

# Industrial and Systems Engineering 5 Year Plan of Study for ROTC Students

## First Year

FALL			SPRING		
Course	Course Title	Credits	Course	Course Title	Credits
CHEM 1035	General Chemistry	3	ENGE 1216	Foundations of Engineering	2
CHEM 1045	General Chemistry Lab	1	ENGL 1106	First-Year Writing	3
ENGE 1215	Foundations of Engineering	2	MATH 1226	Calculus of a Single Variable	4
ENGL 1105	First-Year Writing	3	PHYS 2305	Foundations of Physics	4
MATH 1225	Calculus of a Single Variable	4			
	ROTC	Varies		ROTC	Varies
<b>Total Credit Hours</b>			<b>Total Credit Hours</b>		
<b>15-18</b>			<b>15-18</b>		

## Second Year

FALL			SPRING		
Course	Course Title	Credits	Course	Course Title	Credits
ISE 2004	Intro to ISE	3	ISE 2014	Engineering Economy	2
ISE 2214	Manufacturing Process Lab	1	ISE 2034	Data Management	3
CS 1044	Intro to Programming C <b>OR</b>	3	ISE 2404	Deter. Operations Research I	3
CS 1064	Intro to Programming Python		MATH 2214	Differential Equations	3
MATH 2204	Multivariable Calculus	3	STAT 4105	Theoretical Statistics	3
MATH 1114	Elem. Linear Algebra <b>OR</b>	2			
MATH 2114	Intro. to Linear Algebra	3			
	ROTC	Varies		ROTC	Varies
<b>Total Credit Hours</b>			<b>Total Credit Hours</b>		
<b>13-17</b>			<b>15-18</b>		

## Third Year

FALL			SPRING		
Course	Course Title	Credits	Course	Course Title	Credits
ISE 3434	Deter. Operations Research II	3	ISE 3214	Facilities Plan & Matl Handling	3
ISE 3414	Probabilistic Oper. Research	3	ISE 3424	Discrete Event Comp. Simulation	3
PHYS 2306	Foundations of Physics	4	ISE 4404	Statistical Quality Control	3
STAT 4706	Statistics for Engineering	3	ISE 2204	Manufacturing Process	3
	ROTC	Varies		ROTC	Varies
<b>Total Credit Hours</b>			<b>Total Credit Hours</b>		
<b>14 - 19</b>			<b>13-18</b>		

## Fourth Year

FALL			SPRING		
Course	Course Title	Credits	Course	Course Title	Credits
ECE 3054	Electrical Theory	3	ESM 2304	Dynamics	3
ESM 2104	Statics	3		ISE Technical Elective	3
ISE 3614	Intro to Human Factors	3		Technical Elective	3
	Area 2	3		Area 2	3
				Area 6	1
	ROTC	Varies		ROTC	Varies
<b>Total Credit Hours</b>			<b>Total Credit Hours</b>		
<b>13 - 18</b>			<b>14-19</b>		

## Fifth Year

FALL			SPRING		
Course	Course Title	Credits	Course	Course Title	Credits
ISE 4005	Proj Mgmt & System Design	3	ISE 4006	Proj Mgmt & System Design	3
ISE 4204	Prod Planning & Inv Control	3	ISE 4214	Lean Manufacturing	3
ISE 3624	Ind Ergo & Work Measures	3		ISE Technical Elective	3
	Technical Elective	3		Area 3	3
	Area 3	3		Area 7	3
	ROTC	Varies		ROTC	Varies
<b>Total Credit Hours</b>			<b>Total Credit Hours</b>		
<b>15 - 17</b>			<b>15-17</b>		