


**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)
<b>FIRST YEAR, FIRST SEMESTER ( 20 UNITS )</b>						
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 Activities Toward Health and Fitness 1 (PATHfit 1)	2	0	2	
NSTP	001	National Service Training Program 1	(3)	0	(3)	
<b>TOTAL</b>			<b>17</b>	<b>9</b>	<b>20</b>	
<b>FIRST YEAR, SECOND SEMESTER ( 24 UNITS )</b>						
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 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)
<b>TOTAL</b>			<b>20</b>	<b>12</b>	<b>24</b>	
<b>SECOND YEAR, FIRST SEMESTER ( 25 UNITS )</b>						
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 Activities Toward Health and Fitness 3 (PATHfit 3)	2	0	2	PE 001(P)
ECE	100	Fundamentals of LabVIEW Programming	0	3	1	ITE 001A(P)
<b>TOTAL</b>			<b>21</b>	<b>12</b>	<b>25</b>	
<b>SECOND YEAR, SECOND SEMESTER ( 26 UNITS )</b>						
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 Activities Toward Health and Fitness 4 (PATHfit 4)	2	0	2	PE 001(P)
<b>TOTAL</b>			<b>21</b>	<b>15</b>	<b>26</b>	
<b>THIRD YEAR, FIRST SEMESTER ( 26 UNITS )</b>						
MATH	006	Discrete Mathematics	3	0	3	MATH 013(P)
GEE	001	General Education Elective 1	3	0	3	



COURSE CODE		DESCRIPTIVE TITLE	LEC HOURS	LAB HOURS	CREDIT UNITS	PRE-REQUISITE(S)/CO-REQUISITE(S)
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)
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	
<b>TOTAL</b>			<b>23</b>	<b>9</b>	<b>26</b>	
<b>THIRD YEAR, SECOND SEMESTER ( 25 UNITS )</b>						
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)
<b>TOTAL</b>			<b>20</b>	<b>15</b>	<b>25</b>	
<b>THIRD YEAR, SUMMER ( 3 UNITS )</b>						
ECE	020	On-the-Job- Training for ECE	3	0	3	3rd Year Standing
<b>TOTAL</b>			<b>3</b>	<b>0</b>	<b>3</b>	
<b>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.</b>						
<b>FOURTH YEAR, FIRST SEMESTER ( 18 UNITS )</b>						
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	
<b>TOTAL</b>			<b>16</b>	<b>6</b>	<b>18</b>	
<b>FOURTH YEAR, SECOND SEMESTER ( 18 UNITS )</b>						
ECE	025	ECE Design Project 2	1	6	3	Graduating 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)
SOCSOC	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	
<b>TOTAL</b>			<b>15</b>	<b>9</b>	<b>18</b>	
<b>ELECTIVE COURSES</b>						
<b>TRACK ELECTIVE 1: Power Electronics</b>						
PEL	001	Advanced Power Supply Systems	3	3	4	ECE 006(C) ECE 014(P)
PEL	002	Renewable Energy Systems	3	3	4	EE 003(P) PEL 001(P)
<b>TOTAL</b>			<b>6</b>	<b>6</b>	<b>8</b>	
<b>TRACK ELECTIVE 2: Telecommunications</b>						
COM	001	Advanced Wireless Communication Systems	3	3	4	ECE 016(C)
COM	002	Advanced Networking	3	3	4	ECE 017(P)
<b>TOTAL</b>			<b>6</b>	<b>6</b>	<b>8</b>	
<b>TRACK ELECTIVE 3: Technopreneurship</b>						
TECH	102	Advanced Course in Entrepreneurship	4	0	4	TECH 101(P)
TECH	103	Product Management	3	3	4	TECH 102(P)
<b>TOTAL</b>			<b>7</b>	<b>3</b>	<b>8</b>	



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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)	
<b>TOTAL</b>			<b>6</b>	<b>6</b>	<b>8</b>		

**CREDENTIALS PRESENTED:**

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

**DEFICIENCY/IES:**

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**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.