



Swansea University
Prifysgol Abertawe

Faculty of Science and Engineering
Cyfadran Gwyddoniaeth a Pheirianneg

FACULTY OF SCIENCE AND ENGINEERING

**UNDERGRADUATE YEAR
IN APPLIED RESEARCH
PROGRAMMES
STUDENT HANDBOOK**

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DISCLAIMER

The Faculty has made all reasonable efforts to ensure that the information contained within this publication is accurate at the date of publication. However, some changes, for example to programmes, modules, study location, placement opportunity, facilities or fees may become necessary due to legitimate staffing, financial, regulatory and academic reasons, or due to other circumstances outside the reasonable control of the University. The University will endeavour at all times to keep any changes to a minimum and to keep students informed appropriately.

IMPORTANT

This handbook includes information relating to Year in Applied Research programmes across the Faculty. Please read the required guidance carefully.

If you have any questions about your studies and cannot find what you need in the handbooks, please contact the Faculty of Science and Engineering Employability and Placements Team (employability-scienceengineering@swansea.ac.uk) or MyUniHub.

OVERVIEW

This handbook contains all relevant information relating to your Year in Applied Research as a student of the Faculty of Science and Engineering.

This handbook is available in different formats, should you need an alternative version please contact quality-scienceengineering@swansea.ac.uk.

Some information in this guide links to the [University's Academic Handbook](#), which contains important regulations, policies and procedures relating to your studies. As a Swansea University student, it is your responsibility to familiarise yourself with the information contained in all academic handbooks.

If you have any questions about your studies and cannot find what you need in the handbooks, please contact the Student Information Team in the Faculty of Science and Engineering or MyUniHub.

What is a Year in Applied Research?

The Year in Applied Research provides an opportunity for you to spend a period of 9-12 months, with a minimum of 40 weeks in an academic or research organisation, or other approved establishment, in order to gain first-hand research experience. You should also learn to appreciate the advantages and limitations of multiple research techniques.

During the placement, students often work within a research group. They will carry out the day-to-day research-based activities relevant to the discipline within that specific research area. Students should expect to be involved in multiple research projects, often being undertaken consecutively. Throughout the placement, they should also get the opportunities to develop advanced research skills, such as mastering appropriate forms of technology, analyses or surveying, use and apply

relevant methods of experimental design, data collection and analysis. Students may also be involved in writing technical reports, searching for and synthesising relevant literature and communicating technical information via a range of modes. While on the research placement, there should be opportunities to network and build a professional profile.

The student will be expected to gain a critical understanding of the techniques used to collect and analyse data and scientific research, being able to identify and discuss their applications and limitations and to creatively apply them to future projects.

Whilst working in the research group, a thorough understanding should be developed of the appropriate Health and Safety requirements. Students will also gain an in-depth understanding of research ethics and understand the requirement and process of gaining ethical approval.

In order to achieve the aims of the Professional Training Scheme, you should spend the majority of your time on research activities.

Your work should be reported and discussed within the research organisation and then written up as a detailed portfolio, which forms part of the assessment for the year. This portfolio should be a detailed account of the placement and include a reflective critical review of the work undertaken. The report is assessed on your return to Swansea. The results obtained during the Professional Training Year are also examined via a poster presentation on return from the placement.

MODULES

DETAILS OF MODULES OFFERED

While enrolled on the Year in Applied Research programme students are expected to

- i) Engage with the employability activities offered in Year 1 and 2.
- ii) Attend and complete discipline specific modules outlined **below**.
- iii) Complete a Health and Safety briefing and test in the year immediately preceding the placement.
- iv) Secure a placement to be undertaken between year 2 and year 3 (available to BSc)
- v) Complete their placement and associated pre-placement module outlined below

MODULE INFORMATION

All students undertaking the *Year in Applied Research* will need to attend the Pre-Placement Preparation module which will cover more specific elements of sourcing, applying for and undertaking placements.

Year Two Module

BI-200

The placement application process is typically competitive, the decision to recruit lies solely with the organisation to which you have applied. Therefore, securing a placement is **not guaranteed**. It is possible that not all students will be successful in securing a placement; indeed, it is likely that there will be a limited number of placements available at any one time. If a student is unable to secure a placement, they will be automatically transferred to the three- or four-year variant of their degree scheme.

ACADEMIC MENTORING ON PLACEMENT

Students will be contacted by the placements team or academic mentor at least once a month during their placement, using students' official Swansea University email address. A timely response to such emails is required. Students are asked to ensure that the Academic Supervisor and Visiting Tutor are made aware of any changes that may occur in any contact details, including postal addresses in the UK and abroad during the period of placement.

The Academic Supervisor and Visiting Tutor should be informed immediately of any difficulties being encountered so that assistance can be provided quickly and effectively.

YEAR IN APPLIED RESEARCH PLACEMENT REQUIREMENTS

PLACEMENT CRITERIA

To qualify for a Year in Applied Research placement, it must:

- Be of a duration of 40 weeks or more (full time work or full time equivalent).
- Provide work at or near graduate level.
- Be conducted within a research organisation such as the University or a Research Institute

The placements *may* also include a partnership with industry, however the main supervisor/line manager should be within a research organisation.

Students are encouraged to review the placements they propose to undertake if they are in doubt about the suitability.

In addition to the above, all placements must meet the following:

- Placements must be confirmed by the placement provider in writing.
- E-mail confirmation of a secured placement must be provided by the student to the Employability Team by the 31st August.

The above date relates to the year in which the placement commences. After this date any placement secured will not normally be eligible.

- The placement agreement must be signed by all parties prior to the start of

the placement.

- The placement provider must give adequate insurance cover to the student, and thus deem the student an employee for the purposes of insurance.
 - o Specifically, Employers liability and public liability (or the national equivalent requirements) must be in place and cover the student for the work they are undertaking for the provider.
- The decision as to whether the placement is eligible for the Year in Applied Research scheme will be determined by the University. This decision is final.
- Students must have valid Right to Work in the country of their placement. If necessary, a valid VISA to cover their Year in Applied Research and have a National Insurance number. This is the responsibility of the student.
- All placement opportunities undergo a risk review prior to approval. If the University considers that risk mitigation measures are not appropriate and the risk to the student in undertaking the placement is too high, the University reserves the right to not approve the placement. In addition, where there has been a material change in the placement resulting in unacceptable risk to the student, the University reserves the right to terminate placements that are already underway.

Note: The Year in Applied Research is not credit bearing and will not add credits to the final degree outcome. However it will be recorded on the HEAR transcript, and therefore will be noted on the degree certificate.

Year in Applied Research: International Placements

Please note for Year in Applied Research located outside of the UK the University has some insurance cover in place for students going abroad (more details can be obtained from the Go Global Team. A copy of the details of this level of cover should be obtained by the student. As part of the University's due diligence, the University will ask placement providers to confirm whether or not students are covered under the placement provider's insurance cover. If there are gaps in the placement provider's insurance, students will be advised to take out their own personal accident insurance.

The University is not able to advise on any insurance policy in line with Financial Conduct Authority guidelines.

TRANSFER TO THE YEAR IN APPLIED RESEARCH SCHEME

FACULTY PROCEDURES FOR TRANSFER REQUESTS

If you wish to transfer degree programmes within the Faculty, in order to be considered, you must complete an electronic [Transfer Form](#) (available to download on the [Intranet](#)). International students will also need to complete a [Previous Study Questionnaire](#). Transfers require the permission of your current Programme Director and the Programme Director of the programme which you are applying to transfer to, where these differ. Students wishing to transfer into the Faculty of Science and Engineering from another Faculty will usually be

asked to provide some written information to explain their request and may be asked to attend an interview before their transfer can be considered.

Before proceeding it is advisable to contact the Money@CampusLife team for advice about fees and funding and International@CampusLife if you are an International student for visa implications.

Deadlines may apply and more information is available from the Student Information Team via studentsupport-scienceengineering@swansea.ac.uk.

For students to be considered for transfer onto a Year in Applied Research programme they must meet the appropriate progression criteria as outlined in Progression Criteria – Year in Applied Research.

If a student has secured a placement after the start of teaching they must review the handbook fully and contact the appropriate the Employability and Placements Team to seek approval for transfer.

FACULTY PROCEDURES FOR SUSPENSION REQUESTS

The University/Faculty recognises that students may need to suspend their studies for various reasons. Full guidelines on suspension can be found [here](#). If this is something that you wish to explore further please talk to a member of the Student Information Team who would be happy to discuss the process with you.

FACULTY PROCEDURES FOR WITHDRAWALS

Withdrawals are processed by MyUni Hub but if this is something that you are considering we would encourage you to meet with a member of the Student Information Team to discuss all available options and how to proceed.

PROGRESSION CRITERIA YEAR IN APPLIED RESEARCH

Specific progression criteria for the Year in Applied Research programme are as follows. Please note that the criteria is strictly applied.

Year 1 (FHEQ Level 4)

Students must obtain an average in Year 1 of 55% or more in order to progress to Year 2 of a degree programme with a Year in Applied Research. If a student does not satisfy the progression criteria, they will normally be transferred to the respective 3-year BSc.

Year 2 (FHEQ Level 5)

There is no progression bar for this year; however, students must complete the year to enable them to progress onto the subsequent year, following their placement year.

All Science and Engineering students must complete 5 modules of the Swansea Employability Academy's Career Development Course by the end of Semester 1 in Year 2. **All students** must successfully complete the associated zero-credit pre-placement module as outlined in Modules.

Students who satisfy the above criteria, but who are required to sit August supplementary examinations must be aware that they are personally responsible for i) preparing for these examinations, ii) attending supplementary examinations at the university designated times and iii) making all necessary arrangements to satisfy i) and ii) with their Year in Applied Research placement host. Students must inform the Employability Team if this is the case.

Students with supplementary exams, or deferred examinations due to extenuating circumstances from Semester 1 or Semester 2 to the August examination period are strongly advised to apply for placements starting from September in order to allow time for preparation study, for the examinations to take place and for the results and progression decision to become available. Students with deferred or supplementary examinations who have secured placements which commence prior to the August re-sit window are responsible for informing their Placement

Provider ahead of their start date.

Students who do not satisfy the progression criteria after taking supplementary or deferred examinations will not be eligible to undertake their industrial placement year and will be transferred to the respective 3 year programme.

DIFFERENCES BETWEEN YEAR IN APPLIED RESEARCH (YiAR) AND YEAR IN INDUSTRY (YII)

Undertaking the Year in Industry option typically means that students will undertake paid placements as employees, contributing to the organisation's output and day to day operations. For further information please refer to the Year in Industry Handbook and see the Year in Applied Research Learning Outcomes.

Although there are some similarities between the two programmes; namely fees, placement preparation module, duration, progression requirements and faculty support whilst on placement, there are some key differences which have proven benefits to students considering different pathways post-graduation. The YiAR provides an opportunity to work in an active research environment and to undertake both supervised and independent research which will be crucial to the overall research project. Placements can be in a wide variety of research areas such as laboratories, pharmaceuticals or NGOs ecologists involved in ecological conservation. The scope whilst on a research placement should entail experience with a broad range of scientific techniques, the concepts of which can be generalised to most scientific areas and theoretical principles. YiAR students should become adept at relevant analytical techniques and engage with the scientific community via research and networking wherever possible.

BENEFITS

The YiAR mode of work-based learning has many benefits to students:

- Working independently and within a larger research group to generate research ideas and carry out research and analysis
- Use literature acquisition enabling understanding of recent innovations and developments within the relevant field
- Exposure and development of relevant research methodologies and literature searches
- Exposure and appreciation of research topics within a particular research area
- Field/laboratory skills specific to discipline
- Appreciation of the importance of scientific rigour and the scientific method when undertaking duties
- Appreciation of the importance of following health and safety guidelines when undertaking duties
- Handling complex data sets and undertaking data analysis and display
- Running and potentially designing experiments
- Collecting and reporting on data
- Contributing to and producing focused scientific reports in appropriate formats
- An ability to decide, plan and thrive in a research environment
- Developing technical skills in a research environment will enhance employability in future roles (see 'Employment Opportunities and Transferable Skills' section below)
- The programme helps to grow students' confidence and reaffirm their desire to pursue a career in scientific research. Alternatively, students will gain valuable skills but decide that research is not for them
- Learning about and dealing with real limitations to research and how to overcome these

EXPECTATIONS OF THE STUDENT

Providing placements is a large commitment for a research organisation and they will be contributing staff time, resource, provision of materials and opportunities. Therefore, as a minimum, students who successfully gain a placement are expected to:

- Behave professionally and make your supervisor and university tutor aware of anything that impacts your placement.
- Read and understand all H&S processes and procedures and be responsible for following them. Students are not expected to undertake any activity in which they feel inadequately prepared.
- Represent yourself and the University to the best of your ability by completing duties on time, having a genuine enthusiasm for the organisation's activities and by committing to personal development.
- Produce and submit on time the required outputs for the scheme as determined in this handbook to the best of your ability.

EMPLOYMENT OPPORTUNITIES AND TRANSFERABLE SKILLS

Successful completion of a YiAR should impress upon a student the key qualities expected of a successful research scientist, namely; an inquisitive, innovative and creative intellect, an ability to plan and undertake experiments, the ability to analyse results in a robust scientific manner and an ability to broaden scientific understanding in general.

As stated by Prospects (<https://www.prospects.ac.uk/job-profiles/research-scientist-life-sciences>):

'You'll usually carry out your experiments and research on your own, but you'll typically be part of a larger team and will share your findings and relevant information with colleagues. This is sometimes done at international conferences or through the publication of research papers.

You can find employment in commercial or government laboratories,

hospitals and higher education institutions.'

Although the nature of the work depends on levels of seniority, the specific area of Biosciences you'll work in and the specific setting, it is likely that you will be expected to have all or most of the skills outlined in the [Benefits](#) section above.

Specific employment pathways for Biosciences include:

- Fast track to Post-Graduate Research such as PhD
- Laboratory-based research centres including: Animal, Medical, Veterinary, Genetic and Environmental research
- Local, National and International government sectors as analysts, e.g. NRW, SNCOs, WWF, JNCC,
- Field-based research for the environmental sector requiring robust frameworks for data collection and analysis, for example, British Trust for Ornithology, Biological Records Centres, Zoological and Marine Conservation
- Natural History Museum curators
- Field and Laboratory technical support staff

EMPLOYABILITY SUPPORT

The Employability team will regularly share placement opportunities via email, social media, noticeboards, and engemployability.swan.ac.uk.

Research placements at Swansea University or its research institutions will be advertised during the first semester of Year 2. However, it is the student's responsibility to apply and secure a placement, details of which should be shared with the [FSE Employability Team](#) once confirmed.

An academic member of staff or one of the Employability team will be your Visiting Tutor whilst on placement. Visiting tutors will meet with you at least once whilst on placement, either virtually or in-person, along with your placement supervisor at the organisation.

The Faculty of Science and Engineering is committed to ensuring that every student is provided with the best level of employability support from day 1 of their degree. The Faculty has its own **Employability Team** who focus on providing a network of resources to ensure students are continually supported with as many opportunities to enhance their

employability and develop the skills and knowledge to take on challenges and succeed in the workplace.

As a team, we are continually striving to ensure that we provide a variety of networking opportunities for students with industries across all our disciplines, therefore, we run a busy schedule across both Semester 1 and 2 of employer talks, skills days, careers fairs and site visits. As a student of the Faculty of Science and Engineering you will also have access to drop-in sessions hosted by the team to support with one-to-one advice and guidance for your placement and graduate employment job search. As highlighted earlier, securing a placement is a competitive process and engaging with the wider support offered by the Faculty is very likely to increase your chances of securing a placement.

SWANSEA EMPLOYABILITY ACADEMY (SEA)

The Faculty works closely with the Swansea Employability Academy (SEA) which offers broader information and resources relating to your future employability.

A degree is most important to getting a great job, but employers look for much more than a degree when recruiting graduates. Getting experience and developing skills whilst you study and during your holiday periods will give you a competitive edge.

But what exactly do you want to do when you graduate? What kind of work would suit you? The Career Development Course helps you explore these questions and develop the skills employers look for within their graduate recruitment processes.

The Career Development Course is one of your Modules in Canvas.

If you complete any 5 units you will achieve the **Career Development Course** (<https://myuni.swansea.ac.uk/sea/cdc/>). On completion of 10 or more units you will achieve the **Advanced Career Development Course** which will be recorded on your HEAR (Higher Education Achievement Report).

There are 16 units in the Career Development Course, for example:

Developing self-awareness

Work experience

Mindset, Resilience, Decision making and Career action planning

Employment Zone: The Swansea University Employment Zone connects our talented students with graduate recruiters, part time jobs and short-term work experience.

<https://myuni.swansea.ac.uk/employability-enterprise//>

EMPLOYABILITY IN THE CURRICULUM

Many of you who have decided to study Science or Engineering at degree level are likely to continue to use your subject in your future careers and the programmes provided by the Faculty of Science and Engineering are closely linked to the needs of industry, research and enterprise. Where relevant, programmes are accredited by the relevant professional body and all those enrolling with us can become student members of their respective institutions, where applicable.

Our degree programmes combine the relevant engineering, science and mathematical knowledge you require, and the professional skills sought by employers. Professional bodies have a set of standards which highlight the need for science and engineering professionals to demonstrate:

- Effective interpersonal skills
- Personal and social skills
- Demonstrating Continuing Professional Development to maintain and enhance competence in own area of practice
- The ability to use analytical skills and tools to formulate and solve problems
- The ability to use laboratory and workshop equipment to generate data
- The ability to work in a multi-disciplinary team
- Effective use of IT
- Innovation
- Practical skills in using tools, techniques and equipment
- Creativity
- Effective oral and written communication
- The management of time and resources
- Self-discipline and motivation
- Project management skills
- Safety awareness

For more information, contact the Science and Engineering Employability Team employability-scienceengineering@swansea.ac.uk.

FEES

For the Year in Applied Research programme, your standard Tuition Fee costs will be reduced pro-rata for the session the Sandwich Year applies, this is normally the 3rd year of a 4 year programme.

For a Year in Applied Research, you will be charged 20% of the agreed standard fee.

If you would like more information about this please contact studentfinance@swansea.ac.uk.

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