BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING EFFECTIVE ACADEMIC YEAR 2018-2019 (Updated Program of Study as of Academic Year 2020-2021) HOURS COURSE **COURSE TITLE** PRE-REQUISITE **CO-REQUISITE** UNITS CODE LEC LAB **FIRST YEAR** FIRST SEMESTER 15 9 23 EE181 **EE Orientation Course** 0 3 1 MATH137 **Engineering Calculus 1** 3 0 3 CHEM131 Chemistry for Engineers, lec 3 O 3 **CHEM181** 0 3 CHEM181 1 **CHEM131** Chemistry for Engineers, lab ES083 0 Computer-Aided Design and Drafting 3 1 3 0 STS031 Science, Technology and Society 3 SOCSCI031 Readings in Philippine History 3 3 0 PSYCH031 3 Understanding the Self n 3 PE103 2 Movement Enhancement 3 NSTP111 National Service Training Program 1 SECOND SEMESTER 15 9 23 EE182 **Electrical Technology** 0 3 MATH138 3 0 **MATH137 Engineering Calculus 2** 3 PHYS182, PHYS132 3 **MATH137** Physics for Engineers, lec 0 3 **MATH138** PHYS132, PHYS182 Physics for Engineers, lab 0 3 1 **MATH137 MATH138** ES084 Computer Programming 1 0 3 1 MATH031 Mathematics in the Modern World 3 0 3 ENGL031 Purposive Communication 3 0 3 **HUM031** Art Appreciation 3 0 3 PE104 Fitness Exercises 2 PE103 National Service Training Program 2 NSTP112 3 NSTP111 **SECOND YEAR** FIRST SEMESTER 21 6 25 PHYS132. EE231 Electrical Circuits 1, lec 3 0 EE281 3 MATH138 PHYS132, EE281 Electrical Circuits 1, lab 0 3 1 EE231 **MATH138** MATH237 **Differential Equations** 3 0 **MATH138** 3 ES031 3 0 3 **MATH137 Engineering Data Analysis** PHYS132. ES033 **Engineering Mechanics** 3 n 3 **PHYS182** ES085 0 Computer Programming 2 3 1 ES084 PHYS132. ME233 3 0 3 Basic Thermodynamics **PHYS182** GE-EE1 General Education Elective 1 3 O 3 SOCSCI032 The Contemporary World 3 0 3 Physical Activities Towards Health and PE205 2 PE103 Fitness I SECOND SEMESTER 19 6 23 EE232 Electrical Circuits 2. lec 3 EE231, EE281 EE282 0 3 EE282 Electrical Circuits 2, lab 0 3 1 EE231, EE281 EE232 EE234 Engineering Mathematics for EE 3 0 3 MATH237 PHYS132, EE236 Electromagnetics 2 0 2 **MATH138** Electronic Circuits: Devices and Analysis, 3 ECE252 0 3 EE231, EE281 ECE202 lec

ECE202	Electronic Circuits: Devices and Analysis,	0	3	1	EE231, EE281	ECE252
ES035	Fundamentals of Deformable Bodies	2	0	2	ES033	
RIZAL031	The Life and Works of Rizal	3	0	3		
GE-EE2	General Education Elective 2	3	0	3		
PE206	Physical Activities Towards Health and Fitness II			2	PE103	
SUMMER TERM	Filliess II	6	0	6		
EE330	Advanced Electrical Circuits	3	0	3	EE232, EE282	
EE350	Basic Occupational Safety and Health for	3	0	3		
	EE THIRD YEAR					_
FIRST SEMESTER	TIME TEAK	24	6	26		
EE351	Electrical Machines 1, lec	2	0	2	EE232, EE282,	EE381
					EE236 EE232, EE282,	
EE381	Electrical Machines 1, lab	0	3	1	EE236	EE351
EE353	Feedback Control Systems	2	0	2	EE234, ECE252	
EE361	Numerical Methods and Analysis	2	3	3	EE234	
ECE335A	Logic Circuits and Switching Theory	2	0	2	ECE252	
ECE351	Fundamentals of Electronic Communications	3	0	3	ECE252	
ME331A	Fluid Mechanics	2	0	2	PHYS132, PHYS182	
ES032	Engineering Economics	3	0	3	ES031	
ES037A	Materials Science and Engineering	2	0	2	CHEM131,	
PHILO031	Ethics	3	0	3	ES035	
GE-EE3	General Education Elective 3	3	0	3		
SECOND SEMESTER		15	18	21		
EE352	Electrical Machines 2, lec	3	0	3	EE351, EE381	EE382
EE382	Electrical Machines 2, lab	0	3	1	EE351, EE381	EE352
EE354	Electrical Apparatus and Devices, lec	3	0	3	EE232, EE282	EE384
EE384	Electrical Apparatus and Devices, lab	0	3	1	EE232, EE282	EE354
EE356	EE Laws, Codes and Professional Ethics	2	0	2	PHILO013	
EE386	Research Methods	0	3	1	ES031	
EECC382	EE Comprehensive Course 1	0	3	1	EE234	
ECE356	Industrial Electronics, lec	3	0	3	ECE252, ECE202	ECE304
ECE306	Industrial Electronics, lab	0	3	1	ECE252, ECE202	ECE352
CPE366A	Microprocessor Systems	2	3	3	ECE335A	
ES036A	Environmental Science and Engineering	2	0	2	CHEM131	
SUMMER TERM		0	6	2		
EE480	On the Job Training (240 Hours)	0	6	2	4th Year Standing	
	FOURTH YEAR				1 - 1 - 3	
FIRST SEMESTER		13	24	21		
EE461	Electrical Systems Design	2	3	3	EE352, EE382	
EE463	Illumination Engineering	1	3	2	4th Year Standing	
EE465	Distribution Systems and Substation Design	2	3	3	EE354, EE384	EE461
EE467	Instrumentation and Control	2	3	3	EE353	
EE481	Research Project or Capstone Design Project 1	0	3	1	EE386	
EE483	Electrical Standards and Practices	0	3	1	EE356	
EETE1	EE Track Elective 1	3	3	4	4th Year Standing	
EECC481	EE Comprehensive Course 2	0	3	1	EECC382	
ES034	Engineering Management	3	0	3		
		1	1	-		

SECOND SEMESTER		13	21	20		
EE452	Management of Engineering Projects	2	0	2	ES032	
EE462	Power System Analysis	3	3	4	EE465, EE483	
EE464	Power System Protection	2	3	3	EE465	EE462
EE482	Research Project or Capstone Design Project 2	0	3	1	EE481	
EE484	Fundamentals of Power Plant Engineering Design	0	3	1	EE483	EE462
EE486	Seminars/Colloquia	0	3	1	4th year standing	
EETE2	EE Track Elective 2	3	3	4	EETE1	
EECC482	EE Comprehensive Course 3	0	3	1	EECC481	
ES038	Technopreneurship	3	0	3	ES034	
GRAND TOTAL		141	105	190		
	LIST OF ELECTIVES					
Machine Automation and Process Control Track	LIST OF ELECTIVES					
EETE461	EE Track Elective 1: Electro-pneumatics with PLC	3	3	4		
EETE462	EE Track Elective 2: Instrumentation and Control of Electrical Machines	3	3	4	EETE461	
Advanced Power System Design and Maintenance Track	d					
EETE463	EE Track Elective 1 : Industrial and Commercial Power System Design	3	3	4		
EETE464	EE Track Elective 2: Power System Element Testing and Maintenace	3	3	4	EETE463	
	RECOMMENDED GENERAL EDUCATION	ON EI	ECTI	VES		
ENGL014	Technical Writing/ Communication	3	0	3		
SSP031	Creative Thinking Tools	3	0	3		
SSP032	Sustainability Development and Global Citizenship	3	0	3		