

## FIVE YEAR BS ISE / MS SYSTEMS ENGINEERING

Freshman Year - Fall		
Course	Description	Cr
CHM 101	General Chem I Lecture	3
CHM 102	General Chem I Lab	1
EGR 105	Foundations of Engineering I	1
MTH 141	Intro Calculus w/Analytic Geometry	4
PHY 203	Elementary Physics I Lecture	3
PHY 273	Elementary Physics I Lab	1
	General Education Elective	3
		<b>16</b>

Sophomore Year - Fall		
ISE 240	Manufacturing Processes and Systems	3
ISE 241	Lab for Manuf Processes and Systems	1
MCE 201	Engineering Graphics	3
MCE 262	Statics	3
MTH 243	Calculus for Functions of Several Variables	3
PHY 205	Elementary Physics III Lecture	3
PHY 275	Elementary Physics III Lab	1
		<b>17</b>

Junior Year - Fall		
CHE 333	Engineering Materials	3
EGR 316 or PHL 212	Engineering Ethics or Ethics	3
ISE 325	Computer Tools for Engineers	3
ISE 411	Probability and Statistics for Engineers	3
ISE432	Deterministic Systems	3
		<b>15</b>

Senior Year - Fall		
ISE 451	Industrial & Systems Eng Design I	3
	Professional Elective	3
	General Education Elective	3
	Free Elective	3
	ISE Graduate Credits*	3
		<b>15</b>

Summer Term(s)		
	Two General Education Electives	6
	ISE Graduate Credits*	3
		<b>9</b>

Fifth Year - Fall		
	ISE Graduate Credits*	12

Freshman Year - Spring		
Course	Description	Cr
ECN 201	Principles of Microeconomics	3
EGR 106	Foundations of Engineering II	2
MTH 142	Intermed Calculus w/Analytic Geometry	4
PHY 204	Elementary Physics II Lecture	3
PHY 274	Elementary Physics II Lab	1
	General Education Elective	3
		<b>16</b>

Sophomore Year - Spring		
CVE 220	Mechanics of Materials	3
ELE 220	Passive and Active Circuits	3
ISE 220	Industrial & Systems Eng Seminar	1
MCE263	Dynamics	3
MTH 362 or MTH 244	Advanced Engineering Mathematics I or Differential Equations	3
	General Education Elective	3
		<b>16</b>

Junior Year - Spring		
BUS 201	Financial Accounting	3
ISE 404	Engineering Economy & Project Planning	3
ISE 412	Statistical Methods and Quality Systems	3
ISE 433	Stochastic Systems	3
	Professional Elective	3
		<b>15</b>

Senior Year - Spring		
ISE 452	Industrial & Systems Eng Design II	3
	Professional Elective	3
	Professional Elective	3
	General Education Elective	3
	ISE Graduate Credits*	3
		<b>15</b>

Fifth Year - Spring		
	ISE Graduate Credits*	9

TOTAL CREDIT HOURS 125 (BS) + 30 (MS)

\*For more information about the five year ISE BS/MS program requirements , go to:

[egr.uri.edu/mcise](http://egr.uri.edu/mcise)