

<b>Liberal Studies</b>	(42 Hours)	<b>Major</b>	(85 Hours)
<b>Core Requirements</b>		ENGR 199 Intro to Engineering Practices & Principles I	3 _____ (F)
<b>C1: Writing (6 Hours Req.)</b>		ENGR 200 Intro to Engineering Practices & Principles II	2 _____ (S)
ENGL 101	3 _____	ENGR 300 Professional Development	1 _____ (F)
ENGL 102*	3 _____	EE 200 Computer Utilization in C++	3 _____ (F)
<b>C2: MATHEMATICS</b>		EE 201 Network Theory I	3 _____ (F)
waived/MATH 152		EE 202 Network Theory II	3 _____ (S)
<b>C3: ORAL COMM.</b>		EE 211 Logic and Networks Lab	1 _____ (F)
CMHC 201 Speech Comm.*	3 _____	EE 212 Instrumentation and Networks Lab	1 _____ (S)
<b>C4: WELLNESS</b>		EE 221 Logic Systems Design I	3 _____ (F)
HEAL 123 or HSCC 101	3 _____	EE 222 Electrical Engineering Design I	2 _____ (S)
<b>C5: PHYSICAL &amp; BIOLOGICAL SCIENCES</b>		EE 311 Systems and Electronics Lab	1 _____ (F)
Science 1: waived/PHYS 230		EE 312 Electromagnetic and Electronic Devices Lab	1 _____ (S)
Science 2: waived/CHEM 140		EE 321 Electromagnetic Fields	3 _____ (F)
		EE 322 Electromagnetic Waves	3 _____ (S)
		EE 331 Fund. of Electronics and Semiconductors	3 _____ (F)
		EE 332 Electronics	3 _____ (S)
		EE 341 Electrical Engineering Design II	2 _____ (F)
		EE 342 Solid State Electronic Devices	3 _____ (S)
		EE 351 System Analysis I	3 _____ (F)
		EE 401 Senior Design I	2 _____ (F)
		EE 402 Senior Design II	2 _____ (S)
		EE 411 Analog and Digital Communication	3 _____ (F)
		EE 412 Electrical Engineering Professional Practice	2 _____ (S)
		EE 4xx Senior Elective	3 _____ (F)
		Technical Elective	3 _____ (F)
		Technical Elective	3 _____ (S)
		Technical Elective	3 _____ (S)
		MATH 152 Engineering Calculus I	3 _____ (F)
		MATH 252 Engineering Calculus II	3 _____ (S)
		MATH 253 Engineering Calculus III	3 _____ (F)
		MATH 320 Ordinary Differential Equations*	3 _____ (S)
		MATH 370 Probability and Statistics I	3 _____
		CHEM 140 Advanced General Chemistry	4 _____
		PHYS 230 Calculus Based Physics I	4 _____ (S)
		PHYS 231 Calculus Based Physics II*	3 _____ (F)
		PHYS 310 Modern Physics *	3 _____ (S)
		PHYS 322 Optics and Materials	3 _____ (F)

(F) – Indicates Fall only offering

(S) – Indicates Spring only offering

(X) – Indicates any Perspectives Course

(\*) – Indicated Pre-requisite Required

Application for graduation must be filed after earning (90) hours and paying the \$30 graduation fee.

**Liberal Studies Notes**

An upper level Perspectives course is required and must be outside the major.

**Major Notes**

To enroll in the EE major courses, students must have completed the following courses with a "C" or better: ENGR 199 and 200; MATH 152 and 252; CHEM 140; PHY 230; ENGL 101 and 102.

**Graduation Requirements**

25% of 127 or 32 hours for graduation must be at the 300 – 400 level.

At least 42 hours at the 300 / 400 level in the major are required.

A minimum GPA of 2.0 on all work attempted at WCU and on all (not each) courses in the major.





## Electrical Engineering (B.S.) Suggested 4-year Plan of Study

### FIRST YEAR

Fall Semester	Hours	Spring Semester	Hours
ENGL 101 Composition I (C1)	3	ENGL 102 Composition II* (C1)	3
MATH 152 Engineering Calculus I (C2)	3	MATH 252 Engineering Calculus II*	3
ENGR 199 Eng/Prac/Prin. I (FS)	3	ENGR 200 Eng/Prac/Prin. II*	2
CHEM 140 Adv General Chemistry (C5)	4	PHYS 230 Calculus Based Physics I* (C5)	4
Perspective	3	Wellness (C4)	3
	<b>16</b>		<b>15</b>

### SECOND YEAR

Fall Semester	Hours	Spring Semester	Hours
EE 201 Network Theory I*	3	EE 202 Network Theory II*	3
EE 200 Computer Utilization in C++*	3	EE 222 Electrical Engineering Design I*	2
EE 221 Logic Systems Design I*	3	EE 212 Instrumentation & Networks Lab*	1
EE 211 Logic and Networks Lab*	1	CMHC 201 Communications* (C3)	3
MATH 253 Engineering Calculus III*	3	MATH 320 Ord. Diff. Equations*	3
PHYS 231 Calculus Based Physics II*	3	PHYS 310 Modern Physics *	3
	<b>16</b>		<b>15</b>

### THIRD YEAR

Fall Semester	Hours	Spring Semester	Hours
EE 351 System Analysis I*	3	EE 322 Electromagnetic Waves*	3
EE 341 Electrical Engineering Design II*	2	EE 332 Electronics*	3
EE 331 Fund. Electronics & Semiconductors*	3	EE 342 Solid State Electronic Devices*	3
EE 321 Electromagnetic Fields*	3	EE 312 E-M and Electronic Devices Lab*	1
ENGR 300 Prof. Dev.*	1	MATH 370 Probability and Statistics I*	3
EE 311 Systems and Electronics Lab*	1	Perspective	3
PHYS 322 Optics and Materials*	3		
	<b>16</b>		<b>16</b>

**After earning ninety (90) hours, the student must file an application form with the Dean after paying a \$30 graduation fee to the University Cashier.**

### FOURTH YEAR

Fall Semester	Hours	Spring Semester	Hours
EE 401 Senior Design I *	2	EE 402 Senior Design II*	2
EE 411 Analog and Digital Communication*	3	EE 412 EE Professional Practice*	2
EE 4xx Elective*	3	Perspective	3
Technical Elective*	3	Perspective	3
Perspective	3	Technical Elective*	3
Perspective	3	Technical Elective*	3
	<b>17</b>		<b>16</b>

Total program requires **127 hours**.

> Liberal Studies **42 hours**. > Major Requirements **85 hours**

> To enroll in the EE major courses, students **must** have completed the following courses with a "C" or better: ENGR 199 and 200; MATH 152 and 252; CHEM 140; PHY 230; and ENGL 101 and 102.

> (\*) indicates pre-requisite required

> EE and ENGR courses are offered once per year, in the semester shown above.

> Technical electives must be at 300-400 level.

> One Perspective must be at the 300-400 level.

