

# Industrial Engineering, B.S.

Course	Title	Semester Credit Hours
<b>Freshman Year</b>		
<b>Semester 1</b>		
CHEM 1311 & CHEM 1111	Gen Inorganic Chemistry I and Gen Inorganic Chem Lab I	4
ENGL 1301	Rhetoric and Composition	3
MATH 2413	Calculus I	4
MEEN 1310	Engineering Graphics I	3
GEEN 1201	Engineering as a Career <sup>1</sup>	2
<b>Semester Credit Hours</b>		<b>16</b>
<b>Semester 2</b>		
ENGL 1302	Rhetoric and Composition	3
HIST 1301	American History to 1877	3
MATH 2414	Calculus II	4
MEEN 1320	Elem Num Meth & Engr Prob Solv	3
PHYS 2325 & PHYS 2125	University Physics I and University Physics I Lab	4
<b>Semester Credit Hours</b>		<b>17</b>
<b>Sophomore Year</b>		
<b>Semester 1</b>		
IEEN 2310	Appl. Meth. in Engr. Stat. I	3
MATH 3320	Differential Equations	3
PHYS 2326 & PHYS 2126	University Physics II and University Physics II Lab	4
POLS 2301	Government and Politics of US	3
Social/Behavioral <sup>2</sup>		3
<b>Semester Credit Hours</b>		<b>16</b>
<b>Semester 2</b>		
IEEN 3321	Op. Research Meth. in Engr. I	3
IEEN 3325	Engr Economic Analysis I	3
MEEN 2355	Statics and Dynamics	3
MEEN 3344	Materials Science	3
Creative Arts		3
<b>Semester Credit Hours</b>		<b>15</b>
<b>Junior Year</b>		
<b>Semester 1</b>		
IEEN 3314	Engr. Meth. In Qual Assurance	3
IEEN 3315	Comp. Based Prod. & Inv. Con.	3
MATH 3415	Calculus III	4
MEEN 3347	Thermodynamics	3
Communications <sup>3</sup>		3
<b>Semester Credit Hours</b>		<b>16</b>
<b>Semester 2</b>		
EEEN 3331	Circuits and Electmag Devices	3
IEEN 3310	Appl. Meth. in Engr. Stat. II	3
IEEN 3341	Human Factors and Ergonomics	3
MEEN 3349	Fundamentals of Mfg Processes	3
POLS 2302	Government and Politics of TX	3

HIST 1302	American History since 1877	3
<b>Semester Credit Hours</b>		<b>18</b>
<b>Senior Year</b>		
<b>Semester 1</b>		
IEEN 4163	Senior Design Project I	1
IEEN 4316	Facility Design & Plant Layout	3
IEEN 4328	Appl. of Computer Simulation	3
IEEN 4332	Prin of Engr Proj Management	3
Engineering Elective (p. 2)		3
<b>Semester Credit Hours</b>		<b>13</b>
<b>Semester 2</b>		
IEEN 4264	Senior Design Project II (WI)	2
IEEN 4354	System Safety Engineering	3
Engineering Elective (p. 2)		3
Engineering Elective (p. 2)		3
Lang/Phil/Culture		3
<b>Semester Credit Hours</b>		<b>14</b>
<b>Total Credit Hours Required:</b>		<b>125</b>

<sup>1</sup> Pre-Engineering Students and Alternate Pre-Engineering students are required to take UNIV 1201 instead of GEEN 1201.

<sup>2</sup> EVEN 2372 or ECON 2301 recommended

<sup>3</sup> ENGL 2374 or COMS 2374 is required unless otherwise approved by advisor and department chair.

## Engineering Electives

Code	Title	Semester Credit Hours
CSEN 4367	Data Mining	3
EEEN 4357	Wireless Sensor Networks	3
IEEN 4312	Supply Chain Management	3
IEEN 4313	Standards in Supply Chain	3
IEEN 4321	Op. Research Meth. in Engr. II	3
IEEN 4325	Engr. Economic Analysis II	3
IEEN 4334	Lean Manufacturing	3
IEEN 4335	Special Problems	1-3
IEEN 4336	Selected Topics	1-3
IEEN 4351	Reliability & Adv. Top. in QC	3
IEEN 4360	Comp. Int. Manuf. Sys.	3
MEEN 4341	Appl of Thermodynamics	3
MEEN 4355	Robotics I	3
MEEN 4371	Introduction to UAVs	3
MEEN 4372	Resource Optimization for DHS	3
MEEN 4373	Info Anal. & Mod. in Sec Eng	3

Other courses must be approved in advanced by Student's advisor