

Fall 2016 BS in Industrial and Systems Engineering Curriculum

Freshman Year

Semester 1 (Fall) Courses			Cr	Semester 2 (Spring) Courses			Cr
ENGL 100	Ideas and their Expressions I	3	ENGL 101	Ideas and their Expressions II	3		
CHEM 106	Gen. Chemistry VI	3		Humanities/Fine Arts Elective ¹	3		
CHEM 116	Gen. Chemistry VI Lab	1	ISEN 162	Computer Programming in VB for Eng	2		
MATH 131	Calculus I	4	MATH 132	Calculus II	4		
GEEN 100	Engineering Design and Ethics	2	PHYS 241	General Physics I	3		
GEEN 111	College of Engineering Colloquium I	1	PHYS 251	General Physics I Lab	1		
			ISEN 121	ISE Colloquium	1		
Semester Total			14	Semester Total			17

Sophomore Year

Semester 3 (Fall) Courses			Cr	Semester 4 (Spring) Courses			Cr
PSYC 101	General Psychology	3		Global Awareness Elective ¹	3		
ISEN 102	Graphic Visualization for ISE	2		African-American Culture/Hist Elective ¹	3		
ISEN 246	Industrial Production Processes	3	MEEN 260	Materials Science	2		
MATH 350	Linear Algebra and Matrix Theory	3	ISEN 255	Methods Engineering	3		
PHYS 242	General Physics II	3	ISEN 286	Engineering Teams & Leadership	1		
PHYS 252	General Physics II Lab	1	MATH 231	Calculus III	4		
Semester Total			15	Semester Total			16

Junior Year

Semester 5 (Fall) Courses			Cr	Semester 6 (Spring) Courses			Cr
ISEN 380	Information Technology for ISE	3	ISEN 324	Computer Aided Design and Mfg	3		
ISEN 430	Deterministic Operations Research	3	ISEN 386	Systems Approaches for ISE	1		
ISEN 361	Engineering Econ and Cost Analysis	3	ISEN 435	Stochastic Operations Research	3		
ISEN 370	Engineering Statistics	3	ISEN 465	Facilities Design	3		
ISEN 471	Ergonomics	2	ISEN 472	Cognitive Human Factors	2		
			MEEN 230	Statics/Mechanics of Materials	3		
Semester Total			14	Semester Total			15

Senior Year

Semester 7 (Fall) Courses			Cr	Semester 8 (Spring) Courses			Cr
ISEN 425	Quality Assurance	3	ISEN 440	Decision Support Systems for ISE	3		
ISEN 455	Production Control	3	ISEN 486	Professionalism and Ethics for ISE	1		
ISEN 415	Discrete Event Systems Mod. & Sim.	3	ISEN 495	Design Projects in ISE	3		
ISEN 475	Design of Experiments	3	ISEN 480	Systems Engineering	3		
ISEN 400	Problem Solving in ISE	1		ISE Technical Elective ¹	3		
	ISE Technical Elective ¹	3					
Semester Total			16	Semester Total			13
							Program Total 120

¹ See your academic advisor for a list of eligible courses to satisfy these requirements.