

**This manual is for students who commenced degree programs
prior to 2023**

ENGINEERING AND SURVEYING INDUSTRIAL EXPERIENCE

STUDENT MANUAL - CALLAGHAN



COLLEGE OF ENGINEERING, SCIENCE AND ENVIRONMENT

This manual is for students who commenced prior to 2023

This manual outlines the requirements for the Exposure to Professional Practice (EPP), or Industrial Experience (IE) component of the Engineering (Honours), Surveying (Honours), and Master of Professional Engineering degrees. It should be read in conjunction with the over-arching [Student Professional Experience Policy](#) and the compulsory program requirements as outlined in the program handbooks.

Industrial Experience applications are assessed on a case-by-case basis by the relevant Industrial Experience Coordinator. The experience is assessed in reference to Engineers Australia Accreditation Requirements. The Industrial Experience Coordinator has the ultimate discretion to deny an application if the experience is not appropriate.

Industrial experience provides an opportunity to gain valuable hands-on training and experience in real world situations. Additionally, through exposure to current practice, students can reflect on, and appreciate the link between curriculum and practice. **IE is a core requirement for graduation.**

It can be challenging and rewarding to find an appropriate placement. While the University is unable to organise your Industrial Experience, the [Careers Service](#) can provide some guidance for students looking for placement opportunities. Some of the services that they provide are:

- The [CareerHub](#) - an online portal with discipline-related work and work experience opportunities.
- Information about job searching strategies.
- Drop-in and appointment-based resume and application checking and an interview preparation service.

An [Engineering Directory](#) developed and provided by the Newcastle Division of Engineers Australia lists information about local companies such as contact details, work experience availability and discipline. To increase your chances of finding the right placement you should also join the accrediting professional bodies of your degree (many of which offer free student memberships), go to professional networking events and career fairs and build relationships with the contacts you make, consider unpaid IE and don't give up!

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DEGREE REQUIREMENTS

Students can complete their IE in one single block, or several shorter periods totaling the required number of weeks. It can be part-time, full-time, during semester or semester breaks. **Twelve (12) weeks is considered as 60 days (~420 hours) total**, across all placements.

Degree - UON Callaghan	Total Weeks
Bachelor of Engineering (Hons) Degrees	12
Bachelor of Surveying (Hons)	12
Master of Professional Engineering Degrees*	12
Master of Professional Engineering (Geospatial Engineering & Surveying)	12

* MPE students in the 1 year program are not required to undertake IE

APPLICATION AND APPROVAL FOR INDUSTRIAL EXPERIENCE

All Engineering and Surveying IE placements are managed in the **SONIA** system. All IE applications should be submitted for **pre-approval** in SONIA **BEFORE** the IE commences to ensure that the duties during your placement satisfy the compulsory requirements of your degree. The University is unable to provide support if we do not know if/where you are undertaking Industrial Experience.

Please note: For accreditation purposes, Engineering (Honours) students must complete a minimum of 6 weeks (as part of the total 12 week requirement) working in a place conducting professional engineering work, under supervision of a qualified, practising professional for accreditation.

PRE-APPROVAL IE APPLICATION FORM

STEP 1

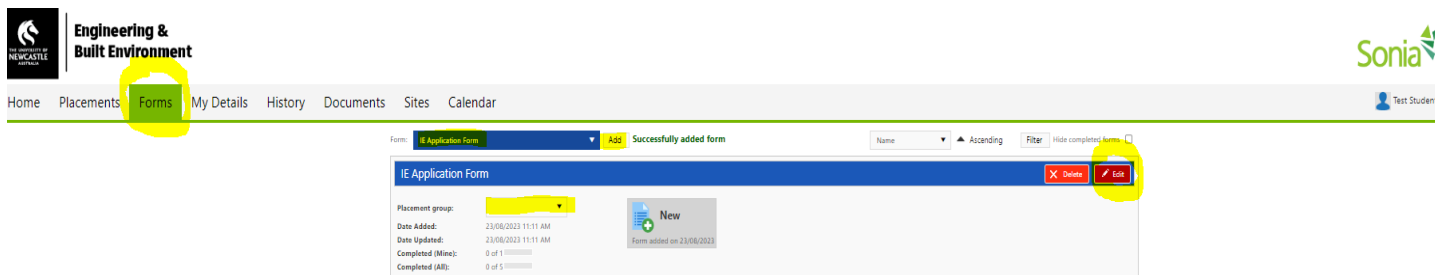
Login to [SONIA Online](#). (UON username and password) Select *Engineering & Built Environment*.

WORK INTEGRATED LEARNING PLACEMENT PORTAL

English (Australia)

- Engineering and Built Environment
- School of Environmental and Life Sciences
- Exercise and Sports Science
- School of Health Sciences
- Joint Medical Program
- School of Humanities and Social Science
- Newcastle Business School
- School of Nursing and Midwifery
- Newcastle Law School
- School of Psychological Sciences
- School of Biomedical Sciences and Pharmacy
- SoHSS B Social Science program
- School of Education

Click on the **'FORMS'** tab and from the dropdown selection box, select *'IE Application Form'* and click **'Add'**. Select the appropriate Placement Group from the drop-down list. Click **'edit'** to add the relevant information.



STEP 2

Student number / name / email / degree program will be automatically filled. Complete the blue student sections and student declaration section. The *Desired Outcome* description of duties should contain sufficient information for the IE coordinator to evaluate if the placement is appropriate.

Industrial Experience Application Form

STUDENT SECTION

Complete this section to submit an Industrial Experience Application

Name	Student Number	Email	
Student Mobile Number	Degree Program		
Organisation / Company Name	Organisation / Company Street Address	Organisation / Company Suburb	
Organisation / Company Postcode	Organisation / Company State / Province	Organisation / Company Country	
Organisation / Company Supervisor FIRST (given) Name	Organisation / Company Supervisor FAMILY name (Surname)	Organisation / Company Supervisor email	Organisation / Company Supervisor Phone/Mobile
Proposed Industrial Experience Start Date	Proposed Industrial Experience Finish Date	Expected Duration of IE (number of weekdays as applicable)	Organisation / Company Website URL (please provide if available)
The Industrial Experience will be: <input type="radio"/> Paid <input type="radio"/> Unpaid <input type="radio"/> Both Paid and Unpaid (provide details in Additional Comments)	Please provide details of whether you will be working full-time / part-time / taking leave during the IE	Additional comments	
Desired Outcome: Please provide a description of your role/responsibilities during the Industrial Experience. This should contain sufficient information for the IE coordinator to evaluate if the IE is appropriate.			

STUDENT DECLARATION

I have read and understood the Student Professional Experience Policy and agree to undertake my responsibilities as outlined in this policy. <input type="checkbox"/>	I will comply with standards of professional behaviour, reasonable directions from the host organisation and the University's Student Conduct Rule and Code of Conduct at all times while participating in a professional experience. <input type="checkbox"/>
I have read and understood Student Insurance covered by The University of Newcastle. <input type="checkbox"/>	I will discuss Personal Protective Equipment (PPE) with my company supervisor and will provide my emergency contact details to my company supervisor. <input type="checkbox"/>

By clicking the **Student submit agreement & accept conditions** button below, your form will be sent to the Professional Experience Unit (PEU). The PEU will arrange completion of the agreement with the organisation's supervisor. You will receive communication once the form has been approved by your University coordinator and your Industrial Experience can commence.

[Save Draft](#) [Student submit agreement & accept conditions](#)

When you have completed your sections, click **'Student submit agreement and accept conditions'** button.

The Professional Experience Unit (PEU) will then forward your application to your company supervisor. You will receive an email notification when the supervisor has submitted the form. **If you do not receive notification within 7 days, please contact CESE-PEU@newcastle.edu.au.**

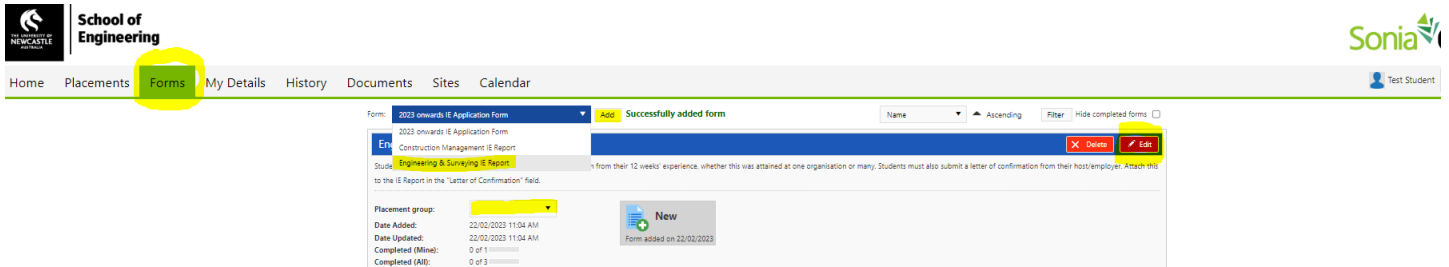
The IE Application will be reviewed by the IE Coordinator for final approval. You may be required to provide more clarification regarding the details before it can be approved. When IE is approved, you will receive email notification that you are able to commence your IE.

Please allow up to 2 weeks for approval by your IE Coordinator.

IE REPORTS

Students are required to submit a **single** IE Report which includes all IE placements with one company or across several companies. The IE report can be started at any time after the IE is approved. Students should submit their IE Report prior to their final semester of study to easily facilitate graduation.

Students add the 'Engineering & Surveying IE Report' in SONIA, choose the relevant Placement Group from the dropdown list and click 'edit'.



If the industry experience spans across different activities/companies, students should clearly indicate the dates and duration claimed as part of industry experience for each of them under "Placement organisation(s) and dates" in SONIA.

Students must record tasks and observations in **6** of the self-reflection sections of the report (you can choose any 6). Please write a few sentences for each of the 6 reflections.

Instructions:

Please **select 6 (total)** of the competency elements listed in the following Reflection Areas and write a sentence or two describing activities you were involved in that demonstrate attainment. These activities may come from various placements you have completed.

REFLECTION AREA: Exposure to Professional Practice

COMPETENCY ELEMENT	POTENTIAL INDICATORS OF ATTAINMENT	SELF REFLECTION
Exposure to an industrial/technical environment in order to appreciate the various activities associated with engineering in industry	a) Routine, punctuality and maintained work ethic b) Professionalism - integrity, honesty, respect and confidentiality c) Communication with colleagues, experts and laypeople d) Appreciation of the relevance of the engineering curriculum e) Understanding of the influence of professional engineers and the inherent associated responsibility	<div style="border: 1px solid black; height: 40px;"></div>
Observe and undertake tasks in practical aspects of investigation, design and construction of engineering works as a complement to theoretical studies	a) Understanding of the supporting social function that engineers provide b) Appreciate that every engineering discipline spans a breadth of knowledge beyond the specific curriculum c) Appreciate that a team of people is require to complete any project	<div style="border: 1px solid black; height: 40px;"></div>

For accreditation purposes, students must also:

- i) Enter a **1500-word** narrative describing their experiences. Photos/work may be included.
- ii) Attach a letter of confirmation from each employer. The confirmation letter **must be signed** (not just the printed name) and on company letterhead and contain:
 - a) dates of Industrial Experience
 - b) total weeks/days/hours of IE completed
 - c) a brief description of activities undertaken
- iii) Attach any alternative IE attendance certificates (if applicable) – these should also be reflected upon in the IE Report.

Please note: Letters of offer / contracts etc. are NOT suitable letters of confirmation as they do not confirm that the IE has been completed.

If the word count is not met, and/or the letter is not acceptable, you will be asked to resubmit, which will delay completion.

If more than one IE placement is undertaken, keep saving the draft report until the total number of weeks have been completed. When the report is completed and ready to send, press "Submit".

Narrative

Write **1500 words** describing where you went, what you did and who you worked with, across multiple sites if applicable.

Letter of Confirmation from site: *(must be signed and on company letterhead, must confirm placement dates and provide a brief description of activities undertaken)*

 Browse

Supporting Documents *(diary, work samples, reports completed while on placement - this is NOT compulsory)*

 Browse

"Save Draft" if you intend to complete further placements and add to this portfolio, or if the report is completed, press "Submit".

Save Draft Submit

When the report is submitted in SONIA, it is automatically emailed to the relevant IE Coordinator for approval. IE Coordinators can then approve the report or request resubmission from the student if the report does not satisfy requirements.

When/If the IE report is approved, the PEU will then update your student milestone in NUSTAR. An auto-email notification will be sent to you advising that the IE Report has been approved. The email will also include links to graduation information (relevant only if you have completed all other degree requirements).

Chemical Engineering (Honours) Students

Students are encouraged to record their experiences, particularly procedures and data related to their placement, in a laboratory notebook.

Medical Engineering (Honours) Students

If Medical Engineering students want a Health placement, refer to the College of Health Medicine and Wellbeing [Placement Essentials](#) for further information on medical placement. Select the 'Bachelor of Medical Engineering' degree which contains the relevant information, for example vaccination and NSW Health Verification requirements. This process can take two weeks to complete. An IE application is also required through the SONIA system.

WHAT INDUSTRIAL EXPERIENCE CAN I CLAIM?

It is the student's responsibility to find appropriate IE opportunities in a field related to their studies. Students should look for ways to meet their requirements from their first year of study. If students are unable to obtain suitable IE, they are encouraged to utilise [UON Career Resources](#) and talk to their IE Coordinator or contact CESE-PEU@newcastle.edu.au. IE might include a mixture of different experiences; some examples are provided here:

INDUSTRY PLACEMENT / EMPLOYMENT

Students can complete all or some of their IE in an industry placement (paid or unpaid) or through relevant employment. Engineering (Honours) students must complete a minimum of 6 weeks (as part of the 12 week requirement) working in a place conducting professional engineering work, under supervision of a qualified, practising professional for accreditation.

UNPAID and PAID Industrial Experience

Students must submit an IE Application Form in SONIA for all IE **BEFORE** the IE commences to ensure that it is a University approved experience and will count towards your degree program.

PLEASE NOTE: Under the Fair Work Act (2009), the University cannot allow any student to complete more than the requisite 12 (Engineering (Honours) & Surveying (Honours) weeks of **unpaid** experience. Students completing IE in countries other than Australia would need to ensure compliance with local Fair Work laws if applicable.

PRIOR WORK EXPERIENCE

Students **may** be able to have relevant prior work experience counted towards their Industrial Experience. Please submit a single IE Report (refer [page 5](#)) in SONIA together with employer confirmation letter(s) when you have completed a total of 12 weeks IE across all placements. Approval will be at the discretion of the IE Coordinator and is **not** guaranteed.

OVERSEAS (in countries outside of Australia) INDUSTRIAL EXPERIENCE and STUDY ABROAD PROGRAMS

If you are considering undertaking IE in a country outside Australia, you must email the Professional Experience Unit CESE-PEU@newcastle.edu.au for further information.

All or part of the IE requirements can be completed overseas (in countries outside of Australia) if the Industrial Experience is approved by your IE Coordinator and Head of School. Students may source their own Industrial Experience relevant to their degree program, or the University of Newcastle works with some

third-party providers such as Projects Abroad and CIS Australia to enable students to find a relevant opportunity. Students can visit the [Global Experience](#) website to find out more.

Overseas Industrial Experience must be pre-approved prior to confirming or signing any internship / program agreement. This is to avoid any non-refundable items such as airfares, accommodation and associated expenses.

Students must also be aware of insurance requirements for overseas Industrial Experience – students may be required to purchase their own individual travel, medical and industrial experience insurance dependent upon the overseas industry, visa requirements, arrival and departure dates in connection with the dates of IE and other considerations. Please contact insurance@newcastle.edu.au for further information.

EXTRA-CURRICULAR PROGRAMS

STUDENT GROUPS AND PROJECTS

A **maximum of 4 weeks** may be claimed for a substantial leadership or team member role in one of the many student-based project teams or academically-aligned student groups, which are under the supervision of an academic or qualified professional. An Alternative IE Attendance Certificate must be completed in SONIA. The student will need to email CESE-PEU@newcastle.edu.au to request the form to be added to their SONIA forms, which must be completed by the academic supervisor and approved by the IE Coordinator.

SUMMER SCHOLARSHIPS

Up to eight weeks (at the discretion of the IE Coordinator) may be considered for a Summer Scholarship provided that:

- the placement is approved by the IE Coordinator (noting that sufficient detail must be provided to the IE Coordinator outlining the tasks/responsibilities undertaken),
- the full 8 weeks of the scholarship is completed,
- an Alternative IE Attendance Certificate is signed by the Project Supervisor and approved by the IE Coordinator. Students will need to email CESE-PEU@newcastle.edu.au to request this form to be added to their SONIA forms.

ENGINEERS AUSTRALIA VIRTUAL WORK EXPERIENCE MODULES

The virtual work experiences are real world scenarios designed to test and develop a student's professional skills, bridging the gap between university theory and working practice. Completion of the virtual work experience modules may be considered as a way to complement or supplement IE / EPP for those students

nearing completion of their programs and who have already completed additional work experience.

There are virtual work experiences for the following engineering disciplines:

- Biomedical Engineering
- Chemical Engineering
- Civil Engineering
- Electrical Engineering
- Environmental Engineering
- Mechanical Engineering

Students will receive a verifiable certificate from Engineers Australia (EA) after completing all of the modules relevant to their discipline, which must be uploaded to their IE Report

Students can receive **1 day of IE** for completion of the virtual work experience relevant to their discipline.

Students must submit an Alternative IE Attendance Certificate in SONIA for these modules - students will need to email CESE-PEU@newcastle.edu.au to request this form to be added to their SONIA forms.

Details of the Virtual Experiences can be found at [Engineering Virtual Work Experiences | Young Engineers Australia](#)

INDUSTRY EVENTS

A maximum of 1 week (total) can be claimed for events run by accrediting international bodies, such as continuing professional development seminars, site visits, technical presentations, or demonstrations.

A maximum of a ½ day can be claimed per event.

An Alternative IE Attendance Certificate for each event must be completed in SONIA (the student will need to email CESE-PEU@newcastle.edu.au to request the form to be added to their SONIA forms), which must be completed by the event supervisor/coordinator confirming attendance AND participation.

POLICIES, GUIDELINES AND INSURANCE

[Student Professional Experience Policy](#)

[UON Privacy and Personal Information Protection](#)

UNIVERSITY OF NEWCASTLE INSURANCE

The University of Newcastle has a general insurance program that extends to cover the range of people, activities and equipment involved in the delivery of teaching and research. While there is no single insurance policy that can offer cover to Students who participate in the range of WIL activities with Host /Professional Experience Providers (Employers), Students should be aware of the role that insurance can – and can't – play in the event of an incident while they are under the control and supervision of their Provider.

For more information please refer:

Updated 9 February 2024

[WIL Insurance Summary](#) - (Key information regarding cover, general limits, exclusions and Claims.)

[Student Insurance](#) webpage

(For specific information, questions or concerns relating to Insurance) Insurance@newcastle.edu.au

CONTACT FOR ADDITIONAL INFORMATION

CESE PROFESSIONAL EXPERIENCE UNIT

Email: CESE-PEU@newcastle.edu.au

Phone: (02) 4921 7302 Website: [UON Industrial Experience](#)

