


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

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 (20 UNITS)						
MATH	016	Calculus 1	3	0	3	
CHEM	001C	Chemistry for Engineers	3	3	4	
ITE	001A	Computer Fundamentals and Programming	0	6	2	
GEC	007	Science, Technology and Society	3	0	3	
GEC	004	Mathematics in the Modern World	3	0	3	
GEC	001	Understanding the Self	3	0	3	
PE	001	Physical Education 1	2	0	2	
NSTP	001	National Service Training Program 1	(3)	0	(3)	
TOTAL			17	9	20	
FIRST YEAR, SECOND SEMESTER (24 UNITS)						
MATH	017	Calculus 2	3	0	3	MATH 016(P)
MATH	019A	Engineering Data Analysis	3	3	4	MATH 016(P)
PHYS	001	Calculus-Based Physics 1	3	3	4	MATH 017(C)
CHEM	004	Materials Science and Engineering	3	0	3	CHEM 001C(P)
CADD	001B	Computer - Aided Drafting and Design	0	3	1	
PHYS	002	Calculus-Based Physics 2	3	3	4	PHYS 001(C)
GEC	008	Ethics	3	0	3	
PE	002	Physical Education 2	2	0	2	PE 001(P)
NSTP	002	National Service Training Program 2	(3)	0	(3)	NSTP 001(P)
TOTAL			20	12	24	
SECOND YEAR, FIRST SEMESTER (25 UNITS)						
MATH	010	Differential Equations	3	0	3	MATH 017(P)
MATH	013	Linear Algebra with MATLAB	2	3	3	MATH 016(P)
COE	002	Fundamentals of Intellectual Property	2	0	2	
ME	005	Engineering Economy	3	0	3	MATH 019A(P)
EE	002	Electrical Circuits 1	3	3	4	PHYS 002(P)
ECE	007	Electronics 1: Electronic Devices and Circuits	3	3	4	EE 002(C)
ECE	008	ECE Laws, Contracts, Ethics, Standards and Safety	3	0	3	
PE	003	Physical Education 3	2	0	2	PE 001(P)
ECE	100	Fundamentals of LabVIEW Programming	0	3	1	ITE 001A(P)
TOTAL			21	12	25	
SECOND YEAR, SECOND SEMESTER (26 UNITS)						
MATH	011ECE	Advanced Engineering Mathematics for ECE	3	3	4	MATH 010(P)
EE	003	Electrical Circuits 2	3	3	4	EE 002(P)
ECE	010	Electronics 2: Electronic Circuit Analysis and Design	3	3	4	ECE 007(P)
ECE	011	Communications 1: Principles of Communication Systems	3	3	4	ECE 010(C)
ECE	012	Electromagnetics for ECE	4	0	4	MATH 010(P)
ECE	013	Digital Electronics 1: Logic Circuits and Switching Theory	3	3	4	ECE 007(P)
PE	004	Physical Education 4	2	0	2	PE 001(P)
TOTAL			21	15	26	
THIRD YEAR, FIRST SEMESTER (26 UNITS)						
MATH	006	Discrete Mathematics	3	0	3	MATH 013(P)
GEE	001	General Education Elective 1	3	0	3	
ECE	014	Electronics 3: Electronic Systems and Design	3	3	4	ECE 010(P)
ECE	015	Communications 2: Modulation and Coding Techniques	3	3	4	ECE 011(P) MATH 019A(P)
ECE	401	Signals, Spectra, Signal Processing	3	3	4	MATH 011ECE(P) MATH 019A(P)



COURSE CODE		DESCRIPTIVE TITLE	LEC HOURS	LAB HOURS	CREDIT UNITS	PRE-REQUISITE(S)/CO-REQUISITE(S)
EMAN	001	Engineering Management	2	0	2	
TECH	101	Introduction to Engineering Entrepreneurship	3	0	3	ME 005(P)
GEC	005	Purposive Communication	3	0	3	
TOTAL			23	9	26	
THIRD YEAR, SECOND SEMESTER (25 UNITS)						
ECE	018	Digital Electronics 2: Microprocessor and Microcontroller Systems and Design	3	3	4	ECE 013(P)
ECE	016	Communications 3: Transmission Media and Antenna Systems and Design	3	3	4	ECE 012(P) ECE 015(P)
ECE	017	Communications 4: Data Communications	3	3	4	ECE 015(P)
ECE	006	Feedback and Control Systems	3	3	4	ECE 010(P) EE 003(P) MATH 011ECE(P)
ECE	019	Integration Course 1 for ECE	2	0	2	MATH 006(P) MATH 011ECE(P)
ECE	021	Methods of Research	3	0	3	MATH 019A(P)
ECE ELEC	1	ECE Elective 1	3	3	4	See track for pre-requisite(s)
TOTAL			20	15	25	
THIRD YEAR, SUMMER (3 UNITS)						
ECE	020	On-the-Job- Training for ECE	3	0	3	3rd Year Standing
TOTAL			3	0	3	
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 (18 UNITS)						
ECE	022	ECE Design Project 1	2	3	3	ECE 006(P) ECE 014(P) ECE 016(P) ECE 017(P) ECE 018(P) ECE ELEC 1(P)
GEE	002	General Education Elective 2	3	0	3	GEE 001(P)
ECE	023	Integration Course 2 for ECE	2	0	2	ECE 019(P)
ECE ELEC	2	ECE Elective 2	3	3	4	See track for pre-requisite(s)
ENVI	001	Environmental Science and Engineering	3	0	3	CHEM 001C(P)
GEC	006	Art Appreciation	3	0	3	
TOTAL			16	6	18	
FOURTH YEAR, SECOND SEMESTER (18 UNITS)						
ECE	025	ECE Design Project 2	1	6	3	ECE 022(P)
ECE	024	Seminars/Colloquia for ECE	0	3	1	4th Year Standing
ECE	026	Integration Course 3 for ECE	2	0	2	ECE 023(P)
SOCSC	005	Life and Works of Rizal	3	0	3	
GEC	002	Readings in Philippine History	3	0	3	
GEC	003	The Contemporary World	3	0	3	
GEE	003	General Education Elective 3	3	0	3	
TOTAL			15	9	18	
ELECTIVE COURSES						
TRACK ELECTIVE 1: Power Electronics						
PEL	001	Advanced Power Supply Systems	3	3	4	ECE 006(P) ECE 012(P) ECE 014(P)
PEL	002	Renewable Energy Systems	3	3	4	EE 003(P)
TOTAL			6	6	8	
TRACK ELECTIVE 2: Telecommunications						
COM	001	Advanced Wireless Communication Systems	3	3	4	ECE 016(C)
COM	002	Advanced Networking	3	3	4	ECE 017(P)
TOTAL			6	6	8	
TRACK ELECTIVE 3: Technopreneurship						
TECH	102	Advanced Course in Entrepreneurship	4	0	4	TECH 101(P)
TECH	103	Product Management	3	3	4	TECH 102(P)
TOTAL			7	3	8	
TRACK ELECTIVE 4: Data Science						
COE	003	Computational Thinking with Python	3	3	4	MATH 013(P) MATH 019A(P)
COE	005	Prediction and Machine Learning	3	3	4	COE 003(P)



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	TOTAL	6	6	8	
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CREDENTIALS PRESENTED:

- () F137A () NSO Birth Certificate
- () F138 () HD
- () GMC () TOR

DEFICIENCY/IES:

Evaluated By: _____

Date: _____

Received By: _____

Date: _____

LEGEND

P = Pre-requisite

C = Co-requisite

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.