


TECHNOLOGICAL INSTITUTE OF THE PHILIPPINES
Quezon City
2018 CURRICULUM FOR BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING (BSME)

IMPORTANT: Registration in any course/s without all the pre-requisite/s, correct sequence and authorized load shall not be given any credit regardless of the grade/s obtained.

NAME : _____ STUDENT NO : _____

	COURSE CODE		DESCRIPTIVE TITLE	LEC HOURS	LAB HOURS	CREDIT UNITS	PRE-REQUISITE(S)/CO-REQUISITE(S)
FIRST YEAR, FIRST SEMESTER (17 UNITS)							
	NSTP	001	National Service Training Program 1	(3)	0	(3)	
	PE	001	Physical Education 1	2	0	2	
	GEC	004	Mathematics in the Modern World	3	0	3	
	GEC	001	Understanding the Self	3	0	3	
	MATH	016	Calculus 1	3	0	3	
	CHEM	001C	Chemistry for Engineers	3	3	4	
	AR	001	Engineering Drawing	0	3	1	
	ME	003	Mechanical Engineering Orientation	1	0	1	
	TOTAL			15	6	17	
FIRST YEAR, SECOND SEMESTER (22 UNITS)							
	NSTP	002	National Service Training Program 2	(3)	0	(3)	NSTP 001(P)
	PE	002	Physical Education 2	2	0	2	PE 001(P)
	GEC	006	Art Appreciation	3	0	3	
	SOCSC	005	Life and Works of Rizal	3	0	3	
	MATH	013	Linear Algebra with MATLAB	2	3	3	MATH 016(P)
	MATH	017	Calculus 2	3	0	3	MATH 016(P)
	PHYS	001C	Calculus-Based Physics	3	3	4	MATH 017(C)
	ME	008	Computer-Aided Drafting for ME	0	3	1	AR 001(P)
	GEC	003	The Contemporary World	3	0	3	
	TOTAL			19	9	22	
SECOND YEAR, FIRST SEMESTER (27 UNITS)							
	GEC	005	Purposive Communication	3	0	3	
	GEC	007	Science, Technology, and Society	3	0	3	
	MATH	010	Differential Equations	3	0	3	MATH 017(P)
	MATH	006	Discrete Mathematics	3	0	3	
	TECH	101	Introduction to Engineering Entrepreneurship	3	0	3	
	THER	001	Thermodynamics 1	3	0	3	MATH 017(P) PHYS 001C(P)
	CE	001	Statics of Rigid Bodies	3	0	3	MATH 017(P) PHYS 001C(P)
	EE	001	Basic Electrical Engineering	2	3	3	MATH 017(P) PHYS 001C(P)
	ME	518	Workshop Theory and Practice	0	3	1	ME 003(P)
	PE	003	Physical Education 3	2	0	2	PE 002(P)
	TOTAL			25	6	27	
SECOND YEAR, SECOND SEMESTER (24 UNITS)							
	MATH	019	Engineering Data Analysis	3	0	3	MATH 017(P)
	CE	002	Dynamics of Rigid Bodies	2	0	2	CE 001(P)
	GEC	002	Readings in Philippine History	3	0	3	
	MATH	018	Multivariate Calculus	3	0	3	MATH 017(P)
	THER	002	Thermodynamics 2	3	0	3	THER 001(P)
	ITE	001B	Computer Programming	0	3	1	
	MATH	011ME	Advanced Mathematics for ME	3	0	3	MATH 010(P)
	ME	524	Integration Course in Mathematics	2	0	2	MATH 016(P)
	ME	001	Machine Shop Theory	0	6	2	ME 518(P)
	PE	004	Physical Education 4	2	0	2	PE 003(P)
	TOTAL			21	9	24	
THIRD YEAR, FIRST SEMESTER (23 UNITS)							
	CE	003A	Mechanics of Deformable Bodies	3	0	3	CE 002(P)



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ME	005	Engineering Economy	3	0	3	MATH 019(P)
EE	004A	DC and AC Machinery	2	3	3	EE 001(P)
ME	403	Heat Transfer	2	0	2	THER 002(P)
CE	402A	Fluid Mechanics	3	0	3	THER 001(P)
ME	514	Vibration Engineering	2	0	2	MATH 010(P)
ME	520	Computer Applications for ME	0	3	1	ITE 001B(P)
ECE	005	Basic Electronics	2	3	3	EE 001(P)
GEE	001	General Education Elective 1	3	0	3	
TOTAL			20	9	23	
THIRD YEAR, SECOND SEMESTER (24 UNITS)						
ME	411	Methods of Research for ME	1	0	1	GEC 005(P)
ME	407	Refrigeration Systems	3	0	3	ME 403(P)
ME	409	Combustion Engineering	2	0	2	THER 002(P)
ME	406	Fluid Machineries	3	0	3	CE 402A(P)
ME	303	Machine Elements	2	3	3	CE 002(P)
ME	401	Mechanical Engineering Lab 1	0	3	1	THER 002(P)
ME	525	Integration Course in Engineering and Science	2	0	2	ME 524(P)
GEC	008	Ethics	3	0	3	
GEE	002	General Education Elective 2	3	0	3	
GEE	003	General Education Elective 3	3	0	3	
TOTAL			22	6	24	
THIRD YEAR, SUMMER (2 UNITS)						
ME	500	On-the-Job Training for ME	0	240	2	3rd Year Standing
TOTAL			0	240	2	
NO STUDENT SHALL BE ALLOWED TO TAKE FOURTH YEAR PROFESSIONAL COURSES UNLESS HE HAS COMPLETED THE BASIC AND THE THIRD YEAR COURSES INCLUDING PE AND NSTP COURSES.						
FOURTH YEAR, FIRST SEMESTER (26 UNITS)						
MEE	001	Mechanical Engineering Elective 1	2	0	2	See track for pre-requisite(s)
ME	508	ME Project Study 1	0	3	1	ME 411(P)
ME	519	Air Conditioning and Ventilation Systems	3	0	3	ME 407(P)
ECE	006	Control Engineering	2	3	3	ECE 005(P)
ME	522	Power Plant Design with Renewable Energy	3	3	4	ME 409(P)
ME	404	Machine Design 1	3	0	3	ME 303(P)
EMAN	001	Engineering Management	2	0	2	
ME	410	Mechanical Engineering Lab 2	0	6	2	ME 401(P) ME 406(P)
ME	513	ME Design Project 1	2	3	3	
ME	007	Materials Science and Engineering for ME	2	3	3	CE 003A(P) CHEM 001C(P)
TOTAL			19	21	26	
FOURTH YEAR, SECOND SEMESTER (24 UNITS)						
ME	510	Industrial Plant Engineering	3	3	4	ME 516(C) ME 519(P)
ME	512	ME Project Study 2	0	3	1	ME 508(P)
ME	521	Machine Design 2	2	3	3	ME 404(P)
ME	517	Basic Occupational Safety and Health	3	0	3	
ME	516	Manufacturing and Industrial Processes with Plant Visits	1	3	2	
ME	505	Mechanical Engineering Lab 3	0	6	2	ME 410(P) ME 522(P)
MEE	002	Mechanical Engineering Elective 2	2	0	2	MEE 001(P), See track for pre-requisite(s)
ME	523	ME Laws, Ethics, Codes and Standards	2	0	2	GEC 008(P)
ME	526	Integration Course in Power Plant and Industrial Plant	2	0	2	ME 525(P)
ME	515	ME Design Project 2	1	6	3	Graduating ME 513(P) ME 522(P)
TOTAL			16	24	24	
ELECTIVE COURSES						
TRACK ELECTIVE 1: (Energy Engineering and Management)						
ME	527	Energy Management in Buildings	2	0	2	



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	ME	528	Energy Management in Industry	2	0	2	
	TOTAL			4	0	4	
TRACK ELECTIVE 2:(Heating, Ventilation, Air Conditioning and Refrigeration)							
	ME	529	Design of Thermal Systems	2	0	2	
	ME	530	Design of Building Piping System and Air Conditioning Duct Works	2	0	2	
	TOTAL			4	0	4	
TRACK ELECTIVE 3: (Mechatronics Engineering)							
	ME	531	Introduction to Robotics	2	0	2	
	ME	532	Industrial Robots	2	0	2	
	TOTAL			4	0	4	
TRACK ELECTIVE 4: (Railway Engineering)							
	RWE	001	Introduction to Railway Systems and Engineering	3	0	3	
	RWE	002	Advanced Topic on Railway Engineering	3	0	3	
	TOTAL			6	0	6	

CREDENTIALS PRESENTED:

- () F137A () NSO Birth Certificate
- () F138 () HD
- () GMC () TOR

DEFICIENCY/IES:

Evaluated By: _____

Date: _____

Received By: _____

Date: _____

LEGEND

P = Pre-requisite

C = Co-requisite

NOTE: EVALUATION IS TENTATIVE AND MAY BE REVISED FOR SOME VALID CAUSES OR REASONS OR IF OMISSIONS AND/OR LACK OF UNITS CREDITED BE DISCOVERED LATER.