

College of Engineering
Main, Banilad, Lapulapu-Mandaue

Bachelor of Science in Electrical Engineering (BSEE)

CMO No. 88, Series of 2017
Effective School Year 2019-2020

Name : _____ Date Started / First Enrolled: _____
ID Number : _____ Expected Date of Graduation: _____

FIRST YEAR

	CourseCode	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / CoRequisite
1 st Semester	ENGL 100	Communication Arts	3	0	3	
	SOCIO 102	Gender and Society	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	Pre-Calculus
	CHEM 111	Chemistry for Engineers	3	1	4	General Chemistry
	BES 101	Engineering Drawing	0	1	1	
	EE 101	Orientation to EE	1	0	1	
	PE 101	Movement Enhancement	2	0	2	
	NSTP 101	National Services Training Program 1	3	0	3	
Total					26	

	CourseCode	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / CoRequisite
2 nd Semester	ENGL 101	Purposive Communication	3	0	3	
	HUM 102	Philippine Popular Culture	3	0	3	
	EMATH 121	Calculus 2	3	0	3	EMATH 111
	EMATH 122	Engineering Data Analysis	3	0	3	
	PHYS 121	Physics for Engineers	3	1	4	General Physics, EMATH 111
	HIST 101	Readings in Philippine History	3	0	3	
	BES 102A	Computer Aided Drafting	0	1	1	BES 101
	PE 102	Fitness Exercises	2	0	2	PE 101
	NSTP 102	National Service Training Program 2	3	0	3	NSTP 101
	Total					25

Engineering Bridging Courses for Non-STEM:

- EBR 101 – Pre-Calculus 3 units
- EBR 102 – General Chemistry 3 units
- EBR 103 – General Physics 3 units

SECOND YEAR

	CourseCode	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / CoRequisite
1 st Semester	EMATH 211	Differential Equations	3	0	3	EMATH 121
	STS 101	Science, Technology and Society	3	0	3	
	RIZAL 101	Life and Works of Dr. Jose Rizal	3	0	3	
	AS 101	Thermodynamics 1	3	0	3	
	BES 103	Computer Programming	0	2	2	
	BES 105	Basic Occupational Safety and Health	3	0	3	
	MECH 211A	Static of Rigid Bodies	3	0	3	PHYS 121
	EE 211	Electrical Circuits 1	3	1	4	EMATH 121, PHYS 121
	EETVET 211	Shop Theory & Practice 1	0	1	1	EE 211
	PE 103	Physical Activity Towards Health and Fitness I	2	0	2	PE 102
Total					27	

	CourseCode	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / CoRequisite
2 nd Semester	EMATH 222A	Engineering Mathematics for EE	3	0	3	EMATH 211
	PHILO 101	Ethics	3	0	3	
	SOCIO 101	The Contemporary World	3	0	3	
	MECH 222A	Fluid Mechanics	2	0	2	PHYS 121
	MECH 224	Mechanics of Deformable Bodies	3	0	3	MECH 211A
	ECE 221A	Electronic Circuits: Devices and Analysis	3	1	4	EE 211
	EE 221	Electrical Circuits 2	3	1	4	EE 211
	EE 222	Electromagnetics for EE	3	0	3	PHYS 121, EMATH 211
	EETVET 221	Shop Theory & Practice 2	0	1	1	EETVET 211
	PE 104	Physical Activity Towards Health and Fitness II	2	0	2	PE 103
Total					28	

THIRD YEAR

	CourseCode	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / CoRequisite
1 st Semester	EMATH 311	Numerical Methods and Analysis	2	1	3	EMATH 222A
	HUM 101	Art Appreciation	3	0	3	
	BES 104	Engineering Economics	3	0	3	
	CPE 311A	Logic Circuits and Switching Theory	3	1	4	ECE 221A
	ECE 312A	Fundamentals of Electronic Communications	3	0	3	ECE 221A
	ECE 321A	Industrial Electronics	3	1	4	ECE 221A
	EE 311	Electrical Machines 1	3	1	4	EE 221
	EE EC 1	Enhancement Course 1	0	1	1	EMATH 222A
Total					25	

	CourseCode	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / CoRequisite
2 nd Semester	PSYCH 101	Understanding the Self	3	0	3	
	LIT 101	Literature of the World	3	0	3	
	BES 106	Environmental Science and Engineering	3	0	3	CHEM 111
	CPE 322A	Microprocessor Systems	2	1	3	CPE 311A
	ECE 323A	Feedback Control Systems	3	0	3	EMATH 222A, ECE 221A
	EE 321	Electrical Machines 2	3	1	4	EE 311
	EE 322	Electrical Apparatus and Devices	2	1	3	EE 221, EE 222
	EE 323	Research Methods for EE	0	1	1	EMATH 122, ENGL 101
	EE EC 2	Enhancement Course 2	0	1	1	EE EC 1
	Total					24

	CourseCode	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / CoRequisite
Summer	EE 331	On-The-Job Training	3	1	4	EE 321, EE 322
	Total					4

FOURTH YEAR

	CourseCode	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / CoRequisite
1 st Semester	BES 108	Materials Science and Engineering	3	0	3	CHEM 111
	TECHNO 101	Technopreneurship	3	0	3	EE 414
	EE 410	EE Laws, Codes, and Professional Ethics	3	0	3	PHILO 101
	EE 411	Electrical Standards and Practices	0	1	1	EE 410
	EE 412	Electrical Systems and Illumination Engineering Design	3	2	5	EE 321
	EE 413	Instrumentation and Control	3	1	4	ECE 323A
	EE 414	EE Design Project 1	0	1	1	EE 323
	EE 415	Management of Engineering Projects	3	0	3	BES 104
	EE EC 3	Enhancement Course 3	0	1	1	EE EC 2
Total					24	

	CourseCode	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / CoRequisite
2 nd Semester	EE 421	Power System Analysis	3	1	4	EE 411
	EE 422	EE Design Project 2	0	1	1	EE 414
	EE 423	Seminars/Colloquia	0	1	1	EE 422
	EE 424	Distribution Systems and Substation Design	2	1	3	EE 421
	EE 425	Fundamentals of Power Plant Engineering Design	0	1	1	EE 421
	EE EC 4	Enhancement Course 4	0	1	1	EE EC 3
	EE FR EL 1	EE Elective 1	3	0	3	EE 421
	EE FR EL 2	EE Elective 2	3	0	3	EE 421
Total					17	

I. TECHNICAL COURSES:

A. Mathematics	12	units
B. Natural/Physical Sciences	8	units
C. Basic Engineering Sciences	10	units
D. Allied Courses	40	units
E. Professional Courses	60	units
F. Electives	6	units
SUB-TOTAL:	136	Units

Suggested Electives:

1. Power System Protection
2. Advanced Power System Analysis and Design
3. Advanced Electrical Systems Design
4. Special Studies in Renewable Energy Resources
5. Machine Automation and Process Control
6. Electrical Estimates

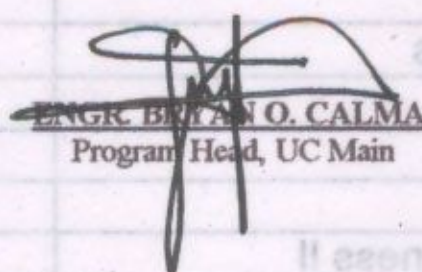
II. NON - TECHNICAL COURSES:

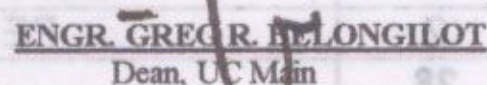
A. General Education Courses	53	Units
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III. INSTITUTIONAL COURSES, BRIDGING AND OTHER COURSES:

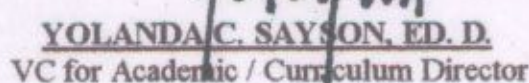
A. Institutional Courses	3	units
B. Bridging Courses	9	units
C. Other Courses	8	units
SUB-TOTAL:	20	Units

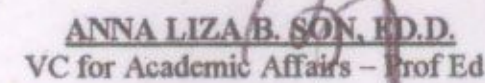
GRAND TOTAL: 200 UNITS (STEM Enrollees)
GRAND TOTAL: 209 UNITS (NON - STEM Enrollee)


ENGR. BRYAN O. CALMA
 Program Head, UC Main


ENGR. GREG R. DELONGILOT
 Dean, UC Main


ENGR. ROLAND B. FERNANDEZ
 Dean, UC LM


YOLANDA C. SAYSON, ED. D.
 VC for Academic / Curriculum Director


ANNA LIZA B. SON, ED. D.
 VC for Academic Affairs - Prof Ed