School of Engineering and Technology

CG21 Bachelor of Engineering Technology (Mechanical)
Full Time Course Planner – Tern 2 2019 onwards

Year	Unit Code	Unit Name	CP	Requisites	Adv. Stand	Comp Term /Status
Year 1	**ENEG11008****	Materials for Engineers	6			T2 2019
	ENEG11009**	Fundamentals of Energy and Electricity	6			T2 2019
	MATH11218	Applied Mathematics	6	Anti-Req: MATH12223 or MATH12224		T2 2019
	ENEG11006	Engineering Statics	6			T3 2019
	MATH11219	Applied Calculus	6	Pre-Req MATH11218		T3 2019
	ENEG11005**	Fundamentals of Professional Engineering	12			T1 2020
	ENEM12009	Structural Mechanics	6	Pre-Req Refer To Handbook		T1 2020
	MATH12222	Advanced Mathematical Applications	6	Pre-Req MATH11219		T1 2020
Year 2	**ENEG11007**	Engineering Industry Project Investigation	6	Pre-Req ENEG11005 or ENEG11001		T2 2020
	ENEM13018 #	Materials and Manufacturing	6	Pre-Req Refer To Handbook		T2 2020
	ENEM12006**	Fluid Mechanics	6	Pre-Req Refer To Handbook		T2 2020
	MATH12225	Applied Computational Modelling	6	Pre-Req MATH12222 or MATH13218		T2 2020
	ENEG12007	Design and Project Management	6	Pre-Req Refer To Handbook		T1 2021
		See Plug In Choice (Page 3)				T1 2021
	ENEM12008**	Solid Materials Handling	6	Pre-Req Refer To Handbook		T1 2021
	ENEM12010	Engineering Dynamics	6	Pre-Req ENEG11006 and MATH11219		T1 2021
Year 3		*See Plug In Choice (Page 3)*				T2 2021
	ENTG13002	Technology Project Planning	6	COND: completion of all prior units in nominal course structure – to be checked by HOC or Unit Coord. prior to enrolment.		T2 2021
		See Plug In Choice (Page 3)				T2 2021
		See Plug In Choice (Page 3)				T2 2021
	ENTG13001	Technology Project Implementation	6	Pre-Req ENTG13002		T1 2022
		See Plug In Choice (Page 3)				T1 2022
		See Plug In Choice (Page 3)				T1 2022
Total Units:			144			

** Available over Term 3
* Compulsory Residential School
# Optional Residential School
^ Alternate Years
✓ Completed
CP = Credit Points

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

Important Note: This Course Planner has no formal or legal status but is used to assist students in planning their course.
Students should refer to the official University database and/or University transcripts to ensure they are meeting course requirements.
Last Updated: 08/01/2019

MORE DETAILS:

To satisfy the requirements for the award of CG21 Bachelor of Engineering Technology, students must complete 22 units (144 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 course planner. 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 CG21 Bachelor of Engineering Technology, students are required to complete the following course structure:

- 7 Core Units
- 10 Major Units
- 5 Plug-In Units

Course Duration Requirements

Full Time Duration	3 years full time
Part Time Duration	6 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	Interim Awards do not exist for this course
Exit Awards	Exit Awards do not exist for this course

Professional Accreditation

This course is accredited by Engineers Australia.

Deferment/Leave of Absence

Domestic students in the Bachelor of Engineering Technology 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. 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

Students studying via Online mode may be required to attend compulsory on-campus residential schools and have been marked with an asterisk (*) in the above course planner.

The units that require a compulsory residential school must be enrolled in as "Mixed Mode" under the unit availabilities in MyCentre.

For more information on the various units containing residential schools, please refer to the following link in the CQUni Handbook: https://handbook.cqu.edu.au/resschools/index or contact the Unit Coordinator directly.

Unit Coordinator contact information can be found via the Unit Profiles in the following link: https://my-courses.cqu.edu.au/pub/profiles/search

Pre-Approved Electives

Below is a list of pre-approved elective choices for students to complete:

- BLAR12038 Building Industry Contracts (available Term 1)
- BLAR13047 Construction Economics 1 (available Term 1)
- BLAR13035 Building Contract Administration (available Term 2)
- BLAR13040 Building Life Cycle Maintenance (available Term 2)
- BLAR11039 Building Law & Regulations (available Term 3)
- ENEM13012 Maintenance Engineering (available Term 1)
- ENEG13001 Humanitarian Engineering Project (available Term 3)
- ENTC13011 Environmental Engineering (available Term 2)
- ENEM13012 Maintenance Engineering (available Term 1)
- ENEG13001 Humanitarian Engineering Project (available Term 3)

Please Note: Students who want to study a unit outside the pre-approved lists following for their relevant discipline will need to contact their Discipline Lead to seek approval to study the unit as one of their electives.

- Undergraduate Level One Unit Codes begin with a "11" (e.g. MRKT11029)
- Undergraduate Advanced Level Unit Codes begin with either a "12", "13", or "19" (e.g. MGMT19128)

Plug-In Choices

Mechanical Design Plug-in Choices (36 units of Credit)			*Requisites*
Term 2	ENEM13015	Design of Machine Elements	Pre-Req Refer To Handbook
Term 2	ENEM13012	Maintenance Engineering	Pre-Req Refer To Handbook
+++	**Select 1 of the following:**		
Term 2 & 3	ENEM14015	Dynamic System Modelling and Control (12)	Pre-Req Refer To Handbook
Term 1	ENEM14016	Fluid Machinery (12)	Pre-Req Refer To Handbook
And			
+++		Two approved electives	

Mechanical Energy Plug-in Choices (36 units of Credit)			*Requisites*
Term 2	ENEM13014	Thermodynamics	Pre-Req Refer to Handbook
	Select 1 of the following:		
No Term	ENEM13017	Heat Transfer Engineering	Pre-Req Refer To Handbook
Term 1	ENEM14011	Energy Conversion	Pre-Req Refer To Handbook
+++	**Select 1 of the following:**		
Term 1	ENEM14014	Capstone Thermofluid Engineering	Pre-Req Refer To Handbook
Term 1	ENEM14016	Fluid Machinery (12)	Pre-Req Refer To Handbook
And			
+++		Two approved electives	

Practicum/Work Integrated Learning (WIL) Requirements

Students are required to complete a total of 6 weeks industry practice.

Engineering practice (work experience) and report

An integral part of the course, and a requirement of Engineers Australia for course accreditation, is a minimum of six weeks of approved work experience in an engineering environment.

As proof of work experience, students will be required to submit a formal report indicating the type of work done, the degree of responsibility involved, the person(s) to whom the student was directly responsible, and the general activities of the employer. This report should be certified by the employer. Refer to 'Engineering Practice' document located here for further information on work experience documentation required.

You should ensure that you submit your report in a timely manner prior to your expected graduation date. You will be assessed for eligibility to graduate immediately following Certification of Grades in your final Term of study. Please allow a 2 week turn-around time for assessment of your report. Failure to meet this deadline may result in a delay to your graduation date.

Please note: That even if you are working full-time in industry whilst studying, you must still submit a report. However, if you are carrying out appropriate engineering work, you can use your normal employment as the basis of your report.

If you have any questions about your course, please contact the Course Advice Team: 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.