



IMPLEMENTATION

- I.1.2. Non-Technical Course 53 units
- Social Sciences: 12 units
 - Humanities: 9 units
 - Languages: 15 units
 - Life and Works of Rizal: 3 units
 - Physical Education: 8 units
 - National Training Service Program: 6 units



BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING (BSEE)
CMO No. 87, S. of 2017
Effective A.Y 2020-2021

First Semester						
Course Code	Descriptive Title	Lec	Lab	Units	Pre-requisite	
MATH 111	Calculus 1	5	0	5	None	
ES 133	Computer-aided Drafting	0	2	2	None	
GE Math	Mathematics in the Modern World	5	0	5	None	
GE USelf	Understanding the Self	3	1	4	None	
CHEM 121	Chemistry for Engineers	3	0	3	None	
IC 102	Introduction to Electrical Engineering	3	0	3	None	
PE 1	Physical Fitness & Health	2	0	2	None	
NSTP 1	National Service Training Program 1	3	0	3	None	
Sub- Total		24	3	27		

Second Semester						
Course Code	Descriptive Title	Lec	Lab	Units	Pre-requisite	
Math 112	Calculus 2	5	0	5	Math 111	
Phys 122	Physics for Engineers	3	1	4	Math 111; Co-requisite Math 112	
GE Entrep	The Entrepreneurial Mind	3	0	3	None	
GE IT	Living in the IT Era	3	0	3	None	
CPE 143	Computer Programming	0	1	1	None	
GE Rizal	Life and Works of Rizal	3	0	3	None	
GE PurCom	Purposive Communication	3	0	3	None	
E 2	Rhythmic Activities	2	0	2	None	
STP 2	National Service Training Program 2	3	0	3	NSTP 1	
Sub- Total		25	1	27		

First Semester						
Course Code	Descriptive Title	Lec	Lab	Units	Pre-requisite	
Math 113	Differential Equations	3	0	3	Math 112	
EE 201	Electrical Circuits 1	3	1	4	Phys 122; Math 112	
ES 255	Engineering Mechanics	3	0	3	Phys 122	
Math 114	Engineering Data Analysis	3	0	3	Math 111	
ES 302	Fluid Mechanics	2	0	2	Phys 122	
GE ArtApp	Art Appreciation	3	0	3	None	
GE EnviSci	Environmental Science	3	0	3	None	
PE 3	PE 3	2	0	2	None	
Sub- Total		22	1	23		

Second Semester						
Course Code	Descriptive Title	Lec	Lab	Units	Pre-requisite	
Math 161	Engineering Mathematics for EE	3	0	3	Math 113	
EE 202	Electrical Circuits 2	3	1	4	EE 201	
EE 201	Electronic Circuits: Devices and Analysis	3	1	4	EE 201	
ES 282	Basic Thermodynamics	2	0	2	Phys 122	
ES 137	Engineering Economics	3	0	3	Math 114	
ECE 252	Electromagnetics	4	0	4	Phys 122; Math 113	
GE Eth	Ethics	3	0	3	None	
PE 4	PE 4	2	0	2	None	
Sub- Total		23	2	25		

First Semester						
Course Code	Descriptive Title	Lec	Lab	Units	Pre-requisite	
EE 301	Numerical Methods and Analysis	2	1	3	Math 161	
ECE 371	Logic Circuits and Switching Theory	3	1	4	ECE 201	
ES 246	Environmental Science and Engineering	3	0	3	None	
GE STS	Science, Technology and Society	3	0	3	None	
EE 311	Industrial Electronics	3	1	4	ECE 201	
EE 312	Fundamentals of Electronic Communications	3	0	3	ECE 201	
EE 302	Electrical Machines 1	2	0	2	ECE 252; EE 202	
ES 261	Fundamentals of Deformable Bodies	2	0	2	ES 255	
Sub- Total		21	3	24		

Second Semester						
Course Code	Descriptive Title	Lec	Lab	Units	Pre-requisite	
CpE 371	Microprocessor Systems	3	1	4	ECE 371	
EE 304	Electrical Apparatus and Devices	2	1	3	EE 202	
EE 303	Electrical Machines 2	3	1	4	EE 302	
ES 301	Basic Occupational Safety and Health	3	0	3	3rd year standing	
ES 138	Technopreneurship	3	0	3	4 th year standing	
EE 305	EE Law, Codes, and Professional Ethics	2	0	2	GE Eth	
ECE 357	Feedback and Control Systems	3	0	3	Math 161; ECE 201	
GE ConWorld	Contemporary World	3	0	3	None	
Sub- Total		22	3	25		

Summer					
Course Code	Descriptive Title	Lec	Lab	Units	Pre-requisite
Practicum	On-the-Job Training	3	240	2	4th Year Standing
Sub- Total		3	240	2	

Fourth Year First Semester					
Course Code	Descriptive Title	Lec	Lab	Units	Pre-requisite
ES 142	Materials Science and Engineering	3	0	3	CHEM 121; ES 261
EE 401	Electrical Standards and Practices	0	1	1	EE 305
EE 402	Electrical Systems and Illumination Engineering Design	3	2	5	EE 303
EE 481	Power Systems - Generation and Transmission	3	0	3	4 th year standing
EE 164	Management of Engineering Projects	2	0	2	ES 137
ES 140	Research Methods	0	1	1	Math 114; GE PurCom
EE 403	Instrumentation and Control	2	1	3	ECE 357
IC 105	EE REVIEW 1	2	0	2	4 th year standing
Sub- Total		15	5	20	

Second Semester					
Course Code	Descriptive Title	Lec	Lab	Units	Pre-requisite
EE 431	Power Systems Analysis	3	1	4	EE 401
EE 432	Fundamentals of Power Plant Engineering Design	0	1	1	Co-requisite: EE 431
EE 433	Distribution Systems and Substation Design	2	1	3	Co-requisite: EE 431
EE 482	Power Systems - Distribution System and Supply	3	0	3	EE 481
EE 422	Research Project or Capstone Design Project for EE	0	1	1	ES 142
ES 484	Seminars/Colloquia & Field Trips	0	1	1	4 th year standing
IC 106	EE REVIEW 2	2	0	2	4 th year standing
GE Hist	Readings in Philippine History	3	0	3	NONE
Sub- Total		13	5	18	
Grand Total		165	254	188	

Category	Units
I. Technical Courses	
A. Mathematics	16
B. Natural/Physical Sciences	6
C. Basic Engineering Sciences	11
D. Allied Courses	39
E. Professional Courses	52
F. Electives	6
Sub-Total	132
II. Non-Technical Courses	
A. GE Core Courses	24
B. Electives	9
C. Mandated Courses	3
D. Physical Education	6
E. NSTP	6
Sub-Total	50
III. Institutional Courses	
A. Introduction to Electrical Engineering	2
B. EE Review 1	2
C. EE Review 2	2
Sub-Total	6
Grand Total	188

Prepared by:

ENGR. JOSELITO BALDAPAN, PEE
Program Chair, BSEE

Noted by:

CARLOS H. DONOSO, EdD
Campus Director, Surigao City Campus

Checked and Reviewed by:

ENGR. ROBERT R. BACARRO, MECE, MBA
Dean, CEIT

Recommended by:

EMMYLOU A. BORJA, EdD
VP for Academic Affairs

Approved by:

GREGORIO Z. GAMBOA, JR., EdD
College President

