



**BACHELOR OF SCIENCE IN MECHANICAL 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
ME 11 - Orientation to ME	1-0-1		* Math 12 - College Algebra II	2-0-2	Math 11
* Math 11 - College Algebra I	3-0-3		* Math 14 - Analytic Geometry and Differential Calculus	6-0-6	Math 11, Math 13
* Math 13 - Plane and Spherical Trigonometry	3-0-3		* Math 16 - Solid Mensuration	2-0-2	Math 11, Math 13
* Draw 11 - Engineering Drawing	0-6-2		* Draw 12 - Computer Aided Drafting	0-3-1	Draw 11
* BC 11 - Basic Comm. Skills: English for Acad. Purpose	3-0-3		* Phys 45 - General Physics I	3-3-4	Math 11, Math 13
Speech 11 - Effective Oral Communication	3-0-3		* BC 12 - Basic Comm. Skills: Reading to Writing Paragraphs & Essay	3-0-3	BC 11
Rel 11 - Old Testament	3-0-3		Rel 22 - New Testament	3-0-3	Rel 11
Fil 13 - Sining ng Pakikipagtalastasan	3-0-3		PEP 2 - Personality Enhancement Program II	(NC)	PEP 1
PEP 1 - Personality Enhancement Program I	(NC)		PE 12 - Physical Education II	2	PE 11
PE 11 - Physical Education I	2		NSTP 2 - National Service Training Program II	3	NSTP 1
NSTP 1 - National Service Training Program I	3				
<b>Load (units)</b>	<b>26</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 16, Math 14	* Math 22 - Differential Equations	3-0-3	Math 21
* ES 23 - Engineering Mechanics I: Statics	2-3-3	Phys 45, Math 14	* CpE 22R - Computer Fundamentals & Programming	0-6-2	-
* Phys 46 - General Physics II	3-3-4	Phys 45	* ES 24 - Engineering Mechanics II: Dynamics	2-3-3	ES 23, Math 21
Chem 11 - General Chemistry I	3-6-5	-	Fil 24 - Panitikang Pilipino	3-0-3	Fil 13
Hist 31 - Phil. History & Gov't. w/ New Cons.	3-0-3	-	Socio 63R - Current Issues & Contemporary Nat'l Dev't	3-0-3	-
ES 11 - Elementary Surveying	0-3-1	Math 13	Hist 41 - Rizal's Life and Works	3-0-3	-
PE 21 - Physical Education III	2	PE 11	Chem 12 - General Chemistry II	3-6-5	Chem 11
			PE 22 - Physical Education IV	2	PE 11
<b>Load (units)</b>	<b>22</b>		<b>Load (units)</b>	<b>24</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
EE 21 - Electrical Circuits I	2-3-3	Phys 46, Math 21	*Math 32R - Probability & Statistics	3-0-3	Math 21
*Math 31M - Advanced Engineering Math for ME	3-0-3	Math 22	ME 32 - Dynamics of Systems II	2-3-3	ME 31
ME 31 - Dynamics of Systems I	2-3-3	ES 24	ME 34 - Thermodynamics II	3-0-3	ME 33
ME 33 - Thermodynamics I	5-0-5	Phys 46, Math 21	MEE 38 - Mechanical Engineering Lit. *(Elective)	3-0-3	3 <sup>rd</sup> year standing
ES 33** - Mechanics of Deformable Bodies	2-3-3	Math 22, ES 24	ES 32 - Fluid Mechanics	2-3-3	ES 24, ME 33
ES 35 - Materials Engineering	3-3-4	Phys 46, Chem 12	ES 36 - Technical Literature & Shop Tech.	0-6-2	ES 35, Draw 11
* BC 26 - Technical Report Writing	3-0-3	BC 12	ES 38 - Environmental Engineering	2-0-2	-
			FA 51 - Arts and Music Appreciation	3-0-3	-
<b>Load (units)</b>	<b>24</b>		Pol Sci 11 - Taxation & Land Reform	3-0-3	-
			<b>Load (units)</b>	<b>25</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
ME 41 - ME Laboratory I	0-6-2	4 <sup>th</sup> year standing	ME 42 - ME Laboratory II	0-6-2	ME 41
ME 43 - I.C.E., Fuels & Lubricants/Tribology	3-0-3	ME 33, 4 <sup>th</sup> yr standing	ME 44 - Ref. & Air Con./Environmental System	3-0-3	ME 47, 4 <sup>th</sup> yr standing
ME 45 - Machine Design I	3-0-3	ES 33, 4 <sup>th</sup> yr standing	ME 46 - Machine Design II	3-0-3	ME 45, 4 <sup>th</sup> yr standing
ME 47 - Heat Transfer	3-0-3	ME 34, 4 <sup>th</sup> yr standing	EEM 42 - 3Phase Systems and Electrical Machines	3-3-4	EE 21, 4 <sup>th</sup> yr standing
EEM 41 - Electronics Fundamentals	2-3-3	EE 21	ES 50R - Engineering Economics and Accounting	3-0-3	Math 21, 4 <sup>th</sup> yrstanding
ES 40R - Engineering Management	3-0-3	4 <sup>th</sup> year standing	MEE 46 - Advanced Materials Engineering (Elective)	2-3-3	4 <sup>th</sup> year standing
ES 41ME - Engineering Research	2-0-2	BC 26, Math 32R	Philo 31 - Introduction to Logic	3-0-3	-
ES 43 - Workshop Theory and Practice	0-6-2	ES 36	MEE 48 - Energy Systems & Utilization (Elective) *	3-0-3	4 <sup>th</sup> year standing
MEE 49 - Manufacturing Processes & Sys. (Elec.)	3-0-3	4 <sup>th</sup> year standing			
<b>Load (units)</b>	<b>24</b>		<b>Load (units)</b>	<b>24</b>	

**SUMMER**

ME 400 - On The Job Training	0-6-2		5 <sup>th</sup> year standing
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**FIFTH YEAR**

1 <sup>st</sup> Semester			2 <sup>nd</sup> Semester		
Subject Code & Title	Units	Pre-requisites	Subject Code & Title	Units	Pre-requisites
ME 51 - ME Lab III & Maintenance Eng'g	0-6-2	ME 42, 5 <sup>th</sup> yr standing	ME 52 - Vibration Engineering	2-0-2	ME 46, ME 32, 5 <sup>th</sup> yr
ME 53 - Steam Power Engineering	2-3-3	ME 34, 5 <sup>th</sup> yr standing	ME 54 - Power Plant Design (Power Generation)	2-3-3	ME 53, 5 <sup>th</sup> yr standing
ME 55 - Industrial Equipment & Processes	4-3-5	ES 35, 5 <sup>th</sup> yr standing	ME 56 - Instrumentation & Control Engineering	2-3-3	ME 55, EEM 42, 5 <sup>th</sup> yr
ME 57 - Eng'g. & Society: Laws, Contracts & Ethics	3-0-3	5 <sup>th</sup> yr standing	ME 58 - Industrial Plant Design	2-3-3	ME 55, 5 <sup>th</sup> yr standing
ME 59 - Refrigeration and Air Con. Design	2-3-3	ME 44, ME 47, 5 <sup>th</sup> yr	ME 60 - Engineering Safety & Management (OSHE)	3-0-3	ME 55, 5 <sup>th</sup> yr standing
ME 51P - Engineering Project I/OJT	0-3-1	ES 41, 5 <sup>th</sup> yr standing	ME 52P - Engineering Project II	0-6-2	ME 51P, 5 <sup>th</sup> yr standing
Psych 11 - General Psychology	3-0-3	-	Rel 61 - Christian Ethics	3-0-3	Rel 22
<b>Load (units)</b>	<b>20</b>		<b>Load (units)</b>	<b>19</b>	

**TOTAL CREDIT UNITS: 236**

**NOTE: 1. \* Fifth year standing has completed and passed all the lower year courses.**

**2. The deficiency of two units in ME 54 (Power Plant Design) is compensated in ME 53 (Steam Power Engineering).**

**IMPLEMENTING GUIDELINE:**

The passing grade for ME, EE, ES, and subjects with asterisks (\*) is 2.0. These subjects maybe offered off-semester upon request, strictly for repeaters only. These subjects maybe taken twice, otherwise the student is required to shift to another course.