



**BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING**  
**EFFECTIVE SCHOOL YEAR 2009-2010**

FIRST YEAR					
1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
Subject Code & Title	Units	Pre-requisites	Subject Code & Title	Units	Pre-requisites
*Math 11 - College Algebra I	3-0-3		*Math 12 - College Algebra II	2-0-2	Math 11
*Math 13 - Plane and Spherical Trigonometry	3-0-3		*Math 14 - Analytic Geometry and Differential Calculus	6-0-6	Math 11, Math 13
*Draw 11 - Engineering Drawing	0-6-2		*Math 16 - Solid Mensuration	2-0-2	Math 11, Math 13
Rel 11 - Old Testament	3-0-3		*Draw 12 - Computer Aided Drafting	0-3-1	Draw 11
*BC 11 - Basic Comm. Skills: English for Academic Purpose	3-0-3		*BC 12 - Basic Comm. Skills: Reading to Writing Paragraphs & Essays	3-0-3	BC 11
Fil 13 - Sining ng Pakikipagtalastasan	3-0-3		*Phys 45 - General Physics I	3-3-4	Math 11, Math 13
Speech 11 - Effective Oral Communication	3-0-3		Rel 22 - New Testament	3-0-3	Rel 11
PEP 1 - Personality Enhancement Prog	(1)		PEP 2 - Personality Enhancement Program	(1)	PEP 1
PE 11 - Physical Education I	2		PE 12 - Physical Education II	2	PE 11
NSTP 1 - National Service Training Program I	3		NSTP 2 - National Service Training Program II	3	NSTP 1
<b>Load (units)</b>	<b>25</b>		<b>Load (units)</b>	<b>26</b>	
SECOND YEAR					
1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
Subject Code & Title	Units	Pre-requisites	Subject Code & Title	Units	Pre-requisites
*Math 21 - Integral Calculus	4-0-4	Math 14, Math 16	*Math 22 - Differential Equations	3-0-3	Math 21
*ES 23 - Engineering Mechanics I: Statics	2-3-3	Phys 45, Math 14	*ES 24 - Engineering Mechanics II: Dynamics	2-3-3	ES 23, Math 21
*ES 11 - Elementary Surveying	0-3-1	Math 13	*CpE 22R - Computer Fundamentals & Programming	0-6-2	2 <sup>nd</sup> year standing
*Phys 46 - General Physics II	3-3-4	Phys 45	*EE 22 - Electrical Circuits I	3-3-4	Phys 46, Math 21
Chem 11 - General Chemistry I	3-6-5	-	Fil 22 - Panitikang Pilipino	3-0-3	Fil 13
Hist 31 - Phil. History & Gov't w/ the New Cons.	3-0-3	-	Chem 12 - General Chemistry II	3-6-5	Chem 11
PE 21 - Physical Education III	2	PE 11	Socio 63R - Current Issues & Contemporary Nat'l Dev't	3-0-3	-
<b>Load (units)</b>	<b>22</b>		PE 22 - Physical Education IV	2	PE 11
<b>Load (units)</b>			<b>Load (units)</b>	<b>25</b>	
THIRD YEAR					
1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
Subject Code & Title	Units	Pre-requisites	Subject Code & Title	Units	Pre-requisites
*MathE 31 - Advanced Engineering Math for EE	4-0-4	Math 22	*Math 32R - Probability and Statistics	3-0-3	Math 21
*ES 30 - Thermodynamics	3-0-3	ES 23, Phys 46, Math 21	*Math 34R* - Numerical Methods	2-3-3	MathE 31, CpE 22R
*ES 33** - Mechanics of Deformable Bodies	2-3-3	ES 24, Math 22	*EE 36 - Shop Technology for EE	1-3-2	EE 31, ESEe 35
*ESEe 35 - Fundamentals of Materials Eng'g	3-0-3	Con. w/ ES 33, Chem 12	*EE 32 - Electrical Circuits III	2-3-3	EE 31, Math 22
*EE 31 - Electrical Circuits II	3-3-4	EE 22R, Math 22	*EE 34 - DC Machinery	2-3-3	EE 31
*EE 33 - Electromagnetics	3-0-3	EE 22R	Psych 11 - General Psychology	3-0-3	-
*BC 26 - Technical Report Writing	3-0-3	BC 12	Pol Sci 11 - Taxation & Land Reform	3-0-3	-
Hist 41 - Rizal's Life and Works	3-0-3	-	Rel 61 - Christian Ethics	3-0-3	Rel 22
<b>Load (units)</b>	<b>26</b>		<b>Load (units)</b>	<b>23</b>	
FOURTH YEAR					
1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
Subject Code & Title	Units	Pre-requisites	Subject Code & Title	Units	Pre-requisites
*ES 40R - Engineering Management	3-0-3	4 <sup>th</sup> year standing	*ESEe 44 - Environmental Engineering and Safety Mgt.	3-0-3	Chem 11, 4 <sup>th</sup> yr standing
*ES 41EE - Fluid Mechanics	3-0-3	ES 24	*EE 40 - Electrical Equip't Operation & Maintenance	2-3-3	EE 43
*EE 41EE - Electronic Circuits and Devices	2-3-3	EE 31	*EE 42EE - Electronic Circuits Analysis and Design	2-3-3	EE 41
*EE 43 - AC Apparatus & Devices	2-3-3	EE 34, concurrent w/ EE 47	*EE 44 - Illumination Engineering Design	2-3-3	EE 36, con w/EE 46
*EE 45 - Electrical Transients	3-0-3	EE 31, MathE 31	*EE 46 - Electrical System Design	2-3-3	EE 43, con. w/ EE 44
*EE 47 - AC Machinery	3-3-4	EE 34, concurrent w/EE 43	*EE 48 - Control Systems Analysis	3-0-3	MathE 31
*EE 49 - Power System Planning (Elective)	3-0-3	EE 32, EE 34	Philo 31 - Introduction to Logic	3-0-3	-
<b>Load (units)</b>	<b>22</b>		FA 51 - Arts and Music Appreciation	3-0-3	-
<b>Load (units)</b>			<b>Load (units)</b>	<b>24</b>	
SUMMER					
*EE 400 - On-The-Job- Training	0-0-3				EE 40, EE 42, EE 46, EE 48
FIFTH YEAR					
1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
Subject Code & Title	Units	Pre-requisites	Subject Code & Title	Units	Pre-requisites
*ES 50R - Engineering Economics and Accounting	3-0-3	5 <sup>th</sup> year standing	*EE 50 - Power System Analysis and Design	3-3-4	EE 46, con.w/ EE 52
*EE 51 - Electrical Engineering Safety with Local & Int'l Codes & Standards	2-0-2	ESEe 44, EE 44, EE 46	*EE 52 - Power Plant Engineering	2-3-3	EE 46, con.w/ EE 50
*EE 53 - Power System Reliability (Elective)	3-0-3	EE 44, EE 46	*EE 54 - EE Laws, Contracts and Ethics	2-0-2	EE 51
*EE 55 - Principles of Communications	3-3-4	EE 42, EE 48	*EE 56 - Electrical Transmission & Dist. Systems	3-3-4	EE 47, EE 32
*EE 57 - Industrial Electronics	3-3-4	EE 42, EE 48	*EE 58 - Instrumentation and Control	2-3-3	EE 57
*EE 59 - Research Methods & Project	1-3-2	ES 42, con.w/EE 53 & EE57	*EE 60 - Seminars and Field Trips	1-0-1	EE 59
*EE 71 - Logic Circuits & Switching Theory	3-3-4	EE 42	*EE 62 - Information Technology	2-3-3	EE 55
*EE 73 - Economic Operation of Power Sys. (Elect)	3-0-3	EE 44, EE 46	*EE 72 - Microprocessor Systems	2-3-3	EE 71
<b>Load (units)</b>	<b>25</b>		*EE 74 - Power Quality & Demand-Side Mgt. (Elect)	3-0-3	EE 53, EE 73
<b>Load (units)</b>			<b>Load (units)</b>	<b>26</b>	

ESEe 35 and ESEe 44, though considered basic engineering, are discipline-specific when it comes to emphasis.

**TOTAL CREDIT UNITS: 247**

**NOTE:**

1. \* Needs to have at least a satisfactory grade of 2.0 before a student is considered to have passed the subject.