

Major Requirements

The BS in Electrical Engineering requires 128 credit hours. All courses must be completed with a “C” or higher. Two tracks are available: 1) Computer Design and 2) System Design. A curriculum block schedule is attached at the end of this handbook.

Track 1: Computer Design

Course Title	Course Number	Credit Hours
<i>Pre-Engineering</i>		
See the section above. All engineering majors complete the same pre-engineering coursework.		
<i>Subtotal</i>		50
<i>Other Lower Division Courses</i>		
Introduction to Literature	LIT 2110	3
Statics	EGN 3311	3
Computer Science I	COP 2220	3
Free Elective		1
<i>Subtotal</i>		10
<i>Foundation</i>		
Probability and Statistics for Engineers	STA 3032	3
Dynamics	EGN 3321	3
Applied Thermal Science	EGN 3358	3
<i>Subtotal</i>		9
<i>Core Requirements</i>		
Circuit Analysis I	EEL 3111	3
Circuit Analysis II	EEL 3112	3
Signals and Systems	EEL 3135	3
Electrical Circuits Lab	EEL 3303 L	1
Electronic Circuits I	EEL 3304	3
Introduction to Digital Systems	EEL 3701 C	4
Introduction to Embedded Systems Design	EEL 3889 C	3
Electronic Circuits 2	EEL 4309 C	4
Linear Control Systems	EEL 4657 C	4
Microcontroller Applications	EEL 4744 C	4
Senior Design I	EEL 4914	1
Electrical Engineering Design 2	EEL 4915	3
<i>Subtotal</i>		36
<i>Major Requirements</i>		
Digital Design	EEL 4712 C	4
Digital Computer Architecture	EEL 4713	3
Digital Computer Architecture Lab	EEL 4713 L	1
Computer Science II	COP 3503	3
Data Structures	COP 3530	4

<i>Subtotal</i>		<i>15</i>
<i>Technical Electives</i>		
See the Engineering academic advisor for a list of approved courses.		
<i>Subtotal</i>		<i>8</i>
TOTAL		128

Track 2: System Design

Course Title	Course Number	Credit Hours
<i>Pre-Engineering</i>		
See the section above. All engineering majors complete the same pre-engineering coursework.		
<i>Subtotal</i>		<i>50</i>
<i>Other Lower Division Courses</i>		
Introduction to Literature	LIT 2110	3
Statics	EGN 3311	3
Computer Science I	COP 2220	3
Free Elective		1
<i>Subtotal</i>		<i>10</i>
<i>Foundation</i>		
Probability and Statistics for Engineers	STA 3032	3
Dynamics	EGN 3321	3
Applied Thermal Science	EGN 3358	3
<i>Subtotal</i>		<i>9</i>
<i>Core Requirements</i>		
Circuit Analysis I	EEL 3111	3
Circuit Analysis II	EEL 3112	3
Signals and Systems	EEL 3135	3
Electrical Circuits Lab	EEL 3303 L	1
Electronic Circuits I	EEL 3304	3
Electromagnetic Fields Applications	EEL 3472	3
Introduction to Digital Systems	EEL 3701 C	4
Introduction to Embedded Systems Design	EEL 3889 C	3
Electronic Circuits 2	EEL 4309 C	4
Linear Control Systems	EEL 4657 C	4
Microcontroller Applications	EEL 4744 C	4
Senior Design I	EEL 4914	1
Electrical Engineering Design 2	EEL 4915	3
<i>Subtotal</i>		<i>39</i>
<i>Major Requirements (select 3 courses)</i>		
Introduction to Electric Machines	EEL 3211	3
Advanced Electronics	EEL 4314L	2
Communications Systems	EEL 4514	3

Digital Design	EEL 4712 C	4
Intro Digital Signal Processing/ DSP Lab	EEL 4750/4750 L	4
State-Space Control Systems	EEL 4610	3
<i>Subtotal</i>		<i>8-11</i>
<i>Technical Electives</i>		
See the Engineering academic advisor for a list of approved courses.		
<i>Subtotal</i>		<i>9-12</i>
<i>TOTAL</i>		<i>128</i>