


TECHNOLOGICAL INSTITUTE OF THE PHILIPPINES
Quezon City
2023 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 (17 UNITS)							
	CHEM	001C	Chemistry for Engineers	3	3	4	
	EMATH	016	Calculus 1	4	0	4	
	MATH	006	Discrete Mathematics	3	0	3	
	EE	112	Introduction to Electrical Engineering	1	0	1	
	EMATH	015	Engineering Mathematics	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			16	3	17	
FIRST YEAR, SECOND SEMESTER (22 UNITS)							
	PHYS	001C	Calculus-Based Physics	3	3	4	EMATH 016(P)
	EMATH	017	Calculus 2	4	0	4	EMATH 016(P)
	GEC	008	Ethics	3	0	3	
	GEC	004	Mathematics in the Modern World	3	0	3	
	ENVI	001	Environmental Science and Engineering	3	0	3	
	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)	NSTP 001(P)
	TOTAL			21	3	22	
SECOND YEAR, FIRST SEMESTER (28 UNITS)							
	EE	020	Electrical Circuits 1	3	3	4	PHYS 001C(P)
	MATH	010	Differential Equations	3	0	3	EMATH 017(P)
	GEC	003	The Contemporary World	3	0	3	
	MECH	001	Engineering Mechanics	3	0	3	PHYS 001C(P)
	GEE	003	General Education Elective 3	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 001(P) PE 002(P)
	MATH	013	Linear Algebra with MATLAB	2	3	3	EMATH 016(P)
	ITE	001B	Computer Programming	0	3	1	
	TOTAL			25	9	28	
SECOND YEAR, SECOND SEMESTER (25 UNITS)							
	EE	021	Electrical Circuits 2	3	3	4	EE 020(P)
	EE	022	Electromagnetics for Electrical Engineering	2	0	2	EMATH 017(P)
	EEM	001	Engineering Math for Electrical Engineering	3	0	3	MATH 010(P)
	ECE	007A	Electronic Circuits: Devices and Analysis	3	3	4	EE 020(P)
	CE	003B	Fundamentals of Deformable Bodies	2	0	2	MECH 001(P)
	CE	402B	Fluid Mechanics	2	0	2	PHYS 001C(P)
	MATH	012B	Numerical Methods and Analysis	2	3	3	MATH 010(P)
	MATH	019	Engineering Data Analysis	3	0	3	MATH 013(P)
	PE	004	Physical Activities Toward Health and Fitness 4 (PATHfit 4)	2	0	2	PE 001(P) PE 002(P)
	TOTAL			22	9	25	
THIRD YEAR, FIRST SEMESTER (26 UNITS)							
	EE	023	Electrical Machines 1	2	0	2	EE 021(P)
	ECE	003	Industrial Electronics	3	3	4	ECE 007A(P)



COURSE CODE		DESCRIPTIVE TITLE	LEC HOURS	LAB HOURS	CREDIT UNITS	PRE-REQUISITE(S)/CO-REQUISITE(S)
CPE	004	Logic Circuits and Switching Theory	3	3	4	ECE 007A(P)
ME	005	Engineering Economy	3	0	3	MATH 019(P)
IE	102	Engineering Data Analysis Lab	0	3	1	MATH 019(P)
CHEM	004	Materials Science and Engineering	3	0	3	
SOCSC	005	Life and Works of Rizal	3	0	3	
GEC	002	Readings in Philippine History	3	0	3	
EE-ELEC	1	ELECTIVE 1	3	0	3	
TOTAL			23	9	26	
THIRD YEAR, SECOND SEMESTER (26 UNITS)						
EE	028	Control System Analysis	2	0	2	ECE 007A(P)
EE	301	Integration Course for Mathematics	2	0	2	EEM 001(P)
EE	024	Electrical Machines 2	3	3	4	EE 023(P)
EE	025	Electrical Apparatus and Devices	2	3	3	EE 021(P)
EE	026	Research Methods	0	3	1	MATH 019(P)
COE	002A	Introduction to Intellectual Property	0	3	1	EE 026(C)
GEC	001	Understanding the Self	3	0	3	
EE	027	EE Law, Codes and Professional Ethics	2	0	2	
CPE	006	Microprocessor Systems	3	3	4	CPE 004(P)
CADD	001B	Computer - Aided Drafting and Design	0	3	1	3rd Year Standing
EE-ELEC	2	ELECTIVE 2	3	0	3	
TOTAL			20	18	26	
THIRD YEAR, SUMMER (9 UNITS)						
EE	030	Electrical Standards and Practices	0	3	1	EE 027(P)
EE	032	Management of EE Projects	2	0	2	ME 005(P)
IE	573	Basic Occupational Safety and Health	3	0	3	
ECE	011A	Principles of Electronic Communications	3	0	3	ECE 007A(P)
TOTAL			8	3	9	
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 (27 UNITS)						
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)
EE	302	Integration Course for Engineering Sciences	2	0	2	EE 301(P)
EE	035	Power Systems Analysis	3	3	4	EE 024(P) EE 025(P)
EE	036	Power Plant Engineering and Generating Substation Design	0	3	1	EE 035(C)
GEC	005	Purposive Communication	3	0	3	
EE	037A	Transmission and Distribution Systems with Substation Design	2	3	3	EE 035(C)
EE-ELEC	3	ELECTIVE 3	3	0	3	
TOTAL			20	21	27	
FOURTH YEAR, SECOND SEMESTER (17 UNITS)						
EE	029	On-the-Job-Training	0	240	2	Graduating
GEC	007	Science, Technology and Society	3	0	3	
TECH	101A	Technology Entrepreneurship	3	0	3	Graduating
GEC	006	Art Appreciation	3	0	3	
EE	040	EE Design Project 2	1	6	3	Graduating EE 034(P)
EE	038	Seminars/Colloquia	0	3	1	4th Year Standing
EE	402	Integration Course for Electrical Engineering	2	0	2	Graduating
TOTAL			12	249	17	
ELECTIVE COURSES						
TRACK ELECTIVE 1: Power Systems Economics						



TECHNOLOGICAL INSTITUTE OF THE PHILIPPINES
Quezon City

TE1-PSE	1	Power System Reliability and Planning	3	0	3	EE 021(P) MATH 019(P)
TE1-PSE	2	Power Quality and Demand Side Management	3	0	3	TE1-PSE 1(P)
TE1-PSE	3	Power System Market Operation	3	0	3	TE1-PSE 2(P)
TOTAL			9	0	9	
TRACK ELECTIVE 2: Power System Automation and Renewable Energy						
TE2-PSA	1	Renewable Energy Systems and Integration	3	0	3	EE 021(P) MATH 019(P)
TE2-PSA	2	Smart Grid Application in Power System	3	0	3	TE2-PSA 1(P)
TE2-PSA	3	Advanced Automation in Distribution System	3	0	3	TE2-PSA 2(P)
TOTAL			9	0	9	
TRACK ELECTIVE 3: Railway Engineering						
RWE	001	Introduction to Railway Systems and Engineering	3	0	3	
RWE	002	Railway Management, Governance, and Operations	3	0	3	RWE 001(P)
RWE	003	Railway Power System and Protection	3	0	3	RWE 002(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.