



2018 CURRICULUM FOR BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING (BSEE)

IMPORTANT : REGISTRATION IN ANY COURSE WITHOUT ALL THE PREREQUISITES, CORRECT SEQUENCE AND AUTHORIZED LOAD SHALL NOT BE GIVEN ANY CREDIT REGARDLESS OF THE GRADE OBTAINED.
EVALUATION IS TENTATIVE AND MAY BE REVISED FOR SOME VALID CAUSES OR REASONS OR IF OMISSIONS AND/OR LACK OF UNITS CREDITED BE DISCOVERED LATER.

COURSE CODE		DESCRIPTIVE TITLE	Student's Name and Signature			PREREQUISITE(S)
			Lecture Hours	Laboratory Hours	Credit Units	
FIRST YEAR, FIRST SEMESTER (18 UNITS)						
CHM	001	Chemistry for Engineers	3	3	4	
MATH	018	Calculus 1	3	0	3	
MATH	025	Discrete Mathematics	3	0	3	
GEC	004	Mathematics in the Modern World	3	0	3	
GEC	005	Purposive Communication	3	0	3	
PE	101	Physical Education 1	2	0	2	
NSTP	001	National Service Training Program 1	(3)	0	(3)	
FIRST YEAR, SECOND SEMESTER (18 UNITS)						
PHYS	111	Calculus-Based Physics	3	3	4	MATH 018
MATH	019	Calculus 2	3	0	3	MATH 018
GEC	008	Ethics	3	0	3	
CHM	008	Environmental Science and Engineering	3	0	3	
GEE	001B	GE Elective 1 - Gender and Society	3	0	3	
PE	102	Physical Education 2	2	0	2	PE 101
NSTP	002	National Service Training Program 2	(3)	0	(3)	NSTP 001
SECOND YEAR, FIRST SEMESTER (25 UNITS)						
EE	200	Electrical Circuits 1	3	3	4	PHYS 111
MATH	021	Differential Equations	3	0	3	MATH 019
CE	201B	Engineering Mechanics	3	0	3	PHYS 111
TECH	101	Introduction to Engineering Entrepreneurship	3	0	3	2nd Year Standing
ME	201A	Thermodynamics	3	0	3	CHM 001, PHYS 111
GEE	002B	GE Elective 2 - Living in the IT Era	3	0	3	GEE 001B
PE	201	Physical Education 3	2	0	2	PE 102
MATH	022B	Linear Algebra with MATLAB	2	3	3	MATH 019, MATH 025
CPE	102A	Computer Programming	0	3	1	
SECOND YEAR, SECOND SEMESTER (26 UNITS)						
EE	202	Electrical Circuits 2	3	3	4	EE 200, MATH 021
EE	201	Electromagnetics for EE	2	0	2	EE 200
MATH	024D	Engineering Mathematics for EE	3	0	3	CPE 102A, MATH 021, MATH 022B
ECE	200A	Electronic Circuits: Devices and Analysis	3	3	4	EE 200
CE	205A	Fundamentals of Deformable Bodies	2	0	2	CE 201B
CE	309A	Fluid Mechanics	2	0	2	PHYS 111
MATH	026A	Numerical Methods and Analysis	2	3	3	MATH 022B
MATH	027A	Engineering Data Analysis	3	3	4	MATH 018
PE	202	Physical Education 4	2	0	2	PE 201
THIRD YEAR, FIRST SEMESTER (27 UNITS)						
EE	303	Integration Course in Mathematics	2	0	2	MATH 024D
EE	304	Electrical Machines 1	2	0	2	EE 201, EE 202
EE	340	Industrial Power Electronics	3	3	4	ECE 200A, EE 202
CPE	203	Logic Circuits and Switching Theory	3	3	4	ECE 200A
ME	304	Engineering Economics	3	0	3	MATH 027A
CHM	007A	Materials Science and Engineering	3	0	3	CHM 001
GEM	001	Life and Works of Rizal	3	0	3	
GEC	002	Readings in Philippine History	3	0	3	
EE ELEC	1	EE Elective 1	3	0	3	See track for pre-requisite(s)
THIRD YEAR, SECOND SEMESTER (25 UNITS)						
EE	310	Control Systems Analysis	2	0	2	EE 202, MATH 024D, MATH 026A
EE	305	Electrical Machines 2	3	3	4	EE 304
EE	306	Electrical Apparatus and Devices	2	3	3	EE 202, MATH 027A
EE	307	Integration Course in Engineering Sciences	2	0	2	3rd Year Standing, EE 303
EE	308	Research Methods	0	3	1	MATH 027A
EE	309	EE Laws, Codes and Professional Ethics	2	0	2	GE 008
CPE	405A	Microprocessor Systems	3	3	4	CPE 203
CADD	001A	Computer-Aided Drafting and Design	0	3	1	3rd Year Standing
ECE	204A	Principles of Electronic Communications	3	0	3	ECE 200A
EE ELEC	2	EE Elective 2	3	0	3	See track for pre-requisite(s)
THIRD YEAR, SUMMER (2 UNITS)						
EE	312	On-the-Job Training for EE	0	240	2	4th Year Standing

NO STUDENT SHALL BE ALLOWED TO TAKE FIFTH YEAR PROFESSIONAL COURSES UNLESS HE HAS COMPLETED THE BASIC AND THE THIRD YEAR COURSES INCLUDING PE AND NSTP.

COURSE CODE	DESCRIPTIVE TITLE	Lecture Hours			Laboratory Hours			CREDIT UNITS	PREREQUISITE(S)
FOURTH YEAR, FIRST SEMESTER (26 UNITS)									
EE	400	Electrical Standards and Practices	0	3	1			EE 309	
EE	410	Electrical Systems and Illumination Engineering Design	3	6	5			EE 306	
EE	431	EE Design Project 1	2	3	3			EE 305, EE 306	
EE	432	Instrumentation and Control	2	3	3			EE 310	
GEE	003B	GE Elective 3 - People and the Earth's Ecosystem	3	0	3			GEE 002B	
EE	415	Power Systems Analysis	3	3	4			EE 305, EE 306	
EE	416	Power Plant Engineering and Generating Substation Design	0	3	1			EE 415 (C)	
EE	417	Distribution Systems and Substation Design	2	3	3			EE 415 (C)	
EE	ELEC 3	EE Elective 3	3	0	3			See track for pre-requisite(s)	
FOURTH YEAR, SECOND SEMESTER (23 UNITS)									
EE	430	Management of EE Projects	2	0	2			ME 304	
GEC	007	Science, Technology and Society	3	0	3				
GEC	006	Art Appreciation	3	0	3				
GEC	001	Understanding the Self	3	0	3				
EE	414	EE Design Project 2	1	6	3			Graduating, EE 431	
GEC	003	The Contemporary World	3	0	3				
EE	418	Seminars/Colloquia	0	3	1			4th Year Standing	
EE	419	Integration Course in Electrical Engineering	2	0	2			Graduating	
BOSH	101	Basic Occupational Safety and Health	3	0	3				
TOTAL NO. OF UNITS 196									

ELECTIVE COURSES									
NOTE: A STUDENT MAY CHOOSE ANY OF THE TRACK ELECTIVES BELOW AND ONCE A TRACK ELECTIVE IS CHOSEN, ALL COURSES IN THE TRACK MUST BE TAKEN.									
Track Elective 1: Power System Economics									
PSE	420	Power System Reliability and Planning	3	0	3			EE 202, MATH 027A	
PSE	421	Power Quality and Demand Side Management	3	0	3			PSE 420	
PSE	422	Power System Market Operation	3	0	3			PSE 421	
Track Elective 2: Power System Automation and Renewable Energy									
PSA	422	Renewable Energy Systems Integration	3	0	3			EE 304 (C)	
PSA	423	Smart Grid Application in Power System	3	0	3			PSA 422	
PSA	424	Advanced Automation in Distribution System	3	0	3			PSA 423	
Track Elective 3: Power Electronics									
PWE	424	DC and AC Power Drives	3	0	3			EE 202, EE 201	
PWE	425	Magnetics Circuits for Power Converters	3	0	3			EE 304, PWE 424	
PWE	426	Power Converters in HVDC	3	0	3			PWE 425	
Track Elective 4: Technopreneurship									
TECH	102	Technopreneurship 2	3	0	3			TECH 101	
TECH	103	Technopreneurship 3	3	0	3			TECH 102	
TECH	104	Technopreneurship 4	3	0	3			TECH 103	
Track Elective 5: Railway Engineering									
RWE	001	Introduction to Railway Systems and Engineering	3	0	3				
RWE	002A	Railway Management and Governance and Operations	3	0	3			RWE 001	
RWE	003	Railway Power System and Protection	3	0	3			RWE002A	

CREDENTIALS SUBMITTED:

- () F138 () PSA Birth Certificate
- () GMC () Transfer Credential
- () F137A () TOR

DEFICIENCY/IES

Evaluated by: _____

Date: _____

Received by: _____

Date: _____