



COLLEGE OF ENGINEERING AND COMPUTING
DEGREE CURRICULUM SHEET | 2017 CATALOG
Bachelor of Science in Engineering in General Engineering

GENERAL EDUCATION REQUIREMENTS		
Area/Course	Credits	Frequency
Written Composition		
<i>6 credits at or above COMP 1500</i>		
COMP 1500 College Writing	3	FW
COMP 2000 Advanced College Writing	3	FW
Mathematics		
<i>6 credits at or above MATH 1040</i>		
<i>Satisfied by Major Prerequisites</i>		
<i>Satisfied by Major Prerequisites</i>		
Arts & Humanities		
<i>6 credits in HIST, ARTS, PHIL, HUMN, LITR, THEA, FILM, MUSC, DANC, WRIT, foreign language</i>		
Open Arts & Humanities	3	
Open Arts & Humanities	3	
Social & Behavioral Sciences		
<i>6 credits in PSYC, SOCL, ANTH, ECN, COMM, GEOG, GEST, INST, POLS</i>		
ECN 2020 Principles of Microeconomics	3	
PSYC 2330 Interpersonal Communication	3	
Science		
<i>6 credits in BIOL, MBIO, CHEM, SCIE, ENVS, PHYS</i>		
BIOL 1500 Biology I	3	FW
CHEM 1300 General Chemistry I	3	FW
Total General Education Credits	24	

CONCENTRATIONS	
<i>take 18 concentration credits; see concentration sheet</i>	15
Total Concentration Credits	15

ELECTIVES	
<i>take 6 elective credits</i>	6
Total Elective Credits	6

Frequency Key: F-Every Fall; W-Every Winter; FO - Odd Year Fall; FE - Even Year Fall;
 WO - Odd Year Winter; WE - Even Year Winter

MAJOR PREREQUISITES		
Course	Credits	Frequency
Science		
BIOL 1500 Biology I Lab	1	FW
CHEM 1300 General Chemistry I Lab	1	FW
PHYS 2400 Physics I/Lab	4	FW
PHYS 2500 Physics II/Lab	4	FW
Mathematics		
MATH 2100 Calculus I	4	FW
MATH 2154 Eng. Linear Algebra & Differential Equations	4	FW
MATH 2200 Calculus II	4	FW
MATH 3200 Calculus III	4	FW
MATH 4500 Probability and Statistics	3	FW
Total Major Prerequisites Credits	29	

MAJOR		
Course	Credits	Frequency
CENG 4910 Engineering Ethics Seminar	1	FW
EENG 2710 Electrical Circuits/Lab	4	FW
GENG 1000 Introduction to Engineering	1	
GENG 1012 Engineering Graphics	3	
GENG 1016 Introduction to Engineering Design	3	
GENG 2000 Engineering Design and Project Management I	2	
GENG 2022 Statics	3	
GENG 2050 Computer Applications in Engineering	3	
GENG 2070 Materials and Processes	3	
GENG 2450 Dynamics	3	
GENG 3000 Engineering Design and Project Management II	3	
GENG 3012 Thermal and Fluid Systems	3	
GENG 3024 Mechanics of Materials	3	
GENG 3050 Sensors, Measurements, and Controls	3	
GENG 3420 Engineering Economics	3	
GENG 3800 Quality Control for Engineers	3	
GENG 4010 Senior Capstone Design Project I	3	
GENG 4020 Senior Capstone Design Project II	3	
Total Major Credits	50	

TOTAL CREDITS: 124

Subject to change
Pending approval from the Southern Association of Colleges and Schools Commission on Colleges



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CONCENTRATION SHEET | 2017 CATALOG
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There are 2 concentrations available; choose 15 credits from one of the following:

BIOMEDICAL ENGINEERING

Course	Credits	Frequency
BENG 2080 Foundations of Biomedical Engineering	3	
BENG 4030 Biomechanics and Materials	3	
BENG 4040 Physiological Systems and Modeling for Engineering I	3	
BENG 4050 Physiological Systems and Modeling for Engineering II	3	
BENG 4200 Biomedical Instrumentation		
Total Biomedical Engineering Concentration Credits	15	

INDUSTRIAL AND SYSTEMS ENGINEERING

Course	Credits	Frequency
IENG 3010 Principles and Methods of Industrial and Systems Engineering	3	
IENG 3060 Systems Optimization	3	
IENG 4010 Work Measurement and Human Factors	3	
IENG 4020 Analysis of Production Systems and Facility Design	3	
ISYS 4065 Discrete System Modeling	3	
Total Indus. and Sys. Engin. Concentration Credits	15	

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COLLEGE OF ENGINEERING AND COMPUTING
SAMPLE FOUR YEAR CURRICULUM | 2017 CATALOG
Bachelor of Science in Engineering in General Engineering

Freshman Year			
Fall		Winter	
<u>Course</u>	<u>Credits</u>	<u>Course</u>	<u>Credits</u>
COMP 1500 College Writing	3	COMP 2000 Advanced College Writing	3
BIOL 1500 Biology I/Lab	4	CHEM 1300 General Chemistry I/Lab	4
MATH 2100 Calculus I	4	MATH 2200 Calculus II	4
GENG 1000 Introduction to Engineering	1	GENG 1016 Introduction to Engineering Design	3
GENG 1012 Engineering Graphics	3	GENG 2050 Computer Applications in Engineering	3
Total Credits	15	Total Credits	17

Sophomore Year			
Fall		Winter	
<u>Course</u>	<u>Credits</u>	<u>Course</u>	<u>Credits</u>
PHYS 2400 Physics I/Lab	4	PHYS 2500 Physics II/Lab	4
MATH 3200 Calculus III	4	GENG 3800 Quality Control for Engineers	3
MATH 4500 Probability and Statistics	3	MATH 2154 Engineering Linear Algebra and Differential Equations	4 3
GENG 2000 Engineering Design and Project Management I	2	GENG 2070 Materials and Processes	3
GENG 2022 Statics	3	GENG 2450 Dynamics	3
Total Credits	16	Total Credits	17

Junior Year			
Fall		Winter	
<u>Course</u>	<u>Credits</u>	<u>Course</u>	<u>Credits</u>
ECN 2020 Principles of Microeconomics	3	GENG 3000 Engineering Design and Project Management II	3
EENG 2710 Electrical Circuits/Lab	4	GENG 3012 Thermal and Fluid Systems	3
GENG 3024 Mechanics of Materials	3	GENG 3050 Sensors, Measurements, and Controls	3
GENG 3420 Engineering Economics	3	Open Concentration	3
Open Concentration	3	Open Concentration	3
Total Credits	16	Total Credits	15

Senior Year			
Fall		Winter	
<u>Course</u>	<u>Credits</u>	<u>Course</u>	<u>Credits</u>
Open Arts & Humanities	3	Open Arts & Humanities	3
CENG 4910 Engineering Ethics Seminar	1	PSYC 2330 Interpersonal Communication	3
GENG 4010 Senior Capstone Design Project I	3	GENG 4020 Senior Capstone Design Project II	3
Open Concentration	3	Open Concentration	3
Open elective	3	Open elective	3
Total Credits	13	Total Credits	15

TOTAL CREDITS: 124

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