

ME Study Abroad Curriculum for The University of Southampton



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 Southampton		
EE 212	Electronic Systems	3	FEEG 2002 ¹	Mechanics, Machines, Vibration	15
GA,GH,GS	General Education	3	SESM 3029 ²	Engr. Design w/ Management	15
GHA	Health & Physical Activity	1.5	SESM 3032 ³	Heat Transfer and Applications	15
ME 320	Fluid Dynamics	3	GA,GH,GS	General Education	15
ME 345	Instrumentation & Statistics	4			
E MCH 315	Mch. Response of Eng. Mat'l	2			
	Total	16.5		Southampton CATS Points	60

 $^1\text{FEEG}$ 2002 (M E 370); $^2\text{SESM3029}$ (M E 340); $^3\text{SESM}$ 3032 (M E 410); 45 Southampton CATS course points transfer as 12 Penn State credits. Students receive program credit for ME340, ME370, ME410 and an Engineering Technical Elective (ETE).

7 th Semester			8 th Semester		
ENGL 202C	Technical Writing	3	METE	ME Tech Elective	3
IE 312	Manufacturing Processes	3	GA,GH,GS	General Education	3
MATSE 259	Properties of Eng Materials	3	GTE	General Tech Elective	3
ME 450	Dynamic System Modeling	3	ME 440/441	Capstone Design Project	3
ME Lab	Lab	1	ME Lab	Lab	1
ME 360	Machine Components	3	ETE	Engineering Tech Elective	3
	Total	16		Total	16