

Industrial Training

Student Guide



Industrial Training (IT) Student Guide

To graduate and qualify for accreditation by Engineers Australia (EA), all UNSW students must complete a minimum of 60 days approved Industrial Training (IT). This means that you will get some real work experience in an Engineering environment. You will also develop employability skills whilst gaining valuable contacts for your future career. If you are a Co-op scholar, your Industrial Training requirements will be completed in the Co-op program.



Click directly on the subject headings to be directed to more information.

Student Industrial Training Roadmap



Industrial Training Rules

- Best time to undertake IT
- Duration
- Time limit
- Engineers Australia (EA) Stage 1 Competencies
- Insurance



Process to commence your Industrial Training



Placement Types and Required Supporting Documentation







Get Started

Complete this checklist to track your progress with your Industrial Training (IT) requirements!

Suitable Industrial Training

- Understand the Pre-approval process
- Find out about the classifications of acceptable **Industrial Training** placements, including Traditional, Unpaid Traditional or Non-Traditional

Recognition of Prior Learning

Completed Industrial Training prior to university? You may be eligible for Recognition of Prior Learning



How to find Industrial Training and other useful sources

Assessment and Contacts

- Report instruction and requirement
- When and how to submit your report



Frequently Asked **Questions**

Find out where to find answers to your questions



Checklist

1. Enrol in Moodle

Use this key to enrol in the Faculty of Engineering Industrial Training Moodle course under "Self-enrolment (Student)" (see image below):

Eng5tudent!



2. Have I completed the 5 prerequisite modules?

- ☐ Writing a Successful Resume and Cover Letter
- ☐ Interview Skills
- ☐ Career Planning and Networking Skills
- Workplace Behaviours
- ☐ Industrial Training and Your Health and Safety

3. Have I enrolled in my School group on Moodle using the group activity key?

- ☐ Yes You now have access to submitting a placement pre-approval application
- No Be sure to enrol, or you will not be able to access any of your assessment requirements

4. Have I received my job offer?

- ☐ Yes Congratulations
- ☐ No Refer to Tips How to find Industrial Training

5. Have I applied for Industrial Training pre-approval with the required documentation?

- Yes Await approval confirmation
 No Refer to <u>Placement Types and Required Supporting Documentation</u>
- 6. Have I collected the required supporting documentation from my employer?
 - ☐ Yes You can apply for pre-approval
 - □ No Contact your employer and obtain the <u>Required Supporting Documentation</u>

7. Have I received approval on my pre-approval application prior to commencement?

- ☐ Yes You can start your Industrial Training. Remember to set work goals (in the Employer Evaluation form) during your first week
- No Contact <u>eng.wil@unsw.edu.au</u> for further information and instructions

8. Have I completed the Employer Evaluation form with my employer?

- ☐ Yes Make sure your hours have been signed off
- No Be sure to set up a meeting with your employer in order fill out this form, and get the days you have worked signed off. This must be done for each placement

9. Have I accumulated 60 days from all of my Industrial Training placements (maximum 3 placements can be counted)?

- ☐ Yes You can start writing your Final IT Report. You only need to write one report for all of your placements. Refer to Moodle Assessment for instruction.
- No You need to find more placement(s) to ensure you have a minimum of 60 days

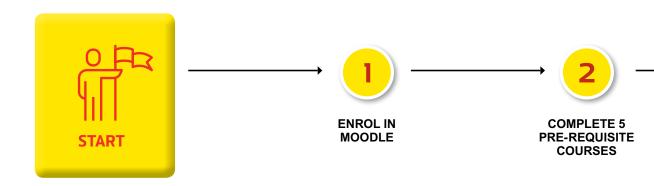
10. Have I submitted my Final IT Report to Moodle?

- □ Yes As soon as you receive a mark of "Satisfactory" on your report, you've completed with Industrial Training!
- No Submit your report on Moodle as soon as possible after completing your 60 days of IT. See Moodle for more information



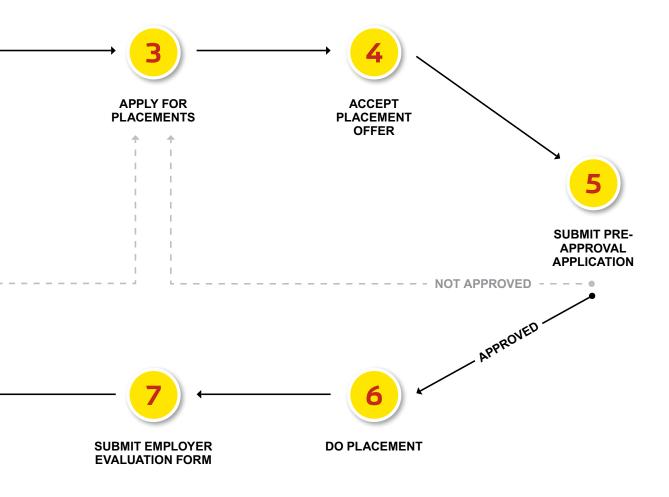


Student Industrial Training Roadmap











Industrial Training Rules

THE BEST TIME TO UNDERTAKE YOUR INDUSTRIAL TRAINING IS

DURING YOUR 2ND OR 3RD YEAR FOR UNDERGRADUATES

THAT YOU'RE ENROLLED IN YOUR ENGINEERING PROGRAM.
FOR MASTERS STUDENTS, PLEASE DISCUSS WITH YOUR
SCHOOL INDUSTRIAL TRAINING COORDINATOR



MINIMUM

60 DAYS

IN TOTAL

MAXIMUM

3 PLACEMENTS

WILL COUNT TOWARDS YOUR INDUSTRIAL TRAINING REQUIREMENT ONE PLACEMENT MUST BE TRADITIONAL AND AT LEAST

30 DAYS

MINIMUM DURATION FOR TRADITIONAL AND UNPAID PLACEMENTS IS

10 DAYS

MINIMUM DURATION FOR NON-TRADITIONAL PLACEMENTS IS

5 DAYS

MAXIMUM NUMBER OF NON-TRADITIONAL PLACEMENTS IS

2

STUDENTS CAN UNDERTAKE

PART-TIME OR CASUAL EMPLOYMENT

OVER A CONTINUOUS EXTENDED PERIOD



STUDENTS NEED TO COMPLETE PLACEMENTS WHICH FULFIL AT LEAST

5 OF THE 16 ELEMENTS OF COMPETENCY

FROM THE ENGINEERS AUSTRALIA STAGE 1
COMPETENCY STANDARD FOR PROFESSIONAL
ENGINEER WITH AT LEAST ONE ELEMENT FOR
EACH COMPETENCY (PLEASE SEE THE FORMAT
GUIDE FOR WRITING YOUR FINAL IT REPORT)



THE COMPANY YOU ARE UNDERTAKING INDUSTRIAL TRAINING WITH SHOULD PROVIDE YOU WITH

WORKERS COMPENSATION, PUBLIC LIABILITY AND GENERAL PERSONAL ACCIDENT INSURANCES

AS A MINIMUM



FOR THOSE WHO HAVE COMPLETED INDUSTRIAL TRAINING AT A PREVIOUS INSTITUTION OR WORKED IN INDUSTRY PRIOR TO ENROLLING AT UNSW, YOU MAY BE ABLE TO APPLY FOR

RECOGNITION OF PRIOR LEARNING (RPL)

PRIOR LEARNING MUST HAVE BEEN:

- · Completed within the last 2 years
- Relevant to your program of study and stream
 - · Supervised by a qualified engineer

EXAMPLES OF

NUMBER OF DAYS

MINIMUM OF 5 DAYS FOR NON-TRADITIONAL AND 10 DAYS FOR TRADITIONAL AND UNPAID TRADITIONAL 1 PLACEMENT

60

2 PLACEMENTS

> 50 + 10 40 + 20 30 + 30

3 PLACEMENTS

> 50 + 5 + 5 40 + 10 + 10 30 + 20 + 10 30 + 15 + 15 30 + 25 + 5



What is suitable Industrial Training (IT)



IT IS INTENDED THAT

YOU ARE EMPLOYED

AT A RATE COMPARABLE TO YOUR QUALIFICATIONS AND EXPERIENCE. ESTIMATE YOUR RATE VIA FAIR WORK OMBUDSMAN PAY CALCULATOR

YOUR EXPERIENCE WILL EXPOSE YOU TO A RANGE OF

ENGINEERING ACTIVITIES

INCLUDING DESIGN, ANALYSIS, EXPERIMENTAL AND ON-SITE ACTIVITIES

THERE ARE

3 INDUSTRIAL TRAINING CLASSIFICATIONS

INCLUDING TRADITIONAL, UNPAID TRADITIONAL AND NON-TRADITIONAL

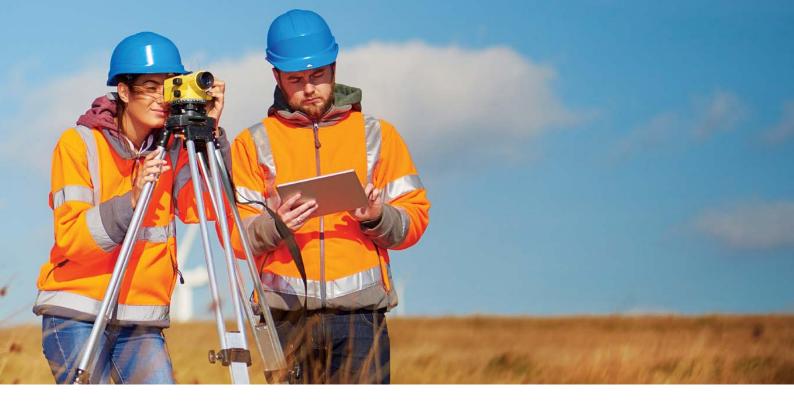
TRADITIONAL

Work experience in a conventional professional engineering workplace where significant technical engineering tasks related to the Engineers Australia (EA) Stage 1 Competencies are undertaken.

You are supervised by a qualified engineer and paid for your time.

It can be in the form of technical engineering tasks, engineering-related tasks or engineering consulting.

Refer to Further Information for details.



UNPAID TRADITIONAL

The work must involve a learning experience related to the EA Stage 1 Competencies.

You must demonstrate that the role allows you to achieve the learning objectives of Industrial Training through engagement with new learning, and NOT completing work that simply assists with the ordinary operation of the business or organisation.

You will need to apply for pre-approval via the Faculty IT Moodle.

Additional requirements for Pre-approval process can be found in Placement Types and Required Supporting Documentation

NON-TRADITIONAL

If your placement is a project in a university setting, organised through the university or is a program (i.e. mentorship, project based program, immersion experience, etc), and you are gaining exposure to engineering related tasks and technical skills, the placement may be classed as Non-Traditional. As with traditional placements, you must be supervised by a qualified engineer (or in exceptional circumstances, a discipline professional).

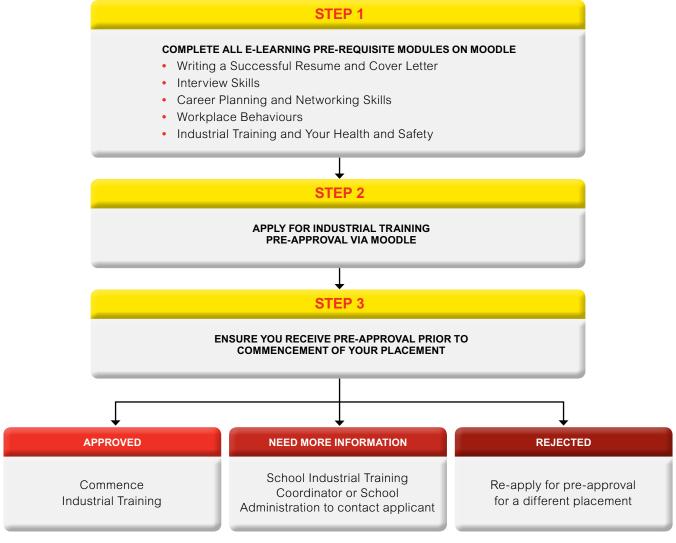
If your placement is not on the Faculty's list of preauthorised non-traditional placements, you will need to apply to the Industrial Training office via eng.wil@unsw.edu.au for the placement to be assessed and authorised.

You can only count a maximum of 30 days of non-traditional placement towards your Industrial Training requirement. (unless otherwise stated).

A list of approved Non-Traditional placements and additional requirements for pre-approval process can be found in Moodle in the "Career & Employment Resources" section.



The process to commence Industrial Training (IT)



Finalist AITD Excellence Awards (2018) Workplace Behaviour and Health & Safety Modules



Tips – How to find Industrial Training



OFFERING ENGINEERING GRADUATE PROGRAMS

BECOME A MEMBER OF ENGINEERS AUSTRALIA

AND GAIN ACCESS TO THEIR VACATION AND GRADUATE EMPLOYMENT HANDBOOK

WATCH OUT FOR

OPPORTUNITIES POSTED VIA MOODLE AND STUDENT NEWS

VISIT CAREERS AND EMPLOYMENT

TO IMPROVE YOUR RESUME AND INTERVIEW SKILLS

INTRODUCTION TO THE WORKPLACE (DIPP1112)

A GENERAL EDUCATION COURSE WHICH PREPARES YOU FOR FUTURE EMPLOYMENT CONSULT

ACADEMIC STAFF

WHO FREQUENTLY HAVE INDUSTRY CONTACTS

OTHER USEFUL SOURCES













TOP100







Placement Types and Required Supporting Documentation

Pre-approval of all placements

You will need to apply for pre-approval before you go out on a placement. Failure to do so may result in not being able to use your experience towards your Industrial Training requirement.

To gain pre-approval for your Industrial Training, your employer should provide you with a position description outlining the tasks and activities related the placement. You may also obtain a project outline or other information that allows you to demonstrate that you are undertaking work that is relevant to your field of study and meets the EA Stage 1 competencies.

It is your responsibility to find appropriate Industrial Training. The philosophy behind this is that the process of finding Industrial Training is nearly identical to that of finding a job as a graduate.

Pre-approval for traditional, non-traditional and unpaid traditional placements can be applied for via Moodle.

Required Supporting Documentation

- Confirmation of employment on company letterhead (email with company logo in signature, contract or offer letter of employment are acceptable)
- Job description outlining what activities, tasks and duties you will be doing
- All documents must be in English. To have your documents translated please use the link below UNSW Admissions Office
- Submit the translated documents and the original documents for pre-approval

Traditional

A traditional placement is work experience in a conventional professional engineering workplace where significant technical engineering tasks related to the EA Stage 1 Competencies are undertaken, you are supervised by a qualified engineer, and you are paid for your time. Traditional Industrial Training can be in form of technical engineering tasks, engineering-related tasks, engineering consulting or engineering R&D.

Traditional Placement Pre-approval Process

STEP 1

OBTAIN THE REQUIRED SUPPORTING DOCUMENTATION FROM YOUR EMPLOYER

- Job description outlining the activities, tasks and duties you will be doing
- Confirmation of employment (letter, email or contract)

STEP 2

APPLY FOR PRE-APPROVAL

Submit pre-approval application form via Moodle with all required supporting documentation

STEP 3

CONFIRMATION

You will be informed via email if your placement has been approved

Unpaid Traditional

Faculty of Engineering strongly does <u>not</u> recommend unpaid Industrial Training, however recognises that in some extenuating circumstances, students may not be able to obtain paid Industrial Training. If you wish to pursue unpaid Industrial Training, it must involve a learning experience related to the Engineers Australia Stage 1 Competencies. Thus, you must be able to demonstrate that you are in a role that will allow you to achieve the learning objectives of Industrial Training through engagement with new learning, and NOT completing work that simply assists with the ordinary operation of the business or organisation. For further information, refer to the <u>Fair Work Ombudsman</u>.

Additional information for pre-approval. To apply for pre-approval of an unpaid placement, please follow the below procedure. Please note: Students will only be able to undertake unpaid Industrial Training at the proposed organisation for a **maximum of 12 weeks (i.e. 60 days)**.

Required Supporting Documentation

- · Offer of employment on company letterhead, email or contract
- Job description outlining the activities, tasks and duties you will be doing
- · Learning outcomes for Unpaid Industrial Training filled out and signed by you and your workplace supervisor
- Engineering Industrial Training Risk Management Form filled out and signed by you and your workplace supervisor.
 Refer to Guide to completing a Risk Management Form for instruction

Insurance

- You will be informed via email if your placement has been approved. If your employer requires a copy of the UNSW Certificate of Currency for Personnel Accident and Public Liability, they must email unpaidit@unsw.edu.au
- Students are advised to contact <u>UNSW Insurance Department</u> to ensure that you are covered by the correct insurance
- You will be covered for Public Liability and General Personal accident insurance by UNSW.

Unpaid Placements Pre-approval Process





Placement Types and Required Supporting Documentation continued

Non-traditional

Non-traditional placements are all those that fall outside the scope of traditional placements, but you still gain relevant engineering experience. As with traditional placements, you must be supervised by a qualified engineer (or in exceptional circumstances, a discipline professional). Such non-traditional placements include but are not limited to:

- Student-led Projects
- Research Placements (Taste of Research, research opportunities at UNSW or other Universities)
- Domestic UNSW immersion programs
- International UNSW immersion programs

The Faculty of Engineering will maintain a list of preauthorised non-traditional placements with their associated credit durations which can be found on Moodle.

If you are completing a placement that is considered non-traditional and is <u>not</u> on the list of preauthorised placements, complete the non-traditional pre-approval steps so the Faculty can determine if the placement should be accepted and to go on the preauthorised list.

Non-Traditional Pre-approval Process

OBTAIN THE REQUIRED SUPPORTING DOCUMENTATION FROM YOUR EMPLOYER • An offer letter of acceptance into the program • Program advertisement STEP 2 APPLY FOR PRE-APPROVAL Submit pre-approval application form via Moodle with all required supporting documentation STEP 3 CONFIRMATION You will be informed via email if your placement has been approved



Total days - 60 days requirement

The total days required to pass Industrial Training is 60 working days. The days are calculated as working days and do not include weekends, public holidays, sick leave or annual leave. The 60 days can be achieved by undertaking up to 3 placements. The supervisor confirms the total number of days you worked on the Employer Evaluation form at the end of the placement by signing the form. You submit the signed and completed Employer Evaluation form on Moodle.

Employer Evaluation Form

You can obtain a template of the Employer Evaluation form in Moodle.

- On commencement of each placement, make an appointment with your supervisor to agree on the goals that you wish to achieve whilst on your placement
- · At the end of each placement
 - · Review your goals with your supervisor
 - Ask your employer to complete the professional attributes. Ideally this should be done in a meeting.
 This is an opportunity to discuss areas of success and improvement
- Supervisor to complete the total number of days worked
- You must submit your Employer Evaluation form with the total number of days worked, by uploading to Moodle

Final Industrial Training Report

You can obtain a guide on how to format your Industrial Training report in Moodle.

At the end of your Industrial Training, you are required to produce one report covering all your Industrial Training placements.

- Demonstrate you have attained elements of the Engineers Australia Stage 1 Competencies
- Connect your experience and learning at the workplace with academic knowledge at university
- The report should be between 2000 and 3000 words
- You will be informed by an email notification that your report is satisfactory/unsatisfactory including feedback
- You can see if you have completed the requirements of industrial training by checking the completion box in Moodle or your Moodle grade book

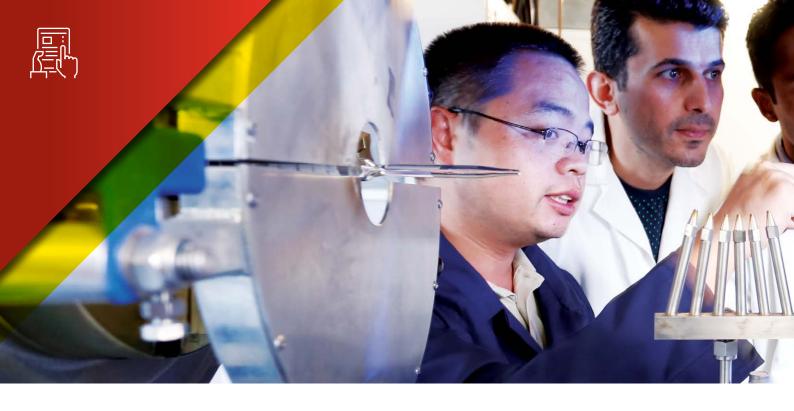
If you are a Co-op Scholarship student, they you can use the Co-op report to submit via Moodle.

Grading

You will receive a grade of either satisfactory or unsatisfactory.

If you receive a satisfactory Grade, Congratulations, you have completed your IT requirements. Your Academic Transcript will be updated to show you have met the requirements for Industrial Training.

If you receive unsatisfactory, you will be given feedback on why and given time to submit a new Final IT Report based on that feedback.



Assessment

For the Industrial Training requirement to be satisfied, the following requirements must be met.

PLACEMENT PRE-APPROVAL



Placement pre-approval is required for all placement(s) and is to ensure your placement(s) is:

- Relevant to your program of study and stream
- You are supervised by a qualified engineer
- You are exposed to engineering technical skills

EMPLOYER EVALUATION FORM



Employer Evaluation Form needs to be completed for every placement and is used to:

- Log your IT days completed in Moodle
- The Feedback from your employer helps to improve your employability skills
- Helps you to complete the Final IT Report

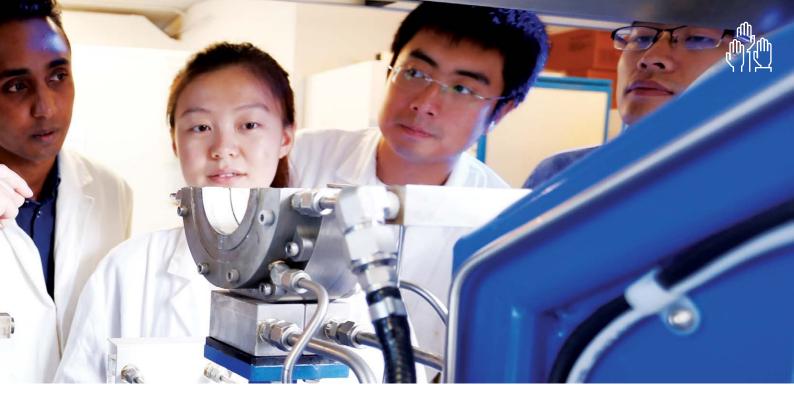
FINAL INDUSTRIAL TRAINING REPORT



The Final Industrial Training (IT) Report is the final step to completing your Industrial Training requirements for an accredited UNSW Engineering degree. The purpose of the report is for you to:

- Demonstrate that you have attained one or more elements of competency in Engineers Australia's Stage 1 Competencies and Elements of Competency for Professional Engineers
- Reflect and connect your experience and learning at the workplace with academic knowledge at university.

When you have received a mark of satisfactory for your Final IT Report, ENGG4999 or ENGG4998 will appear in your Academic Transcript.



Industrial Training Coordinators Contact Details

INDUSTRIAL TRAINING COORDINATORS



Chemical Engineering



Computer Science & Engineering



Civil and Environmental Engineering



Electrical Engineering and Telecommunications



Mechanical and Manufacturing Engineering



Mining Engineering



Petroleum Engineering



Photovoltaic and Renewable Energy Engineering







Frequently Asked Questions

What are benefits of Industrial Training?

The main reason engineering students need to do Industrial Training (IT) is so they are well-prepared for a graduate job in their chosen field. It also provides the opportunity to put what you have learned at university to work in real-life situations.

- First-hand experience working as an engineering professional
- Apply your technical knowledge and engineering methods to real-life situations
- Work with other engineering professionals
- Experience what it's like to work in a professional organisation. Witness the functioning and organisation of business and companies
- Increase your technical, interpersonal and communication skills, both oral and written
- Observe interactions of engineers with other professional groups
- Gain contacts for future networking opportunities

Many employers also use Industrial Training to assess their potential future employees, you will also have the opportunity to determine if this is where you want your future career to be.

• Can I combine multiple placements to accumulate 60 days?

Yes, please see <u>table</u>. Note that only 3 placements in total can count towards your Industrial Training requirement.

What does it mean that I have to comply with the EA Stage I competency and reflect it in my Final IT Report?

You must illustrate how you demonstrated the EA Stage 1 competencies during your work experience in your report.

Your placement should expose you to engineering tasks, skills and activities that demonstrate the EA Stage 1 compentencies. For example, you secure a placement at a car company. If your work is related to sales and customer service, it's most likely not acceptable. If your work is involved with sustainable, engineering car design, it's most likely satisfying specific conditions in the EA Stage 1 Competencies.

Can I take a term off coursework to complete an IT placement? (ENGG4998)

Yes you can. You can enrol for one term only and you need to complete your 60 days and Final IT report in that term. You can enrol in ENGG4998 using this form by week 10 to the previous term before your placement and submit with your pre-approval web application form.

Enrolling into ENGG4998 means that you can keep your full time student load.

When you have completed all IT requirements, ENGG4998 will be added to your Academic Transcript.



Q Can I undertake interstate and overseas opportunities?

We encourage you to do so. You will need to provide adequate information about the proposed nature of the work so we can make sure it is suitable.

For overseas opportunities, please be aware that workplace employment laws and safety standards differ from country to country. It is crucial that you have adequate insurance to cover your Industrial Training placement.

If you have secured approval for an international placement, it is recommended that you complete the Global departure requirements student.unsw.edu.au/global-departure

And check with UNSW insurance to enquire whether you have appropriate coverage at your place of employment.

What if my placement is part-time hours?

If your placement is part-time hours or casual basis, you will need too find out from your employer what constitutes as a standard working day for that company.

For example, a company may have a 8 hour working day. If you work for five hours, you will have to work three more hours to complete one working day towards your 60 days Industrial Training requirement.

What are some common types of Industrial Training?

Any of these types of placements will have to demonstrate how they reflect the EA Stage 1 Competencies, as you will be required to write on these in your report.

- Company R&D involves Research and Development departments of companies.
- Technical Engineering (Both office and field) involve working in an office or hands-on field activities to solve engineering problems.
- Engineering Consulting professional engineering service firms who provide independent services, expertise and technical advice to companies who require specialised engineering tools and support to solve problems.
- Research & Development all projects associated
 with the <u>Taste of Research Summer Scholarships</u>, and
 other Project based non-traditional work must be
 submitted to the Industrial Training Coordinator in your
 School who will consult with the Faculty Unit to approve
 the project for Industrial Training.
- Student-led Projects (SLP) some SLP's have been approved by Faculty to count for up to 30 days of Industrial Training. Refer to Moodle for the approved list of Non-Traditional placements.
- International Immersion Programs volunteer your time and make an immediate impact in communities that need it most. <u>See here</u> for a list of approved immersion programs.



Further information

Best time to undertake Industrial Training

An engineering student's Industrial Training must happen at the same time they are enrolled at UNSW. Ideally this should be in year 3 of full-time study. Your Industrial Training doesn't all have to happen in one stretch: your 60 days of engineering Industrial Training could be spread out over a year in an engineering internship or over your summer holidays at the end of the 2nd and 3rd years. Most of you would have done work experience at high school – this is just the next step up.

How to take a whole term off for Industrial Training (ENGG4998).

- You can enrol into ENGG4998 for one term, which is equivalent to a full time study load
- You can find the ENGG4998 enrolment form in the IT Moodle under forms
- Complete the ENGG4998 enrolment form and upload with your supporting documentation via the preapproval application web form
- Deadline for ENGG4998 enrolment forms is midnight Sunday of Week 10 of the term prior

Time limit for Industrial Training completion

If you do not complete your Industrial Training requirement during your program of study, you will not be able to graduate upon completion of your coursework. In extenuating circumstances, you can apply to complete Industrial Training after the completion of your program of study. The maximum time that may be granted to complete is 2 years. This must be approved by the Academic Industrial Training Coordinator.

If you are undertaking an unpaid Industrial Training placement, you may be required to take out additional insurance as you are no longer enrolled in a programme of study. It is recommended that you check with UNSW Insurance.

Incomplete Industrial Training after this two-year period will result in the student needing to show cause as to why they have not complete their Industrial Training requirements within the allotted time and make a case as to why they should be readmitted to their degree.



Recognition of prior learning

If you completed Industrial Training at a previous Tertiary institution or worked in industry prior to enrolling at UNSW, you can apply for Recognition of Prior Learning (RPL). Applying for RPL can count for up to 60 days of your Industrial Training requirement. You will still need to submit the Final IT Report. For your RPL application to be considered, it must:

- You can apply for RPL any time during your program of study. We suggest you apply as early as possible, as the review and approval process can take up to 5 weeks
- Your prior experience must be within the last 2 years
- Your prior experience must have been completed with a position that is relevant to your current program and stream of study
- Your prior experience must have been supervised by a qualified Engineer

Insurance

The company you are undertaking Industrial Training with should provide you with workers compensation and public liability insurances as a minimum, not UNSW. It is necessary for you to check with the company that insurance is provided and the extent of coverage.

Australian employers carry workers compensation and public liability insurance cover for paid Industrial Training.

If you are undertaking unpaid Traditional Industrial Training, follow the steps required. Insurance cover is provided if you are undertaking work in Australia.

If you are undertaking an International placement, you are required register your travel with International SOS and prepare for departure with <u>UNSW Global Education</u>. You may be required to take out additional insurance.

If there are any concerns regarding this, then you should contact the UNSW Insurance.





Engineering