School of Electrical Engineering & Telecommunications

Faculty of Engineering

UNSW Sydney

Postgraduate by Coursework Programs

8338 - Master of Engineering Science (2 years)
5341 – Graduate Diploma of Engineering Science (1 year)

The School of Electrical Engineering and Telecommunications offer the following areas of Specialisations (PLANS) for each of the above programs:

Electrical Engineering	ELECBS8338 and ELECQS5341
Energy Systems	ELECIS8338 and ELECRS5341
Systems and Control	ELECPS8338 only
Telecommunications	TELEBS8338 and TELECS5341
Satellite Systems	ELECOS8338 only

Postgraduate by Coursework Academic Coordinator

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Postgraduate by coursework program guideline – School of Electrical Engineering & Telecommunications

Master of Engineering Science (2 years)   Graduate Diploma of Engineering Science

GSOE9360 Professional Discourse in Engineering
GSOE9820 Project Management OR CVEN9731 Project Management Framework
GSOE9810 Quality in Engineering
SOLA9103 RE System Modelling & Analysis
MANF6860 Strategic Manufacturing Management
SOLA9004 Sustainable and Renewable Energy
CVEN9892 Sustainability Assessment 2

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Postgraduate by coursework program guideline – School of Electrical Engineering & Telecommunications

Master of Engineering Science (2 years)
Program code: 8338
Specialisation: ELECIS8338 (Energy Systems)

Students choose		UOC
Disciplinary Courses	4 from List A	24
Advance Disciplinary	4 from List B	24
Project Report A *	Elec9771	6
Project Report B **	Elec9772	6
Research-related	Gsoe9010 or 9011 or 9220	6
ETM course	1 from List C	6
Electives (up to 4 courses)	From Lists A/ B/ C	24
Total UOC		96

Graduate Diploma of Engineering Science (1 year)
Program code: 5341
Specialisation: ELECRS5341 (Energy Systems)

Students choose		UOC
Disciplinary Courses	3 from List A	18
Advance Disciplinary	3 from List B	18
Electives (up to 2 courses)	From Lists A/ B/ C	12
Total UOC		48

*The Project Report A must be taken after completion of 48 UOC.
**The Project Report B must be taken immediately after Project Report A.

List A - Disciplinary Courses:

Elec4602 Microelectronic Design and Technology
Elec4611 Power System Equipment
Elec4612 Power System Analysis
Elec4613 Electrical Drive Systems
Elec4614 Power Electronics
Elec4621 Advanced Digital Signal Processing
Elec4631 Continue-Time Control Systems Design
Phtn4661 Optical Circuits and Fibres
Tele4652 Mobile & Satellite Communications Systems

List B – Advance Disciplinary Courses:

Elec4617 Power System Protection
Elec9711 Power Electronics for Renewable Energy
Elec9712 High Voltage Systems
Elec9713 Industrial and Commercial Power
Elec9714 Electricity Industry Planning
Elec9715 Electricity Industry Operation
Elec9716 Electrical Safety
Elec9719 Real-Time Digital simulations
Elec9741 Electrical Engineering Data Science
Gsoe9141 Smart Grids and Networks
Gsoe9142 Energy Efficient Lighting & Equipment

List C – Engineering Technical Management (ETM) courses: (no more than 24uoc of ETM courses to be taken)

GSOE9210 Engineering Decision Structures
GSOE9830 Engineering Economi5 (e)6.7 (b8w 14.0417 0 T-3.3 (gh)-0.7 (t)-5 (G)-5 Tw 0.20-0.7 (j)) 0 Tc 0 &8c 0u8 (g) 0eTc 0 Twc 0

Postgraduate by coursework program guideline – School of Electrical Engineering & Telecommunications

Master of Engineering Science (2 years) Graduate Diploma of Engineering Science (1 year)
Program code: 8338   Program code: 5341
Specialisation: ELECPS8338 (Systems & Control)

List C – Engineering Technical Management (ETM) courses: (no more than 24uoc of ETM courses to be taken)

GSOE9210 Engineering Decision Structures

GSOE9830 Engineering Economics OR CVEN9701 Engineering Economics
and Financial Management OR CEIC8204 Topics in Business Management in Chemical Engineering

GSOE9712 Engineering Statistics and Experimental Design

CVEN9888 Environmental Management

GSOE9510 Ethics & Leadership in Engineering

MANF9400 Industrial Management

GSOE9445 Entrepreneurial Engineering

MATH5846 Introduction to Probability and Stochastic Processes

GSOE9340 Life Cycle Engineering OR SOLA9015 Life Cycle Assessment

GSOE9017 Managing Energy Efficiency OR GSOE9121 Operational Energy Efficiency

MATH3156 Optimization

COMP9021 Principles of Programming

MANF9472 Production Planning and Control

GSOE9360 Professional Discourse in Engineering

GSOE9820 Project Management OR CVEN9731 Project Management Framework

GSOE9810 Quality in Engineering

SOLA9103 RE System Modelling & Analysis

MANF6860 Strategic Manufacturing Management

SOLA9004 Sustainable and Renewable Energy

CVEN9892 Sustainability Assessment

GSOE9143 Sustainable Electrical Energy Technology Assessment

SOLA5056 Sustainable Energy in Developing Countries

GSOE9997 Engineering Work Related Learning for Postgraduates

Notes:
Each course worth 6 units of credit (6 uoc).

Not all courses are offered in both sessions. You need to view the timetable website to find out each course's availability in each session:

https://www.engineering.unsw.edu.au/electrical-engineering/timetables

Courses exemption: Students may apply for some courses exemptions. Students with a four year honours degree (for example in Electrical Engineering) may obtain a maximum of 48 UOC of exemptions.

Postgraduate by coursework program guideline – School of Electrical Engineering & Telecommunications

Master of Engineering Science (2 years)
Program code: 8338
Specialisation: ELECOS8338 (Satellite Systems EysteSpßI

Graduate Diploma of Engineering Science (1 year)
Program code: 5341

GSOE9360 Professional Discourse in Engineering

GSOE9820 Project Management OR CVEN9731 Project Management Framework

GSOE9810 Quality in Engineering

SOLA9103 RE System Modelling & Analysis

MANF6860 Strategic Manufacturing Management

SOLA9004 Sustainable and Renewable Energy

CVEN9892 Sustainability Assessment

GSOE9143 Sustainable Electrical Energy Technology Assessment

SOLA5056 Sustainable Energy in Developing Countries

GSOE9997 Engineering Work Related Learning for Postgraduates

Notes:
Each course worth 6 units of credit (6 uoc).

Not all courses are offered in both sessions. You need to view the timetable website to find out each course's availability in each session:

https://www.engineering.unsw.edu.au/electrical-engineering/timetables

Courses exemption: Students may apply for some courses exemptions. Students with a four year honours degree