



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

Name: _____
 ID Number: _____

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

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	
	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)
	BES 101	Engineering Drawing	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	
	EMATH 121	Calculus 1	3	0	3	EMATH 111
	PHYS 121	Physics for Engineers	3	1	4	EMATH 111, EBR 103 (For Non-Stem Only)
	BES 102A	Computer-Aided Drafting	0	1	1	
	BES 103	Computer Programming	0	2	2	
	PE 102	Exercised-based Fitness Activities (PATHFit 2)	2	0	2	PE 101
	NSTP 102	National Service Training Program 2	3	0	3	NSTP 101
Total					24	

Engineering Bridging Courses for Non-STEM:

EBR 101 – Pre-Calculus	3	0	3
EBR 102 – General Chemistry	2	1	3
EBR 103 – General Physics	2	1	3

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
PE 104	Sports, Outdoor & Adventure Activities (PATHFit 4)	2	0	2	PE 101, PE 102	
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

ENGR. LEODEGARIO C. GATCHO
BSECE Chairman, UC Main

ENGR. ROGELIO A. LANSA
BSECE Chairman, UC Banilad

ENGR. GREG R. BELONGILOT
Dean, College of Engineering, UC Main

ENGR. ROLAND B. FERNANDEZ
Dean, College of Engineering, UC Lapu-Lapu Mandaue

DR. YOLANDA C. SAYSON
VC for Academic Affairs/ Curriculum Director