

**Electrical Engineering**  
**Bachelor of Science in Electrical Engineering (B.S.E.E.) <037T>**  
 Catalog Year 2016-17

First Semester				Second Semester			
ENGL	101	Composition and Rhetoric ( <i>GEF 1</i> )	3.00	ENGL	102	Composition and Rhetoric ( <i>GEF 1</i> )	3.00
MATH	155	Calculus I ( <i>GEF 3</i> )	4.00	MATH	156	Calculus II ( <i>GEF 8</i> )	4.00
WVUE	191	First Year Seminar	1.00	ENGR	101	Engineering Problem Solving I	2.00
CS	112	Computer Science for Engineers I	3.00	<i>GEF</i>	<i>5</i>	Human Inquiry and the Past	3.00
CHEM	115	Fund of Chemistry I ( <i>GEF 8</i> )	4.00	<i>GEF</i>	<i>6</i>	The Arts and Creativity	3.00
			<b>15.00</b>				<b>15.00</b>
Third Semester				Fourth Semester			
MATH	251	Multivariable Calculus	4.00	MATH	261	Elementary Differential Equations	4.00
PHYS	111	General Physics ( <i>GEF 2B</i> )	4.00	PHYS	112	General Physics ( <i>GEF 8</i> )	4.00
EE	200	ECE Software Tools	2.00	EE	223	Electrical Circuits	3.00
EE	221	Intro. Electrical Engr.	3.00	EE	224	Electrical Circuits Lab	1.00
EE	222	Intro. Electrical Engr. Lab	1.00	CPE	271	Digital Logic Design	3.00
<i>GEF</i>	<i>7</i>	Global Studies and Diversity	3.00	CPE	272	Digital Logic Design Lab	1.00
			<b>17.00</b>				<b>16.00</b>
Fifth Semester				Sixth Semester			
EE	355	Analog Electronics	3.00	EE	311	Junior Instrumentation Lab	1.00
EE	356	Analog Electronics Lab	1.00	EE	329	Signals and Systems II	3.00
EE	327	Signals and Systems I	3.00	EE	335	Electromech. Energy Conv.	3.00
CPE	310	Microprocessor Systems	3.00	EE	336	Electromech. Energy Conv. Lab	1.00
CPE	311	Microprocessor Lab	1.00	ENGL	305	Technical Writing	3.00
EE	345	Engineering Electromagnetics	3.00	MATH	441	Applied Linear Algebra	3.00
MATH	448	Probability and Statistics	3.00				<b>14.00</b>
			<b>17.00</b>				
Seventh Semester				Eighth Semester			
EE	480	Senior Design Seminar	3.00	EE	481	Senior Design Projects	3.00
EE	461	Intro. Communication Systems	3.00			EE/CPE Elective <sup>(1)</sup>	3.00
EE	436	Power Systems Analysis	3.00			Technical Elective <sup>(2)</sup>	3.00
EE	411	Fundamentals of Control Systems	3.00			Technical Elective <sup>(2)</sup>	3.00
EE	412	Automatic Control Lab	1.00	ECON	401	Managerial Economics ( <i>GEF 4</i> )	3.00
EE		EE/CPE Elective <sup>(1)</sup>	3.00	EE	400	Community Service	0.00
			<b>16.00</b>				<b>15.00</b>

**Total hours necessary to earn the B.S.E.E. degree = 125.00**

Notes: <sup>(1)</sup> The EE/CPE Electives are those course that have a EE or CPE course prefix.

<sup>(2)</sup> The Technical Elective must be selected from an approved list.

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**Bachelor of Science in Electrical Engineering (B.S.E.E.) <037T>**  
**Electrical Energy Systems Area of Emphasis [ET18]**  
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WVUE	191	First Year Seminar	1.00	ENGR	101	Engineering Problem Solving I	2.00
CS	112	Computer Science for Engineers I	3.00	<i>GEF</i>	<i>5</i>	Human Inquiry and the Past	3.00
CHEM	115	Fund of Chemistry I ( <i>GEF 8</i> )	4.00	<i>GEF</i>	<i>6</i>	The Arts and Creativity	3.00
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CPE	311	Microprocessor Lab	1.00	ENGL	305	Technical Writing	3.00
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EE	480	Senior Design Seminar	3.00	EE	481	Senior Design Projects	3.00
EE	461	Intro. Communication Systems	3.00	EE	435	Power Electronics	3.00
EE	436	Power Systems Analysis	3.00	EE		Energy Related Elective <sup>(1)</sup>	3.00
EE	411	Fundamentals of Control Systems	3.00			Technical Elective <sup>(2)</sup>	3.00
EE	412	Automatic Control Lab	1.00	ECON	401	Managerial Economics ( <i>GEF 4</i> )	3.00
EE		Energy Related Elective <sup>(1)</sup>	3.00	EE	400	Community Service	0.00
			<b>16.00</b>				<b>15.00</b>

Total hours necessary to earn the B.S.E.E. degree = 125.00

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