

## Major in Engineering (BSEngr)

124 hours

A minimum grade of C is required for *all* courses in the BS Engineering degree plan.

### University Requirement - 2 hours

GSTD 1002 Freshman Seminar

### General Education - 18 hours

(17 hours of mathematics, biological science, physical science, social science, and fine arts/humanities courses are included in the major.)

### Engineering - 63 hours

ENGR	1023/1021	Introduction to Engineering/Lab
ENGR	1212	Engineering Graphics
ENGR	2020	Engineering Exams*
ENGR	2033	Electrical Circuits I
ENGR	2043	Properties of Materials
ENGR	2143	Statics
ENGR	2163	Dynamics
ENGR	3163	Computer Aided Engineering Analysis
ENGR	3003	Fluid Mechanics
ENGR	3013	Thermodynamics
ENGR	3023	Heat Transfer
ENGR	3043	Mechanics of Materials
ENGR	3073	Engineering Economics
ENGR	3083	Numerical Methods in Engineering
ENGR	3102	Solid Mechanics Lab
ENGR	3112	Thermal Fluid Science Lab
ENGR	3143	Manufacturing Processes
ENGR	4153	Heating, Ventilation, & Air Conditioning
ENGR	4013	Machine Design
ENGR	4023	Senior Design Project
ENGR	4033	Instrumentation and Control Systems
ENGR	4703	Work Experience Learning I
ENGR	4992	Engineering Proficiency

\*Students must register for this course each fall/spring semester as an exam period for all Engineering and/or Physics courses sophomore and up. See course description.

### Chemistry - 8 hours

CHEM	1023/1021	University Chemistry I/Lab
CHEM	1123/1121	University Chemistry II/Lab

### Computer Science – 3 hours

CSCI	2103	Computer Science I
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### Mathematics - 16 hours

MATH	1525	Calculus I
MATH	1545	Calculus II
MATH	2563	Calculus III
MATH	3033	Differential Equations

### Physics - 8 hours

PHYS	2203/2201	University Physics I/Lab
PHYS	2213/2211	University Physics II/Lab

### Other – 6 hours

ENGL	3003	Advance Professional Writing
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3 hours of elective chosen from upper level Physics or Engineering courses

## Engineering (BSEng)

### Suggested Plan of Study

2018-2019 Catalog

Fall - Semester 1		Spring - Semester 2	
ENGL 1113 Composition I	3	ENGL 1123 Composition II	3
MATH 1525 Calculus I	5	MATH 1545 Calculus II	5
PHYS 2203 2201 University Physics I/Lab	4	ENGR 2143 Statics	3
ENGR 1023 Introduction to Engineering	3	PHYS 2213/2211 University Physics II/Lab	4
GSTD 1002 Freshman Seminar	2	ENGR 1021 Introduction to Engineering Lab	1
		ENGR 2020 Engineering Exams	0
<b>Total Semester Hours</b>	<b>17</b>	<b>Total Semester Hours</b>	<b>16</b>
Fall - Semester 3		Spring - Semester 4	
ENGR 1212 Engineering Graphics	2	CSCI 2103 Computer Science I	3
CHEM 1023/1021 University Chemistry I/Lab	4	CHEM 1123/1121 University Chemistry II/Lab	4
MATH 2563 Calculus III	3	MATH 3033 Differential Equations	3
ENGR 2033 Electric Circuits I	3	ENGR 2163 Dynamics	3
Fine Arts/Humanities (ART 2013, HUM 2003, ENGL 2213, ENGL 2223, MUS 2003 or MUS 2013, PHIL 2403, or THEA 2003)	3	ENGR 2043 Properties of Materials	3
ENGR 2020 Engineering Exams	0	ENGR 2020 Engineering Exams	0
<b>Total Semester Hours</b>	<b>15</b>	<b>Total Semester Hours</b>	<b>16</b>
Fall - Semester 5		Spring - Semester 6	
ENGR 3143 Manufacturing Processes	3	*HIST 2013 or 2023 U.S. History I or II or PSCI 2003 American Government: National	3
ENGR 3003 Fluid Mechanics	3	ENGR 3163 Computer Aided Engineering Analysis	3
ENGR 3013 Thermodynamics	3	ENGR 3112 Thermal Fluid Science Lab	2
ENGR 3043 Mechanics of Materials	3	ENGR 3083 Numerical Methods in Engineering	3
ENGR 3102 Solid Mechanics Lab	2	ENGR 3023 Heat Transfer	3
		ENGL 3003 Advanced Professional Writing	3
ENGR 2020 Engineering Exams	0	ENGR 2020 Engineering Exams	0
<b>Total Semester Hours</b>	<b>14</b>	<b>Total Semester Hours</b>	<b>17</b>
Fall - Semester 7		Spring - Semester 8	
ENGR 4153 Heating, Ventilation, and Air Conditioning	3	ENGR 4073 Work Experience Learning (Internship)	3
ENGR 3073 Engineering Economics	3	ENGR 4023 Senior Design Project	3
ENGR 4992 Engineering Proficiency	2	UL Engineering or Physics Elective	3
ENGR 4033 Instrumentation and Control	3	*Social Science choice (ECON 2103, FIN 2003, GEOG 2003, HIST 1003, HIST 1013, HIST 2013, HIST 2023, PSCI 2003, PSYC 2003, SOC 1003, or SOC 2003)	3
ENGR 4013 Machine Design	3	Fine Arts/Humanities (ART 2013, HUM 2003, ENGL 2213, ENGL 2223, MUS 2003 or MUS 2013, PHIL 2403, or THEA 2003)	3
ENGR 2020 Engineering Exams	0	ENGR 2020 Engineering Exams	0
<b>Total Semester Hours</b>	<b>14</b>	<b>Total Semester Hours</b>	<b>15</b>

Total hours required for major – 124

**A minimum grade of C is required for *all* courses in the BSEng degree plan.**

\*Note: Must have six hours of social science courses. Three hours must be U.S. History I, U.S. History II or American Government: National.