

PROFESSIONAL EXPERIENCE REQUIREMENTS

ENGG454

SUBJECT OUTLINE + GUIDELINES

2020:

STUDENTS & SUPERVISORS



Faculty of Engineering and Information Sciences

PROFESSIONAL EXPERIENCE REQUIREMENTS

INTRODUCTION

As a requirement for the Bachelor of Engineering (Honours) suite of degrees, students are required to obtain at least *twelve (12) weeks of approved professional experience in a relevant industry* during their course and submit a report to a satisfactory standard (based on the grading sheet on page 14).

Students are highly encouraged to commence planning for their professional experience in their first year. It is preferable that candidates undertake this requirement during the summer recess and should be completed at the latest between the third and fourth years of the BE(Hons) degree.

Students should enrol in ENGG454 the session before undertaking 12 weeks full time or equivalent of professional experience.

Exemption from the Professional Experience requirement will be given to students who have passed one or more of the Professional Option subjects (refer to the professional experience coordinator for details).

Note: If a student is unable to obtain twelve weeks continuous employment, a number of shorter periods (totalling at least 12 weeks full time or equivalent) is acceptable. In this case one report covering all periods is required.

ENQUIRIES

All enquiries must be directed to the appropriate professional experience coordinator, whose name will be posted on the appropriate discipline notice board.

OBJECTIVES

The objectives of undertaking this experience is to:-

- Expose the student to an industrial/technical environment in order to appreciate the various activities associated with engineering in industry;
- Allow the student to observe and undertake tasks in practical aspects of investigation, design and construction of engineering works as a complement to theoretical studies;
- Instil confidence in the student to take up positions that require responsibility, motivation, decision making and communication with other people in the market place; and
- Facilitate recognition of the degree by professional bodies such as the Institution of Engineers, Australia.

EMPLOYMENT

It is the student's own responsibility to make every possible effort to obtain vacation employment by contacting various industries and companies, or by making applications in response to advertisements that appear in the news media or on Discipline or Faculty of Engineering and Information Sciences Notice Boards. Students are advised to seek vacation employment well in advance of recess periods.

APPLICATION FOR APPROVAL

It is a requirement that such employment be approved on the attached "Application for Approval of Professional Experience" form by the professional experience coordinator well in advance of taking up the

employment. Students may undertake approved vacation employment in another country, if they have the opportunity to do so.

EEO ONLINE

Students are required to complete EEO (Equal Employment Opportunity) module online <http://eoonlinev2.uow.edu.au/login.aspx> . An acknowledgement of completion is to be printed and included in the final report.

TRAINING

Students are advised to plan a program of training with the help and consent of a senior engineer of the organisation who should be a corporate member of the Institution of Engineers Australia, or equivalent, and who will act as a supervisor. The name and address of this supervisor will be included on the Approval form. If necessary, this supervisor will be contacted by the relevant Discipline to ascertain the progress of the student. Students must keep a weekly diary of various activities of the Professional Experience done over 12 weeks or equivalent.

REPORT

At the completion of the training, the student is required to produce and submit an engineering report. This report must be processed on A4 size sheets, around 4,000 words in length (word count on title page). You must produce a title page which includes your name, company name, supervisor/s name and project title, length of time you spent on the project. Illustrations and relevant photographs, computer programs and drawings may be added as an appendix to the main report. It is stressed that the report should be technical in nature and any relevant technical information must conform to SI Units.

The following information must be included in the Report:

- Title Page – providing student's name, student ID number, project name, word count and Professional Experience Coordinator's name;
- The Grading Sheet.
- Application for Approval form -detailing the organisation where the student worked, the position held, name and position of supervisor and period of employment;
- Description and duration of work on the project(s), significant aspects of the student's activity on the project(s) assigned by the work supervisor and the contribution of the student (provide evidence where possible);
- Student's personal evaluation of the organisation and the work force;
- Critical evaluation and comments by the student on the usefulness of the training and its relevance to university education;
- Safety and environmental procedures adhered to within the industry.
- Weekly diary of activities prepared in the duration of professional experience. The preferred location of this diary is in the Appendix of the PE Report. (Please note, this diary does not replace the 4000 word description/discussion of the professional experience in the PE Report)

APPROVAL OF REPORT BY INDUSTRY SUPERVISOR

A copy of the Report must be submitted to the work supervisor for comment.

It is a requirement that the employer complete a "Certificate of Service" (attached), which indicates the period of employment of the student and acknowledges that the report prepared by the student has been received and that it is a true representation of the activities undertaken. The employer will also be asked to rate the student according to technical ability, cooperation and general attitude.

This "Certificate of Service" (original copy) is to be attached to the back of the report submitted to the appropriate Discipline. This report is to be presented for any period of professional experience which is to be credited towards the student's 12 week requirement, e.g. if a student spends six weeks with one employer in one year and a further six weeks with another the next year, a report covering each period should be presented for approval to the appropriate industry supervisor. The approved reports should then be combined for the final presentation.

ASSESSMENT AND DUE DATES FOR SUBMISSION

Reports will be examined critically to evaluate the student's input and the results of the experience.

Assessment will be made on the basis of the content, presentation and employer's report. Unsatisfactory reports may result in the student being required to repeat the industrial training for 12 weeks (or equivalent) and the submission of an additional report, or the submission of an amended report. Reports are to be submitted to the Moodle site by midnight on Friday of Week 5 of the session.

Extension of submission date will be given only under exceptional circumstances and provided the student has obtained the consent of the coordinator prior to the required submission date. The coordinator may distribute reports to an appropriate academic for assessment. The coordinator will keep a record of submitted reports. The result (satisfactory or unsatisfactory) will then be recorded by the coordinator on SMP.

PROCEDURE FOR THE SUBMISSION AND RETURN OF ASSESSED WORK

Reports should be submitted via the ENGG454 moodle site;

WORK EXPERIENCE LIABILITY COVER

Attention is drawn to the link for 'work experience placement application for Public Liability' (page 7). Please refer to this for details of coverage.

Professional Experience Flowchart



DISTRIBUTION OF FORMS

WHAT STUDENTS NEED TO DO

You need to ENROL in ENGG 454 Professional Experience and choose the appropriate instance i.e. autumn or spring.

“Notice to Employer”

This form, when required by the employer, is to be completed and signed by the *Discipline Coordinator* and *presented to the Employer* upon completion.

“Application for Approval”

This form is to be completed, signed and submitted to the *Discipline Professional Experience Coordinator* who will authorise it and return it to the student to be included with the report.

“Employer’s Report – Certificate of Service”

This form is to be attached to the report and submitted to the *Discipline Coordinator*.

“Student External Work Placement Application/Insurance Form”

This form is to be completed by the student (only if not being paid for work), signed off by the discipline professional experience coordinator and submitted to EIS Central for processing. EIS Central will then forward this document to Financial Services. The form can be located at

<https://documents.uow.edu.au/content/groups/public/@web/@fin/@ins/documents/doc/uow016378.pdf>

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Professional Experience Requirement
for Engineering Students

To Whom it May Concern

Re: Name:

As a requirement for graduation, full-time engineering students are required to obtain at least twelve weeks of approved professional experience. This letter indicates that _____
is currently enrolled in the degree of Bachelor of Engineering in _____
and is in the _____ year of his/her course.

Yours sincerely,

Discipline Coordinator

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Application for Approval of
Professional Experience

Professional Experience Requirement for Engineering Students

Discipline: _____ Engineering

Name: _____ Student ID Number: _____

Degree Course: _____

Name and Address of Employer: _____

Name of Industry Supervisor: _____

Professional Qualifications: _____

Position: _____ Contact Phone No: _____

Type of Experience Expected: _____

Period of Employment: From: _____ To: _____ Weeks: _____

Signature of Student: _____ Date: _____

Approved on behalf of Employer (Supervisor)

Approved on behalf of Discipline (Coordinator)

Date: _____

Date: _____

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Employer's Report - Certificate of Service

Professional Experience Requirement for Engineering Students

Student Name: _____ Student ID Number: _____

Employer: _____

Address: _____

Supervisor: _____

Qualifications: _____

Contact Phone No: _____

Employer's Rating
(Please tick the appropriate
box)

Excellent	Average	Poor

Technical Ability:

Initiative:

Cooperation:

Standard of Work:

Conduct:

Comments: (In particular, is the report an accurate description of work undertaken?)

Signed on behalf of the organisation by

Name: _____

Position: _____

Signature: _____

Date: _____

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PROFESSIONAL EXPERIENCE GRADING SHEET FOR UNIVERSITY MARKERS (Industrial Experience for Full-Time Students) ([X] Included [] Not included)

Name:		Student No:						
Title Page:	Employer	<input type="checkbox"/>	Position Held	<input type="checkbox"/>	Period of Employment	<input type="checkbox"/>	No of weeks	<input type="checkbox"/>
	Supervisor	<input type="checkbox"/>	Position Held	<input type="checkbox"/>	Name	<input type="checkbox"/>	Phone	<input type="checkbox"/>
	FAX	<input type="checkbox"/>	Comments:					
Major activities of the organisation: <input type="checkbox"/>								
Comments:								
Details of experience areas: <input type="checkbox"/>								
For each project/activity undertaken provide comments as follows: What was undertaken? What did you learn from this? How does it correlate with your University work?								
Comments:								
Length (4000 words): <input type="checkbox"/>								
Word Count on Front Page <input type="checkbox"/>								
Comments:								
Certification by Supervisor: <input type="checkbox"/>								
Comments:								
Content: Satisfactory/Unsatisfactory								
<hr/>								
<hr/>								
Presentation: Satisfactory/Unsatisfactory								
<hr/>								
<hr/>								
Result: Satisfactory/Unsatisfactory-Resubmit/Unsatisfactory-Repeat								
Marker: _____ Date: / /								
<i>Please return the completed grading sheet to the Professional Experience Coordinator</i>								

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