

BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING
Curriculum applicable to students who entered as freshmen beginning school year 2020-2021

FIRST YEAR

FIRST SEMESTER						
CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
CHM031	CHEMISTRY FOR ENGINEERS	3.0	-	3.0	None	None
ENG023	RECEPTIVE COMMUNICATION SKILLS	3.0	-	3.0	None	None
HUM021	LOGIC AND CRITICAL THINKING	3.0	-	3.0	None	None
HUM039	ETHICS	3.0	-	3.0	None	None
MATH035	MATHEMATICS IN THE MODERN WORLD	3.0	-	3.0	None	None
MATH053	ENGINEERING CALCULUS 1	5.0	-	5.0	None	None
SS021	UNDERSTANDING THE SELF	3.0	-	3.0	None	None
VE021	LIFE COACHING SERIES 1	1.0	-	(1.0)	None	None
TOTAL		24.0	0.0	23.0		

SECOND SEMESTER						
CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
CHM031L	CHEMISTRY FOR ENGINEERS (LABORATORY)	-	3.0	1.0	None	CHM031
CPE001L	COMPUTER FUNDAMENTALS AND PROGRAMMING 1 (LAB)	-	3.0	1.0	None	None
DRAW021W	ENGINEERING DRAWING 1	-	3.0	1.0	None	None
ECE121L	COMPUTER-AIDED CALCULATIONS (LABORATORY)	-	3.0	1.0	None	None
ENG024	WRITING FOR ACADEMIC STUDIES	3.0	-	3.0	None	None
MATH054	ENGINEERING CALCULUS 2	5.0	-	5.0	MATH053	None
IE101-1	ENGINEERING DATA ANALYSIS	3.0	-	3.0	MATH053	None
PHY033	PHYSICS FOR ENGINEERS	4.0	-	4.0	MATH053	None
PHY033L	PHYSICS FOR ENGINEERS (LABORATORY)	-	3.0	1.0	MATH053	PHY033
SS036	SCIENCE, TECHNOLOGY, AND SOCIETY	3.0	-	3.0	None	None
NSTP010	NATIONAL SERVICE TRAINING PROGRAM 1	3.0	-	(3.0)	None	None
VE022	LIFE COACHING SERIES 2	1.0	-	(1.0)	None	None
TOTAL		22.0	15.0	23.0		

SECOND YEAR

FIRST SEMESTER						
CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
DRAW023L	COMPUTER-AIDED DRAFTING (LABORATORY)	-	3.0	1.0	DRAW021W	None
EE100	ELECTRICAL ENGINEERING ORIENTATION	1.0	-	1.0	None	None
EE101-2	CIRCUITS 1	3.0	-	3.0	MATH054, PHY033	None
EE101L-2	CIRCUITS 1 (LABORATORY)	-	3.0	1.0	PHY033L	EE101-2
ECCO102	ENGINEERING ECONOMY	3.0	-	3.0	IE101-1	None
ENG041	PURPOSIVE COMMUNICATION	3.0	-	3.0	None	None
MATH056	DIFFERENTIAL EQUATIONS	3.0	-	3.0	MATH054	None
ME111-1	THERMODYNAMICS	3.0	-	3.0	MATH054, PHY033	None
MCE100-1	ENGINEERING MECHANICS	3.0	-	3.0	MATH054, PHY033	None
SS023	THE CONTEMPORARY WORLD	3.0	-	3.0	None	None
PE021	MOVEMENT ENHANCEMENT	-	2.0 (2.0)	None	None	None
NSTP011P	NATIONAL SERVICE TRAINING PROGRAM 2 (PAIRED)	2.0	3.0	(3.0)	NSTP010	None
VE023	LIFE COACHING SERIES 3	1.0	-	(1.0)	VE022	None
TOTAL		25.0	11.0	24.0		

SECOND SEMESTER						
CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
CE104-2	MECHANICS OF DEFORMABLE BODIES FOR EE	3.0	-	3.0	MCE100-1	None
ECE101-4	ELECTRONICS CIRCUITS: DEVICES AND ANALYSIS	3.0	-	3.0	EE101-2	None
ECE101L-4	ELECTRONICS CIRCUITS: DEVICES AND ANALYSIS (LAB)	-	3.0	1.0	EE101L-2	ECE101-4
ECE115-1	ELECTROMAGNETICS FOR EE	2.0	-	2.0	PHY033, MATH056	None
EE101-3	CIRCUITS 2	3.0	-	3.0	EE101-2	None
EE102L-1	CIRCUITS 2 (LABORATORY)	-	3.0	1.0	EE101L-2	EE102-1
EMGT100	ENGINEERING MANAGEMENT	2.0	-	2.0	ECCO102	None
HUM034	ART APPRECIATION	3.0	-	3.0	None	None
MATH116	ADVANCED ENGINEERING MATHEMATICS	3.0	-	3.0	MATH056	None
MATH116E	ENGINEERING MATHEMATICS EXIT EXAM	-	-	0.0	IE101-1, MATH056	MATH116
MSE102	FUNDAMENTALS OF MATERIAL SCIENCE AND ENGINEERING	3.0	-	3.0	CHM031	None
PE022	FITNESS EXERCISES	-	2.0 (2.0)	None	PE021	None
TOTAL		22.0	8.0	24.0		

SUMMER

CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
EENV102	ENVIRONMENTAL SCIENCE AND ENGINEERING	3.0	-	3.0	CHM031	None
GELECO1	GE ELECTIVE 1	3.0	-	3.0	None	None
SAF102	BASIC OCCUPATIONAL SAFETY AND HEALTH	3.0	-	3.0	CHM031	None
TOTAL		9.0	0.0	9.0		

THIRD YEAR

FIRST SEMESTER						
CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
CE101-2	LOGIC CIRCUITS AND SWITCHING THEORY FOR EE	2.0	-	2.0	ECE101-4	None
CE101L-2	LOGIC CIRCUITS AND SWITCHING THEORY FOR EE (LAB)	-	3.0	1.0	ECE101L-4	CPE101-2
ECE103-1	INDUSTRIAL ELECTRONICS FOR ELECTRICAL ENGINEERS	3.0	-	3.0	ECE101-4	None
ECE103L-1	INDUSTRIAL ELECTRONICS FOR ELECTRICAL ENGINEERS (LAB)	-	3.0	1.0	ECE101L-4	ECE103-1
ECE130	FEEDBACK AND CONTROL SYSTEMS	3.0	-	3.0	MATH116	None
EE103	CIRCUITS 3	2.0	-	2.0	EE102-1	None
EE103L	CIRCUITS 3 (LABORATORY)	-	3.0	1.0	EE102L-1	EE103
EE106-1	DC MACHINERY	2.0	-	2.0	EE102-1, ECE115-1	None
EE106L-1	DC MACHINERY (LABORATORY)	-	3.0	1.0	EE102L-1	EE106-1
EE181	ELECTRICAL ENGINEERING LAWS, CODES AND ETHICS	2.0	-	2.0	HUM039	None
EE181E	GENERAL ENGINEERING AND APPLIED SCIENCES EXIT EXAM	-	-	0.0	CHM031, PHY033, ECCO102, EENV102, EMGT100, MCE100-1, ME111-1	EE181
GELECO2	GE ELECTIVE 2	3.0	-	3.0	None	None
RES101	METHODS OF RESEARCH	3.0	-	3.0	IE101-1, ENG024	None
PE023	PHYSICAL ACTIVITY TOWARDS HEALTH AND FITNESS 1	-	2.0 (2.0)	None	PE022	None
TOTAL		20.0	14.0	24.0		

SECOND SEMESTER						
CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
CAP200D	CAPSTONE DESIGN / THESIS 1 (LABORATORY)	-	-	2.0	RES101	None
CE120-1	FLUID MECHANICS FOR EE	2.0	-	2.0	MCE100-1	None
CPE103-2	MICROPROCESSOR SYSTEMS FOR ELECTRICAL ENGINEERS	2.0	-	2.0	CPE101-2	None
CPE103L-2	MICROPROCESSOR SYSTEMS FOR ELECTRICAL ENGINEERS (LAB)	-	3.0	1.0	CPE101L-2	CPE103-2
EE107-1	AC MACHINERY	3.0	-	3.0	EE106-1	None
EE107L-1	AC MACHINERY (LABORATORY)	-	3.0	1.0	EE106L-1	EE107-1
EE122-1	AC APPARATUS AND DEVICES	2.0	-	2.0	EE103	None
EE122L-1	AC APPARATUS AND DEVICES (LABORATORY)	-	3.0	1.0	EE103L	EE122-1
EE182L	ELECTRICAL STANDARDS AND PRACTICES (LABORATORY)	-	3.0	1.0	EE181	None
EE182E	ELECTRICAL ENGINEERING 1 EXIT EXAM	-	-	0.0	EE181, EENV102, ECE103-1, ECE103L, ECE104	EE182L
SS085	PHILIPPINE INDIGENOUS COMMUNITIES	3.0	-	3.0	None	None
MATH161	NUMERICAL METHODS	3.0	-	3.0	MATH116	None
MATH161L	NUMERICAL METHODS (LABORATORY)	-	3.0	1.0	MATH116, ECE121L	MATH161
TEC100	TECHNOPRENEURSHIP	3.0	-	3.0	EMGT100	None
PE024	PHYSICAL ACTIVITY TOWARDS HEALTH AND FITNESS 2	-	2.0 (2.0)	None	PE023	None
TOTAL		18.0	20.0	24.0		

SUMMER

CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
EE199R-1	EE PRACTICUM	-	20.0	3.0	EE102-1, ECE101-4, HUM039	None
TOTAL		0.0	20.0	3.0		

FOURTH YEAR

FIRST SEMESTER						
CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
CAP200D-1	CAPSTONE DESIGN / THESIS 2 (LABORATORY)	-	3.0	1.0	CAP200D	None
CAP200D-2	CAPSTONE DESIGN / THESIS 3 (LABORATORY)	-	3.0	1.0	CAP200D	CAP200D-1
EE109-2	ELECTRICAL SYSTEMS AND ILLUMINATION ENGINEERING DESIGN	3.0	-	3.0	EE107-1, EE122L-1	None
EE109L-2	ELECTRICAL SYSTEMS DESIGN (LABORATORY)	-	3.0	1.0	EE107L-1, EE122L-1	EE109-2
EE109L-3	ILLUMINATION ENGINEERING DESIGN (LABORATORY)	-	3.0	1.0	EE107L-1, EE122L-1	EE109-2
ECE132-1	INSTRUMENTATION AND CONTROL	2.0	-	2.0	ECE130	None
ECE132L-1	INSTRUMENTATION AND CONTROL (LABORATORY)	-	3.0	1.0	ECE130	ECE132-1
ECE140-1	PRINCIPLES OF COMMUNICATION SYSTEM FOR EE	3.0	-	3.0	ECE101-4	None
EE134-1	POWER SYSTEMS ANALYSIS 1	2.0	-	2.0	EE182L, MATH161L	None
EE134L-1	POWER SYSTEMS ANALYSIS 1 (LABORATORY)	-	3.0	1.0	EE182L, MATH161L	EE134-1
EE134-1E	ELECTRICAL ENGINEERING 2 EXIT EXAM	-	-	0.0	EE107-1, EE122L-1, EE182L	EE134-1
EELECO1	EE ELECTIVE 1	3.0	-	3.0	None	None
SS022	READINGS IN PHILIPPINE HISTORY	3.0	-	3.0	None	None
COR198	CORRELATION 1	6.0	-	(6.0)	CHM031, MATH116, PHY033, EE101-2	None
TOTAL		22.0	18.0	22.0		

SECOND SEMESTER						
CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
EE135-1	POWER SYSTEMS ANALYSIS 2	2.0	-	2.0	EE134-1	None
EE135L-1	POWER SYSTEMS ANALYSIS 2 (LABORATORY)	-	3.0	1.0	EE134L-1	EE135-1
EE136-1	FUNDAMENTALS OF POWER PLANT ENGINEERING DESIGN (LAB)	-	3.0	1.0	EE134-1, EE134L-1	EE135-1, EE135L-1
EE136-1E	ELECTRICAL ENGINEERING 3 EXIT EXAM	-	-	0.0	EE109-2, ECE140-1, ECE139-1, EE134-1	EE135-1, EE136L-1, EE137-1
EE137-1	DISTRIBUTION SYSTEMS AND SUBSTATION DESIGN	2.0	-	2.0	EE134-1	EE135-1
EE137L-1	DISTRIBUTION SYSTEMS AND SUBSTATION DESIGN (LAB)	-	3.0	1.0	EE134L-1	EE137-1, EE135L-1
EE191F-1	EE SEMINARS AND COLLOQUIUM (FIELD)	-	3.0	1.0	None	None
EELECO2	EE ELECTIVE 2	3.0	-	3.0	None	None
EELECO3	EE ELECTIVE 3	3.0	-	3.0	None	None
SS038	THE LIFE AND WORKS OF JOSE RIZAL	3.0	-	3.0	None	None
EE198-2	EE CORRELATION 2	6.0	-	(6.0)	EE134-1, EE134L-1, ECE140-1, EE181E, EE182E, EE134-1E	EE136-1E
TOTAL		19.0	12.0	17.0		

Required Units of Electives : 9 units

ELECTIVE TITLE 2020

Advanced Power Systems

CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
EE136-1	ADVANCED POWER SYSTEMS ANALYSIS: ECONOMIC OPERATION AND CONTROL	3.0	-	3.0	EE182L	None
EE136-2	SMART GRID APPLICATIONS IN POWER SYSTEMS	3.0	-	3.0	EE182L	None
EE136-3	MAINTENANCE OF POWER GENERATORS AND SUBSTATION EQUIPMENT	3.0	-	3.0	EE182L	None
EE135-2	POWER SYSTEM PROTECTION	3.0	-	3.0	EE134-1, EE134L-1	None

Advanced Electrical Systems Design

CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
EE109P-1	ADVANCED ELECTRICAL SYSTEM DESIGN: HIGH-RISE AND INDUSTRIAL BUILDINGS (PAIRED)	2.0	3.0	3.0	EE109-2, EE109L-3	None
EE132P-1	ADVANCED POWER SYSTEM DESIGN: SUBSTATION AND DISTRIBUTION (PAIRED)	2.0	3.0	3.0	EE109-2, EE109L-3	None

Agricultural Engineering

CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
AEAG012	AG POWER ENGINEERING	3.0	-	3.0	EE102-1	None
AEAG013	AG ELECTRIFICATION AND CONTROL SYSTEMS	3.0	-	3.0	AEAG012	None

CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
EE194	SPECIAL TOPICS IN ELECTRICAL ENGINEERING	3.0	-	3.0	None	None

NOTE: Elective courses offering per semester will depend on the availability of instructor and compliance of prerequisite courses for specific elective course.

Mechatronics

CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
ECE137P-1	MECHATRONICS 1: FUNDAMENTALS OF MECHATRONICS (PAIRED)	2.0	3.0	3.0	ECE130	None
ECE137P-2	MECHATRONICS 2: ROBOTICS (PAIRED)	2.0	3.0	3.0	ECE130	None
ECE137P-3	SUPERVISORY CONTROL AND DATA ACQUISITION SYSTEM (PAIRED)	2.0	3.0	3.0	ECE130	None

GENERAL EDUCATION ELECTIVE TITLE 2020

CODE	TITLE	LEC HRS	LAB HRS	UNITS	PREREQUISITES	CO-REQUISITES
ENV075	ENVIRONMENTAL SCIENCE	3.0	-	3.0	None	None
ENV076	PEOPLE AND THE EARTH'S ECOSYSTEM	3.0	-	3.0	None	None
ENV078	THE ENTREPRENEURIAL MIND	3.0	-	3.0	None	None
HUM080	PHILIPPINE POPULAR CULTURE	3.0	-	3.0	None	None
HUM081	INDIGENOUS CREATIVE CRAFTS	3.0	-	3.0	None	None
HUM082	READING VISUAL ART	3.0	-	3.0	None	None
HUM083	GREAT BOOKS	3.0	-	3.0	None	None
SS084	RELIGIONS, RELIGIOUS EXPERIENCES AND SPIRITUALITY	3.0	-	3.0	None	None
SS086	GENDER AND SOCIETY	3.0	-	3.0	None	None