

Southern University College of Engineering
Electronics Engineering Technology Department
COURSE PRE-REQUISITES

Course ID	Course Title	Pre-Requisite(s)
ENGR 120	Freshman Engineering I	High School Trigonometry
MATH 135	Pre-Calculus Math I	Placement examination
ENGL 110	Freshman Composition I	N/A
	Life Science Elective	
CHEM 132	General Chem Lecture	High school chemistry and algebra
CHEM 112	General Chem Lab	Chem 132-Corequisite
EENT 110	DC CKT Analysis I	Math 135
EENT 111	DC CKT Analysis Lab	Concurrent with or credit in EENT 110
MATH 140	Pre-Calculus Math II	A grade of "C" or better in Math 135 or by Placement exam
ENGL 111	Freshman Composition II	Engl 110
PHYS 141	Elements of Physics	Math 135 or equivalent
ENGR 130	Freshman Engineering II	ENGR 120; MATH 135
ENGR 230	Technical Communication	English 111
EENT 210	AC CKT Analysis	EENT 110, Math 140
EENT 211	AC CKT Analysis Lab	EENT 111, Concurrent with EENT 210
EENT 212	Electronic CKT I	EENT 210
EENT 213	Electronic CKT Lab	EENT 111; Concurrent with EENT 212
PHYS 142	Elements of Physics	Math 135 or equivalent
MATH 264	Calculus I	Math 135 and 140, or the designated placement test score
EENT 216	Electronic CKT II	EENT 212
EENT 217	Electronic CKT II Lab	EENT 213, Concurrent with EENT 216
EENT 220	Digital Logic Lecture	EENT 212
EENT 221	Digital Logic Lab	EENT 213, Concurrent with EENT 220
MATH 265	Calculus II	Math 264 with a grade of "C" or better
EENT 314	Linear Integrated CKt	EENT 216; Math 264
EENT 316	Microprocessor Lec	EENT 220
EENT 317	Microprocessor Lab	EENT 221; Co-requisite: EENT 316
ENGR 320	Statistics for Engrs	MATH 265; Students can select MATH 276 as an alternate.
EENT 330	Semiconductor Device Processing	EENT 216; MATH 264
EENT 360	Elec Machinery Lec	EENT 210; MATH 264
EENT 361	Elec Machinery Lab	EENT 211, Concurrent with EENT 360
EENT 370	Fund Signal & Data Proc	MATH 265; EENT 210
EENT 371	Signal & Data Proc Lab	Co-requisite EENT 370
EENT 380	Comp Asbly, Main, & Repair	EENT 316
EENT 390	Digital Communications Lec	EENT 216, MATH 264
EENT 391	Digital Communications Lab	EENT 217, Concurrent with EENT 390
EENT 404	Adv Electron CKT Analysis & Design	EENT 216 and MATH 264
EENT 434	Selected Topics in Electronic Tech	EENT 216; MATH 264
EENT 450	Control System Tech	EENT 216; MATH 265
EENT 460	Programmable Logic Controllers	EENT 220
EENT 480	Computer Networking	EENT 390
EENT 481	Computer Networking Lab	Concurrent with EENT 480
EENT 486	Computer Security Data Protection	EENT 480
EENT 492	Wireless Communication Systems	EENT 390
EENT 494	Sr Electronics Design Project I	EENT 316, 360, and Sr. standing
EENT 495	Advanced Topics in Communication	EENT 390, MATH 265
EENT 496	Sr Electronics Design Project II	EENT 494
EENT	Technical Electives	JR/SR Standing in EENT Curriculum; Consent of Instructor

Southern University College of Engineering

Degree Requirements

The Bachelor of Science Degree in Electrical Engineering (BS-EET) is awarded to students who complete the requirements of the department as stated below:

1. Complete the **EET-curriculum requirements** with a minimum overall grade point average of 2.00 out of 4.00. The total credit hours required for graduation is 126 credit hours excluding remedial and repeated courses;
2. Pass the **Writing Proficiency Examination** (WPE, ENGL 001) prior to applying for graduation. The Writing Laboratory located in Harris Hall, Room 109, is a resource to prepare students to pass the WPE. For more details, visit <http://web.subr.edu/index.php?id=323>;
3. Pass the **Departmental Comprehensive Examination** (DCE, EENT 000) that is administrated by the Electronics Engineering Technology department in order to graduate.
4. Complete the University mandated **African-American Experience**. Courses that satisfy the African-American Experience requirement include ARTS 440; ENGL 203*, 313, 407, 413, 415, and 485; HIST 311*, 399, 401, 419, 486, 496, and 497; MUSC 243, 352, and 353; HUMN 366, and 403; MCOM 331; PHIL 426; SOCW 250 and 450; SPTH 399. Every student of US or International origin has to fulfill the African American Experience requirement. See the current university catalogue for additional details.

Waiver: *Students who were first-time freshmen at any post-secondary institution before August 1, 1991.*

5. Complete the University mandated **Community Service** Requirement. It is required to complete a minimum of 60 clock hours of COMMUNITY SERVICE as one of the requirements for graduation. Service Learning courses are: Service Learning 100, 200, and 300, (Credit, 1 Hour, each); and Service Learning 400, (Credit, 3 Hours). A total of three semester hours of credit is required.

Waivers:

- a. *Students who were first-time freshmen at any post-secondary institution before August 1, 1993;*
- b. *International Students;*
- c. *Those students **25 years or older** who completed high school or who earned high school equivalency seven or more years prior to admission;*
- d. *Any person with certifiable disability of such a nature that community service projects would jeopardize the welfare of the parties involved*

General Education Requirements ~ All students entering the EET department in the Southern University College of Engineering must complete a general education component, which is discussed below:

1. At least six (6) hours of course work in the **Humanities** are required. These six (6) credit hours must be in history and may be selected from the following courses: History (HIST 104, 105 or 114, 115, 311*).
2. Three (3) hours in **Literature** to be taken from: ENGL 201, 203*, 204, or 205.
3. Six (6) hours of course work are required in **Social Sciences** of which three (3) hours must be Economics (ECON 205). The remaining course must be selected from among the following series of courses: Economics (ECON 210, 370); Geography (GEOG 210, 221, 401); Political Science (POLS 200, 210, 320, 402); Sociology (SOCL 210,324, 448); and Psychology (PSYC 210, 315, 350).
4. Three (3) hours of course work are required in the **Arts** and are to be taken from among the following series of courses: Fine Arts (ARTS 200, 210/211, 320, 330, and 440*); Music (MUSC 200, 250/251, 352*, 353*); Speech and Theater (SPTH 360).
5. Two (2) hours of course work are required in **Health** or **Physical Education** and are to be taken from among the following series of courses: Physical Education (PHED 100-250) or Health (HLTH 110-365).
6. Fifteen (15) hours of course work are required in the **Biological** and **Physical Sciences**, with a laboratory experience. Eight (8) hours must be taken in a two-semester sequence of Physics courses; lecture and laboratory (PHYS 141, 142) and four (4) hours must be taken in Chemistry courses (CHEM 132 and 112). Three (3) hours of **life science** course work are required and may be selected from the following Biology courses: (BIOL 104 or 105).

Residency Requirement ~ All EET students must complete 30 hours of the last 36 hours in residence at Southern.

* These courses can be taken to simultaneously satisfy the indicated EET elective requirements as well as the University's African-American Experience requirement.

CORE Mathematics and Science Requirements ~ A grade of "C" or better is required in the following mathematics and science CORE courses:

<u>Course</u>	<u>Course No.</u>	<u>Credit Hour</u>
Pre-Calculus I	Math 135	3.0
Pre-Calculus II	Math 140	3.0
Calculus I	Math 264	4.0
Calculus II	Math 265	4.0
Elements of Physics	Phys 141	4.0
Elements of Physics	Phys 142	4.0
General Chemistry Lecture	Chem 132	3.0
General Chemistry Lab	Chem 112	1.0
Total		26.0

Departmental Course Requirements ~ All courses designated in the curriculum sheet by the prefix EENT as well as ENGR 120, 130, are considered to be CORE courses for EET majors and a grade of "C" or better is required.

Technical Electives ~ Nine (9) hours of technical electives are to be chosen from the following three elective groups. One technical elective course needs to be selected from each of the following three groups.

Electronic Electives Group

<u>Course Name</u>	<u>Course No.</u>
Linear Integrated Circuits	EENT 314
Semiconductor Device Processing	EENT 330
Advanced Electronics Circuit Analysis and Design	EENT 404

Communication Electives Group

<u>Course Name</u>	<u>Course No.</u>
Advanced Topics in Digital Signal Processing	EENT 479
Advanced Topics in Computer Technology	EENT 489
Fiber Optics Communication	EENT 490
Wireless Communication Systems	EENT 492
Advanced Topics in Communication	EENT 495

General Technical Electives Group

<u>Course Name</u>	<u>Course No.</u>
Information Systems	CMPS 315
Object Oriented Programming	CMPS 370
Advanced Object-Oriented Programming	CMPS 371
Principle of Management	MGMT 300
Human Resource Management	MGMT 320
Organizational Behavior	MGMT 420
Engineering Practice	ENGR 499
Cal III and Diff Equations for Engineering	MATH 395

NOTE: The courses listed under Electronic Electives, and Communication Electives may also count as one of the General Technical Electives, however, a single course cannot meet the requirements of both elective groups.

Transfer Credits

Transfer courses can be substituted or used to satisfy the requirements for engineering or engineering technology courses if, and only if:

- The course contents, rigor of presentation, and prerequisites are equivalent, and
- Transfer credits come from engineering technology programs that are accredited by ABET.