

## Professional Engineering Practicum requirement

### *Guidelines for Students*

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## 1. What is the requirement?

Practical experience is a compulsory part of the Master of Professional Engineering (MPE). In order to graduate you need to accumulate 450 hours of suitable exposure to professional engineering practice. This experience is referred to as a Professional Engineering Practicum, and can also be known as a placement, an internship, a cadetship, work experience, vacation work, and more. Your Professional Engineering Practicum is an opportunity to develop and apply the technical engineering skills and knowledge you have gained through your studies to real world situations.

UWA does not arrange the experience for you. Engineering students are responsible for organising their own Professional Engineering Practicum hours to be completed alongside their course. This expectation requires you to demonstrate initiative, and a proactive demeanour, these traits are identified by Engineers Australia as necessary attributes of professional engineers. Within the University we have multiple resources and services available to assist you and help you to build the skills needed to find and secure opportunities.

## 2. Starting early

The key is to start early. You may start with the exposure and to accumulate Professional Engineering Practicum hours even from the first semester of your undergraduate studies if you are enrolled in the Engineering Science major intending to continue into the MPE. We encourage you to get involved in clubs and societies, volunteering or part-time work, attend site visits and technical presentations- these are all examples of exposure encouraged early in your course. These activities can help enhance your understanding of engineering, commercial awareness and industry knowledge. However, to get the most out of your professional engineering placement, we recommended you wait until you have completed at least two level 3 specialisation units before commencing a formal discipline- specific professional engineering placement.

Students who have space for an elective or broadening unit in their Bachelor degree are encouraged to consider adding to their study plan a unit for credit through a Work Integrated Learning program at UWA i.e. SCIE2205 Science Work Placement, SCIE2206 Science Consultancy Project, or WILG2201 Professional Experience Practicum. Talk to the Student Advising office to find out whether you are eligible.

**IMPORTANT:** If you intend to claim any professional placements towards your Professional Engineering Practicum requirement you must submit the placement details for academic approval through our placement portal SoniaOnline.

## 3. Types of experiences

You may use a number of placements, experiences and activities to complete the professional practicum 450 hours requirement. These can be paid and unpaid, engineering and non-engineering, undertaken locally, regionally and even overseas. The placement can be undertaken part-time or full-time, during a semester, winter or summer break. Vast majority of professional engineering placements are offered by organisations over the summer break period. These get advertised and applications open as early as in February/March so make sure you do not miss out!

## 1. Engineering discipline- specific work experience

### Category 1 – Professional engineering placement

At least 300 hours of your practicum must comprise of placement(s) that are relevant to the discipline/ specialisation you are studying under the supervision of an accredited engineer allowing you to apply your technical engineering science knowledge.

This category includes:

- Paid or unpaid industry placements/internships/vacation work in an engineering work environment
- Voluntary work in an engineering capacity for a recognised non-governmental organisation (NGO) or not-for profit organisation (NFP or NPO)
- National service in an engineering role as a conscript, reservist or military scholarship holder
- Working as an intern for a UWA (or equivalent) engineering research group
- Completing a full CEED project

**Evidence required** - *Certificate of Work Performed* signed by your supervisor for each placement completed.

## 2. Other experiences

Up to 150 hours of your professional practicum can be accrued by undertaking other suitable engineering activities or in a non-engineering work environment under certain conditions. These are educational, professional development or service activities that help to develop your understanding of a particular aspect of the engineering profession.

### Category 2 – Engineering-related professional development activities

Suitable activities include:

- Attending Engineers Australia (or equivalent) short courses, workshops, seminars or conference
- Attending invited guest lectures from industry-based engineers (the lectures must not be a part of the formal requirements of a unit)
- Presenting at a conference or school on an engineering related topic (the presentation must not be a part of the formal requirements of a unit)
- Formal site visits of engineering works

**Evidence required** - proof of participation in the activity- eg a written confirmation of attendance, a letter of thanks etc. An event booking confirmation or an event invitation *are not* a satisfactory evidence.

### Category 3 – Engineering-related work or volunteering experiences

Suitable activities include:

- Participation in local, national or international engineering competitions
- Assisting an academic staff member with engineering consulting work
- Completing a 3/4 CEED project
- Working as a tutor, facilitator or lab demonstrator in an engineering unit

- Service to the engineering profession, including elected roles on the executive of engineering student clubs and societies under the following conditions:
  - i. You are be able to claim up to a maximum of 150 hours towards your practicum if you are an elected member of an engineering student club or society, or you have volunteered to assist with one of their approved activities.
  - ii. The club or society must be listed on the UWA Clubs and Societies page <https://uwastudentguild.com/clubs>.
  - iii. An overview of the activities claimed must be included in the club's annual report. You are expected to keep a log of all of your club activities and the hours involved. You may be requested to submit your log for verification of the hours claimed.
  - iv. Certificate of Work Performed that includes a summary of the club activities that you have contributed to and the total number of hours must be signed by:
    - If you are the president of an engineering club or society, then the certificate must be signed by the chair of the Student Association Council.
    - If you are an elected member of an engineering club or society, other than the president, then the certificate must be signed by the president of the club.
    - If you are not an elected member, but volunteer to help at an approved engineering student club activity, then the certificate must be signed by the president or vice-president of the club.

**Evidence required** - *Certificate of Work Performed* signed by your supervisor for each activity completed.

#### **Category 4 – Non-engineering work and volunteering experiences**

This type of activities and experiences require you to demonstrate the development of generic competencies that are relevant to a professional engineering career, in particular roles that require leadership, management and strong interpersonal skills.

Suitable activities include:

- Work experience in a complementary profession (e.g. accounting firm, law practice)
- A coaching, management or officiating role for a UWA, state, national or international sporting organisation
- Work as a qualified instructor (e.g. AUSTSWIM instructor, licensed driving instructor)
- Volunteer work in a non-engineering capacity for a recognised non-governmental organisation (NGO) or not-for profit organisation (NFP or NPO)
- National service in a non-engineering role as a conscript, reservist or military scholarship holder
- Volunteer work for approved activities of an engineering student club or society.
- Volunteer work for UWA or the Faculty (e.g. UniMentor, EMS mentorship of international students, etc.)
- A management role in the retail or food industries
- An elected role in a registered organisation (e.g. a member of the UWA Guild Council)

**Evidence required** - *Certificate of Work Performed* signed by your supervisor for each activity completed.

If you have any doubt about the suitability or categorisation of a proposed activity, please contact the Professional Portfolio unit coordinator as listed in the Handbook - GENG5010 Professional Engineering Portfolio.

## 4. Sourcing a placement

UWA does not arrange the experience for you. You are responsible for organising your own Professional Engineering Practicum hours to be completed alongside your course.

Look for opportunities everywhere. Within the University there are multiple resources and services available to help you build the skills needed to find and secure opportunities. We encourage you to access these resources to grow your industry knowledge and connections. Students who find success are often taking part in multiple internship/job search and work related activities including:

- networking through joining student societies and professional association bodies
- attending events, speaking with lecturers, industry representatives and classmates
- attending conferences
- volunteering
- taking part in ongoing learning opportunities

Here are a few suggestions of where to look for opportunities:

- Create your profile on **My UniHub**, search for both Internships and Vacation Employment.
- Become a **student member of Engineers Australia** for free and gain access to Australia's premier engineering network, professional development and networking opportunities, technical and career-enhancing resources, news and updates.
- Attend information sessions and events run by **UWA student clubs** and the School of Engineering and start building your professional network, follow up on connections made at events via LinkedIn.
- Set aside time to regularly check websites such as **GradConnection; GradAustralia; WA State Government Internships; Engineers Australia**.
- Register and sign up for **opportunity alerts from the main job seeker sites** including seek.com.au; jora.com.au; indeed.com.au; careerone.com.au; linkedin.com/jobs.
- High achieving students should consider applying for a **Co-operative Education for Enterprise Development (CEED) research project**, a full CEED project will often meet the requirements of both the professional practicum hours and Engineering Research Project unit. Students typically receive payment. For more information please <http://ceed.wa.edu.au/>
- Be proactive, **research small and medium firms** you would be interested in working for, take time to find the right contact (often an internship coordinator in the HR department or for small companies a site supervisor). LinkedIn is a great place to start. Reach out via phone or email with a polished resume and application letter to find out if the company might accept an unsolicited application.
- Contact **your local council** – they often offer work experience to students wanting to gain real-life experience working for a local government – e.g. apply with [City of Stirling](#), [City of Melville](#), [City of Gosnells](#), [City of Vincent](#) etc
- Create a profile and **register directly on company websites** for opportunity alerts (i.e. Alcoa, BHP, Rio Tinto, Clough, Shell, JHG, Woodside Energy, FMG, BP Australia, Hatch, Water Corporation, Aurecon...and more). Many of these companies do not advertise their internships and vacation programs through third party job search engines.
- **Ask your network** of peers, friends, family, academics, and tutors for ideas and introductions or contacts.

## 5. Registration in SoniaOnline

All newly commencing engineering students must register in SoniaOnline so that we can understand your needs and better prepare and support you when seeking and securing placement(s).

1. Go to <https://placements.uwa.edu.au/>
2. Select 'Engineering'
3. Log in using your student ID and PHEME password
4. Follow further instructions as outlined in SoniaOnline

## 6. Practicum Experiences Approval Process

It is important you ensure any activities and experiences you undertake and intend to include in your Professional Engineering Portfolio are suitable.

### Professional placement approval process

It is a requirement of your course to have your Professional Engineering Placement proposal reviewed and approved BEFORE you commence your placement. Once you have secured a placement, please submit your **MPE Practicum - Engineering Placement Proposal** Form in SoniaOnline. The school's academic staff will review the proposal to ensure the placement is suitable and meets the learning outcomes of your course. The form must be submitted **at least 5 working days before commencing** to allow for a timely review and approval. Review and approval of your proposal can take between 10 – 14 business days.

### Other experiences approval process

Please submit any activities not listed above for review and approval by the school's academic staff via completing a **MPE Practicum – Other Experiences Proposal** Form in SoniaOnline. You will be asked to include a clear explanation as to why the activity should be considered a suitable practicum experience and it will be evaluated on individual basis.

### Recognition of prior placement

If you have undertaken a placement prior to starting your MPE studies at UWA, you have an opportunity to get the placement details reviewed by the school's academics and seek a recognition for your previous placement(s). Please submit your **MPE Practicum – Recognition of Prior Placement** Form in SoniaOnline.

### What happens next

- The details you provide will be reviewed by the Work Integrated Learning (WIL) Placement Team to ensure they are sufficient.
- An academic coordinator will review the details to ensure the placement meets the learning outcomes of your course and then provide an approval for the intended placement.
- If the placement is unpaid, the WIL Team will arrange a Placement Agreement to be signed between the Host organization and UWA
- You and the Host will receive an email notification when all your forms and tasks have been successfully approved, including certificates of currency as evidence of insurance cover

## Overseas placements

All students intending to undertake a placement overseas must:

1. Seek approval for both travel and the placement opportunity (as outlined above)
2. Once approved, record their travel plans (as outlined below)

Students participating in UWA approved travel overseas must be recorded on UWA's risk management system Concur, please follow the steps below:

1. Create a Concur account on <http://concurso.webservices.uwa.edu.au/> using your PHEME details.
2. Edit your Profile to ensure the information matches your passport details.
3. Add your UWA student email address, plus any addresses you may be sending itineraries from. Be sure to verify the email addresses you enter.
4. Email a PDF of your travel itinerary to [plans@concur.com](mailto:plans@concur.com) from your verified email address.
5. Concur will extract your travel details and once done, you should have access to a 'My Trip' section on your Concur homepage showing your travel information.
6. Upload a screenshot of your Concur account showing your name and uploaded itinerary (the 'My Trip') in the box below (by using the yellow folder icon)

## 7. Placement Requirements and Responsibilities

### Before your placement

**Before Placement**, you are required to:

- take an active role in preparing for the activity and understanding the specific requirements of the host organisation
- complete any required preparatory training or development sessions provided by UWA or host organisation prior to the formal commencement of the placement

### Placement preparation

In preparation for your placement, you will be required to complete UWA's Pre-placement program via LMS. The program was designed to help you make the most of your placement. The three modules will provide you with information and guidance on health and safety in a workplace, expectations and understanding of professional behaviour, feedback and performance. You can complete the modules at any time, but no later than BEFORE the commencement of your placement. You will be asked to upload the Certificate of completion in SoniaOnline.

### Administrative arrangements

Depending on whether you undertake a paid or unpaid placement, you and your host organisation might be required to complete further paperwork. Your placement coordinator will advise you of the requirements via SoniaOnline.

**Unpaid Practicums** – in SoniaOnline you will be required to submit:

- Your Engineering Placement Proposal Form
- Student Undertaking / Student Deed Poll

We will arrange signing of the Placement Agreement between UWA and the host organisation and issue Certificate of Currency to confirm your insurance coverage for the duration of the placement.



**Paid practicum** - in SoniaOnline you will be required to submit:

- Your Engineering Placement Proposal Form

If you are being paid for work undertaken, you are considered an employee of the company and should be covered by your employers' insurance.

**IMPORTANT:** It is a requirement of your course to have your Professional Engineering Placement proposal reviewed and approved BEFORE you commence your placement.

You can apply to have your Professional Engineering Placement(s) approved at any time but please be aware that you are not allowed to commence any Professional Placement (paid or unpaid) before you have received your approval to do so. This is to ensure your placement is suitable, safe and meets the learning outcomes and requirements of your course. Assessment of your proposal can take between 10 – 14 business days.

### During your placement

**During your placement**, you are required to:

- Communicate in a professional manner with host organisation staff and clients
- Work to the agreed times during the placement, including evenings and weekends where applicable
- Be professional at all times
- Act ethically and responsibly with the host organisation, staff and clients
- Observe the host organisation's dress code
- Undertake all duties as agreed to as part of the placement
- Notify the host organisation as early as possible before the beginning of the working day if you are unable to attend

### Check-in Surveys

Once on your placement you will be required to complete a check-in survey after completing 30 hours, then after completing 60 hours via a form in SoniaOnline. These surveys are an opportunity for us to check how your placement is progressing. We check with your host supervisor as well.

Your Placement Officer will maintain contact with you during the practicum/placement and will ask you to complete a survey after 30 hours and will ask you the following questions:

- Is your placement proceeding satisfactorily?
- Are the tasks you are undertaking relevant and as you expected?
- Are you receiving an adequate level of supervision?
- Are you getting feedback from your supervisor?
- Are you receiving an adequate level of support, and/ or necessary training in your workplace?
- Do you have access to the resources you need?
- Are you getting adequate breaks?
- Have you received adequate safety training?
- Do you have any OH&S concerns?
- Do you have any other concerns?
- How many hours of work placement have you completed?
- Do you have any further comments?
- I would like the Faculty WIL Officer to contact me - Yes/ No

**IMPORTANT:** In case of any incidents, accidents or concerns, please get in touch with your placement coordinator as soon as possible.

### **Keep a Journal**

It is strongly recommended that you keep a journal of your placement experience(s), which you can then refer to when working on your portfolio. Note down any information that will help you with the required content of the portfolio, including important dates, names of the people that you deal with, points of interest, personal observations of the work place, and your roles and activities. The journal should also describe how the experience has contributed to your development as a professional engineer, including the attainment of the *Engineers Australia Stage 1 Competency Standards* and any lessons learnt.

### After your placement

#### **Certificate of Work Performed**

You will be required to ask your host supervisor to complete a *Certificate of work performed*. A separate *Certificate of Work Performed* must be completed for each placement and included in your Portfolio/Report.

#### **Final Placement Survey**

You will be also required to complete a final survey via a form in SoniaOnline within 14 days of (each) placement providing feedback on:

- I understood the main tasks, responsibilities and boundaries of my role
- The work I was assigned was relevant and aligned to my expectations
- I understood instructions and asked for clarification when needed
- I understood and applied some basic principles of analytical and lateral thinking
- I was an active participant in work related conversations
- I established a good rapport and interacted well with my colleagues
- The supervision I received was adequate
- The support I received from other colleagues was helpful
- This experience has helped my confidence
- I would recommend this host for further student placements

#### **Professional Engineering Portfolio**

After you complete all required practicum hours, ensure you enrol in GENG5010 Professional Engineering Portfolio and complete all requirements as outlined in the unit LMS. You will be enrolled into the unit automatically in your last semester of your studies. For an earlier enrolment, please liaise with the *Student advising office*. Your portfolio has to be submitted no later than the due date listed in the GENG5010 Professional Engineering Portfolio LMS.

All students commencing in the MPE from 2017, must submit a portfolio in the unit GENG5010 Professional Engineering Portfolio as part of the course requirements. The portfolio requires students to demonstrate the successful completion of at least 450 hours of suitable professional engineering placement experience, and should detail how this experience has contributed to a student's development as a professional engineer including attainment of the Engineers Australia Stage 1 Competencies.

It is recommend students keep a journal of their practicum experiences that can be used as a reference when preparing the portfolio including important dates, names of people, points of interest, personal

observations of the work place, roles and activities, and importantly any lessons learnt. Although the portfolio is due in the final semester of study, students are strongly encouraged to start working on it as early as possible.

## 8. UWA Resources and Services to support you

### Careers and Employability Centre

The Careers Centre and their team are your one stop shop for preparation. Located on campus in Student Central, access a wealth of resources to help you build your professional engineering identity. Workshops, videos, plus one-on-one consultations are available to discuss topics related to your resume, cover letter, internship/job search strategies and applications. Make sure you access:

- **Resume and cover letter workshops** - to help prepare you for success in your application. Book in to these sessions via MyUnihub to secure your spot.
- **VMock** - online resume checking tool providing feedback on the structure of your resume. This tool is crucial for students considering companies who vet applications using algorithms. Your aim is to achieve a score of 75% or above before submitting to organisations. Most students will start on 25-30% - there are huge improvements to be made! Once you have uploaded to VMock use the feedback provided to you to improve your score. Note: Free resume feedback is limited to a max of 10 uploads per year, therefore make all improvements suggested before resubmitting each time. Careers team run workshops on the use of VMock so make sure you attend one. .
- **Big Interview** – a valuable online resource to assist you in preparing for an interview including hands-on practice and simulation with mock interviews tailored to your specific industry, job and experience level.

Head to My UniHub <https://unihub.uwa.edu.au/> to see and access all the services and resources and to book into workshops and individual appointments.

- **Studiosity** - an online service accessible to UWA students. Students can upload their resume or cover letter for feedback on structure and formatting. The service offers live personalised, online assistance from trained specialists, free for all enrolled students, 24/7.
- **LinkedIn Learning** - a global online platform for developing or enhancing your professional and personal skills and employability.

### Work Integrated Learning Placement Team

UWA's Work Integrated Learning Team is a part of the Student Services and Engagement Team and supports students with:

- Coordination of the administrative arrangements and processes relating to WIL placements / internships to ensure consistent processes across all Schools and Departments which comply with relevant legal, risk and health and safety requirements
- Capturing, managing and reporting on student and host-organisation placement-related data and information
- Arranging a review and approval of their placements by an Academic discipline chair to ensure they meet the learning outcomes of their program of study and undertaking risk assessments and assisting with insurance arrangements and travel approval prior to undertaking the placement
- Identifying of suitable WIL placements / internships – in collaboration with UWA's Careers and Employability Centre
- Placement preparation and monitoring while on placement