Engineering Science- Engineering Management Specialization Curriculum

Level	Freshman Year						
Semester	Fall Term			Spring Term			
	Course Code	Description	Units	Course Code	Description	Units	
	CHE201	General Chemistry	1	MAT128	Calculus B	1	
	MAT127	Calculus A	1	PHY202	General Physics II	1	
	PHY201	General Physics I	1	College Core I	Literary, Visual or Performing Arts	1	
	FYS	First Year Seminar	1	CSC217 or CSC220	Computer Science	1	
	ENG144	Fundamentals of Engineering I	0.5	ENG145	Intro. to Eng. Science and Design	0.5	
	ENG095	Introduction to Engineering	0				
			4.5			**4.5**	

Level	Sophomore Year						
Semester	Fall			Spring			
	Course Code	Description	Units	Course Code	Description	Units	
	ENG212	Circuit Analysis	1	MAT229	Multivariable Calculus	1	
	ENG232	Manufacturing Processes	1	ENG214	Circuit Analysis Laboratory	0.5	
	ENG272	Advanced Engineering Maths I	1	ECO101 or 102	Principles of Micro or Macro-economics	1	
	ENG152	Engineering Materials Science	1	MEC251	Strength of Materials	1	
	ENG222	Statics	1	ENG262	Dynamics	1	
			5			**4.5**	

Level	Junior Year						
Semester	Fall			Spring			
	Course Code	Description	Units	Course Code	Description	Units	
	Engineering Elective*	Engineering Elective I	1	FIN201	Fundamentals of Financial Methods	0.5	
	ENG322	Thermodynamics I	1	Engineering Elective*	Engineering Elective II	1	
	ENG342	Advanced Eng. Maths II	1	ENG352	Control Systems	1	
	MKT201	Marketing Principles	0.5	ENG348	Systems Engineering and Economics	1	
	MGT201	Managing in the 21st Century	0.5	ENG094	Engineering Seminar IV	0	
	ENG093	Engineering Seminar III	0	IDS252	Society, Ethics and Technology	1	
			4			**4.5**	

Level	Senior Year						
Semester	Fall			Spring			
	Course Code	Description	Units	Course Code	Description	Units	
	ENG354	Control Systems Laboratory	0.5	ENG452	Project Management	1	
	ACC201	Financial Accounting	1	ELC/MEC496*	Senior Design Project II	0.5	
	ELC/MEC495*	Senior Design Project I	0.5	College Core III	Social Justice/Multidisciplinary Perspective	1	
	Engineering Elective*	Engineering Elective III	1	BUS200	Legal Regulatory Environment	1	
	College Core II	Historical Perspective	1	College Core IV	Social Justice/Multidisciplinary Perspective	1	
	ENG099	Senior Profesional Seminar	0				
			4			**4.5**	
						35.5	

Technical Electives			Preq		Legend	
I	MEC311 or	Mechanical Design Analysis I	MEC251		Maths and Science Core	
	ENG312	Digital Circuits and Microproce	CSC217, ENG212		Engineering Science Core	
II	ELC251 or	Electronics	ENG212, ENG272		Management/Business Core	
	MEC361	Fluid Mechanics	ENG222, ENG272		General Engineering	
III	Other	Technical Elective			Computer Science	
					Others	

Technical Electives-Other			
	ELC321	Signals and Systems	ENG212
	ELC361	Engineering Electromagnetics	ENG212, MAT229
	ELC411	Embedded System	ELC251, ENG312
	ELC451	Computer Architecture	ENG312
	ELC483/MEC483	Robotics	ENG272
	MEC343	Biomechanics	MEC251
	MEC371	Thermodynamics II	ENG322
	MEC421	Kinematics and Mechanism	CSC217, ENG262
	ELC/MEC470	Special Topics (By advisement)	
	ELC/MEC391	Independent Study	

* Engineering Elective- Students planning to enroll in MEC495/496 must follow the sequence MEC311-MEC361 for technical elective.

* Engineering Elective- Students planning to enroll in ELC495/496 must follow the sequence ENG312-ELC251 for technical elective.