

STUDENT MANUAL

**SENG4001A Software Engineering Final Year Project Part A
Work Integrated Learning**

&

Industrial Experience

COLLEGE OF ENGINEERING, SCIENCE AND ENVIRONMENT



This manual outlines the requirements for the SENG4001A course and Industrial Experience for the Bachelor of Software Engineering program. It should be read in conjunction with the compulsory program requirements as outlined in the program handbook and the over-arching [Student Professional Experience Policy](#).

Industrial Experience is a compulsory requirement of the program. It includes 4 weeks undertaken as part of your in-program Work Integrated Learning (WIL) experience (SENG4001A), and an additional 8 weeks (totaling 12 weeks).

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DEGREE REQUIREMENTS

The Bachelor of Software Engineering program requires completion of a total of 12 weeks (60 days / ~420 hours) Industrial Experience, including 4 weeks undertaken as part of your in-program WIL experience (SENG4001A).

Refer to your program handbook for additional information.

INDUSTRIAL EXPERIENCE

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 deemed 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!

INDUSTRIAL EXPERIENCE APPLICATION

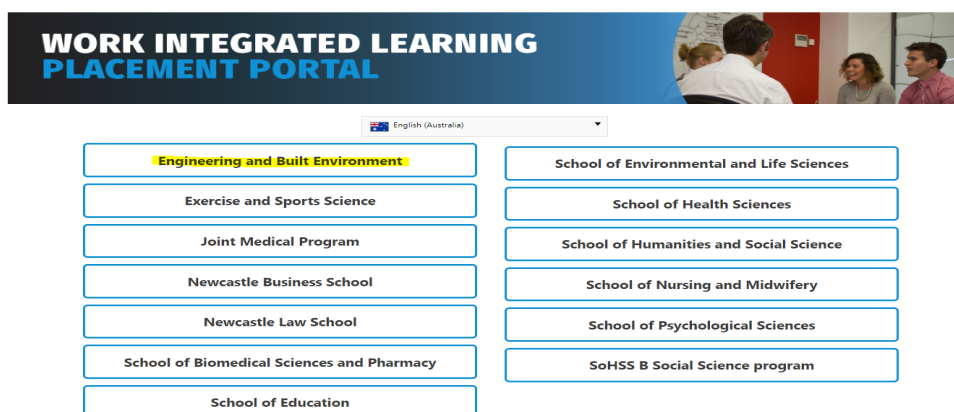
All Industrial Experience documentation is managed in the **SONIA** placement system. All IE applications should be submitted for **pre-approval** in SONIA **BEFORE** the IE commences to ensure that the duties during your placement satisfy the compulsory requirements of your degree. The University is 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	
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. Select *'IE Application Form'* and 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 experience 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		
Company Name	Company Street Address	Company Suburb	
Company Postcode	Company State / Province	Company Country	
Company Supervisor FIRST (given) Name	Company Supervisor FAMILY Name (Surname)	Company Supervisor Email	Company Supervisor Phone/Mobile
Proposed Industrial Experience Start Date	Proposed Industrial Experience Finish Date	Expected Duration of IE (number of weeks/days as applicable)	Company Website URL (please provide if available)
The Industrial Experience will be <input type="checkbox"/> Paid <input type="checkbox"/> Unpaid <input type="checkbox"/> 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	
Description of Industrial Experience role 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.		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.	
I have read and understood Student Insurance covered by The University of Newcastle.		I will discuss Personal Protective Equipment (PPE) with my company supervisor and will provide my emergency contact details to my company supervisor.	
Is this Industrial Experience related to renewable energy / sustainability?			
<small>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</small>			

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

SENG4001A SOFTWARE ENGINEERING FINAL YEAR PROJECT PART A WORK INTEGRATED LEARNING

SENG4001A Final Year Project you are expected to spend 140 hours of effort (contact and non-contact) to complete this course. The 140 hours is equivalent to 4 weeks of Industrial Experience and can be included in your IE Report.

Students must complete a Work Integrated Learning Placement Agreement prior to commencement. Once approved by your Course Coordinator you are welcome to begin your WIL Experience.

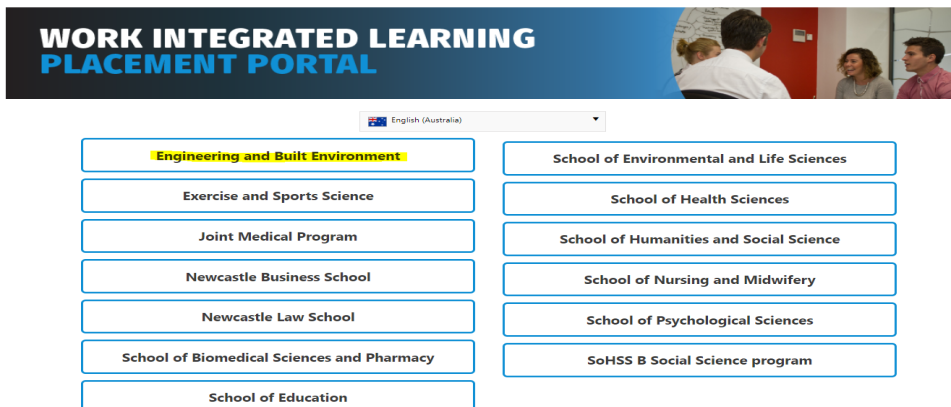
Throughout the experience you must complete weekly timesheets. When you have met the 140 hour requirement you will need to submit a Work Integrated Learning Placement Completion form.

The WIL Completion form can then be uploaded into your IE report as evidence of the 4 week completion. You are only required to submit one (1) IE report containing all the relevant supporting documentation.

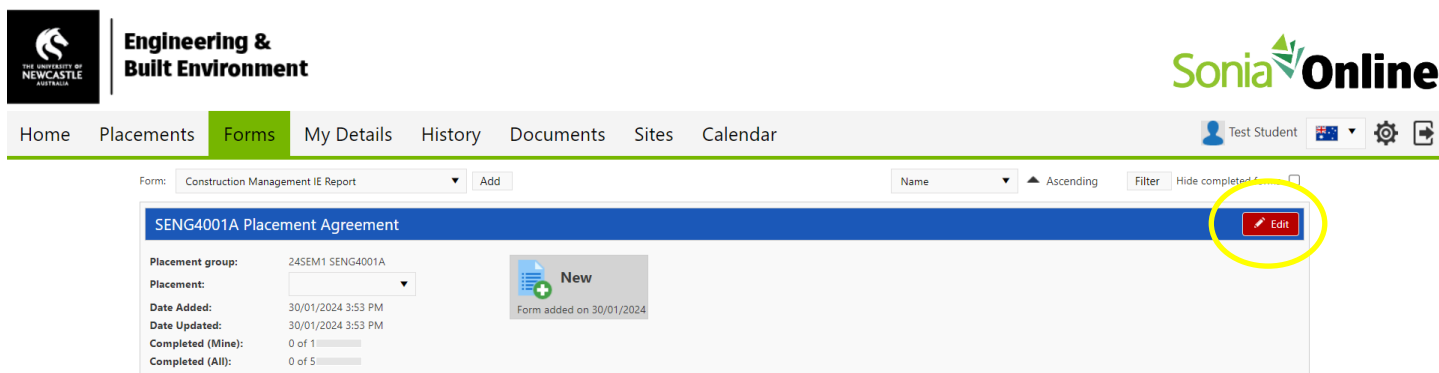
PRE-APPROVAL SENG4001A Work Integrated Learning Placement Agreement

STEP 1

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



Click on the **'FORMS'** tab Click 'edit' to add the relevant information.



STEP 2

Complete the grey & blue sections. The *Desired Outcome* description of duties should contain sufficient information for the Course Coordinator to evaluate if the placement is appropriate.

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

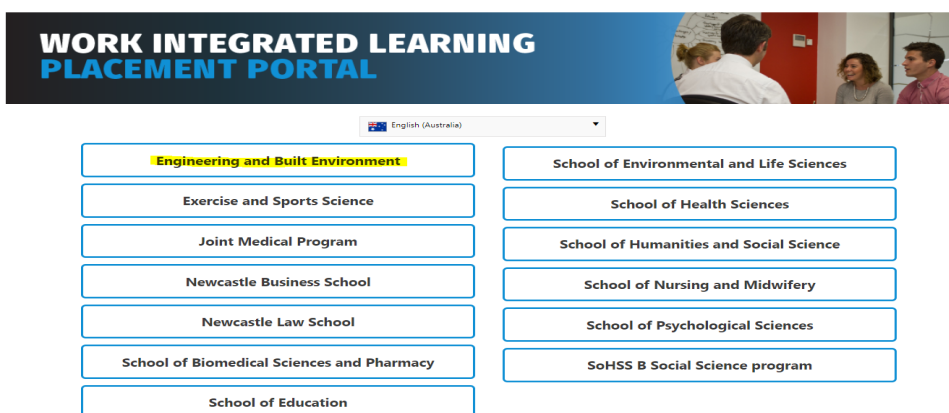
The Professional Experience Unit (PEU) will then forward your application to your company supervisor. You will receive an email notification when the supervisor has submitted the form. **If you do not receive notification within 7 days, please contact CESE-PEU@newcastle.edu.au.**

The Agreement will be reviewed by the Course Coordinator for final approval. You may be required to provide more clarification regarding the details before it can be approved. When it is approved, you will receive email notification that you are able to commence your placement. Please allow up to 2 weeks for approval by your Course Coordinator

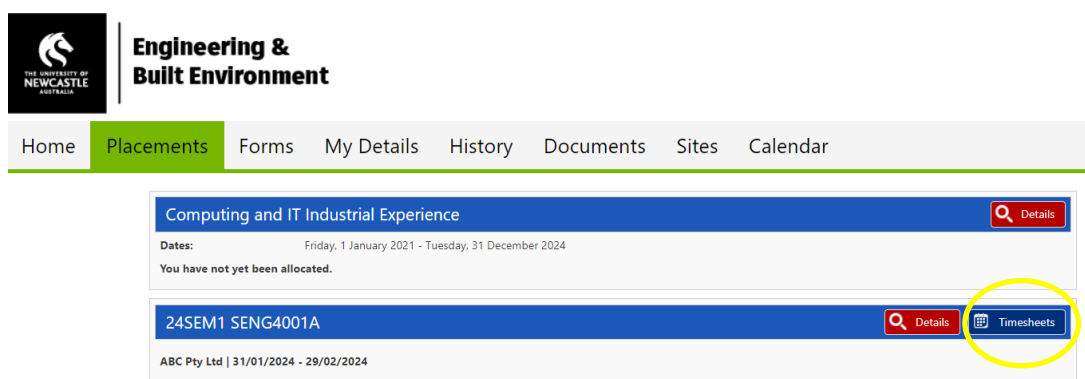
WEEKLY TIMESHEETS

STEP 1

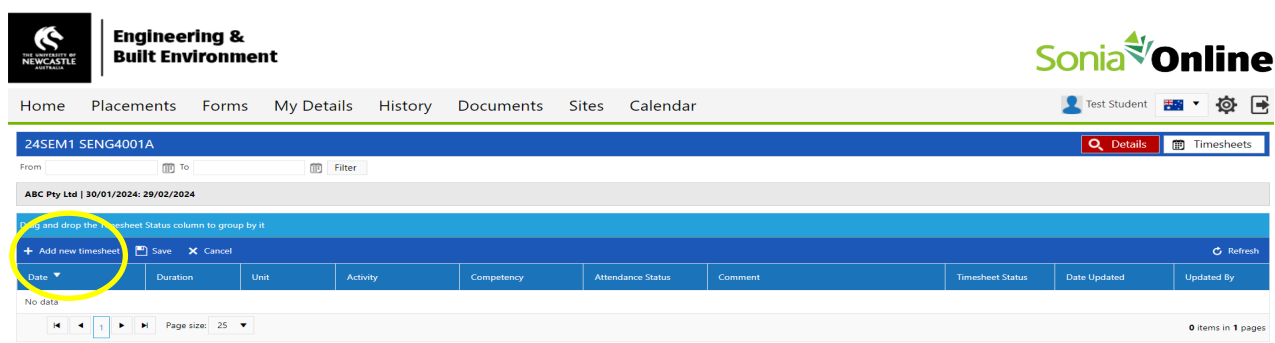
Login to [SONIA Online](#). (UON username and password) Select *Engineering & Built Environment*.



Click on the “Placements” tab, Click on the Timesheet



Click “Add new timesheet”



Please use the tab key to move through the required fields.

Compulsory sections:

- Date
- Duration
- Comment – Ensure to include a description of activities undertaken during the week.

When ready to submit – Click “Save”. This will send your timesheet through to your course coordinator for review.

The screenshot shows the Sonia Online interface for a course titled '24SEM1 SENG4001A'. The user is logged in as 'Test Student'. The interface includes a navigation menu with 'Home', 'Placements', 'Forms', 'My Details', 'History', 'Documents', 'Sites', and 'Calendar'. Below the navigation, there are search and filter options. The main content area displays a table with columns: Date, Duration, Unit, Activity, Competency, Attendance Status, Comment, Timesheet Status, Date Updated, and Updated By. A 'Save' button is highlighted with a yellow circle. Below the table, there is a pagination control showing 'Page size: 25' and '0 items in 1 pages'.

If you submit and you have an error please select the “bin” icon in the actions column to delete. At the bottom of the screen you will see the total hours for the timesheets and the breakdown of approved, remaining, submitted etc

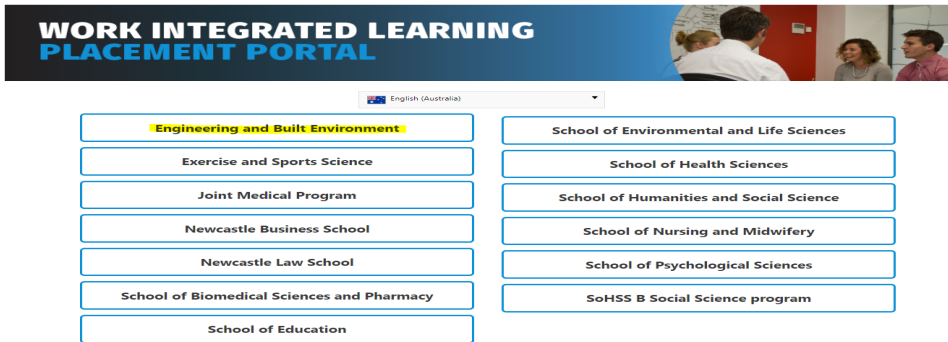
The screenshot shows the Sonia Online interface for a course titled '24SEM1 SENG4001A'. The user is logged in as 'Test Student'. The interface includes a navigation menu with 'Home', 'Placements', 'Forms', 'My Details', 'History', 'Documents', 'Sites', and 'Calendar'. Below the navigation, there are search and filter options. The main content area displays a table with columns: Date, Duration, Unit, Activity, Competency, Attendance Status, Comment, Timesheet Status, Actions, Date Updated, and Updated By. The 'Actions' column is highlighted with a yellow circle. Below the table, there is a pagination control showing 'Page size: 25' and '3 items in 1 pages'. At the bottom of the screen, there is a 'Totals' section with columns: Expected, Approved, Remaining, Total Submitted, Requires Resubmission, and Awaiting Approval. The 'Totals' section is highlighted with a yellow circle.

Expected	Approved	Remaining	Total Submitted	Requires Resubmission	Awaiting Approval
140.00 Hours	0.00 Hours	140.00 Hours	24.00 Hours	0.00 Hours	24.00 Hours

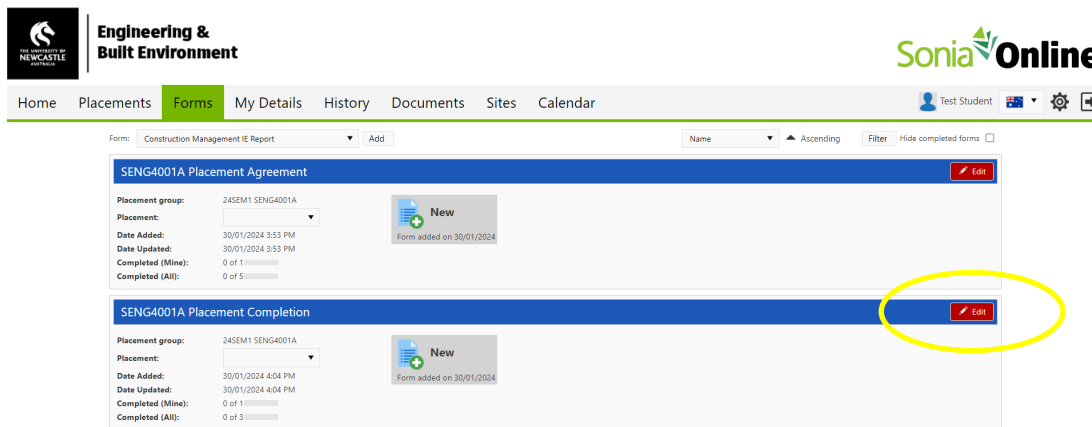
SENG4001A Work Integrated Learning Placement Completion

STEP 1

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



Click on the 'FORMS' tab. Click 'edit' to complete all relevant information.



STEP 2

Complete the grey & blue sections and click 'Submit form to the host organisation for WIL placement completion'. This form will then be sent to the organisation to confirm your completion. The final stage is the course coordinator review. If any additional information is required, your course coordinator will be in contact. Alternatively, if approved you will receive a notification of successful completion.

The screenshot shows the 'WORK INTEGRATED LEARNING PLACEMENT COMPLETION' form for the 'COLLEGE OF ENGINEERING, SCIENCE AND ENVIRONMENT'. The form is for the 'School of Information and Physical Sciences - SENG4001A Software Engineering Final Year Project Part A'. It includes a 'STUDENT SECTION' with fields for Student Name, Student Number, Student Email, Program, Organisation Name, Organisation Supervisor Name, and Organisation Supervisor Email. A 'Save Draft' button and a 'Submit form to the host organisation for WIL placement completion' button are visible at the bottom.

If you would like your WIL Placement experience to be included as part of your Industrial Experience you will need to download the WIL Placement Completion form and upload into your IE Report.

How to download your WIL Placement Completion

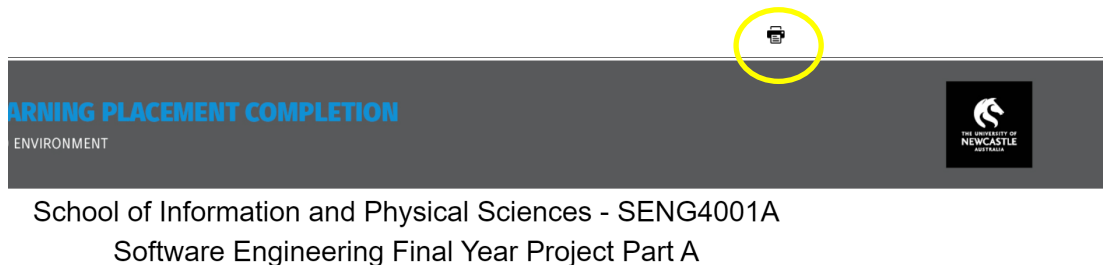
Log into SONIA

Select forms

Edit

Top right hand corner – Printer Icon

Save as PDF



IE REPORTS including SENG4001A

Students are required to submit a **single** IE Report which includes all IE placements with one company or across several companies together with SENG4001A detail and documentation. 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.

Select the “**FORMS**” tab and click ‘edit’ to complete relevant information.

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 the form.

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	<input type="text"/>
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 required to complete any project	<input type="text"/>

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 placement
 - b) total weeks/days/hours of IE completed
 - c) a brief description of activities undertaken
- iii) If you are claiming your SENG4001A WIL placement experience attach the pdf of the Placement Completion form (see instructions above on how to download the completion form)
- iv) 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 attachments are 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)

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

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

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 and Course Coordinator. IE might include a mixture of different experiences; some examples are provided here:

INDUSTRY PLACEMENT / EMPLOYMENT

Students will complete 4 weeks undertaken as part of the in-program WIL experience (SENG4001A) and the remaining 8 weeks as Industrial Experience, which can be completed 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 and/or SENG4001A Work Integrated Learning Placement Agreement for all IE **BEFORE** the IE/placement 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/placement 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 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 INDUSTRIAL EXPERIENCE and STUDY ABROAD PROGRAMS

All or part of the IE/Placement requirements can be completed overseas if approved by your IE/Course Coordinator and Head of School. Students may source their own Industrial Experience/Placement 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 submit the following documentation for review and final approval before any arrangements are made:

IE Application Form and/or SENG4001A Work Integrated Learning Placement Agreement (in SONIA placement system)

1. CESE International IE Application Form (in SONIA placement system)
2. [Safety Travel Risk Assessment](#).

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 **IE** (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.

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 AND GUIDELINES

- [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:

[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

Students who are undertaking overseas Industrial experience should contact insurance@newcastle.edu.au for further clarification.

CONTACT FOR ADDITIONAL INFORMATION

**COLLEGE OF ENGINEERING, SCIENCE & ENVIRONMENT
PROFESSIONAL EXPERIENCE UNIT**

Email: CESE-PEU@newcastle.edu.au

Phone: (02) 4921 7302

Website: [UON Industrial Experience](#)

