

Bachelor of Science in Electrical Engineering
2018 Bridging 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			
BRG 1E	General Chemistry	3	3	4		
BRG 2E	Introduction to Calculus	4	3	5		
GEC 1	Understanding the Self	3	0	3		
GEC 4	Mathematics in the Modern World	3	0	3		
GEC 7	Science, Technology and Society	3	0	3		
GEM	The Life and Works of Rizal	3	0	3		
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	25	6	27		
FIRST YEAR - Second Semester						
Course Code	Descriptive Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
BRG 3E	General Physics	5	3	6		
ECN 1A	Computer Fundamentals and Programming	0	3	1		
FILN 1	Kontekstwalisadong Komunikasyon sa Filipino	3	0	3		
GEC 2	Readings in the Philippine History	3	0	3		
GEC 3	The Contemporary World	3	0	3		
GEC 5	Purposive Communication	3	0	3		
MTN 4	Calculus I	3	0	3	BRG 2E	
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	25	6	27		
FIRST YEAR - Mid Year						
Course Code	Descriptive Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
MTN 5	Calculus II	3	0	3	MTN 4	
PHYS 1D	Physics for Engineers	3	3	4	BRG 3E, MTN 4	MTN 5
	Subtotal	6	3	7		
SECOND YEAR - First Semester						
Course Code	Descriptive Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
CHEM 1A	Chemistry for Engineers	3	3	4	BRG 1E	
EDA 101	Engineering Data Analysis	3	0	3	MTN 4	
FILN 2	Sosyedad at Literatura/Panitikang Panlipunan (SOSLIT)	3	0	3	FILN 1	
GEC 8	Ethics	3	0	3		
MECH 1A	Engineering Mechanics	3	0	3	MTN 5, PHYS 1D	
MTN 6	Differential Equations	3	0	3	MTN 5	
PEEC 211A	Electrical Circuits I	4	3	5	MTN 5, PHYS 1D	
PEN 3	Individual and Dual Sports	2	0	2	PEN 1	
	Subtotal	24	6	26		
SECOND YEAR - Second Semester						
Course Code	Descriptive Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
ACE 221A	Electronic Circuits: Devices and Analysis	4	3	5	PEEC 211A	
BES 02	Engineering Economics	3	0	3	EDA 101	
FILN 3	SineSosyedad/Pelikulang Panlipunan	3	0	3	FILN 1	
FME 211A	Basic Thermodynamics	2	0	2	CHEM 1A, PHYS 1D	
GEC 6	Art Appreciation	3	0	3		
MECH 3A	Mechanics of Deformable Bodies	3	0	3	MECH 1A	
PEEC 221C	Electrical Circuits II	4	3	5	PEEC 211A	
PEEC 222	Engineering Math for EE	3	0	3	MTN 6	
PEN 4	Team Sports	2	0	2	PEN 1	
	Subtotal	27	6	29		

SECOND YEAR - Mid Year						
Course Code	Descriptive Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
ACE 211	Advance Computer Programming for EE	0	3	1	ECN 1A	
ACE 222	Electromagnetics	3	0	3	PHYS 1D, MTN 6	
	Subtotal	3	3	4		
THIRD YEAR - First Semester						
Course Code	Descriptive Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
ACE 311	Logic Circuits and Switching Theory	2	3	3	ACE 221A	
ACE 312	Fundamentals of Electronic Communication	3	0	3	ACE 221A	
BES 01	Computer-Aided Drafting	0	3	1	3rd Year Standing	
PEEC 311A	Electrical Circuits III	3	3	4	PEEC 221C	
PEEC 312	Electrical Machines I	3	3	4	ACE 222, PEEC 221C	
PEEC 313	EE Law, Codes, and Professional Ethics	2	0	2	GEC 8	PEEC 311A
PEEC 314A	Feedback Control Systems	3	3	4	ACE 221A, PEEC 222	PEEC 311A
PEEC 315A	Numerical Methods and Analysis	3	3	4	ACE 211, PEEC 222	
	Subtotal	19	18	25		
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 221A	
ACE 322	Microprocessor Systems	2	3	3	ACE 311	
ACE 323	Basic Occupational Safety and Health	3	0	3	PEEC 313	
FME 311A	Fluid Mechanics	2	0	2	MECH 1A	
GEE 13	Environmental Science and Engineering	2	0	2	CHEM 1A	
PEEC 321	Electrical Machines II	3	3	4	PEEC 311A, PEEC 312	
PEEC 322	Electrical Apparatus and Devices	2	3	3	PEEC 311A	PEEC 321
PEEC 323	Electrical Standards and Practices	0	3	1	BES 01, PEEC 313	PEEC 321
PEEC 324	Research Methods	1	3	2	GEC 5, EDA 101	PEEC 321
	Subtotal	18	18	24		
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	
	Subtotal	3	0	3		
FOURTH YEAR - First Semester						
Course Code	Descriptive Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
GEE 7	Gender and Society	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 413A	Management of Engineering Projects	3	0	3	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 416	Mathematics Course Audit with Comprehensive Examination	0	6	2		PEEC 411
PEEC 417A	Instrumentation and Control	3	3	4	ACE 321, PEEC 314A	
	Subtotal	18	18	24		
FOURTH YEAR - Second Semester						
Course Code	Descriptive Title	Hour/s		Credit Unit/s	Pre-Requisite	Co-Requisite
		Lec	Lab			
ACE 421	Materials Science and Engineering	3	0	3	CHEM 1A, MECH 3A	
BES 04	Technopreneurship 101	3	0	3	PEEC 413A	
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 426	EE Course Audit with Comprehensive Examination	0	6	2	PEEC 416	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	17	21	24		

Total Units = 220

*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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