INDUSTRIAL AND SYSTEMS ENGINEERING - Class of 2014

Total Credits =

122

Freshman Year Fall Semester

Course Code	Description	Cr	
CHM 101	General Chemistry I Lec [ge-n]	3	
CHM 102	General Chemistry I Lab	1	
EGR 105	Foundations of Engineering I	1	
MTH 141	Intro Calculus w/Analytic Geom [GE-MQ]	4	
PHY 203	Elementary Physics I Lect [GE-N]	3	
PHY 273	Elementary Physics I Lab [GE-N]	1	
	General Education Elective*	3	
		40	

Freshman Year Spring Semester

Course Code	Description	Cr	
ECN 201	Principles of Microeconomics [GE-S]	3	
EGR 106	Foundations of Engineering II	2	
MTH 142	Intermed Calculus w/Analytic Geom	4	
PHY 204	Elementary Physics II Lec [GE-N]	3	
PHY 274	Elementary Physics II Lab [GE-N]	1	
	General Education Elective*	3	
		16	

Sophomore Year Fall Semester

Course Code	Description	Cr	
ISE 240	Mfg Processes and Systems	3	
ISE 241	Mfg Processes and Systems Laboratory	1	
MCE 201	Engineering Graphics	3	
MCE 262	Statics	3	
MTH 243	Calculus for Functions of Several Vars	3	
PHY 205	Elementary Physics I Lec [GE-N]	3	
PHY 275	Elementary Physics I Lab [GE-N]	1	
		17	

Sophomore Year Spring Semester

	<u> </u>		
Course Code	Description	Cr	
CVE 220	Mechanics of Materials	3	
ELE 220	Passive and Active Circuits	3	
ISE 220	Indust and Systems Engrg Seminar**	1	
MCE 263	Dynamics	3	
MTH 362 or MTH 244	Advanced Engineering Mathematics I <i>or</i> Differential Equations	3	
	General Education Elective*	3	
		16	

Junior Year Fall Semester

Course Code	Description	Cr	
CHE 333	Engineering Materials	3	
EGR 316 or PHL 212	Engineering Ethics or Ethics [GE-L]	3	
ISE 325	Computer Tools for Engineers	3	
ISE 411	Probability and Statistics for Engineers	3	
ISE 432	Deterministic Systems	3	
		15	

Junior Year Spring Semester

Course Code	Description	Cr	
BUS 201	Financial Accounting	3	
ISE 404	Engineering Economy and Proj Planning	3	
ISE 412	Statistical Methods and Quality Systems	3	
ISE 433	Stochastic Systems	3	
	General Education Elective*	3	
		15	

Senior Year Fall Semester

Course Code	Description	Cr	
ISE 401	ISE Capstone Design I	3	
ISE 451	Production System Design	3	
	Professional Elective***	3	
	Professional Elective***	3	
	Free Elective	3	
		15	

Senior Year Spring Semester

Course Code	Description	Cr	
ISE 402	ISE Capstone Design II	3	
	Professional Elective***	3	
	Professional Elective***	3	
	General Education Elective*	3	
		12	

- * Note the following specific requirements and restrictions for General Education [GE] electives:
 - -Refer to specific Industrial and Systems Engineering General Education course requirements (see 2014 ISE Check Sheet).
 - -[GE-MQ] Additional [GE-MQ] electives are restricted to MTH 111 (only if taken prior to passing MTH 141), BUS 111, and STA 220 only.
 - -[GE-ECw] Must take at least one General Education course in writing [GE-ECw].
- -[GE-ECw] Can only take *one* of the following 100-level writing courses for General Education credit [GE-ECw]: WRT 104, WRT 105, WRT 106.
- -Recommend ECN 202 [GE-S] as a General Education Elective choice.
- ** Can be taken in either Freshman, Sophomore, or Junior year.
- *** Refer to department approved course list.

INDUSTRIAL AND SYSTEMS ENGINEERING - Class of 2014

GENERAL EDUCATION [Gen Ed] REQUIREMENTS (Effective Fall 2010)

Please carefully note the following regarding completion of your degree requirements.

- 1) The Gen Ed requirements shown below are *not retroactive* to any previous catalog years.
- *** This means that if you choose to follow the Gen Ed requirements shown, you are <u>required</u> to follow any and all other changes to the required courses for your major (see 2014 Curriculum Sheet and Check Sheet on the COE web page).
- 2) If you change engineering majors, then you are <u>required</u> follow the Gen Ed requirements for that major. *These requirements vary by major* (see 2014 Curriculum Sheet and Check Sheet on the COE web page).
- 3) If you are considering following the new Gen Ed requirements shown, you <u>must</u> meet with your advisor to discuss the implications this will have on your degree progress.
- **4)** You <u>must</u> also notify the Associate Dean of Engineering (102 Bliss Hall) <u>once you decide</u> that you want to to follow the revised Gen Ed requirements.

			GENE	RAL E	EDUCAT	ION [GI	E] COURSES				
	BREADTH At least one course in <i>each</i> of the Gen Ed Areas					DEPTH At least one additional course in 3 different Gen Ed Areas Remainder are taken in any Gen Ed Area/Areas				as	
Sem	Course	Cr	Grade	QP	Note	Sem	Course	Cr	Grade	QP	Note
	**English Communication	-Writin	g [GE-ECv	v]			Natural Sciences	[GE-N]			
	WRT	3					Satisfied by Required Courses	12			
	Mathematical and Quantitative	e Reas	oning [GE	C-MQ]		**	Two additional courses from: EC	:/ECw;	MQ; A;	FC; L	; S
	Satisfied by MTH 141	4					[must be from two diff	erent a	reas]		
	Fine Arts & Literat	ture [GE	-A]				[GE-EC/ECw; MQ; A; FC; L; S]	3			
		3					[GE-EC/ECw; MQ; A; FC; L; S]	3			
	Foreign Language/Cu	lture [G	E-FC]			FREE ELECTIVE					
		3						3			
	Letters [GE-	·L]					OTHER COURSES (not f	or degr	ee credit)		
	EGR 316 or PHL 212	3									
	Natural Sciences	s [GE-N]									
	Satisfied by CHM 101	3									
	Social Sciences [GE-S]										
	ECN 201	3									

 $^{{}^{**}\ \} Note\ the\ following\ \textit{specific}\ requirements\ and\ restrictions\ for\ General\ Education\ [GE]\ electives:$

- -[GE-MQ] Additional [GE-MQ] electives are restricted to MTH 111 (only if taken prior to passing MTH 141), BUS 111, and STA 220 only.
- -[GE-ECw] Must take at least one General Education course in writing [GE-ECw].
- -[GE-ECw] Can only take one of the following 100-level writing courses for General Education credit [GE-ECw]: WRT 104, WRT 105, WRT 106.
- -Recommend ECN 202 as a General Education Elective choice.

Notes