

Bachelor of Science in Electrical Engineering

2022 Curriculum

Reference: CMO No.88 series of 2017

FIRST YEAR - First Semester						
Course Code	Course Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
CHEM 1A	Chemistry for Engineers	3	3	4		
EN +	Enhanced Communication Skills	3	0	3		
FEMA	Fundamental Engineering Mathematics	4	0	4		MTN 4
FILN 1	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3		
GEC 2AA	Readings in Philippine History (with IP Education)	3	0	3		
GEC 4	Mathematics in the Modern World	3	0	3		
MTN 4	Calculus I	3	0	3		FEMA
PEEC 112	Electrical Engineering Workshop	0	3	1		
PE 1B	Physical Activities Towards Health and Fitness 1 (PATHFit 1) Movement Competency Training	2	0	2		
NSTP 1	National Service Training Program (Common Module) I	3	0	3		
	Subtotal	27	6	29		
FIRST YEAR - Second Semester						
Course Code	Course Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
GEC 1	Understanding the Self	3	0	3		
GEC 3A	The Contemporary World (with Peace Education)	3	0	3		
GEC 5	Purposive Communication	3	0	3	EN +	
GEC 7	Science, Technology and Society	3	0	3		
GEE 7	Gender and Society	3	0	3		
MTN 5	Calculus II	3	0	3	MTN 4, FEMA	
PHYS 121	Physics for Engineers I	3	3	4	MTN 4, FEMA	MTN 5
PHYS 122	Physics for Engineers II	1	3	2	MTN 4, FEMA	MTN 5, PHYS 121
PE 2B	Physical Activities Towards Health and Fitness 2 (PATHFit 2) Exercise-based Fitness Activities	2	0	2	PE 1B	
NSTP 2	National Service Training Program (CWTS/LTS/ROTC) II	3	0	3	NSTP 1	
	Subtotal	27	6	29		
SECOND YEAR - First Semester						
Course Code	Course Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
ECN 1A	Computer Fundamentals and Programming	0	3	1		
EDA 101	Engineering Data Analysis	3	0	3	MTN 4	MTN 5
GEC 6	Art Appreciation	3	0	3		
GEC 8	Ethics	3	0	3		
GEE 15	ASEAN Culture and Studies	3	0	3		
GEE 4	Living in the IT Era	3	0	3		
MECH 1A	Engineering Mechanics	3	0	3	MTN 5, PHYS 121, PHYS 122	
MTN 6	Differential Equations	3	0	3	MTN 5	
PEEC 211	Electrical Circuits I	3	3	4	MTN 5, PHYS 121, PHYS 122	
PE 3AB	Physical Activities Towards Health and Fitness 3 (PATHFit 3) Sports (Individual/Dual Sports)	2	0	2	PE 2B	
	Subtotal	26	6	28		
SECOND YEAR - Second Semester						
Course Code	Course Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
ACE 221	Electronic Circuits: Devices and Analysis	3	3	4	PEEC 211	
ACE 222	Electromagnetics	3	0	3	PHYS 121, PHYS 122, MTN 6	
ACE 225	Programming for EE Applications	0	3	1	ECN 1A	
BES 01	Computer-Aided Drafting	0	3	1		
BES 02	Engineering Economics	3	0	3	EDA 101	
ME 211A	Basic Thermodynamics	2	0	2	CHEM 1A, PHYS 121, PHYS 122	
MECH 3B	Mechanics of Deformable Bodies	2	0	2	MECH 1A	
PEEC 221	Electrical Circuits II	3	3	4	PEEC 211	
PEEC 222	Engineering Math for EE	3	0	3	MTN 6	
PE 4AB	Physical Activities Towards Health and Fitness 4 (PATHFit 4) Sports (Team Sports)	2	0	2	PE 3AB	
	Subtotal	21	12	25		

THIRD YEAR - First Semester						
Course Code	Course Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
ACE 311	Logic Circuits and Switching Theory	2	3	3	ACE 221	
ACE 312	Fundamentals of Electronic Communication	3	0	3	ACE 221	
ACE 313	Materials Science and Engineering	2	0	2	CHEM 1A, MECH 3B	
EN 1	Scientific and Technical Writing	3	0	3		
ME 314A	Fluid Mechanics	2	0	2	MECH 1A	
PEEC 311B	Electrical Circuits III	2	3	3	PEEC 221	
PEEC 312	Electrical Machines I	3	3	4	ACE 222, PEEC 221	
PEEC 313	EE Law, Codes, and Professional Ethics	2	0	2	GEC 8	
PEEC 314	Feedback Control Systems	3	0	3	ACE 221, PEEC 222	PEEC 311B
PEEC 315	Numerical Methods and Analysis	2	3	3	ACE 225, PEEC 222	
	Subtotal	24	12	28		
THIRD YEAR - Second Semester						
Course Code	Course Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
ACE 321	Industrial Electronics	3	3	4	ACE 221	
ACE 322	Microprocessor Systems	2	3	3	ACE 311	
ACE 323	Basic Occupational Safety and Health	3	0	3	PEEC 313	
BES 04	Technopreneurship 101	3	0	3		
PEEC 321	Electrical Machines II	3	3	4	PEEC 311B, PEEC 312	
PEEC 322	Electrical Apparatus and Devices	2	3	3	PEEC 311B	PEEC 321
PEEC 323	Electrical Standards and Practices	0	3	1	BES 01, PEEC 313	PEEC 321
PEEC 324A	Research Methods	0	3	1	EN 1, EDA 101	PEEC 321
PEEC 325	Management of Engineering Projects	2	0	2	PEEC 313, BES 02	
	Subtotal	18	18	24		
THIRD YEAR - Mid Year						
Course Code	Course Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
OJT-EE	On-the-Job Training (280 hours)	3	0	3	4th Year Standing, PEEC 321, PEEC 322, PEEC 323	
	Subtotal	3	0	3		
FOURTH YEAR - First Semester						
Course Code	Course Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
GEM	The Life and Works of Rizal	3	0	3		
PEEC 411	Electrical Systems and Illumination Engineering Design	3	6	5	PEEC 321, PEEC 322, PEEC 323	
PEEC 412	Power Transmission Design	3	0	3	PEEC 321, PEEC 322	PEEC 411
PEEC 414A	Capstone Project I	0	3	1	PEEC 324A, PEEC 325	PEEC 411
PEEC 415	EE Elective I	3	0	3	4th Year Standing	PEEC 411
PEEC 416A	Special Topics in Mathematics	0	6	2	4th Year Standing	PEEC 411
PEEC 417	Instrumentation and Control	2	3	3	ACE 321, PEEC 314	
	Subtotal	14	18	20		
FOURTH YEAR - Second Semester						
Course Code	Course Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
ACE 422	Environmental Science and Engineering	2	0	2	CHEM 1A	
PEEC 421	Power System Analysis	3	3	4	PEEC 411, PEEC 412	
PEEC 422	Distribution Systems and Substation Design	2	3	3	PEEC 411, PEEC 412	
PEEC 423	Fundamentals of Power Plant Engineering Design	1	3	2	PEEC 411, PEEC 412	
PEEC 424A	Capstone Project II	0	3	1	PEEC 414A	
PEEC 425	EE Elective II	3	0	3	PEEC 415	PEEC 421
PEEC 426A	Special Topics in Electrical Engineering	0	6	2	PEEC 416A	PEEC 421
PEEC 428	Seminars/Colloquia	0	3	1	4th Year Standing	PEEC 421
	Subtotal	11	21	18		

Total Units = 204

*The nth Year Standing means that the student shall have completed atleast 75% of the load requirements of the previous year level
 *Pre-requisite subjects with a grade of INC must be completed first before taking the succeeding subject

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