# 2012-13 BS Electrical Engineering Degree Plan Biomedical Specialization

Last	First	Middle	SMU Student ID

Advisor

## See University Curriculum requirements in the Undergraduate Catalog.

#### **MAJOR**

Dallas Address

MAJOR			
Courses	Hours	Semester & Year	Grade
EE 1322 – Survey of Electrical and Electronic Devices	3		
EE 1382 – Fundamentals of Electrical Engineering	3		
EE 2322 – Electronic Circuits I	3		
EE 2122 – EE Laboratory: Electronic Circuits I	1		
EE 2350 – Circuits Analysis I	3		
EE 2370 – Design & Analysis of Signals & Systems	3		
EE 2170 – EE Laboratory: Design & Analysis of Signals & Systems	1		
EE 2381 – Digital Computer Logic	3		
EE 2181 – EE Laboratory: Digital Computer Logic	1		
EE 3372 – Introduction to Signal Processing	3		
EE 3381 – Microprocessors	3		
EE 3181 – EE Laboratory: Microprocessors	1		
EE 3360 – Statistical Methods in EE	3		
Junior EE Elective <sup>2</sup>	3		
Junior EE Elective <sup>2</sup>	3		
EE 5340 – Introduction to Biomedical Engineering	3		
EE 5345 – Biomedical Instrumentation	3		
Advanced Major Elective <sup>3</sup>	3		
EE 4311 – Senior Design I	3		
EE 4312 – Senior Design II	3		
TOTAL	52		

#### **MATHEMATICS**

Courses	Hours	Semester & Year	Grade
MATH 1337 – Calculus with Analytic Geometry I	3		
MATH 1338 – Calculus with Analytic Geometry II	3		
MATH 2339 – Calculus with Analytic Geometry III	3		
MATH 2343 – Elementary Differential Equations	3		
Advanced Mathematics Elective <sup>4</sup>	3		
TOTAL	15		

## **COMPUTER SCIENCE**

Courses	Hours	Semester & Year	Grade
CSE 1341 or CSE 1342	3		
TOTAL	3		

### **SCIENCE**

Courses	Hours	Semester & Year	Grade
PHYS 1303 – Introductory Mechanics	3		
PHYS 1105 – General Physics Laboratory	1		
PHYS 1304 – Introductory Electricity & Magnetism	3		
PHYS 1106 – General Physics Laboratory	1		
CHEM 1303 – General Chemistry I	3		
CHEM 1113 – General Chemistry Laboratory I	1		
CHEM 1304 – General Chemistry II	3		
CHEM 1114 – General Chemistry Laboratory II	1		
CHEM 3371 – Organic Chemistry I	3		
CHEM 3117 – Organic Chemistry Laboratory I	1		
CHEM 3372 – Organic Chemistry II	3		
CHEM 3118 – Organic Chemistry Laboratory II	1		
BIOL 1401 – Introductory Biology I	4		
BIOL 1402 – Introductory Biology II	4		
BIOL 3304 – Genetics	3		
BIOL 3350 – Cell Biology	3		
TOTAL	38		

## **GRADUATION CERTIFICATION:**

Advisor	Date
Dept. Chair or Associate Chair	Date
Assistant Dean	Date

<sup>1</sup> Engineering majors are required to take 9 hours of Perspectives and 6 hours of Cultural Formations, or 12 hours of Perspectives and 3 hours of Cultural Formations for a total of 15 hours. One of the Selections for Perspectives or Cultural Formations must satisfy the Human Diversity Co-Requirement.

To be chosen from EE 3311, EE 3322-3122, EE 3330orR EE 3352

To be chosen from any 5000 level EE course and approved by the student's advisor.

To be chosen from MATH 3308, MATH 3315 / CSE 3365, MATH 3337 or MATH 3353 (Credit will not be given for both CSE 2353 & Math 3308.)