

**College of Engineering and Computer Science**  
**Bachelor of Science in Industrial and Systems Engineering**

As of June 2004		Changes for MTH 235	
<b>I. General Education Requirements*</b>	<b>66</b>	<b>I. General Education Requirements*</b>	<b>66</b>
Required Substitutions		Required Substitutions	
Area One	18	Area One	18
MTH 229, 230		MTH 229, 230	
Area Two	8	Area Two	8
Area Three	8	Area Three	8
Area Four	12	Area Four	12
Area Five	16	Area Five	16
PHY 240/200, 242/202, 244/204		PHY 240/200, 242/202, 244/204	
Area Six	4	Area Six	4
College Component: EGR 190**		College Component: EGR 190**	
*Courses taken to satisfy GE requirements may not be counted toward the major		*Courses taken to satisfy GE requirements may not be counted toward the major	
**For incoming freshmen only. Other students should consult a department advisor.		**For incoming freshmen only. Other students should consult a department advisor.	
<b>II. Engineering Requirements</b>	<b>98</b>	<b>II. Engineering Requirements</b>	<b>98</b>
Core Engineering Requirements		Core Engineering Requirements	
EGR 101, EGR 482	8	EGR 101, EGR 482	8
BME 428	4	BME 428	4
CEG 220	4	CEG 220	4
EE 301/302, 321	9	EE 301/302, 321	9
ME 212, 213, 315	12	ME 212, 213, 315	12
Major Courses		Major Courses	
ISE 195, 301, 302, 406, 407, 451, 465, 470, 471	36	ISE 195, 301, 302, 406, 407, 451, 465, 470, 471	36
ISE 472, 473, 474, 481, 482, 483, 484	25	ISE 472, 473, 474, 481, 482, 483, 484	25
<b>III. Related Course Requirements</b>	<b>23</b>	<b>III. Related Course Requirements</b>	<b>20</b>
CHM 121	5	CHM 121	5
MTH 231, 232, 233, 253	18	MTH 231, 232, 235	15
<b>IV. Technical Communications Requirement</b>	<b>3</b>	<b>IV. Technical Communications Requirement</b>	<b>3</b>
EGR 335	3	EGR 335	3
<b>V. Elective/Concentration Requirement</b>	<b>8</b>	<b>V. Elective/Concentration Requirement</b>	<b>8</b>
ISE Honors Thesis:	8	ISE Honors Thesis:	8
ISE 499-9 and ISE 499-10		ISE 499-9 and ISE 499-10	
Human Integrated Systems:	8	Human Integrated Systems:	8
PSY 110 and ISE 431		PSY 110 and ISE 431	
*Operations Management:	8	*Operations Management:	8
MS 307 and MS 320		MS 307 and MS 320	
Ergonomic Systems:	8	Ergonomic Systems:	8
BME 420 and ISE 480		BME 420 and ISE 480	
** Computer Science:	8	** Computer Science:	8
CS 240 and CS 241		CS 240 and CS 241	
Computer Systems:	8	Computer Systems:	8
CEG 305 and CEG 330		CEG 305 and CEG 330	
***Materials Science & Engineering:	8	***Materials Science & Engineering:	8
Select two: ME 220, ME 370, ME 371, and ME 472		Select two: ME 220, ME 370, ME 371, and ME 472	
<b>Total</b>	<b>198</b>	<b>Total</b>	<b>195</b>
*Minor in Operations Management available. See College of Business for requirements and details		*Minor in Operations Management available. See College of Business for requirements and details	
**Minor in Computer Science for Engineers and Scientist available. See CS Dept for additional requirements and details.		**Minor in Computer Science for Engineers and Scientist available. See CS Dept for additional requirements and details.	
***Minor in Materials Science and Engineering available. See ME Dept for additional requirements and details.		***Minor in Materials Science and Engineering available. See ME Dept for additional requirements and details.	

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**Bachelor of Science in Industrial and Systems Engineering**

New Four Credit Hour Base			
<b>I. General Education Requirements*</b>	<b>66</b>		
Required Substitutions			
Area One	18		
MTH 229, 230			
Area Two	8		
Area Three	8		
Area Four	12		
Area Five	16		
PHY 240/200, 242/202, 244/204			
Area Six	4		
College Component: EGR 190**			
*Courses taken to satisfy GE requirements may not be counted toward the major			
**For incoming freshmen only. Other students should consult a department advisor.			
<b>II. Engineering Requirements</b>	<b>90</b>		
Core Engineering Requirements			
BME 419, 440	7		
CEG 220	4		
EE 301/302, 321	9		
ME 212, 213, 220, 315	15		
Major Courses			
ISE 195, 301, 302, 306, 307, 451, 465, 470, 471	34		
ISE 472, 473, 474, 481, 482, 483	21		
<b>III. Related Course Requirements</b>	<b>27</b>		
CHM 121	5		
MS 307	4		
MTH 231, 232, 233, 253	18		
<b>IV. Technical Communications Requirement</b>	<b>3</b>		
EGR 335	3		
<b>V. Elective/Concentration Requirement</b>	<b>11-12</b>		
ISE Honors Thesis Track	11-12		
ISE 499-9, ISE 499-10, and one technical elective			
Human Computer Interaction Track:	12		
PSY 110, ISE 431, ISE 480			
*Information & Computer Systems Track:	11-12		
Select three from the following:			
CS 241, 242, 400, 405, and MTH 257			
**Operations Management Track:	12		
MS 320, and 2 technical electives			
***Materials Science & Engineering Track:	11-12		
ME 370, ME 371, and ME 472			
<b>Total (minimum)</b>	<b>197</b>		
*Minor in Computer Science for Engineers and Scientist available. See CS Dept for additional requirements and details.			
**Minor in Operations Management available. See College of Business for requirements and details			
***Minor in Materials Science and Engineering available. See ME Dept for additional requirements and details.			