


2023 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 (23 UNITS)						
EMATH	015	Engineering Mathematics	3	0	3	
EMATH	016	Calculus 1	4	0	4	
CHEM	001C	Chemistry for Engineers	3	3	4	
ECE	101	Introduction to Electronics Engineering	1	0	1	
GEC	001	Understanding the Self	3	0	3	
GEC	004	Mathematics in the Modern World	3	0	3	
GEC	007	Science, Technology and Society	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			22	3	23	
FIRST YEAR, SECOND SEMESTER (24 UNITS)						
EMATH	017	Calculus 2	4	0	4	EMATH 015(P) EMATH 016(P)
MATH	013	Linear Algebra with MATLAB	2	3	3	EMATH 015(P) EMATH 016(P)
PHYS	001	Calculus-Based Physics 1	3	3	4	EMATH 017(C)
PHYS	002	Calculus-Based Physics 2	3	3	4	PHYS 001(C)
CHEM	004	Materials Science and Engineering	3	0	3	CHEM 001C(P)
ITE	011	Computer Fundamentals	0	3	1	
GEC	002	Readings in Philippine History	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			20	12	24	
SECOND YEAR, FIRST SEMESTER (26 UNITS)						
MATH	006	Discrete Mathematics	3	0	3	EMATH 017(P) MATH 013(P)
MATH	010	Differential Equations	3	0	3	EMATH 017(P)
MATH	019	Engineering Data Analysis	3	0	3	EMATH 016(P)
CPE	009C	Object-Oriented Programming	0	3	1	ITE 011(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)
GEE	002	General Education Elective 2	3	0	3	
GEC	003	The Contemporary World	3	0	3	
PE	003	Physical Activities Toward Health and Fitness 3 (PATHfit 3)	2	0	2	PE 001(P) PE 002(P)
TOTAL			23	9	26	
SECOND YEAR, SECOND SEMESTER (27 UNITS)						
MATH	011ECE	Advanced Engineering Mathematics for ECE	3	3	4	MATH 010(P)
IE	102	Engineering Data Analysis Lab	0	3	1	MATH 019(P)
EE	003	Electrical Circuits 2	3	3	4	EE 002(P)
ECE	100	Fundamentals of LabVIEW Programming	0	3	1	ITE 011(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)
GEC	005	Purposive Communication	3	0	3	
PE	004	Physical Activities Toward Health and Fitness 4 (PATHfit 4)	2	0	2	PE 001(P) PE 002(P)
TOTAL			21	18	27	



COURSE CODE		DESCRIPTIVE TITLE	LEC HOURS	LAB HOURS	CREDIT UNITS	PRE-REQUISITE(S)/CO-REQUISITE(S)
THIRD YEAR, FIRST SEMESTER (26 UNITS)						
ECE	401	Signals, Spectra, Signal Processing	3	3	4	ECE 100(P) IE 102(P) MATH 011ECE(P) MATH 019(P)
ECE	013	Digital Electronics 1: Logic Circuits and Switching Theory	3	3	4	ECE 007(P)
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) IE 102(P) MATH 019(P)
DSC	100	Fundamentals of Data Science	3	0	3	IE 102(P) MATH 019(P)
ME	005	Engineering Economy	3	0	3	MATH 019(P)
CADD	001B	Computer - Aided Drafting and Design	0	3	1	
GEE	003	General Education Elective 3	3	0	3	
TOTAL			21	15	26	
THIRD YEAR, SECOND SEMESTER (26 UNITS)						
ECE	006	Feedback and Control Systems	3	3	4	ECE 010(P) EE 003(P) MATH 011ECE(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	018	Digital Electronics 2: Microprocessor and Microcontroller Systems and Design	3	3	4	ECE 013(P)
ECE	019	Integration Course 1 for ECE	2	0	2	ECE 012(P) MATH 006(P) MATH 011ECE(P)
ECE	021	Methods of Research	3	0	3	GEC 005(P) IE 102(P) MATH 019(P)
ECE ELEC	1	ECE Elective 1	2	3	3	See track for pre-requisite(s)
EMAN	001	Engineering Management	2	0	2	
TOTAL			21	15	26	
THIRD YEAR, SUMMER (9 UNITS)						
ECE	102	Engineering Technical Communications	3	0	3	ECE 021(P) GEC 005(P)
EPM	101	Project Management for Engineers	2	3	3	EMAN 001(P)
ECE ELEC	2	ECE Elective 2	2	3	3	See track for pre-requisite(s)
TOTAL			7	6	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 (23 UNITS)						
IPR	101	Fundamentals of Intellectual Property	1	3	2	4th Year Standing
ECE	008	ECE Laws, Contracts, Ethics, Standards and Safety	3	0	3	4th Year Standing
ECE	022	ECE Design Project 1	2	3	3	4th Year Standing, ECE 102(P) ECE ELEC 2(P) EPM 101(P)
ECE	023	Integration Course 2 for ECE	2	0	2	ECE 006(P) ECE 018(P) ECE 019(P) EPM 101(P)
ECE	027	Communications Technologies	2	3	3	ECE 016(P) ECE 017(P)
ECE ELEC	3	ECE Elective 3	3	0	3	See track for pre-requisite(s)
ENVI	001	Environmental Science and Engineering	3	0	3	
GEE	001	General Education Elective 1	3	0	3	
ECE	024	Seminars/Colloquia on Current and Emerging Technologies for ECE	0	3	1	4th Year Standing
TOTAL			19	12	23	
FOURTH YEAR, SECOND SEMESTER (20 UNITS)						
ECE	020	On-the-Job- Training for ECE	3	0	3	Graduating
ECE	025	ECE Design Project 2	1	6	3	Graduating ECE 008(P) ECE 022(P) ECE ELEC 3(P)
ECE	026	Integration Course 3 for ECE	2	0	2	ECE 023(P) ECE 027(P)
TECH	101A	Technology Entrepreneurship	3	0	3	Graduating ME 005(P)
GEC	006	Art Appreciation	3	0	3	
GEC	008	Ethics	3	0	3	
SOCSC	005	Life and Works of Rizal	3	0	3	
TOTAL			18	6	20	
ELECTIVE COURSES						



TRACK ELECTIVE 1: Power Electronics							
PEL	101	Power Electronics 1	2	3	3	ECE 006(C) ECE 014(P)	
PEL	102	Power Electronics 2	2	3	3	PEL 101(P)	
PEL	103	Power Electronics 3	2	3	3	PEL 102(P)	
TOTAL			6	9	9		
TRACK ELECTIVE 2: Industrial Automation and Robotics							
IAR	101	Industrial Automation and Robotics 1	2	3	3	ECE 006(C) ECE 014(P) ECE 018(C)	
IAR	102	Industrial Automation and Robotics 2	2	3	3	IAR 101(P)	
IAR	103	Industrial Automation and Robotics 3	2	3	3	IAR 102(P)	
TOTAL			6	9	9		
TRACK ELECTIVE 3: Data Science							
DSC	101	Data Science 1	2	3	3	DSC 100(P) IE 102(P)	
DSC	102	Data Science 2	2	3	3	DSC 101(P)	
DSC	103	Data Science 3	2	3	3	DSC 102(P)	
TOTAL			6	9	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.