

ENGG4099: Industry Experience

S1, WV, S2, S3 - 420 PACE ACTIVITY HOURS

KEY PACE PROCESSES AND TIMELINES





- Enhance your employability by engaging with a partner organisation on a mutually beneficial activity
- Put theoretical knowledge to practice, reflect on your studies, clarify your career goals, and network with professionals
- No matter what stage you are at in life or career, this unit contributes to professional pursuits

B.ENG (HONS) ALUMNI VIDEO

See the MQ Speed team in action at Battle Mountain, USA

EXAMPLES OF PREVIOUS ENGG4099 ACTIVITIES

- Medical device company: research, development, prototype assembly, and quality assurance testing of an electronic mechanism
- Science and technology education facility: develop interactive Engineering-based workshops to inspire young children to become interested in science and technology
- Electronics manufacturing company: participation in the manufacturing, assembly, functionality testing, quality control, and product inspection of mechatronic products
- Hospital: developed the foundations for a robotic surgery system using a robotic arm

ENGG4099 STUDENT TESTIMONIAL

'My PACE placement within Optus was invaluable as it provided experience in working within agile engineering teams. It teaches technical telecommunications and engineering knowledge and introduced me to the challenges faced by such a large organisation - including the sheer engineering scale involved in a national telecommunications network.

ARIE OLDMAN

PACE Timelines (see Unit Guide for academic dates)

Key dates Details

- At the end of Plan ahead and prepare for enrolment in your 2nd year ENGG4099 to maximise outcomes
 - Start looking for your PACE activity and ensure you follow application timelines for proposing (see ENGG4099 Procedural Requirements)

Ongoing

- Reflect on your PACE activity and curriculum in preparation for assessment
- Engage with your partner organisation as agreed by you and your host supervisor
- · Manage and plan carefully so you can meet all commitments

HOW DOES THE UNIT WORK?

It is a requirement of the Bachelor of Engineering (Honours) degree and Engineers Australia that you complete relevant work experience in industry before graduation. As a PACE unit, ENGG4099 is the main vehicle through which you will achieve this for it combines theory-based curriculum with practical experience (PACE activity) to enhance your employability (i.e. being work and life ready in increasingly complex and evolving circumstances).

Engineers Australia's expectation is that professional practice equivalent to approximately 12 weeks in the workplace, be completed by students. Engineers Australia and the University have specifically endorsed that MQ B.Eng (Hons) students will complete 420 hours of professional experience through ENGG4099. You must undertake the unit's curriculum (additional time involved) and the PACE activity (420 hours) in order to be eligible to complete ENGG4099.

It is your responsibility to find a PACE activity that you, as an individual, can carry out in collaboration with a partner organisation. However, on limited occasions, there might be an opportunity to work with other ENGG4099 students for this purpose. You might be able to complete all required professional experience hours with one organisation, or sometimes it is necessary to complete a few PACE activities to accumulate the total number of hours.

Check the Handbook for information about ENGG4099, including pre-reqs and any Special Approval requirements. Consider also viewing previous Unit Guides. Further, be sure to read both the ENGG4099 Procedural Requirements document and the ENGG4099 Timesheets and Assessment Guidance for Students and Host Supervisors document well before planning your PACE activity.

HOW DO I FIND MY PACE ACTIVITY?

The first step in gaining professional experience through ENGG4099 is finding and proposing your own PACE activity. This enables you to:

- be more involved in negotiating your activity tasks and terms;
- learn first-hand how to approach future employers and opportunities be it for the first time, changing directions, or progressing your career;
- enhance chances of finding something that meets your goals and interests no matter at what professional stage you are and;
- explore opportunities that are specific to your discipline within Engineering.

Go to the <u>FSE PACE webpage</u> for resources that can help you find your activity. Other guidance is available through the ENGG4099 iLearn site.

Important: you must receive formal approval before you can start your PACE activity. See the *ENGG4099 Procedural Requirements* document for more information about finding and proposing your PACE activity/ies.

IS RECOGNITION OF PRIOR LEARNING (RPL) POSSIBLE?

As per the University's RPL Policy, if you can evidence prior achievement of the <u>Academic Senate's criteria for PACE units</u> then RPL for PACE might be possible. Evidence occurs through: having completed a PACE-like unit elsewhere, or submission of a portfolio demonstrating that all 4 essential PACE elements (as specified in the Policy) have been met.

Acknowledgement of past or current employment alone is not sufficient for this purpose; however, evidence could include demonstration of you having engaged in an experiential learning activity (as part of that employment) that:

- · was mutually beneficial, and;
- met or exceeded the minimum hours standard set in Senate's Criteria for the Accreditation of PACE units and activities, and;
- · enabled the integration of theory with practice, and;
- was embedded in and supported by a reflective practice framework.

For more information, refer to the PACE-specific detail in the University's <u>RPL Policy</u> and if you want to apply go <u>here</u>.

ANYTHING ELSE I NEED TO KNOW?

IPARTICIPATE

Once enrolled, you will have access to a system called iParticipate which enables acknowledgement of your PACE Roles and Responsibilities (through the *Student Undertaking* form), provision of emergency contacts, identification of which activity you would like to complete, and information on background/health checks (see below). You will also be able to view details of approved PACE activities and have access to iParticipate timesheets if you are undertaking a local or regional activity.

BACKGROUND/HEALTH CHECKS

Some PACE activities require background/health checks such as WWCC, National Police Check etc. The check required depends on your partner organisation and activity type. Checks can take time to complete so it's important to prepare as early as possible.

REASONABLE ADJUSTMENTS

PACE activities are available to all undergraduate Macquarie students regardless of personal circumstances. Students are encouraged to disclose and discuss any personal circumstances which may impact their PACE Activity before activity allocation is finalised.

For more information refer to the <u>PACE Activity Management Procedure</u> and the <u>Student Disability Support Policy.</u>
<u>Reasonable adjustments video</u>

PACE AND ETHICAL PRACTICE

Ethical practice is a key component of PACE. It involves negotiating the ethical complexities in which you are working, engaging in an ethical manner and establishing ethical partnerships. Students should not undertake a PACE activity where a conflict of interest might exist. Please advise your Unit Convenor as soon as any ethical concerns arise.

INTELLECTUAL PROPERTY RIGHTS

Your PACE activity might result in the creation of intellectual property (IP). IP is the application of the mind to develop something new or original and can exist in various forms, such as an invention, brand, design, software program or artistic creation.

Discuss IP with your partner organisation before your PACE activity starts. IP generated by students with substantial use of partner organisation resources and input (e.g. the initial problem for which a solution is being developed) will normally be required to be assigned to the partner organisation.

If you are uncertain about your rights, speak with your Unit Convenor. The University cannot provide you with IP legal advice in respect of IP creation, ownership or rights of use and recommends you obtain independent legal advice before signing an IP agreement. The University has developed a draft agreement that you and partners could use to assign IP and this is available through your Unit Convenor.

For further advice you can contact the Office of Commercialisation and Innovation by emailing commercialisation@mq.edu.au

PACE ACTIVITY RISK MANAGEMENT

Depending on the nature of your ENGG4099 activity, you may be required to undertake supervised site visits and or work onsite regularly. Sites can involve a wide variety of WHS and risk considerations. For example: who will provide Protective Personal Equipment (PPE); what training is provided; safety tickets required; inductions; level of supervision etc. When you first start your PACE activity take time to become acquainted with the site and its many WHS and Risk requirements. For example: warehouse activity; machinery; heat; electricity; site visits; working from heights and in enclosed spaces; etc. If there is anything that is uncertain, or for which you have concern, please speak with your host supervisor as soon as possible.

PACEWISE

Re-visit **PACEWISE** to find out more about:

- · Hints to present yourself professionally
- The Judyth Sachs Prize
- PACE Equity and Travel grants
- · Your Roles and Responsibilities
- Work Health and Safety

CONTACT INFORMATION

For questions specific to the academic requirements of ENGG4099 contact the Unit Convenor.

For all other enquiries about ENGG4099, contact PACE:

T: +61(2) 9850 6842

E: pace.science@mq.edu.au

