

# School of Engineering and Technology

## CV82 Master of Engineering

### Mechanical Major

#### Energy and Fluids Stream OR Dynamics Stream

#### Part Time Study Plan – Term 1 2019 onwards

Year	Unit Code	Unit Name	CP	Requisites	Ad. Stand	Comp Term /Status
Year 1	ENEG20001	Australia Engineering Practice (+ Initial CPD Assessment)	12			T1 2019
	ENEM20003 *	Thermofluids Engineering Applications	12			T2 2019
Year 2	ENEM20004 *	Finite Element Methods for Engineering Design	12			T1 2020
	ENEM20002 * OR ENEM20001 *	Fluid Power Engineering and Control ( <i>Energy and Fluids stream</i> ) OR Advanced Modelling, Simulation, and Control of Dynamic Systems ( <i>Dynamics stream</i> )	12			T2 2020
Year 3	ENRP20001**	Engineering Research Project Planning	12	Pre-Req Completion of 36cp & Head of Course (or delegate) Approval		T1 2021
	ENEP20001	Internship Work Experience ( <i>See Notes on Page 5</i> )	12	Pre-Req Successful Completion of 36cp		T2 2021
Year 4	ENRP20003	Engineering Research Project Implementation	12	Pre-Req ENRP20001		T1 2022
	ENEP20002	Continuing Professional Development for Engineering Masters Students ( <i>See Notes on Page 4</i> )	0	Pre-Req Successful Completion of 48cp		T2 2022
		<i>Elective (See List on Page 3)</i>	12			T2 2022
<b>Total Units: 9</b>			<b>96</b>			

\*\* It is the responsibility of the student to contact the Unit Coordinator prior to enrolment in this unit with their desired topic of investigation

\*Compulsory Residential School

✓ Completed

CP = Credit Points

**DISCLAIMER:** This Part Time Study Plan is for DOMESTIC STUDENTS ONLY. International students are not permitted to study their course on a part time basis.

**DISCLAIMER:** If students wish to complete their full-time Internship as a stand-alone unit, study over the non-compulsory summer term (Term 3) is compulsory. Students who do not enroll over this Term 3 period, will be required to complete an additional unit alongside their Internship.

For information on the terminology used in the above study plan, please refer to the Glossary on the last page of this document.

## MORE DETAILS:

To satisfy the requirements for the award of CV82 Master of Engineering (Mechanical Major), students must complete 9 units (96 credit points).

### Recommended Study Schedule

Students should complete units in an order that is as close as possible to the recommended structure set out in this study plan. Students should concentrate on completing all first year units before moving on to second year units, and all second year units before moving on to third year units.

### Course Structure Requirements

In the CV82 Master of Engineering (Mechanical Major), students are required to complete the following course structure:

- 1 Core Unit
- 7 Mechanical Major Units
- 1 Elective Unit

### Course Duration Requirements

Full Time Duration                      2 years full time

Part Time Duration                      4 years part time

Please also note that if you fail units or take a Leave of Absence, your course duration and completion timeframe may be extended.

**Interim Awards**                              CV86 Graduate Certificate in Engineering  
CV87 Graduate Diploma of Engineering

**Exit Awards**                                      CV86 Graduate Certificate in Engineering  
CV87 Graduate Diploma of Engineering

### Deferment/Leave of Absence

Domestic students in the Master of Engineering degree are permitted to defer the initial offer of their degree for a maximum of 12 months before their offer is withdrawn. Furthermore, domestic students may also take an approved Leave of Absence (LOA) once they have commenced their course of study however only a maximum of 12 months can be granted without requesting further approval from the Head of Course.

You can apply for a deferment or LOA [here](#).

International students are not permitted to defer their initial offer or take a Leave of Absence unless otherwise discussed with their Home Campus.

## Credit Transfer

If you have undertaken study in the last ten years, or have relevant in-formal or non-formal learning, you may be eligible for credit towards your course. Please note that some courses have reduced timeframes within which prior study remains eligible for credit. Please refer to the [CQUni Handbook](#) for specific credit time limits relating to your course.

To submit an application for credit, please refer to the [Credit Calculator](#) or contact the Academic Pathways Team via their email [credit@cqu.edu.au](mailto:credit@cqu.edu.au). Further information about the credit process can also be found on the [Credit for Prior Learning](#) webpage.

Credit applications should be submitted at least four (4) weeks before the relevant term commences. Applications must be complete with all supporting documentation to be assessed by CQUniversity. CQUniversity cannot obtain documents from other institutions, organisations or individuals.

## Residential Schools

### **DISCLAIMER FOR INTERNATIONAL STUDENTS:**

Please note that **the below Residential School information generally does not apply to International Students** who are completing the CV82 Master of Engineering course.

**DISCLAIMER FOR DOMESTIC STUDENTS:** For those students enrolling in units by Distance (this **does not** apply to International Students), some of the above units have Compulsory Residential Schools which have been marked with an asterix (\*). Please refer to the CQUni Handbook for Residential School dates for further information.

Distance education students will be required to attend residential schools on Rockhampton Campus to promote development of unit learning outcomes. The units that require a compulsory residential school are marked as “Mixed Mode” under unit availabilities in the CQUni Handbook.

For information on residential schools, please refer to the CQUni Handbook:

<http://handbook.cqu.edu.au/resschools/index>.

Any further residential school enquiries should be directed to the relevant Unit Coordinator. Contact details for Unit Coordinators can be found on the relevant unit website, or unit profile: <http://nexus.cqu.edu.au/courseprofile> .

## Elective List

Students in the CV82 Master of Engineering (Mechanical Major) course **must** successfully complete either 1 or 2 Elective units (totalling 12 credit points) in order to meet their course requirements: Please see list below:

- ENER20001 Introduction to Railway Engineering (12cp unit)\*
- ENER20002 Mining Engineering Systems and Legislation (12cp unit)\*
- ENEG20003 Sustainability Studio (12cp unit) - Pre-Req Completion of 48cp in CV82
- PPMP20007 Project Management Concepts (6cp unit)
- PPMP20009 Leading Lean Projects (6cp unit)
- ENEM20001 Advanced Modelling, Simulation and Control of Dynamic Systems (12cp unit)\*
- ENEM20002 Fluid Power Engineering and Control (12cp unit)\*

## Mechanical Engineering Streams

In order to meet the requirements of the Mechanical Engineering Major, students are required to complete, either the *Energy and Fluids* or *Dynamics* stream as part of their course. Generally, students will be expected to make this decision prior to the commencement of their second term of study.

The individual units that make up these 2 streams are outlined below:

### Energy and Fluids Stream

- ENEM20003 Thermofluids Engineering Applications
- ENEM20004 Finite Element Methods for Engineering Design
- ENEM20002 Fluid Power Engineering and Control

### Dynamics Stream

- ENEM20003 Thermofluids Engineering Applications
- ENEM20004 Finite Element Methods for Engineering Design
- ENEM20001 Advanced Modelling, Simulation and Control of Dynamic Systems

## ENEP20002 Continuing Professional Development for Engineering Masters Students

All CV82 students are required to meet the requirements of the ENEP20002 Continuing Professional Development for Engineering Masters Students unit as outlined by the accrediting body, Engineers Australia.

All students must complete a total of 480 hours of Continuing Professional Development (CPD) and provide a portfolio of approved evidence which will need to be submitted throughout their studies in order to satisfy the required hours. Please refer back to the [CPD Moodle Site](#) for further information regarding your submission.

Students must complete the following criteria in order to meet the requirements of their CPD as outlined below:

- 360 hours (approx. 12 weeks) of a full-time Internship (provided by Australian Internships)
- 120 hours of approved coursework as identified by your Head of Course and Discipline Leads.
  - *For example: Guest Lectures, Site Visits, Projects, Work Experience, Internship, Other as advised by your Head of Course)*

If students believe that they have already successfully completed their 480 hours, you must submit the following documentation as soon as possible for assessment:

- Completion of equivalent work experience equating to 480 hours or more.
  - *Evidence includes; Reference Letter from a previous Employer, Payslips.*
- Completion of an equivalent Internship at undergraduate (Bachelor) level equating to 480 hours or more.
  - *Evidence includes; Transcripts, Internship Completion Report, Reference Letter from Host Organisation*

If the above assessment of CPD hours is approved by the School of Engineering and Technology, the Course Advice Team will be notified and students may be approved to complete a substitute Elective unit instead of the full-time Internship.

## **ENEP20001 Work Experience Internship**

This full-time Internship encompasses a minimum of 360 hours (approximately 12 weeks) of work experience that meets the remaining requirements of the above CPD unit, ENEP20002.

This unit provides you with the opportunity to apply skills and knowledge developed in your academic course to engineering practice. It will also develop new engineering practice skills and knowledge. You will document and reflect on work activities and relate them to Engineers Australia's Stage 1 Competency Standards and develop a strategic approach to personal growth in the workplace. You are required to undertake a minimum of 12 weeks of full time work placement, which may require relocation of accommodation to suit the placement. Students should contact the unit coordinator prior to enrolment in this unit to discuss placement requirements.

Students must ensure that they submit their application via the CV82 Internship Moodle site by the advised deadline.

For more information on the Internship opportunity, please contact the School of Engineering and Technology Internship Officer on [SETInternships@cqu.edu.au](mailto:SETInternships@cqu.edu.au).

Lastly, if students wish to complete their full-time Internship as a stand-alone unit they will be required to study the minimum of a single unit over the non-compulsory summer term (Term 3). See Study Plan on Page 1.

If you have any questions about your course, please contact the Course Advice Team: [spc@cqu.edu.au](mailto:spc@cqu.edu.au) or by visiting <http://handbook.cqu.edu.au/eforms/index> and filling out the 'Ask a Course Advisor' e-form.

**PLEASE CHECK THE CQUNI HANDBOOK FOR ALL TERM AVAILABILITIES AND PRE-REQUISITES AS THEY MAY CHANGE FROM YEAR TO YEAR <http://handbook.cqu.edu.au>**

## GLOSSARY

- **Course**: A course is the combination of units that contribute towards either a CQUniversity award qualification or non-award study.
- **Course Code**: A course code identifies the specific course a student may be studying at CQUniversity.
- **Unit**: A unit is the individual subject students must complete in order to graduate from their course.
- **Unit Code**: A unit code identifies a specific unit that a student is enrolled in under their course.
- **Pre-Requisite (Pre-Req) Unit**: A pre-req unit is a unit which students must pass before being allowed to enrol in the subsequent unit.
- **Co-Requisite (Co-Req) Unit**: A co-req unit is a unit that must be studied at the same time as another unit.
- **Anti-Requisite (Anti-Req) Unit**: An anti-req unit is an old unit that has been replaced by a new unit and students are not permitted to study the old unit.
- **Credit Points (CP)**: Credit Points are the numerical value of a unit which contributes to the total Credit Points for a course.
- **Core Unit**: A core unit is a compulsory unit that a student must study to meet the requirements of their course.
- **Elective Unit**: An elective unit is a unit within a course that is not compulsory and students may have a choice in what unit they study, provided it meets the elective requirements of their course.
- **Major**: A major is a specific area within a course where a student specialises in and is normally made up of 8 units for undergraduate courses, and 4 units for postgraduate courses. Not all courses have majors.
- **Double Major**: A double major is where students specialise in 2 areas of study and is normally made up of 16 units. Double majors are normally only available in undergraduate courses.
- **Minor**: Like a major, a minor is a specific area within a course where a student specialises and is normally made up of 4 units.
- **Term**: A specified period of time for higher education units in which teaching, learning and assessment occurs. CQUniversity offers 3 Academic Terms per year: Term 1, Term 2 and Term 3.