BS in Engineering Curriculum – ELEC Concentration

TIER III: Math ACT of 25 or higher/Math RSAT of 590 or higher

Freshman Fall Semester			**Freshman Spring Semester**		
MATH 115	Precalculus	3	MATH 122	Calculus I	4
ENGR 100	**Freshman Seminar***	**1**	BIOL 111	Basic Biology	4
ENGR 120	**Foundations of Engineering Design I***	**3**	**ENGR 121**	**Foundations of Engineering Design II***	**3**
ENGL 101	Academic Writing	3	ENGL 102	Academic Writing & Literature	3
CHEM 111	General Chemistry I	4	CHEM 113	General Chemistry II	4
			CUC 100	Connections	0.5
	Semester Total:	**14.0**		**Semester Total:**	**18.5**

Sophomore Fall Semester			**Sophomore Spring Semester**		
Math 223	Calculus II	4	MATH 224	Calculus III	4
PHYS 251	Fundamentals of Physics I	4	**ELEC 265**	**Electronics***	**4**
ENGR 220	**Statics & Strength of Materials**	**3**	PHYS 252	Fundamentals of Physics II	4
ENGR 260	**Electrical Circuits***	**4**	ECON 201	Microeconomics	3
ENGL 2xx	Literature	3	HUM/FINE ARTS or SOC/BEH SCI	Elective	3
CUC 200	Connections	0.5			
	Semester Total:	**18.5**		**Semester Total:**	**18.0**

Junior Fall Semester			**Junior Spring Semester**		
MATH 310	Differential Equations and Linear Algebra	4	**ENGR 320**	**Fluids***	**3**
ELEC 325	**Embedded Systems***	**4**	**ELEC 350**	**Electromagnetic Theory***	**4**
ENGR 310	**Thermodynamics***	**3**	**ELEC 365**	**Linear Systems**	**4**
ENGL 305	Technical Writing and Presentations	3	**ELEC 395**	**Topics in Electrical Engineering***	**3**
ENGR 300	**Engineering Economics**	**3**	CHRS 125	Introduction to Christianity	3
	Semester Total:	**17.0**		**Semester Total:**	**17.0**

Senior Fall Semester			**Senior Spring Semester**		
ENGR 491	**Senior Design I**	**4**	**ENGR 492**	**Senior Design II**	**2**
HUM/FINE ARTS	Elective	3	**ENGR 460**	**Statistical Methods for Engineers**	**3**
HIST 111 or 112	Western Civilization 1 or 2	3	ART 131, MUSIC 131 or THEA 131	Fine Arts	3
ELEC 420	**Controls and Communications**	**4**	PE 185	Lifetime Wellness	2
ELEC 435	**Digital Signal Processing***	**3**	**ELEC 440**	**Automation***	**3**
			ELEC 480	**Digital System Design***	**3**
	Semester Total:	**17.0**		**Semester Total:**	**16.0**
				Degree Total	**136**

8June2019

BS in Engineering Curriculum – ELEC Concentration

TIER III: Math ACT of 25 or higher/Math RSAT of 590 or higher

Total Math and Science Hours: 39 (includes Statistics for Engineers but not Precalculus)
Total Engineering Hours: 61 (includes Engineering Economics)

ABET Requirements (2019-2020 Cycle)
Math and Basic Science: minimum of 30 semester credit hours
Engineering topics: minimum of 45 semester credit hours

LEGEND:

BOLD-FACED FONT – designates a course taught by the School of Engineering

BLUE BOX – indicates a course taken by all engineering students

* - indicates class-lab