

Bachelor of Science in Electrical Engineering

2019 Curriculum

Reference: CMO No.88 series of 2017

FIRST YEAR - First Semester						
Course Code	Descriptive Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
CHEM1	General Chemistry	3	3	4		
FEMA 1	Fundamental Engineering Mathematics I	3	0	3		MTN 4, FEMA 2
FEMA 2	Fundamental Engineering Mathematics II	3	0	3		MTN 4, FEMA 1
FILN 1	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3		
GEC 1	Understanding the Self	3	0	3		
GEC 4	Mathematics in the Modern World	3	0	3		
MTN 4	Calculus I	3	0	3		FEMA 1, FEMA 2
PEEC 111	Electrical Engineering Orientation	1	0	1		
PEN 1	Fitness and Recreational Outdoor Activities	2	0	2		
NSTP 1	National Service Training Program (CWTS/LTS/ROTC) I	3	0	3		
	Subtotal	27	3	28		
FIRST YEAR - Second Semester						
Course Code	Descriptive Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
CHEM 1A	Chemistry for Engineers	3	3	4	CHEM1	
FILN 2	Sosyedad at Literatura/Panitikang Panlipunan (SOSLIT)	3	0	3		
GEC 7	Science, Technology and Society	3	0	3		
MTN 5	Calculus II	3	0	3	MTN 4, FEMA 1, FEMA 2	
PHYS 1A	Physics for Engineers I	3	3	4	MTN 4, FEMA 1, FEMA 2	MTN 5
PHYS 1B	Physics for Engineers II	2	3	3	MTN 4, FEMA 1, FEMA 2	MTN 5, PHYS 1A
PEN 2	Philippine Folkdances	2	0	2	PEN 1	
NSTP 2	National Service Training Program (CWTS/LTS/ROTC) II	3	0	3	NSTP 1	
	Subtotal	22	9	25		
FIRST YEAR - Mid Year						
Course Code	Descriptive Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
GEC 2A	Readings in the Philippine History (IP Education)	3	0	3		
GEC 3A	The Contemporary World (Peace Education)	3	0	3		
GEM	The Life and Works of Rizal	3	0	3		
	Subtotal	9	0	9		
SECOND YEAR - First Semester						
Course Code	Descriptive Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
BES 04	Technopreneurship 101	3	0	3	2nd Year Standing	PEEC 211
ECN 1A	Computer Fundamentals and Programming	0	3	1		
EDA 101	Engineering Data Analysis	3	0	3	MTN 4	
FILN 3	SineSosyedad/Pelikulang Panlipunan	3	0	3	FILN 2	
GEE 2	People and the Earth's Ecosystem	3	0	3		
GEC 6	Art Appreciation	3	0	3		
MECH 1A	Engineering Mechanics	3	0	3	MTN 5, PHYS 1A, PHYS 1B	
MTN 6	Differential Equations	3	0	3	MTN 5	
PEEC 211	Electrical Circuits I	3	3	4	MTN 5, PHYS 1A, PHYS 1B	
PEN 3	Individual and Dual Sports	2	0	2	PEN 1	
	Subtotal	26	6	28		
SECOND YEAR - Second Semester						
Course Code	Descriptive 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 1A, PHYS 1B, MTN 6	
ACE 223	Advance Computer Programming for EE	0	3	1	ECN 1A	
ACE 224	Environmental Science and Engineering	2	0	2	CHEM 1A, GEE 2	
BES 02	Engineering Economics	3	0	3	EDA 101	
ME 211A	Basic Thermodynamics	2	0	2	CHEM 1A, PHYS 1A, PHYS 1B	
MECH 3A	Mechanics of Deformable Bodies	3	0	3	MECH 1A	
PEEC 221	Electrical Circuits II	3	3	4	PEEC 211	
PEEC 222	Engineering Math for EE	3	0	3	MTN 6	
PEN 4	Team Sports	2	0	2	PEN 1	
	Subtotal	24	9	27		

SECOND YEAR - Mid Year						
Course Code	Descriptive Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
GEC 5	Purposive Communication	3	0	3		
GEC 8	Ethics	3	0	3		
GEE 7	Gender and Society	3	0	3		
	Subtotal	9	0	9		
THIRD YEAR - First Semester						
Course Code	Descriptive Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
ACE 311A	Logic Circuits and Switching Theory	3	0	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 3A	
BES 01	Computer-Aided Drafting	0	3	1	3rd Year Standing	
GEE 10	Philippine Popular Culture	3	0	3		
PEEC 311	Electrical Circuits III	3	0	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 311
PEEC 314	Feedback Control Systems	3	0	3	ACE 221, PEEC 222	PEEC 311
PEEC 315	Numerical Methods and Analysis	2	3	3	ACE 223, PEEC 222	
	Subtotal	24	9	27		
THIRD YEAR - Second Semester						
Course Code	Descriptive 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 311A	
ACE 323	Basic Occupational Safety and Health	3	0	3	PEEC 313	
ME 314A	Fluid Mechanics	2	0	2	MECH 1A	
PEEC 321	Electrical Machines II	3	3	4	PEEC 311, PEEC 312	
PEEC 322	Electrical Apparatus and Devices	2	3	3	PEEC 311	PEEC 321
PEEC 323	Electrical Standards and Practices	0	3	1	BES 01, PEEC 313	PEEC 321
PEEC 324	Research Methods	1	3	2	BES 04, GEC 5, EDA 101	PEEC 321
	Subtotal	16	18	22		
THIRD YEAR - Mid Year						
Course Code	Descriptive 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	Descriptive Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
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 413	Management of Engineering Projects	2	0	2	BES 02	
PEEC 414	Research Project or Capstone Design Project I	0	3	1	PEEC 324	PEEC 411
PEEC 415	EE Elective I	3	0	3	4th Year Standing	PEEC 411
PEEC 416A	Special Topics in Mathematics	0	6	2		PEEC 411
PEEC 417	Instrumentation and Control	2	3	3	ACE 321, PEEC 314	
	Subtotal	13	18	19		
FOURTH YEAR - Second Semester						
Course Code	Descriptive Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
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	4th Year Standing	PEEC 421
PEEC 424	Research Project or Capstone Design Project II	0	3	1	PEEC 414	
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 427	Electrical Equipment Operation and Maintenance	2	0	2	4th Year Standing	PEEC 421
PEEC 428	Seminars/Colloquia	0	3	1	4th Year Standing	PEEC 423
	Subtotal	11	21	18		

Total Units = 215

*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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