

## 2015-16 BS Electrical Engineering Degree Plan

# Smart Wireless and Embedded Systems Specialization

Last	First	Middle	SMU Student ID
Dallas Address		Phone Number	Advisor

#### MAJOR

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Courses	Hours	Semester & Year	Grade
EE 1350 – Introduction to Electrical Engineering <sup>1</sup>	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 3311 – Solid State Devices	3		
EE 3322 – Electronic Circuits II	3		
EE 3122 – EE Laboratory: Electronic Circuits II	1		
EE 3330 – Electromagnetic Field Waves	3		
EE 3352 – Fundamentals of Electric Power Engineering	3		
EE 3360 – Statistical Methods in EE	3		
EE 3372 – Introduction to Digital Signal Processing	3		
EE 3381 – Microprocessors	3		
EE 3181 – EE Laboratory: Microprocessors	1		
EE 5377 – Embedded Wireless Design Lab	3		
EE 5385 – Microprocessors in Digital Design	3		
Advanced Major Elective EE 5330, 5333, 5357, 5378, 5379, 5381 or 5387	3		
Advanced Major Elective EE 5330, 5333, 5357, 5378, 5379, 5381 or 5387	3		
Advanced Major Elective <sup>2</sup>	3		
EE 4311 – Senior Design I	3	_	
EE 4312 – Senior Design II	3		
TOTAL	62		

#### **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>3</sup>	3		
TOTAL	15		

### **COMPUTER SCIENCE**

Courses	Hours	Semester & Year	Grade
CSE 1341 – Principles of Computer Science	3		
CSE 1342 – Programming Concepts	3		
CSE 2341 – Data Structures	3		
CSE 2353 – Discrete Computational Structures	3		
TOTAL	12		

## **SCIENCE**

Courses	Hours	Semester & Year	Grade
CHEM 1303 – General Chemistry I	3		
PHYS 1303 – Introductory Mechanics	3		

PHYS 1304 – Introductory Electricity & Magnetism	3	
PHYS 1105 or PHYS 1106	1	
Science Elective <sup>4</sup>	3	
TOTAL	13	

#### **UNIVERSITY CURRICULUM**

	Course or Experience	Hours	Semester & Year	Grade
Discernment and Discourse	-			
Discernment and Discourse				
Ways of Knowing	KNW 2300			
Quantitative Foundation	MATH 1337	####		
Personal Responsibility and Wellness 1		1		
Personal Responsibility and Wellness 2		1		
Pure and Applied Sciences – Level 1	PHYS1303/1105 or 1304/1106	####		
Pure and Applied Sciences – Level 2	EE 3360	####		
Individuals, Institutions, and Cultures – Level 1				
Individuals, Institutions, and Cultures – Level 2				
Historical Contexts – Level 1				
Historical Contexts – Level 2				
Creativity and Aesthetics – Level 1	CSE 1341	####		
Creativity and Aesthetics – Level 2				
Philosophical and Religious Inquiry and Ethics – Level 1	EE 2381	####		
Philosophical and Religious Inquiry and Ethics – Level 2	EE 3381	####		
Writing 1	EE 3311	####		
Writing 2				
Quantitative Reasoning	MATH 2343	####		
Information Literacy 1				
Information Literacy 2				
Oral Communication 1	KNW 2300	####		
Oral Communication 2	EE 3311	####		
Community Engagement				
Human Diversity				
Global Engagement				
Foreign Language 1				
Foreign Language 2				
TOTAL				

Total TCH: (Minimum 125)			
GRADUATION CERTIFICATION:			
Advisor	Date		
Dept. Chair	Date		
Assistant Dean	Date		

<sup>&</sup>lt;sup>1</sup>Courses that are listed multiple times in the Degree Plan in different sections may satisfy multiple requirements, but their hours apply only once to the total TCH of the major.

<sup>2</sup>To be chosen from any 5000 level EE course approved by the student's advisor.

<sup>3</sup>To be chosen from MATH 3315/ CSE 3365, MATH 3337 or MATH 3353 (Credit will not be given for both CSE 2353 & MATH 3308.)

<sup>4</sup>To be chosen from CHEM 1304, PHYS 3305, PHYS 3344 or PHYS 3374