



BACHELOR OF INNOVATION in ELECTRICAL ENGINEERING SAMPLE PROGRAM

The following document is intended for student use only. It represents the suggested order and semesters in which students should take courses to graduate within 4 years. Since each student is different this listing should only be considered a guide. *Please refer to your Degree Audit Report for elective options.* The BI Electrical Engineering program requires a minimum of 128 credit hours to complete. Students must have a minimum 2.0 GPA in all EE course work taken, and a minimum 2.0 GPA in all cumulative course work.

Courses marked with an * are often available in the summer. Courses marked with ** are ONLY offered that semester. Please note that all ECE courses numbered above 3000 are generally only offered during the indicated semester. Students must have a grade of C or better in ECE 1411, 2411 and 2610.

FRESHMAN YEAR

FALL SEMESTER (16 credit hours)	SPRING SEMESTER (16 credit hours)
*ECE 1411 – Logic Circuits I – 2 ENTP 1000 Intro. to Entrepreneurship – 3 *MATH 1350 Calculus I – 4 *PES 1110 General Physics I – 4 ID 1010 Mindstorms Freshman Seminar – 3 <u>OR</u> ECE 1001 Introduction to Robotics – 3	*ECE 2411 Logic Circuits II – 2 ECE 1021 Computer Based Modeling – 3 INOV 1010 The Innovation Process – 3 *MATH 1360 Calculus II – 4 *PES 1120 General Physics II – 4

SOPHOMORE YEAR

FALL SEMESTER (17 credit hours)	SPRING SEMESTER (16 credit hours)
ECE 2610 Intro to Signals and Systems – 4 **BLAW 2010 Business and Intellectual Property Law – 3 *ENGL 1310 Rhetoric & Writing I – 3 INOV 2010 Innovation Team: Analyze & Report– 3 *MATH 2350 Calculus III – 4	ECE 2205 Intro. to Circuits and Systems I – 4 **ECE 2050 Intro. to Physical Electronics – 3 INOV 2100 Tech. Writing, Proposals and Presentation – 3 MATH 3400 Intro. to Differential Equations – 3 PES 2130 General Physics III – 3

JUNIOR YEAR

FALL SEMESTER (18 credit hours)	SPRING SEMESTER (15 credit hours)
**ECE 3210 Electronics I – 3 **ECE 3230 Electronics Lab I – 1 **ECE 3205 Circuits and Systems II – 4 **ECE 3420 Microprocessor Systems Lab – 1 **ECE 3430 Intro. to Microcomputer Systems – 3 INOV 3010 Innovation Team: Research & Execute – 3 Cross Discipline Core Course – 3	**ECE 3110 Electromagnetic Fields – 3 **ECE 3610 Engineering Probability & Stats – 3 *Technical Elective Course – 3 Cross Discipline Core Course – 3 Cross Discipline Core Course – 3

SENIOR YEAR

FALL SEMESTER (15 credit hours)	SPRING SEMESTER (15 credit hours)
**ECE 3020 Semiconductor Device I – 3 *MATH elective number 3100 or higher (except 3810) – 3 *Technical Elective Course – 3 INOV 4010 Innovation Team: Design & Lead – 3 Open Elective – 3	**ENTP 4500 Entrepreneurship and Strategy – 3 *Technical Elective Course – 3 Cross Discipline Core Course – 3 Cross Discipline Core Course – 3 Open Elective – 3

CROSS DISCIPLINE CORES – CHOOSE ONE

BUSINESS

COURSE NUMBER & TITLE	HRS	PREREQUISITES/COREQUISITES
ECON 1010 Intro to Microeconomics	3	
ACCT 2010 Intro to Financial Accounting	3	Sophomore or higher standing
MGMT 3300 Introduction to Management & Organization	3	
Choose two from:	6	
OPTM 3000 Fundamentals of Operations Management		Permission number needed
MKTG 3000 Principles of Marketing		Permission number needed
FNCE 3050 Basic Finance		Permission number needed
TOTAL	15	

CREATIVE COMMUNICATION

COURSE NUMBER & TITLE	HRS	COURSE NUMBER & TITLE	HRS
COMM 3440 Leadership Communication	3		
Choose one MUS course	3		
Choose one from:	3	Choose two from:	6
VA 1010 Beginning Studio 2D		MGMT 3900 Improving Personal and Team Creativity	
VA 1020 Beginning Studio 3D		COMM 1020 Interpersonal Communication	
VA 1040 Beginning Drawing		COMM 2010 Oral Communication in the Workplace	
VA 2060 Two-Dimensional Topics		COMM 2250 Introduction to Film and Video	
VA 2070 Three-Dimensional Topics		COMM 3100 Directing for Film and Television	
VA 2100 Digital Imaging		COMM 3280 Intercultural Communication	
VA 2110 Introduction to Photography		COMM 4220 Creative Communication	
VA 2150 Digital Photography		ENGL 2050 Introduction to Creative Writing – Fiction	
Total	15		

GLOBALIZATION

COURSE NUMBER & TITLE	HRS	PREREQUISITES/COREQUISITES	HRS
Foreign Language			6
Passing 2 semesters of the same foreign language, at a level appropriate to the student, fulfills this requirement. 4 years of a foreign language in HS fulfills this requirement. Demonstrating proficiency to the advisor fulfills the req. If the requirement is fulfilled in less than 6 credit hours, the remaining credit hours must be taken from the list below.			
Choose three courses from:			9
ANTH 1040 Intro to Cultural Anthropology		INTB 4800 International Management	
ANTH 3040 Women Around the World		MKTG 4900 International Marketing	
COMM 3280 Intercultural Communication		PHIL 3090 Philosophies of Asia	
ECON 3590 Globalization		PHIL 3100 Religions Around the World	
ECON 3710 Comparative Economic Systems		PSC 1010 Introduction to Global Politics	
FNCE 4400 International Financial Management		PSC 4210 International Politics	
GES 1980 World Regional Geography		PSC 4590 Globalization	
GES 1990 Intro to Human Geography		SOC 4380 Globalization and Development	
GES 3400 Geopolitics		WEST 3040 Women Around the World	
INTB 3600 International Business		WEST 3480 Global Women's Issues	
Total			15