



PennState
College of Engineering

**MECHANICAL AND
NUCLEAR ENGINEERING**

ME Study Abroad Curriculum for The University of Melbourne



THE UNIVERSITY OF
MELBOURNE

1 st Semester			2 nd Semester		
ENGL 15/30	English	3	Econ 2/4	Economics	3
FYS	1 st year Seminar	1	CHEM 112	Chemical Principles 2	3
EDSGN 100	Intro to Engineering Design	3	GA,GH,GS	General Education	3
GA,GH,GS	General Education	3	PHYS 211	Mechanics	4
CHEM 110	Chemical Principles 1	3	MATH 141	Calculus 2	4
MATH 140	Calculus 1	4			
	Total	17		Total	17

3 rd Semester			4 th Semester		
CMPSC 200	MATLAB	3	EMCH 212	Dynamics	3
CAS 100	Speech Communications	3	EMCH 213	Strength of Materials	3
EMCH 211	Statics	3	GHA	Health & Physical Activity	1.5
MATH 220	Matrices	2	ME 300	Thermodynamics	3
MATH 231	Calculus 3	2	MATH 251	Differential Equations	4
PHYS 212	Electricity & Magnetism	4	PHYS 214	Wave and Quantum Physics	2
	Total	17		Total	16.5

5 th Semester			6 th Semester – University of Melbourne		
EE 212	Electronic Systems	3	MCEN 90012 ¹	Design & Manufacturing I	12.5
ME 370	Mechanical Vibrations	3	ETE	Engineering Tech Elective	12.5
EMCH 315	Mech Materials Response	2	ETE	Engineering Tech Elective	12.5
ME 320	Fluid Dynamics	3	GA,GH,GS	General Education	12.5
ME 360	Machine Components	3	GTE ⁴	General Tech Elective	
MATSE 259	Properties of Eng Materials	3			
	Total	17		Melbourne Units	50

¹ MCEN90012 (ME340); ² MCEN 900xx course (found here) may be substituted for ETEs

7 th Semester			8 th Semester		
ME 410	Heat Transfer	3	ME 440/441	Capstone Design Project	3
ENGL 202C	Technical Writing	3	METE	ME Tech Elective	3
ME 345	Instrumentation & Statistics	4	GA,GH,GS	General Education	3
IE 312	Manufacturing Processes	3	ETE	Engineering Tech Elective	3
GA,GH,GS	General Education	3	ME Lab	Lab	1
			ME Lab	Lab	1
			GHA	Health & Physical Activity	1.5
	Total	16		Total	15.5