

## BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING

(Revised Curriculum Effective SY 2008-09)

### FIRST YEAR

#### FIRST SEMESTER

<i>Cat. No.</i>	<i>Descriptive Title</i>	<i>Lec</i>	<i>Lab</i>	<i>Units</i>	<i>Pre-requisite</i>
___ Chem 115	General Chemistry (lec)	3	0	3	
___ Chem 100	General Chemistry (lab)	0	3	1	
___ Math 115	Plane & Spherical Trigonometry	3	0	3	
___ Math 111	College Algebra	3	0	3	
___ ES 111	Engineering Drawing 1	0	6	2	
___ Engl 101	Communication Arts 1	3	0	3	
___ SocSc 111	General Psychology	3	0	3	
___ Fil 111	Sining ng Pakikipagtalastasan	3	0	3	
___ RE 103	Salvation History	3	0	3	
___ PE 111	Health & Self-Testing Activities	2	0	2	
___ SDS 1	Student Development Session 1	0	1.5	1	
___ NSTP 1	National Service Training Program 1	0	4.5	3	
___ *Math 101	Intermediate Algebra	3	0	3	
___ *Engl 100	English Plus	3	0	3	
___ *RE 101	Islamic Studies 1	3	0	3	
				30	

#### SECOND SEMESTER

___ ES 112	Advanced College Algebra	3	0	3	Math 111
___ Math 114	Solid Mensuration	2	0	2	Math 111
___ Math 116	Analytic Geometry	3	0	3	Math 115, 111
___ ES 118	Differential Calculus	4	0	4	Math 115, 111
___ CS 105	Computer Fundamentals	2	3	3	
___ Engl 102	Communication Arts 2	3	0	3	Engl 101
___ RE 104	Christology	3	0	3	RE 103
___ PE 112	Fundamentals in Rhythmic Activities	2	0	2	PE 111
___ SDS 2	Student Development Session 2	0	1.5	1	SDS 1
___ NSTP 2	National Service Training Program 2	0	4.5	3	NSTP 1
___ *RE 102	Islamic Studies 2	3	0	3	
				27	

### SECOND YEAR

#### FIRST SEMESTER

___ ES 121	Integral Calculus	4	0	4	ES 118, Math 116
___ Phys 127	Engineering Physics 1 (lec)	3	0	3	Math 115, 111
___ Phys 107-N	Engineering Physics 1 (lab)	0	3	1	Co-req Phys. 127
___ Engl 123	Speech Communication	3	0	3	Engl 102
___ RE 105	The Christian Faith	3	0	3	RE 104
___ Fil 111	Sining ng Pakikipagtalastasan	3	0	3	
___ SocSc 145	Art Appreciation	3	0	3	
___ Philo 11	Logic	3	0	3	
___ Philo 111	Philosophy of Man	3	0	3	
___ PE 121	Fundamentals in Games & Sports	2	0	2	PE 111
___ *RE 123	History of Christian Church	3	0	3	
				28	

#### SECOND SEMESTER

___ Phys 128	Engineering Physics 11 (lec)	3	0	3	Phys 127, 107-N
___ Phys 108-N	Engineering Physics 11 (lab)	0	3	1	Co-req Phys. 128
___ ES 122	Engineering Mechanics (Statics)	3	0	3	ES 121, Phys 107-N, 127
___ ES 124	Computer-Aided Drafting	2	3	3	ES 111, CS 105
___ Fil 112	Pagbasa at Pagsulat sa Iba't Ibang Disiplina	3	0	3	Fil 111
___ SocSc 112	Society & Culture with Family Planning	3	0	3	
___ SocSc 143	Rizal's Life, Works, & Writings	3	0	3	
___ RE 106	The Church	3	0	3	RE 107
___ PE 122	Recreational Activities	2	0	2	PE 111
___ Engl 140	Technical Report Writing	3	0	3	Engl 102
___ *RE 125	World Religions	3	0	3	
				27	

### THIRD YEAR

#### FIRST SEMESTER

<i>Cat. No.</i>	<i>Descriptive Title</i>	<i>Lec</i>	<i>Lab</i>	<i>Units</i>	<i>Pre-requisite</i>
___ EE 133	Electric Circuits 1 (lec)	3	0	3	Phys 128, 108-N
___ EE 103	Electric Circuits 1 (lab)	0	3	1	Co-req EE 133
___ EE 135	Electrical Engineering Safety	1	0	1	3 <sup>rd</sup> yr standing
___ ES 131	Electromagnetics	3	0	3	ES 121, Phys 128, 108-N
___ ES 133	Engineering Mechanics (Dynamics)	3	0	3	ES 122
___ ES 135	Engineering Materials	3	0	3	Chem 115, 100
___ ES 137	Differential Equations w/ Eng'g Appl.	3	0	3	ES 121
___ ES 141	Engineering Economy	3	0	3	3rd Yr. Standing
___ SocSc 141	Politics & Governance w/ Phil. Constitution	3	0	3	
___ RE 107	Liturgy and Sacraments	3	0	<u>3</u>	RE 106
				26	

#### SECOND SEMESTER

___ EE 134	Electric Circuits II (lec)	3	0	3	EE 133
___ EE 104	Electric Circuits II (lab)	0	3	1	Co-req. EE 134
___ EC 136	Electronics 1 (lec)	3	0	3	EE 133
___ EC 106	Electronics 1 (lab)	0	3	1	Co-req. EC 136
___ ES 132	Advanced Engineering Mathematics	3	0	3	ES 121
___ ES 134	Engineering Probability & Statistics	3	0	3	ES 112
___ ES 136	Mechanics of Deformable Bodies	3	0	3	ES 122
___ ES 138	Numerical Methods with Computer Appl.2	3	3	3	Math 121
___ ES 142	Thermodynamics	3	0	3	Phys 127, 107
___ Hist 111	Philippine History	3	0	3	
___ RE 108	Christian Morality	3	0	<u>3</u>	RE 105
				29	

### FOURTH YEAR

#### FIRST SEMESTER

___ EE 149	Electric Circuits 111 (lec)	3	0	3	EE 134
___ EE 119	Electric Circuits 111 (lab)	0	3	1	Co-req EE 147
___ EE 143	DC Machinery (lec)	2	0	2	EE 134
___ EE 113	DC Machinery (lab)	0	3	1	Co-req. EE 143
___ EC 141	Electronics II (lec)	3	0	3	EC 136
___ EC 111	Electronics II (lab)	0	3	1	Co-req. EC 141
___ EC 149	Logic Circuits & Switching Theory (lec)	3	0	3	EC 136
___ EC 109	Logic Circuits & Switching Theory (lab)	0	3	1	Co-req. EC 149
___ CE 139	Mechanics of Fluids	3	0	3	ES 136
___ ES 145	Software Application	2	3	3	CS 106
___ ES 147	Control Systems for non-ECE	3	0	3	EE 134
___ Lit 122	World Literature	3	0	<u>3</u>	
				27	

#### SECOND SEMESTER

___ EE 144	Power Systems Analysis and Design (lec)	3	0	3	EE 143
___ EE 114	Power Systems Analysis and Design (lab)	0	3	1	Co-req. EE 144
___ EE 146-N	AC Machinery (lec)	3	0	3	EE 145
___ EE 106-N	AC Machinery (lab)	0	3	1	Co-req. EE 146
___ EE 148	AC Apparatus and Devices	2	3	3	Co-req EE 146
___ EE 155-N	Pneumatics & Process Control (Elective 1)	3	0	3	4 <sup>th</sup> year standing
___ EE 156-N	Electrical Equipment: Opt'n & Maintenance	3	3	4	EE 146
___ EC 140	Instrumentation & Controls (lec)	3	0	3	EC 141
___ EC 102	Instrumentation & Control (lab)	0	3	1	Co-req EC 140
___ EC 142	Principles of Communications (lec)	3	0	3	EC 136, ES 133
___ EC 107	Principles of Communications (lab)	0	3	1	Co-req EC 142
___ ES 140	Methods of Research for Eng'g	3	0	<u>3</u>	4th year Standing
				29	

### SUMMER

___ EE 199	Apprenticeship (320 Hours)			3 Units	
------------	----------------------------	--	--	---------	--

**FIFTH YEAR**  
**FIRST SEMESTER**

Cat. No.	Descriptive Title	Lec	Lab	Units	Pre-requisite
___ EE 154	Power Plant Engineering	2	3	3	EE 144
___ EE 151	Electrical System Design I (lec)	3	0	3	5 th Yr. Standing
___ EE 111	Electrical System Design I (lab)	0	3	1	Co-req. EE 151
___ EE 157-N	Illumination Engineering Design	2	3	3	5 <sup>th</sup> Year Standing
___ EE 159-N	Electropneumatics (Elective 2)	3	0	3	5 <sup>th</sup> Year Standing
___ EE 161	Electrical Engineering Review 1	3	0	3	5 th Yr. Standing
___ EE 163	Electrical Engineering Project	0	3	1	ES 140
___ EE 165	Electrical X'mission & Distb'n System	3	3	4	EE 144
___ EC 161	Industrial Electronics (lec)	3	0	3	EC 141
___ EC 119	Industrial Electronics (lab)	0	3	<u>1</u>	Co-req. EC 161
				25	

**SECOND SEMESTER**

___ EE 152	EE Laws, Contracts, & Ethics	3	0	3	5 th Yr. Standing
___ EE 162	Electrical Engineering Review II	3	0	3	EE 161
___ EE 164	Programmable Logic Controllers in Manufacturing and Power System(Elctv 3)	3	0	3	5 <sup>th</sup> year Standing
___ EE 168	Human Machine Interface (Elective 4)	3	0	3	5 <sup>th</sup> year Standing
___ EC 168	Microprocessor System (lec)	3	0	3	EC 149
___ EC 128	Microprocessor System (lab)	0	3	1	Co-req. EC 168
___ ES 150	Seminars & Field Trip	0	3	1	5 th Yr. Standing
___ ES 152	Environmental & Safety Eng'g.	3	0	3	Chem 100, 115
___ IT 160	Information Technology for Eng'g.	2	3	3	
___ ES 144	Engineering Management	3	0	<u>3</u>	
				26	

\* RE 101/102 – For Muslim Students

\* RE 123/125 – For Protestant Students

\*Math 101 is a non-credit course. Students who pass the Qualifying Test for Math(QTM) proceed to Math111.

\*Engl. 100 – Students who pass the Qualifying Test for Engl (QTE) can proceed to Engl 101.

NSTP 1 & 2 – Should be taken during 1st. Year.

REVISED CURRICULUM: 2008-09

/gmp