- Support of policy or project development. Investigation/research and collation and critical review to produce recommendations for more senior decision-making. Monitoring and control of production within a broader project/work function.

- Problem solving on particular aspects of the work using standard methods with some innovative/ adaptive thinking, some scope for fresh practices. Offering advice on technical issues, complex fault diagnosis. Resolution of day to day customer and staff issues. Quality assurance within precedent/practice.

- Production of high quality technical specifications, providing advice where discretion/judgement needed, adapting existing principles, interpreting scientific theory.

- Functional specialism and productive individual research often within team context.

- Representation of group/division inter-departmentally or externally, usually at routine contact level on operational issues. Some straightforward negotiating.

Key attributes:

- Strong ability to think creatively, to seek and accept change and continuous improvement.

- High level of drive, enthusiasm and focus on the achievement of goals. Ability to utilise organisational systems effectively.

- Good inter-personal skills, particularly in communication and contribution to team motivation and problem-solving.

- Proven people management skills and potential for further development.

- Ability to attract funding and commercial interest to the organisation.

- Self-identification with the organisation. The reflection of STFC values in attitudes.

BAND C

Key tasks:

- Active team membership and contribution. Assistance to more senior staff with the design/construction of equipment/experiments/projects or data analysis or creation of policy or service provision.

- Technical/precision work requiring well-developed skills/experience.

- Obtaining, analysing and presenting data. Interpretation and application of set procedures/guidelines, some scope to set operational precedents. Input to team debate but no responsibility for resolution. Contribution to higher-level decision- making though presentation of analysis/recommendations.

- Direct day to day supervision of small team (as first-level line manager) within larger discrete group in addition to other management functions such as work planning, technical assessment, advisory functions performed largely without close supervision.

- Inspection roles, safety "authorised person" activities in complex areas, software development in technical areas, installation design as part of a team, contribution of specialist know-how in specific limited field.

- Frequent local contacts, internal and external, directly associated with the job.

Key attributes:

- Ability to seek and accept change and continuous improvement.

- Enthusiasm and focus on the achievement of goals. Ability to utilise organisational systems effectively.

- Good inter-personal skills, particularly in communication and contribution to team motivation and problem solving.

- An aptitude for basic people management skills, normally founded in some training, and with potential for further development.

- Attention to detail.

- Awareness of and identification with STFC's mission.

BAND B

Key tasks:

- Active team membership and contribution.

- Support tasks under supervision, such as calculations, maintenance of information systems, writing straightforward letters and proposals, assembling data, setting up straightforward apparatus or materials, conducting straightforward/ repetitive experiments and tests, taking readings, calibration, maintenance inspections of estates/buildings.

- Preparing factual reports or recommendations for line management approval, preparation of architectural/engineering/working drawings from supplied information.

- Application of well-established methods or set procedures, using discretion and initiative, under supervision.

- Day to day guidance of and allocation of tasks to junior staff, monitoring of contractors.

- Undertaking limited authorised person duties where qualified, compliance with health and safety provisions.

- Frequent exchange of information with internal contacts or customers.

Key attributes:

- Ability to seek and accept change and continuous improvement.

- Enthusiasm and focus on the achievement of goals. Ability to utilise organisational systems effectively.

- Good inter-personal skills.

- Conscientiousness and attention to detail.

- Awareness of and identification with STFC's mission.

BAND A

Key tasks:

- Active team membership and contribution.

- Work under direct guidance to provide general assistance with routine, repetitive tasks, such as filing, cataloguing, standard letters and amendments to documents, maintenance of supplies, basic calculations, data input, proof-reading, basic workshop tasks and maintenance.

- Operation of machinery (including office equipment).

- Answering straightforward enquiries.

Key attributes:

- Ability to seek and accept change and continuous improvement.

- Enthusiasm and focus on the achievement of goals, and willingness to seek guidance and follow instructions when less routine circumstances arise.

- Good inter-personal skills.

- Conscientiousness and attention to detail.

- Awareness of and identification with STFC's mission.

Section 10
Professional Institution
Scheme Requirements

If you are following a professional institution training scheme use this section to hold your training plans, learning logs, and any other relevant documents.

Documents can be downloaded from institution websites as follows:

Institution of Mechanical Engineers (I Mech E) at
www.imeche.org

Institution of Engineering and Technology IET) at
www.theiet.org

Institute of Physics (IoP) at
www.iop.org

For advice or guidance related to your institution's scheme, your training plan, or your application for membership you should speak to your mentor or to the STFC's senior mentor for the IMechE, IET, or IoP as appropriate. Contact details for the senior mentors are available on the Graduate Training web page – accessible from the Learning and Development pages on InFocus.

INSTITUTE OF PHYSICS

Graduate Physics Training Scheme

The Institute of Physics (IoP) specifies requirements for chartered status, including relevant responsible experience[1]. Each graduate follows an individual training schedule, which is drawn up with the help of his or her manager and mentor in order to meet the chartered competences for CPhys status. All members of the Graduate Physics Scheme are expected to comply with the Institute of Physics' code of conduct[2].

For those trainees coming into the Graduate Physics Training Scheme from a non-physics academic background, or from an institution whose integrated masters physics degree course (MPhys/MSci) is not in the IoP's register of accredited degree courses[3], it will be necessary to demonstrate MPhys equivalence by completing a Core of Physics Report and MPhys Equivalence Form before applying for CPhys status.

- The IoP recommends that for those who have completed an accredited training scheme, the minimum time period between completion of a first degree and application for CPhys status is four years.
- In order to gain a suitable profile of competence to meet the chartered requirements within four years, members of the Graduate Physics Training Scheme should typically spend their first two years with STFC following the guidelines set out in the STFC Graduate Training Scheme Manual in conjunction with the CPhys guidance provided by the IoP. This will ensure that the basic competences are met and appropriate trainee/mentor relationships are established.
- Thereafter, the following two years should be in a responsible position where trainees continue to establish as full a profile of competences as possible and apply their physics knowledge and skills to work at a professional level. Evidence of these competences should be provided by use of the STFC Graduate Physics Competence Matrix. Although trainees will have the support of their line management and mentor throughout the training scheme they are strongly encouraged to adopt a proactive attitude towards their own professional training and development.

The Senior Mentor for the Graduate Physics Training Scheme, John Thomason, will be happy to clarify any further points regarding the requirements for CPhys status, or enquiries about Membership and Chartered applications can be directed to membership@iop.org.

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[1]http://www.iop.org/membership/chartered/chartered_titles/cphys/file_38080.pdf
[2]http://www.iop.org/about/royal_charter/file_38393.pdf
[3]http://www.iop.org/education/higher_education/accreditation/page_43310.html

INSTITUTION OF ENGINEERING AND TECHNOLOGY

Electrical and Electronics Engineer Professional Development

To become a Chartered Engineer through membership of the IET[1], the graduate engineer will need to satisfy the educational and professional development requirements of the IET. STFC's graduate training scheme is designed to establish the graduate engineer well on the path to achieving the level of competency that is required by the IET to qualify as a Chartered Engineer. The IET assesses candidates under UK-SPEC; the process laid down by the Engineering Council UK[2] to define the routes to qualification.

UK-SPEC requires a minimum of an accredited Bachelors Degree plus further learning up to Masters level or an accredited Masters Degree. After the educational requirements have been met the graduate must complete a period of professional development[3] to enable them to develop the competencies and demonstrate the commitment appropriate to a professional engineer. Within a few years of completing the scheme the graduate should be able to play a significant part in major projects. Figure 1 shows how the STFC scheme meets the UK-SPEC requirements.
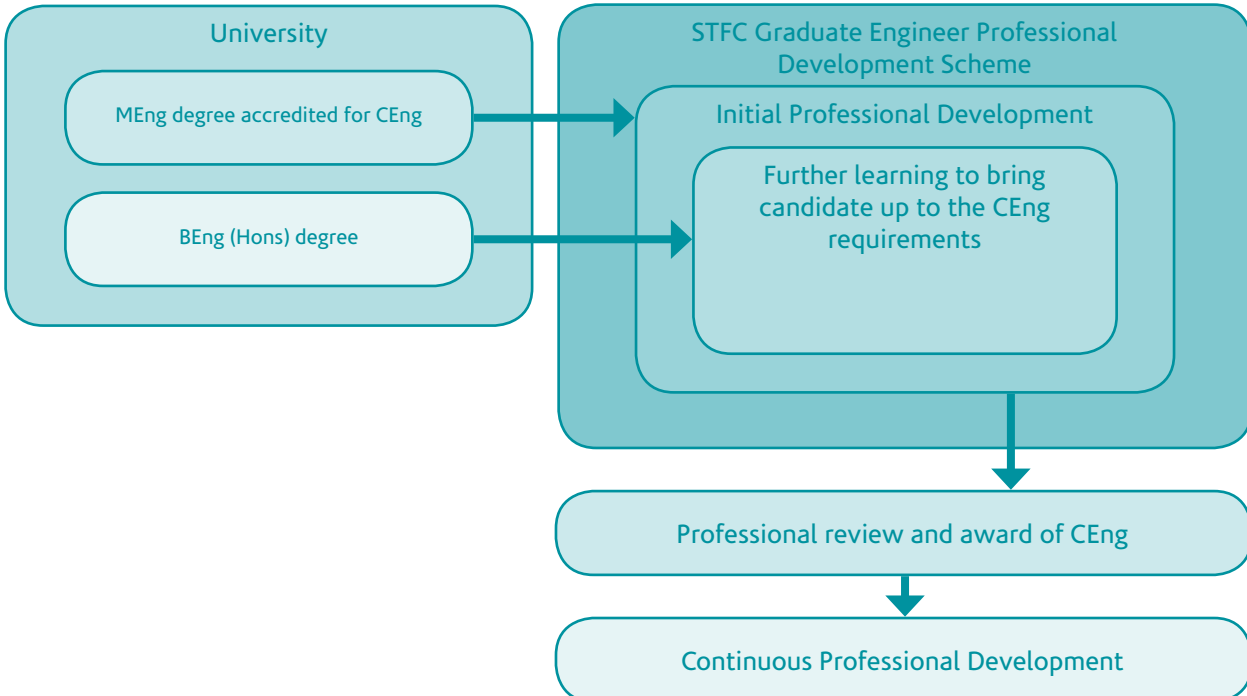

Figure 1: STFC Graduate Engineer Professional Development Scheme

Working towards professional registration

To start working towards professional registration as a chartered engineer, you will need to:

- Check if your qualifications meet the entry criteria for professional registration.
- Familiarise yourself with the UK-SPEC. You will need to prove you have met them when you apply, so think about how you can develop your skills and knowledge.
- Work with a mentor.
- Set up a process for recording your work[4].

More detailed information is given in the document, Graduate Training Scheme: Electrical and Electronic Engineer Professional Development, which will be issued to the graduate trainees on the IET scheme.

For advice or guidance related to the IET scheme, your training, training registration (form RPD), training credits (previous relevant experience if applicable), application for membership, etc, you should speak to one of the senior mentors; Viraj Perera or Steve West.

[1]*http://www.theiet.org*
[2]*http://www.engc.org.uk/*
[3]*http://www.pd-how2.org/1_2.htm*
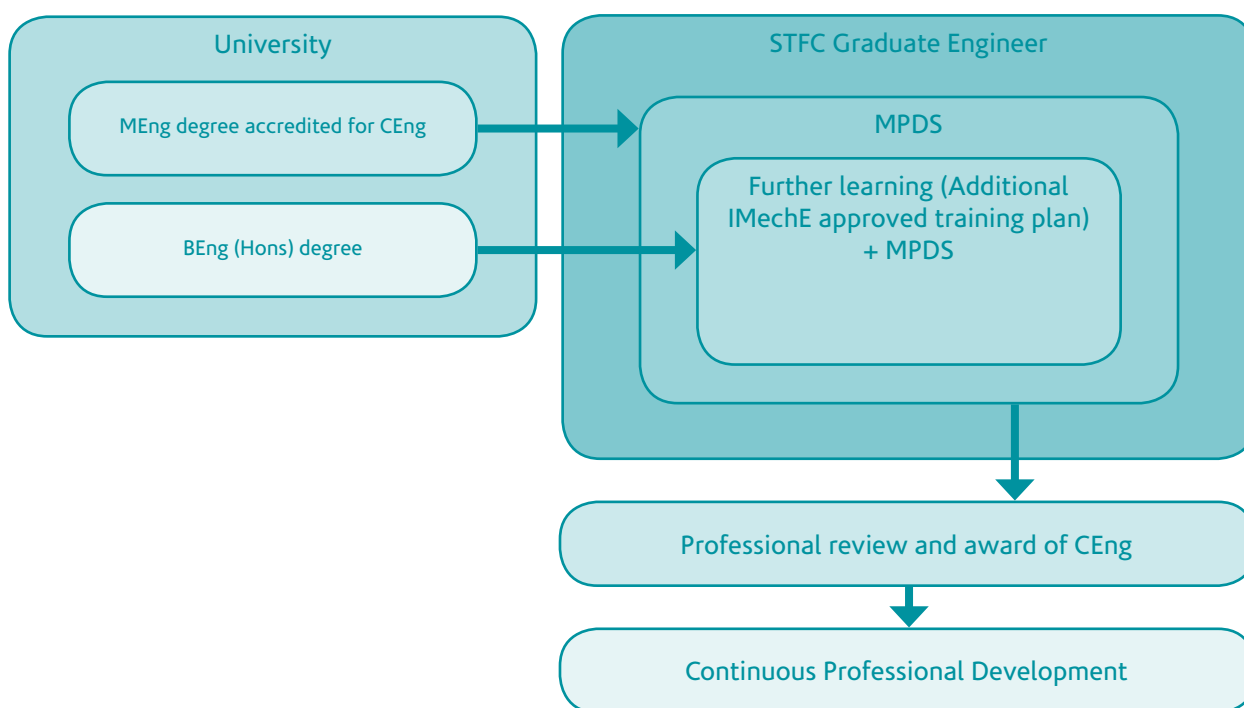[4]*http://www.theiet.org/careers/cmanager/index.cfm*

INSTITUTION OF MECHANICAL ENGINEERS

Mechanical Engineer Professional Development

To become a Chartered Engineer via the STFC graduate scheme, all graduates are encouraged to enrol on the monitored professional development scheme (MPDS). This allows the graduate and STFC to have a clear vision for their development and work towards the UK – SPEC competences, over their four years on the scheme. A mentor is assigned to the graduate; they will assess how the developing engineer is progressing towards the competence framework, during the entire training period. Where further training is required, the graduate will be reviewed on a case by case basis to decide on the most suitable path to CEng.

More detailed information is available at the following IMechE web address:

MPDS,
 http://www.imeche.org/training-and-professional-development/professional-registration/working-toward-registration/mpds/overview

FORMS,
http://www.imeche.org/training-and-professional-development/professional-registration/working-toward-registration/mpds/support-and-resources/forms

FAQs
http://www.imeche.org/training-and-professional-development/professional-registration/working-toward-registration/mpds/support-and-resources/faqs

Section 11
Guidance for Managers
of Graduate Trainees

GUIDELINES FOR MANAGERS OF GRADUATE TRAINEES

Eligibility to join the scheme

- The graduate training scheme is open to graduates who have obtained their first degree (ie bachelors or a 4 year masters) within the 18 months prior to applying. It is not intended for PhDs or graduates who already have significant post graduate work experience elsewhere.

- Graduates are recruited onto the scheme via the annual graduate recruitment campaign and assessment centre. Advertising starts in October with an end of December closing date. The Assessment Centre takes place in February. Graduates can start at any time from then onwards to the beginning of October as convenient to the recruiting department, but the training scheme does not start until the welcome meeting in September or October.

- Exceptionally first degree recent recruits to STFC can be admitted to the scheme within a few months of joining, provided that they are considered suitable by their manager and the graduate training panel, and they complete the ability tests to an acceptable standard.

Pay

Graduate trainees are recruited into identified and advertised opportunities within departments and the recruiting department funds their salary costs from day 1. All graduate trainees start on the same salary – Band C standard pay.

Training

- During their first two years graduate trainees are required to complete a training plan that includes technical and non- technical training.

- Details of the scheme are contained in the training binder which is given to the graduates at their welcome meeting, and which is also available electronically on the learning and development page of InFocus. Graduates should use this binder to record training undertaken, complete learning logs and file course handouts, certificates etc.

- Where appropriate graduates are expected to work towards membership of a professional institution and are supported to do

this. The STFC scheme is accredited by I MechE, IET, and IoP, but graduates should work towards membership of whichever professional body is most appropriate to their degree discipline and/or likely career path. Whilst graduates are actively working towards chartered membership of their Institution their registration and membership fees can be reimbursed from the graduate training budget, for up to 5 years from their start date. They should claim re-imbursement using Oracle i-expenses.

• All graduates are required to have a trained mentor to support their professional development. The scheme's four senior mentors (representing mechanical, electrical and electronic engineering and physics) and the Head of People Development will help to assign suitable mentors. Achieving chartered membership typically takes between 4 and 5 years, so graduate trainees continue to work with their mentors well beyond their initial two year training programme.

• Graduate's departments arrange and fund all technical training. Corporate HR arranges and funds all non-technical training, and also pays the essential professional membership fees for the trainees and their mentors, and essential T&S for any graduates based at DL and the ATC to attend non-technical training held in the RAL area.

• The non-technical training includes a number of mandatory elements which all graduates are required to have attended before they are considered for re-banding. This is explained to them during their welcome meeting and a copy of the programme with dates is given to the graduates and their managers.

• The programme is reviewed each year and changed to reflect feedback and suggestions from graduates and the training panel. At September 2013 mandatory modules are:

  • Welcome meeting/induction – half day at RAL, normally in October

  • Forum – a one day education, networking and team skills event arranged by a group of the second year trainees – Coseners House, in October (day after the welcome/induction meeting)

- CRISTAL 2 – 3 day course being held at Cosener's in Abingdon.

- Understanding and Working with Different Personality Types – 2 days at Coseners in March or April of year 1.

- PERA Innovation - A 10 day formal training progamme delivered in 2 day modules over approximately 5 months with additional pre and post course assessments. This is an ILM accredited course designed to develop the skills of new STFC graduates in managing innovation, commercialisation and change within an organisation. This gives graduates exposure to the key skills to help them in their current and future roles within STFC, and provides an opportunity for some of the course participants to present a proposal for innovation to senior management.

- Equality and diversity awareness - Half day course attended at RAL.

- Tall Ships Programme – 3 or 4 day team building / personal development event which runs alternate years, so graduates attend either in year 1 or 2. Takes place in early summer. As part of this programme graduates work before and after the event in groups on a team project which they have to present to a group of directors and senior managers. Total commitment is around 8 days.

Broader experience

- As well as attending training programmes graduate trainees are expected to take part in corporate activities to broaden their skills and develop their awareness and understanding across STFC and beyond. Examples of corporate activities are outreach work with schools, for example by becoming trained SEA ambassadors and participation in the Headstart education programme, helping with external visits, helping with graduate recruitment, and taking part in relevant cross department project work and committees.

- Graduates are also required to undertake at least one placement of up to 3 months in a department other than their 'home' department during their second year. Placements

available and wanted are advertised on the graduate community page of InFocus and can be read by the graduates, mentors, training panel members and managers.

Promotion

Providing that the trainee's on the job performance is up to the required standard, they have made good progress with their training plan and have demonstrated an appropriate level of competence against the CRISTAL competencies they are re-banded to band D on their second anniversary. To be considered for re-banding they work with their manager and mentor to make their case on a nomination form which is considered by the graduate training panel. The graduate's manager and/or mentor can attend the panel meeting to speak on their behalf. If the case for re-banding is not clear cut the panel can refer the nomination form back for re-work, or can ask to interview the graduate.

Scheme management

The scheme is managed by the Head of People Development working with members of the graduate training panel. The training panel includes the senior mentors and managers and/or mentors who are able to represent the interests of each trainee. The training panel meets 3 times a year for 1.5 hours per meeting to review the training programme, monitor graduates' progress and approve re-bandings.

Role of graduate trainee managers

Managers of graduate trainees are required to:

- Take part in the selection process at the assessment centre (unless this is covered by a colleague from their department)

- Provide the trainee with work at an appropriate level, agree a job plan and learning and development plan, and provide support and regular feedback in completing these plans

- Complete the trainee's induction programme as for all other employees

- Complete the trainee's probation reports as for all other employees

- Encourage the graduate to participate in broader activities such as cross site/department projects and outreach work

- Provide representation for the trainee on the graduate training panel

- Allow time off to attend all mandatory training, even when this requires travel to another site to attend with the other graduates.

- Allow the graduate to complete at least one placement of up to 3 months in a different department during their second year (their salary during their placement will be paid for from the graduate training budget).

- Support the graduate in completing their re-banding nomination, which includes completing an assessment of them against the CRISTAL competencies