



College of Engineering
 Main, Banilad, Lapu-Lapu Mandaue
Bachelor of Science in Electronics Engineering (BSECE)
 CMO No. 101, Series of 2017
 Effective School Year 2024-2025
Guide for Non-STEM Students

Name: _____
 ID Number: _____

Date Started/First Enrolled: _____
 Expected Date of Graduation: _____

FIRST YEAR

FIRST YEAR						
1 st Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	ENGL 101	Purposive Communication	3	0	3	
	HIST 101	Readings in Philippine History	3	0	3	
	SOCIO 101	The Contemporary World	3	0	3	
	MATH 100E	College Mathematics	3	0	3	
	MATH 101E	Mathematics in the Modern World	3	0	3	
	EBR 101	Pre-Calculus	3	0	3	
	EBR 102	General Chemistry	2	1	3	
	BES 101	Engineering Drawing	0	1	1	
	BES 102A	Computer-Aided Drafting	0	1	1	
	PE 101	Movement Competency Training (PATHFit 1)	2	0	2	
	NSTP 101	National Service Training Program 1	3	0	3	
Total					28	
2 nd Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	PHILO 101	Ethics	3	0	3	
	SOCIO 102	Gender and Society	3	0	3	
	STS 101	Science, Technology and Society	3	0	3	
	EBR 103	General Physics	2	1	3	
	EMATH 111	Calculus 1	3	0	3	EBR 101 (For Non-Stem Only)
	CHEM 111	Chemistry for Engineers	3	1	4	EBR 102 (For Non-Stem Only)
	PE 102	Exercise-based Fitness Activities (PATHFit 2)	2	0	2	PE 101
	NSTP 102	National Service Training Program 2	3	0	3	NSTP 101
Total					24	
Summer	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	EMATH 121	Calculus 2	3	0	3	EMATH 111
	PHYS 121	Physics for Engineers	3	1	4	EMATH 111, EBR 103 (For Non-Stem Only)
	BES 103	Computer Programming	0	2	2	
Total					9	

SECOND YEAR

SECOND YEAR						
1 st Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	HUM 101	Art Appreciation	3	0	3	
	PSYCH 101	Understanding the Self	3	0	3	
	EMATH 122	Engineering Data Analysis	3	0	3	EMATH 111
	EMATH 211	Differential Equations	3	0	3	EMATH 121
	BES 104	Engineering Economics	3	0	3	
	BES 108	Materials Science and Engineering	3	0	3	CHEM 111
	ECE 211	ECE Laws, Contracts, Ethics, Standards & Safety	3	0	3	
	ECE 212A	Physics 2	3	1	4	EMATH 111
	PE 103	Sports and Dance (PATHFit 3)	2	0	2	PE 101, PE 102
Total					27	
2 nd Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	HUM 102	Philippine Popular Culture	3	0	3	
	LIT 101	Literature of the World	3	0	3	
	RIZAL 101	Life and Works of Dr. Jose Rizal	3	0	3	
	EMATH 222	Advanced Engineering Mathematics for ECE	3	1	4	EMATH 211
	EE 211	Electrical Circuits 1	3	1	4	ECE 212A, ECE 221
	ECE 221	Electronic Devices and Circuits	3	1	4	ECE 212A, EE 211
	ECE 222	Electromagnetics for ECE	4	0	4	EMATH 211
Total					27	

THIRD YEAR

1 st Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	TECHNO 101	Technopreneurship	3	0	3	ENGL 101, BES 104
	CPE 212A	Cisco Certified Network Associate 1	0	2	2	STS 101
	CPE 311A	Logic Circuits and Switching Theory	3	1	4	ECE 221
	EE 221	Electrical Circuits 2	3	1	4	EE 211
	ECE 311	Electronic Circuit Analysis and Design	3	1	4	ECE 221, ECE 312
	ECE 312	Principles of Communication Systems	3	1	4	ECE 221, ECE 311
	ECE 313	Signals, Spectra and Signal Processing	3	1	4	EMATH 222
Total					25	

2 nd Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	RES 101	Methods of Research	3	0	3	ENGL 101, EMATH 122
	CPE 222A	Cisco Certified Network Associate 2	0	2	2	CPE 212A
	CPE 322	Microprocessors	3	1	4	CPE 311A
	ECE 321	Electronic Systems and Design	3	1	4	ECE 311
	ECE 322	Modulation and Coding Techniques	3	1	4	ECE 312
	ECE 323	Feedback and Control Systems	3	1	4	EMATH 222
Total					21	

Summer	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	ECE 331	On-The-Job Training	3	1	4	ECE 323
Total					4	

FOURTH YEAR

1 st Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	CPE 313A	Cisco Certified Network Associate 3	0	2	2	CPE 222A
	ECE 411	Data Communications	3	1	4	ECE 322
	ECE 412	Transmission Media, Antenna System and Design	3	1	4	ECE 322
	ECE 413	Design 1/ Capstone Project 1	0	1	1	RES 101
	ECE EC 1	Enhancement Course 1	0	1	1	EMATH 222
	ECE EC 2	Enhancement Course 2	0	1	1	ECE 321
	ECE FR EL 1	ECE Elective 1	3	1	4	ECE 322
Total					17	

2 nd Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	BES 106	Environmental Science and Engineering	3	0	3	CHEM 111
	BES 107	Engineering Management	2	0	2	
	ECE 421	Seminars/Colloquium	0	1	1	ECE 331
	ECE 422	Design 2/ Capstone Project 2	0	1	1	ECE 413
	ECE EC 3	Enhancement Course 3	0	1	1	ECE EC 2
	ECE EC 4	Enhancement Course 4	0	1	1	ECE 412
ECE FR EL 2	ECE Elective 2	3	1	4	ECE FR EL 1	
Total					13	

I. TECHNICAL COURSES:

A. Mathematics	12	units
B. Natural/Physical Sciences	8	units
C. Basic Engineering Sciences	9	units
D. Allied Courses	20	units
E. Professional Core Courses	61	units
F. Technical Electives	8	units
G. On-the-Job Training	4	units
SUB-TOTAL	122	units

II. NON-TECHNICAL COURSES:

A. General Education Courses	50	units
SUB-TOTAL	50	units

III. INSTITUTIONAL, ENGINEERING BRIDGING & OTHER COURSES:

A. Institutional Course	3	units
B. Engineering Bridging Courses	9	units
C. Other Courses	11	units
SUB-TOTAL	23	units

GRAND TOTAL: **186 units (STEM Enrollees)**
 GRAND TOTAL: **195 units (Non-STEM Enrollees)**

SUGGESTED ELECTIVES:

- Track 1 Advanced Communication System & Design (Wireless)
- Advanced Networking
- Track 2 Analog IC Design
- Digital IC Design
- Track 3 Advanced Power Supply Systems
- Renewable Energy Systems
- Track 4 Fundamentals of Biomedical Engineering
- Medical Imaging
- Track 5 Computer Systems Architecture
- Operating Systems & Advanced Programming Languages
- Track 6 Broadcast Production Engineering
- Broadcast Transmission & Distribution

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