


TECHNOLOGICAL INSTITUTE OF THE PHILIPPINES
Quezon City
2018 CURRICULUM FOR BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING (BSEE)

IMPORTANT: Registration in any course/s without all the pre-requisite/s, correct sequence and authorized load shall not be given any credit regardless of the grade/s obtained.

NAME : _____ STUDENT NO : _____

	COURSE CODE		DESCRIPTIVE TITLE	LEC HOURS	LAB HOURS	CREDIT UNITS	PRE-REQUISITE(S)/CO-REQUISITE(S)
FIRST YEAR, FIRST SEMESTER (18 UNITS)							
	CHEM	001C	Chemistry for Engineers	3	3	4	
	MATH	016	Calculus 1	3	0	3	
	MATH	006	Discrete Mathematics	3	0	3	
	GEC	004	Mathematics in the Modern World	3	0	3	
	GEC	005	Purposive Communication	3	0	3	
	PE	001	Physical Activities Toward Health and Fitness 1 (PATHfit 1)	2	0	2	
	NSTP	001	National Service Training Program 1	(3)	0	(3)	
	TOTAL			17	3	18	
FIRST YEAR, SECOND SEMESTER (18 UNITS)							
	PHYS	001C	Calculus-Based Physics	3	3	4	MATH 016(P)
	MATH	017	Calculus 2	3	0	3	MATH 016(P)
	ENVI	001	Environmental Science and Engineering	3	0	3	
	MATH	013	Linear Algebra with MATLAB	2	3	3	MATH 016(P)
	GEE	001	General Education Elective 1	3	0	3	
	PE	002	Physical Activities Toward Health and Fitness 2 (PATHfit 2)	2	0	2	PE 001(P)
	NSTP	002	National Service Training Program 2	(3)	0	(3)	
	TOTAL			16	6	18	
SECOND YEAR, FIRST SEMESTER (26 UNITS)							
	MATH	010	Differential Equations	3	0	3	MATH 017(P)
	EE	020	Electrical Circuits 1	3	3	4	MATH 017(P) PHYS 001C(P)
	MECH	001	Engineering Mechanics	3	0	3	PHYS 001C(P)
	TECH	101	Introduction to Engineering Entrepreneurship	3	0	3	
	ME	004	Thermodynamics	3	0	3	CHEM 001C(P) PHYS 001C(P)
	GEE	002	General Education Elective 2	3	0	3	
	PE	003	Physical Activities Toward Health and Fitness 3 (PATHfit 3)	2	0	2	PE 002(P)
	MATH	019A	Engineering Data Analysis	3	3	4	MATH 013(P)
	ITE	001B	Computer Programming	0	3	1	
	TOTAL			23	9	26	
SECOND YEAR, SECOND SEMESTER (25 UNITS)							
	EEM	001	Engineering Math for Electrical Engineering	3	0	3	MATH 010(P)
	EE	021	Electrical Circuits 2	3	3	4	EE 020(P) MATH 010(P)
	ECE	007A	Electronic Circuits: Devices and Analysis	3	3	4	EE 020(P)
	EE	022	Electromagnetics for Electrical Engineering	2	0	2	EE 020(P) MATH 010(P)
	CE	003B	Fundamentals of Deformable Bodies	2	0	2	MECH 001(P)
	CE	402B	Fluid Mechanics	2	0	2	PHYS 001C(P)
	GEC	008	Ethics	3	0	3	
	MATH	012B	Numerical Methods and Analysis	2	3	3	EEM 001(C)
	PE	004	Physical Activities Toward Health and Fitness 4 (PATHfit 4)	2	0	2	PE 003(P)
	TOTAL			22	9	25	
THIRD YEAR, FIRST SEMESTER (27 UNITS)							
	EE	301	Integration Course for Mathematics	2	0	2	EEM 001(P)
	CPE	004	Logic Circuits and Switching Theory	3	3	4	ECE 007A(P)
	EE-ELEC	1	ELECTIVE 1	3	0	3	3rd Year Standing
	ECE	003	Industrial Electronics	3	3	4	ECE 007A(P)



TECHNOLOGICAL INSTITUTE OF THE PHILIPPINES
Quezon City

COURSE CODE		DESCRIPTIVE TITLE	LEC HOURS	LAB HOURS	CREDIT UNITS	PRE-REQUISITE(S)/CO-REQUISITE(S)
EE	023	Electrical Machines 1	2	0	2	EE 021(P) EE 022(P)
GEC	002	Readings in Philippine History	3	0	3	
CHEM	004	Materials Science and Engineering	3	0	3	CE 003B(P) CHEM 001C(P)
SOCSC	005	Life and Works of Rizal	3	0	3	
ME	005	Engineering Economy	3	0	3	MATH 019A(P)
TOTAL			25	6	27	
THIRD YEAR, SECOND SEMESTER (25 UNITS)						
EE	024	Electrical Machines 2	3	3	4	EE 023(P)
EE	025	Electrical Apparatus and Devices	2	3	3	EE 021(P) MATH 019A(P)
CPE	006	Microprocessor Systems	3	3	4	CPE 004(P)
EE	302	Integration Course for Engineering Sciences	2	0	2	3rd Year Standing,EE 301(P)
EE	026	Research Methods	0	3	1	MATH 019A(P)
EE	027	EE Law, Codes and Professional Ethics	2	0	2	GEC 008(P)
CADD	001B	Computer - Aided Drafting and Design	0	3	1	ITE 001B(P)
ECE	011A	Principles of Electronic Communications	3	0	3	ECE 007A(P)
EE	028	Control System Analysis	2	0	2	ECE 007A(P) EEM 001(P)
EE-ELEC	2	ELECTIVE 2	3	0	3	EE-ELEC 1(P)
TOTAL			20	15	25	
THIRD YEAR, SUMMER (2 UNITS)						
EE	029	On-the-Job-Training	0	240	2	3rd Year Standing
TOTAL			0	240	2	
NO STUDENT SHALL BE ALLOWED TO TAKE FOURTH YEAR PROFESSIONAL COURSES UNLESS HE HAS COMPLETED THE BASIC AND THE THIRD YEAR COURSES INCLUDING PE AND NSTP COURSES.						
FOURTH YEAR, FIRST SEMESTER (26 UNITS)						
EE	030	Electrical Standards and Practices	0	3	1	EE 027(P)
EE	036	Power Plant Engineering and Generating Substation Design	0	3	1	EE 035(C)
EE	037	Distribution Systems and Substation Design	2	3	3	EE 035(C)
EE	035	Power Systems Analysis	3	3	4	EE 024(P) EE 025(P)
EE	031	Electrical Systems and Illumination Engineering Design	3	6	5	EE 024(P) EE 025(P)
EE	034	EE Design Project 1	2	3	3	EE 024(P) EE 025(P)
EE	033	Instrumentation and Control	2	3	3	EE 028(P)
GEC	001	Understanding the Self	3	0	3	
EE-ELEC	3	ELECTIVE 3	3	0	3	
TOTAL			18	24	26	
FOURTH YEAR, SECOND SEMESTER (23 UNITS)						
GEE	003	General Education Elective 3	3	0	3	
EE	032	Management of EE Projects	2	0	2	ME 005(P)
EE	040	EE Design Project 2	1	6	3	Graduating EE 034(P)
GEC	007	Science, Technology and Society	3	0	3	
EE	038	Seminars/Colloquia for Electrical Engineering	0	3	1	4th Year Standing
EE	402	Integration Course for Electrical Engineering	2	0	2	
GEC	003	The Contemporary World	3	0	3	
IE	573	Basic Occupational Safety and Health	3	0	3	
GEC	006	Art Appreciation	3	0	3	
TOTAL			20	9	23	
ELECTIVE COURSES						
TRACK ELECTIVE 1 (Power System Economics)						
		Power System Reliability and Planning	3	0	3	EE 021(P) MATH 019A(P)
		Power Quality and Demand Side Management	3	0	3	TE1-PSE1(P)
		Power System Market Operation	3	0	3	TE1-PSE2(P)
TOTAL			9	0	9	
TRACK ELECTIVE 2 (Power System Automation)						



TECHNOLOGICAL INSTITUTE OF THE PHILIPPINES
Quezon City

			Renewable Energy Systems and Integration	3	0	3	
			Smart Grid Application in Power System	3	0	3	ECE 011A(P) TE2-PSA1(P)
			Advanced Automation in Distribution System	3	0	3	EE 035(P) TE2-PSA2(P)
			TOTAL	9	0	9	
TRACK ELECTIVE 3 (Power Electronics)							
	TE-3PEL	1	Advanced Converter Control System	3	0	3	ECE 003(P) EE 028(P)
	TE-3PEL	2	Magnetics for Power Converters/Inverters	3	0	3	EE 024(P) TE-3PEL 1(P)
	TE-3PEL	3	Power Converters in HVDC Power System	3	0	3	TE-3PEL 2(P)
			TOTAL	9	0	9	
TRACK ELECTIVE 4 (Technopreneurship)							
	TECH	102	Technopreneurship 102	3	0	3	TECH 101(P)
	TECH	103	Technopreneurship 103	3	0	3	TECH 102(P)
	TECH	104	Technopreneurship 104	3	0	3	TECH 103(P)
			TOTAL	9	0	9	
TRACK ELECTIVE 5 (Railway Engineering)							
	RWE	001	Introduction to Railway Systems and Engineering	3	0	3	EE 023(P) EE 037(C)
	RWE	002	Railway Management, Governance, and Operations	3	0	3	RWE 001(P)
	RWE	003	Railway Power System and Protection	3	0	3	EE 035(P) RWE 002(P)
			TOTAL	9	0	9	
TRACK ELECTIVE 6 (Battery Storage System and Technology)							
			Battery Storage System and Control Engineering	3	0	3	EE 024(P) EE 028(P)
			Battery Storage System for Hybrid Power System	3	0	3	ECE 003(P) TE6-BS01(P)
			Advanced Battery Management for E-Vehicles	3	0	3	CPE 006(P) TE6-BS02(P)
			TOTAL	9	0	9	

CREDENTIALS PRESENTED:

- F137A NSO Birth Certificate
- F138 HD
- GMC TOR

DEFICIENCY/IES:

Evaluated By: _____ **LEGEND**

Date: _____ P = Pre-requisite

Received By: _____ C = Co-requisite

Date: _____

NOTE: 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.