COLLEGE OF ENGINEERING & DESIGN
SILLIMAN UNIVERSITY
Dumaguete City

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

Effective School Year 2018-2019 (v3)

FIRST YEAR

1st Semester					2nd Semester				
Subject Code & Title	*No. of Hours*		*Units*	*Pre-requisites*	*Subject Code & Title*	*No. of Hours*		*Units*	*Pre-requisites*
	Lec	*Lab*				*Lec*	*Lab*		
EM 11 - Calculus 1 (Differential Calculus)	3	0	3		Draw 12R – Computer – Aided Drafting (CAD)	0	3	1	Draw 11R
EM 13 - Algebra and Trigonometry for Engineering	4	0	4		EM 18 - Calculus 2 (Integral Calculus)	4	0	4	EM 11, EM 13
Draw 11R – Engineering Drawing and Plans	0	3	1		CHS 2 - Reading and Interpreting the Christian Scriptures	3	0	3	CHS 1
ME 11 – Mechanical Engineering Orientation	1	0	1		GE 1 - Understanding the Self	3	0	3	
Chem 14 – Chemistry for Engineers	3	3	4		GE 4 - Mathematics in the Modern World	3	0	3	
CHS 1 - Reading and Interpreting the Hebrew Scriptures	3	0	3		GE 5 - Purposive Communication	3	0	3	
GE 2 - Readings in Philippine History	3	0	3		Phys 1 - Physics for Engineers	3	3	4	EM 11
GE 6 - Art Appreciation	3	0	3		PE 2 - Physical Education	2	0	2	PE 1
PE 1 - Physical Fitness and Swimming	2	0	2		NSTP 2 - National Service Training Program	3	0	3	NSTP 1
NSTP 1 - National Service Training Program	3	0	3		PEP 2 - Personality Enhancement Program	-	-	-	
PEP 1 - Personality Enhancement Program	-	-	-						
Total	***25***	***6***	***27***		***Total***	***24***	***6***	***26***	

SECOND YEAR

EM 21 – Differential Equations	3	0	3	EM 18	EM 24 - Engineering Data Analysis	3	0	3	EM 21
ES 21 – Engineering Economics	3	0	3	EM 18	ES 24 – Dynamics of Rigid Bodies	2	0	2	ES 23R
ES 23R – Statics of Rigid Bodies	3	0	3	EM 18, Phys 1	ES 28 - Technopreneurship	3	0	3	EM 21
ES 25R - Environmental Science and Engineering	3	0	3	Chem 14	EEM 22 – Basic Electronics	2	3	3	EEM 21
EEM 21 - Basic Electrical Engineering	2	3	3	EM 18, Phys 1	EMM 26 - Advanced Mathematics for ME	3	0	3	EM 21
ME 21 – Thermodynamics 1	2	3	3	EM 18, Phys 1	ME 22 – Thermodynamics 2	3	0	3	ME 21
ME 23 – Workshop Theory and Safety Practices	0	3	1	Draw 12R	ME 24 – Machine Shop Theory and Practice	0	6	2	ME 23
GE 11 – Climate Change: Effects on People and Ecosystems	3	0	3		GE 9 - The Life and Works of Jose Rizal	3	0	3	
GE 3 - The Contemporary World	3	0	3		GE 10A - Whole Person Education	3	0	3	
PE 3 - Physical Education	2	0	2	PE 1	PE 4 - Physical Education	2	0	2	PE 1
Total	***24***	***9***	***27***		***Total***	***24***	***9***	***27***	

THIRD YEAR

CPEM 37 - Computer Engineering for ME	1	3	2	Draw 12R	ME 30 – Refrigeration Systems	3	0	3	ME 37
EEM 31 - DC and AC Machinery	2	3	3	EEM 21	ME 32 – Machine Elements 2	2	3	3	ME 31
ESM 33 – Fundamentals of Statics of Deformable Bodies	3	0	3	ES 24, EM 21	ME 34 – Fluid Machinery	3	0	3	ME 33
ME 31 – Machine Elements 1	2	3	3	ES 24	ME 36 – Methods of Research for ME	2	0	2	GE 5, EM 24
ME 33 – Fluid Mechanics	2	3	3	ME 21	ME 38 – Combustion Engineering	2	0	2	ME 22
ME 35 – Vibration Engineering	2	0	2	EM 21, ES 24	ME 50 – Mechanical Engineering Lab 1	0	3	1	Draw12R,ME 22
ME 37 – Heat Transfer	2	0	2	ME 22	ME 56 - Materials Science and Engineering for ME	2	3	3	Chem11,ESM 33
MEE 39 – Energy Engineering and Management	3	0	3	ME 22	MEE 32 - Mechatronics	3	0	3	ME 35, CPEM 37, EEM 31
GE 7 – Science, Technology and Society	3	0	3		GE 8 - Ethics	3	0	3	
					GE 12/CHS 3 – Ethics of the Christian Faith	3	0	3	CHS 2
Total	***20***	***12***	***24***		***Total***	***23***	***9***	***26***	

SUMMER

ME 300 – On-the-Job Training (OJT)	**2**	**3**	**3**	ME 30, ME 34, ME 36, ME 38

FOURTH YEAR

ME 41 - ME Project Study 1	0	3	1	ME 36	ME 40 – Industrial Plant Engineering	2	3	3	ME 43, ME 45
ME 43 – Air-conditioning and Ventilation Systems	3	0	3	ME 30, ME 300	ME 42 – Project Study 2	0	6	2	ME 41
ME 45 – Control Engineering	3	0	3	EEM 22	ME 44 – Environment, Safety and Health for ME	3	0	3	ME 300
ME 47 – Control Engineering Laboratory	0	3	1	EEM 22	ME 46 – Manufacturing and Industrial Processes with Plant Visits	2	3	3	ME 55
ME 49 – Power Plant Design with Renewable Energy	3	3	4	ME 38, ME 300	ME 48 - ME Laws, Ethics, Contracts, Codes and Standards	3	0	3	ME 300
ME 51 – Machine Design 1	2	3	3	ME 32, ME 300	ME 52 – Machine Design 2	3	0	3	ME 51
ME 53 – Mechanical Engineering Lab 2	0	6	2	ME 50	ME 54 – Mechanical Engineering Lab 3	0	6	2	ME 53
ME 55 – Advanced Materials Engineering	2	3	3	ME 56	MEE 42- Heating, Ventilation and Air Conditioning	3	0	3	ME 30, ME 43
MEE 41 – Manufacturing Engineering	3	0	3	ME 56					
ES 40R – Engineering Management	2	0	2	ES 21					
Total	***18***	***21***	***25***		***Total***	***16***	***18***	***22***	

Total units: 207

***Students are required to obtain a minimum grade of 1.8 in all Eng'g & Phys subjects for progression.**

Revision approved by Academic Council on May 15, 2019.