



(204 units)

2023 CURRICULUM FOR BACHELOR OF SCIENCE IN ELECTRONICS ENGINEERING (BSECE)

IMPORTANT : REGISTRATION IN ANY COURSE WITHOUT ALL THE PREREQUISITES, CORRECT SEQUENCE AND AUTHORIZED LOAD SHALL NOT BE GIVEN ANY CREDIT REGARDLESS OF THE GRADE OBTAINED.
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.

COURSE CODE	DESCRIPTIVE TITLE	Lecture Hours	Laboratory Hours	Credit Units	PREREQUISITE(S)/ COREQUISITE(S)
FIRST YEAR, FIRST SEMESTER (23 UNITS)					
MATH 131	Engineering Mathematics	3	0	3	
MATH 141	Calculus 1	4	0	4	
CHM 001	Chemistry for Engineers	3	3	4	
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	
ECE 101	Introduction to Electronics Engineering	1	0	1	
PE 001	Physical Activities Toward Health & Fitness 1 (PATHFit 1)	2	0	2	
NSTP 001	National Service Training Program 1	(3)	0	(3)	
FIRST YEAR, SECOND SEMESTER (24 UNITS)					
MATH 242	Calculus 2	4	0	4	MATH 131 (P), MATH 141 (P)
MATH 022A	Linear Algebra with MATLAB	2	3	3	MATH 141 (P)
PHYS 111A	Calculus-Based Physics 1	3	3	4	MATH 242 (C)
PHYS 112	Calculus-Based Physics 2	3	3	4	PHYS 111A (C)
CHM 007A	Materials Science and Engineering	3	0	3	CHM 001 (P)
CPE 106A	Computer Fundamentals	0	3	1	
GEC 002	Readings in Philippine History	3	0	3	
PE 002	Physical Activities Toward Health & Fitness 2 (PATHFit 2)	2	0	2	PE 001 (P)
NSTP 002	National Service Training Program 2	(3)	0	(3)	NSTP 001 (P)
SECOND YEAR, FIRST SEMESTER (26 UNITS)					
MATH 021	Differential Equations	3	0	3	MATH 242 (P)
COE 027A	Engineering Data Analysis I	3	0	3	MATH 141 (P)
GEC 003	The Contemporary World	3	0	3	
EE 200E	Electrical Circuits 1	3	3	4	PHYS 112 (P)
ECE 201	Electronics 1: Electronic Devices and Circuits	3	3	4	EE 200E (C)
GEE 003C	GE Elective 3-The Entrepreneurial Mind	3	0	3	
MATH 025A	Discrete Mathematics	3	0	3	MATH 022A (P)
CPE 106B	Object-Oriented Programming	0	3	1	CPE 106A (P)
PE 003	Physical Activities Toward Health & Fitness 3 (PATHFit 3)	2	0	2	PE 002 (P)
SECOND YEAR, SECOND SEMESTER (27 UNITS)					
ECE 024	Advanced Engineering Mathematics for ECE	3	3	4	MATH 021 (P)
EE 202	Electrical Circuits 2	3	3	4	EE 200E (P)
ECE 202	Electronics 2: Electronic Circuit Analysis and Design	3	3	4	ECE 201 (P)
ECE 205	Communications 1: Principles of Communication Systems	3	3	4	ECE 202 (C)
ECE 204	Electromagnetics for ECE	4	0	4	MATH 021 (P)
GEC 005	Purposive Communication	3	0	3	
ECE 100	Fundamentals of LabVIEW Programming	0	3	1	CPE 106B (P)
IE 321	Engineering Data Analysis II	0	3	1	COE 027A (P)
PE 004	Physical Activities Toward Health & Fitness 4 (PATHFit 4)	2	0	2	PE 003 (P)
THIRD YEAR, FIRST SEMESTER (26 UNITS)					
ECE 304	Digital Electronics 1: Logic Circuits and Switching Theory	3	3	4	ECE 201 (P)
ME 304	Engineering Economics	3	0	3	IE 321 (P)
ECE 305	Electronics 3: Electronic Systems and Design	3	3	4	ECE 202 (P)
ECE 306	Communications 2: Modulation and Coding Techniques	3	3	4	ECE 205 (P), IE 321 (P)
ECE 307	Signals, Spectra & Signal Processing	3	3	4	ECE 024 (P), IE 321 (P), ECE 100 (P)
DSC 100	Fundamentals of Data Science	3	0	3	IE 321 (P), ECE 100 (P)
GEE 002B	GE Elective 2-Living in the IT Era	3	0	3	
CADD 001	Computer - Aided Drafting and Design	0	3	1	
THIRD YEAR, SECOND SEMESTER (26 UNITS)					
ECE 308	Digital Electronics 2: Microprocessor and Microcontroller Systems and Design	3	3	4	ECE 304 (P)
ECE 309	Communications 3: Transmission Media and Antenna Systems and Design	3	3	4	ECE 306 (P), ECE 204 (P)
ECE 310	Communications 4: Data Communications	3	3	4	ECE 306 (P)
ECE 311	Feedback and Control Systems	3	3	4	ECE 024(P), EE 202 (P), ECE 202 (P)
ECE 312	Methods of Research	3	0	3	IE 321 (P), GEC 005(P)
IE 101	Engineering Management	2	0	2	
ECE ELEC ELEC 1	ECE Elective 1	2	3	3	See specific track for prerequisite(s)
ECE 313	Integration Course 1 for ECE	2	0	2	ECE 024 (P), MATH 025A (P), ECE 204 (P)

COURSE CODE	DESCRIPTIVE TITLE	Lecture Hours			Laboratory Hours			PREREQUISITE(S)/ COREQUISITE(S)
		Lecture Hours	Laboratory Hours	Credit Units				
THIRD YEAR, SUMMER (9 UNITS)								
ECE	102	Engineering Technical Communications	3	0	3	GEC 005 (P), ECE 312 (P)		
EPM	001	Project Management for Engineers	2	3	3	IE 101 (P)		
ECE ELEC	ELEC 2	ECE Elective 2	2	3	3	See specific track for prerequisite(s)		
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.								
FOURTH YEAR, FIRST SEMESTER (23 UNITS)								
ECE	405	ECE Design Project 1	2	3	3	ECE 102 (P), EPM 001 (P), ECE ELEC 2 (P), 4th Year Standing*		
ECE	414	Fundamentals of Intellectual Property	1	3	2	4th Year Standing*		
GEE	001B	GE Elective 1- Gender and Society	3	0	3			
ECE	406	Integration Course 2 for ECE	2	0	2	ECE 313 (P), EPM 001 (P), ECE 308 (P), ECE 311 (P)		
ECE	408A	Seminars / Colloquia on Current and Emerging Technologies in ECE	0	3	1	4th Year Standing*		
ECE	419	Communication Technologies	2	3	3	ECE 309 (P), ECE 310 (P)		
CHM	008A	Environmental Science and Engineering	3	0	3	CHM 001 (P)		
ECE	200	ECE Laws, Contracts, Ethics, Standards and Safety	3	0	3	4th Year Standing*		
ECE ELEC	ELEC 3	ECE Elective 3	2	3	3	See specific track for prerequisite(s)		
FOURTH YEAR, SECOND SEMESTER (20 UNITS)								
ECE	407	ECE Design Project 2	1	6	3	ECE 405 (P), Graduating		
ECE	409	Integration Course 3 for ECE	2	0	2	ECE 406 (P)		
ECE	314	On-the-Job- Training for ECE	3	0	3	4th Year Standing*		
GEC	006	Art Appreciation	3	0	3			
TECH	101A	Technology Entrepreneurship	3	0	3	4th Year Standing* ME 304 (P)		
GEM	001	Life and Works of Rizal	3	0	3			
GEC	008	Ethics	3	0	3			
Elective Courses: 9 Credit Units								
A student can choose any of the three (3) tracks below and once a track is chosen, all courses in the track must be taken.								
TRACK ELECTIVE 1: BIOMEDICAL ELECTRONICS								
BEL	001	Biomedical Electronics 1	2	3	3	PHYS 112 (P), ECE 307 (P)		
BEL	002	Biomedical Electronics 2	2	3	3	BEL 001 (P)		
BEL	003	Biomedical Electronics 3	2	3	3	BEL 002 (P)		
TRACK ELECTIVE 2: INDUSTRIAL AUTOMATION AND ROBOTICS								
IAR	001	Industrial Automation and Robotics 1	2	3	3	ECE 311 (C)		
IAR	002	Industrial Automation and Robotics 2	2	3	3	IAR 001 (P)		
IAR	003	Industrial Automation and Robotics 3	2	3	3	IAR 002 (P)		
TRACK ELECTIVE 3: DATA SCIENCE								
DSC	101A	Data Science 1	2	3	3	DSC 100 (P)		
DSC	102A	Data Science 2	2	3	3	DSC 101A (P)		
DSC	103A	Data Science 3	2	3	3	DSC 102A (P)		
TOTAL NO. OF UNITS			204					

CREDENTIALS SUBMITTED:

- () F138 () PSA Birth Certificate
 () GMC () Transfer Credential
 () F137A () TOR

DEFICIENCY/IES

Evaluated by: _____

Date: _____

Received by: _____

Date: _____