

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	

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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	

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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	

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Sophomore Year *Spring* Semester

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 <i>or</i> MTH 244	Advanced Engineering Mathematics I <i>or</i> Differential Equations	3	
	General Education Elective*	3	

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Junior Year *Fall* Semester

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

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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	

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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	

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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	

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* 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.

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

4) You ***must*** also notify the Associate Dean of Engineering (102 Bliss Hall) ***once you decide*** that you want to follow the revised Gen Ed requirements.

-Recommend ECN 202 as a General Education Elective choice.

[illegible]