



THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

CREATE CHANGE

Renewable Energy Engineering (with Mechanical/Chemical Specialisation)

Master of Engineering



Recommended Study Plan

This study plan is a guide only for students commencing the Master of Engineering (Renewable Energy Engineering) in 2020. Please note that all course selections must adhere to the program course list outlined at [UQ Courses and Programs](#). If you have any questions or concerns regarding your course selections, please speak with an [Academic Advisor](#) in the School of Mechanical and Mining Engineering.

Semester 1 Commencement

SEM		YEAR 1		
Sem 1 Feb	ENGG7901 Prof. Engineering & the Business Environment: Global Practice	Elective Part D	Elective Part D or Part F	ENGY4000 Energy Systems
Sem 2 July	ENGG7902 Engineering Innovation & Leadership	Elective Part D	ENGY7210 Frontiers in Renewable Energy Technologies	METR7203 Control Engineering 2 or CHEE4302 Electrochemistry & Corrosion
SEM		YEAR 2		
Sem 1 Feb	ENGG7281 Engineering Project 8A		ENGY7003 Low Emission Technologies and Supply Systems	MATE7016 Materials for Energy Conversion and Storage
Sem 2 July			ENGY7117 Energy Markets, Law & Policy	CHEE7601 Nanomaterials

Part D Electives

[CHEE3005](#) Reaction Engineering
[CHEE3007](#) Process Modelling & Dynamics
[CHEE3020](#) Process Systems Analysis
[CHEE4009](#) Transport Phenomena
[CHEE4060](#) Process & Control System Synthesis
[CHEE7111](#) Advanced Process and System Modelling
[CHEE7112](#) Integrated Safety Design and Management
[CHEE7113](#) Whole of Process Optimisation and Control
[CHEE7501](#) Advanced Water Technology and Management
[CIVL3141](#) Hydrology and Hydrological Risk
[CIVL3150](#) Modelling of Environmental Systems
[CIVL3210](#) Geotechnical Engineering
[CIVL3340](#) Structural Analysis
[CIVL3350](#) Integrated Structural Design
[CIVL4110](#) Coastal & Estuarine Engineering
[CIVL4340](#) Wind Engineering
[CIVL4140](#) Contaminant Transport Modelling
[CIVL4160](#) Advanced Fluid Mechanics
[CIVL4170](#) Environmental Risk Assessment and Management
[CIVL4180](#) Sustainable Built Environment
[CIVL4270](#) Geotechnical Investigation & Testing
[CIVL4280](#) Advanced Rock Mechanics
[CIVL4332](#) Advanced Structural Analysis
[CIVL4333](#) Advanced Concrete Design
[CIVL4522](#) Analytical Methods for the Design of Construction Operations
[CIVL7155](#) Environmental Fluid Mechanics - Modelling Applications
[CIVL7131](#) Urban Hydrology
[CIVL7135](#) Advanced Environmental Monitoring Technologies for Civil Engineers
[CIVL7170](#) Pollution Control in Cities
[CIVL7225](#) Dam and Embankment Engineering
[CIVL7315](#) Advanced Concrete Structures and Concrete Technology
[CIVL7360](#) Computational Design and Digital Workflows
[COMS7305](#) Advanced Microwave Engineering
[COMS7307](#) Advanced Photonics
[COMS7309](#) Computational Techniques in Electromagnetics
[CSSE3010](#) Embedded Systems Design & Interfacing
[ELEC7051](#) Transformer Technology Design and Operation
[ELEC3300](#) Electrical Energy Conversion & Utilisation
[ELEC7310](#) Electricity Market Operation and Security
[ELEC4302](#) Power System Protection
[ELEC3400](#) Electronic Circuits
[ELEC4320](#) Modern Asset Management and Condition Monitoring in Power System
[ENGG7811](#) Research Methods
[ENGG4800](#) Project Management
[ENGG7302](#) Advanced Computational Techniques in Engineering
[ENGG7500](#) Geoscience for Petroleum Engineering
[ENGG7502](#) Reservoir Engineering

[ENGG7504](#) Reservoir Simulation
[ENGG7506](#) Drilling Engineering
[ENGG7507](#) Petroleum Project Economics and Decision Making
[ENGY7004](#) Energy Investment and Finance
[ENGY2200](#) Energy, Strategy, Innovation, and Entrepreneurship
[ENGY7301](#) Energy Efficiency and Transport
[MATE7013](#) Advanced Manufacturing
[MATE7015](#) Additive Manufacturing
[MECH3410](#) Fluid Mechanics
[MECH7101](#) Design of Experiments
[MECH7480](#) Computational Fluid Dynamics
[WATR7103](#) Advanced Wastewater and Biosolids Treatment
[WATR7104](#) Sewer Networks-Design, Operation and Maintenance
[WATR7106](#) Emerging Issues in the Urban Water Cycle and Public Health
[WATR7107](#) Wastewater Modelling and Control
[WATR7108](#) Advanced Unit Operations in Water Management
[WATR7109](#) Drinking Water Supply: Source, Treatment and Distribution

Part F Non-Engineering ME Electives

[ECON7000](#) Foundations in Microeconomics
[ECON7540](#) Economics of Innovation & Entrepreneurship
[ECON7730](#) Natural Resource Economics
[ECON7760](#) The Economics of Climate Change
[EIBS7300](#) Creativity for Innovation and Design Thinking
[EIBS7301](#) Idea Management
[EIBS7302](#) Evidence Based Innovation: From Business Model to Business Plan
[EIBS7303](#) Building Innovation Capability
[EIBS7304](#) Entrepreneurial Leadership
[IBUS7302](#) Operating International Business
[IBUS7316](#) International Supply Chains
[IBUS7322](#) International Service Operations Management
[LAWS7805](#) Natural Resources Law
[MGTS7303](#) Principles of Strategic Management
[MGTS7308](#) Social Enterprises and Not for Profits
[MGTS7309](#) Decision Making & Reporting for Sustainability
[MGTS7310](#) Business Negotiation
[TIMS7301](#) Principles of Entrepreneurship
[TIMS7317](#) Corporate Sustainability
[TIMS7323](#) Bio-Entrepreneurship and Innovation
[TIMS7326](#) Management of Intellectual Property
[TIMS7328](#) Strategies for Business Sustainability and Innovation
[TIMS7331](#) Entrepreneurship Incubator

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Semester 2 Commencement

SEM YEAR 1				
Sem 2 July	ENGG7902 Engineering Innovation & Leadership	Elective Part D	ENGY7210 Frontiers in Renewable Energy Technologies	METR7203 Control Engineering 2 or CHEE4302 Electrochemistry & Corrosion
Sem 1 Feb	ENGG7901 Prof. Engineering & the Business Environment: Global Practice	Elective Part D	Elective Part D or Part F	ENGY4000 Energy Systems
SEM YEAR 2				
Sem 2 July	ENGG7282 Engineering Project 8A		ENGY7117 Energy Markets, Law & Policy	CHEE7601 Nanomaterials
Sem 1 Feb			ENGY7003 Low Emission Technologies and Supply Systems	MATE7016 Materials for Energy Conversion and Storage

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