



**College of Engineering**  
 Main, Lapu-Lapu Mandaue  
**Bachelor of Science in Mechanical Engineering (BSME)**  
 CMO No. 97, Series of 2017  
 Effective School Year 2024-2025  
**Guide for Non-STEM Students**

Name: \_\_\_\_\_  
 ID Number: \_\_\_\_\_

Date Started/First Enrolled: \_\_\_\_\_  
 Expected Date of Graduation: \_\_\_\_\_

**FIRST YEAR**

FIRST YEAR						
1st Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	SOCIO 101	The Contemporary World	3	0	3	
	HUM 101	Art Appreciation	3	0	3	
	MATH 100E	College Mathematics	3	0	3	
	MATH 101E	Mathematics in the Modern World	3	0	3	
	EBR 101	Pre-Calculus	3	0	3	
	EBR 102	General Chemistry	2	1	3	
	EBR 103	General Physics	2	1	3	
	PE 101	Movement Competency Training (PATHFit 1)	2	0	2	
	NSTP 101	National Service Training Program 1	3	0	3	
<b>Total</b>					<b>26</b>	
2nd Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	SOCIO 102	Gender and Society	3	0	3	SOCIO 101
	LIT 101	Literature of the World	3	0	3	
	EMATH 111	Calculus 1	3	0	3	EBR 101 (For Non-Stem Only)
	HUM 102	Philippine Popular Culture	3	0	3	HUM 101
	CHEM 111	Chemistry for Engineers	3	1	4	EBR 102 (For Non-Stem Only)
	STS 101	Science, Technology and Society	3	0	3	
	PHILO 101	Ethics	3	0	3	
	BES 101	Engineering Drawing	0	1	1	
	PE 102	Exercise-based Fitness Activities (PATHFit 2)	2	0	2	PE 101
NSTP 102	National Service Training Program 2	3	0	3	NSTP 101	
<b>Total</b>					<b>28</b>	
Summer	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	EMATH 121	Calculus 2	3	0	3	EMATH 111
	PHYS 121	Physics for Engineers	3	1	4	EMATH 111, EBR 103 (For Non-Stem Only)
	ME 101	Mechanical Engineering Orientation	1	0	1	
	BES 102A	Computer-Aided Drafting	0	1	1	BES 101
<b>Total</b>					<b>9</b>	

**SECOND YEAR**

SECOND YEAR						
1st Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	ENGL 101	Purposive Communication	3	0	3	
	BES 103	Computer Programming	0	2	2	
	EMATH 211	Differential Equations	3	0	3	EMATH 121
	EMATH 122	Engineering Data Analysis	3	0	3	EMATH 111
	EE 211C	Electrical Circuits 1 for ME	2	1	3	EMATH 121, PHYS 121
	MECH 211A	Statics of Rigid Bodies	3	0	3	PHYS 121
	AS 101	Thermodynamics 1	3	0	3	PHYS 121
	METVET 111A	Workshop Theory and Practice	0	1	1	
	PE 103	Sports and Dance (PATHFit 3)	2	0	2	PE 101, PE 102
<b>Total</b>					<b>23</b>	
2nd Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	RIZAL 101	Life and Works of Dr. Jose Rizal	3	0	3	
	EMATH 222B	Advanced Mathematics for ME	3	0	3	EMATH 211
	BES 104	Engineering Economics	3	0	3	
	ECE 212C	Basic Electronics	2	1	3	EE 211C
	AS 103	DC and AC Machinery	2	1	3	EE 211C
	MECH 223	Dynamics of Rigid Bodies	2	0	2	MECH 211A
	MECH 222	Fluid Mechanics	3	0	3	AS 101
	AS 102	Thermodynamics 2	3	0	3	AS 101
	METVET 121	Machine Shop Theory	0	2	2	METVET 111
PE 104	Sports, Outdoor & Adventure Activities (PATHFit 4)	2	0	2	PE 101, PE 102	
<b>Total</b>					<b>27</b>	

THIRD YEAR						
1 <sup>st</sup> Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	HIST 101	Readings in Philippine History	3	0	3	
	PSYCH 101	Understanding the Self	3	0	3	
	MECH 224C	Mechanics of Deformable Bodies	3	0	3	MECH 211A
	MECH 311	Fluid Machinery	3	0	3	MECH 222
	RES 101C	Methods of Research for ME	1	0	1	ENGL 101
	ME 311	Heat Transfer	2	0	2	AS 102
	ME 312D	Machine Elements	2	2	4	MECH 211A, MECH 223
	ME 313	Vibration Engineering	2	0	2	EMATH 211
	ME 314B	Computer Applications for ME	1	0	1	BES 103
ME 315B	Mechanical Engineering Lab 1	0	1	1	AS 102	
<b>Total</b>					<b>23</b>	
2 <sup>nd</sup> Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	BES 105	Basic Occupational Safety and Health	3	0	3	ME 315B
	ME 323C	Refrigeration System	2	1	3	ME 311
	ME 322B	Combustion Engineering	2	0	2	AS 102
	ME 324	ME Project Study 1	0	1	1	RES 101C
	ME 325	Control Engineering	2	1	3	ECE 212C
	ME 326	Material Science and Engineering for ME	2	1	3	MECH 224C/ CHEM 111
	ME 327	Mechanical Engineering Lab 2	0	2	2	ME 315B
	ME 328	Power Plant Design with Renewable Energy	3	1	4	ME 322B
	ME 329	Machine Design 1	2	1	3	MECH 224C/ ME 327/ ME 312D
<b>Total</b>					<b>24</b>	
Summer	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	ME 410	On-The-Job Training	3	1	4	BES 105/ ME 327
<b>Total</b>					<b>4</b>	

FOURTH YEAR						
1 <sup>st</sup> Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	BES 107	Engineering Management	2	0	2	
	ME 411	Manufacturing & Industrial Processes with Plant Visits	1	1	2	
	ME 412C	Air Conditioning and Ventilation Systems	2	1	3	ME 323C
	ME 416B	ME Project Study 2	0	1	1	ME 324
	ME 417A	ME Laws, Ethics, Contracts, Codes & Standards	2	0	2	ME 410
	ME 413C	Machine Design 2	2	1	3	ME 329
	ME 418C	Industrial Plant Engineering	3	1	4	ME 328
<b>Total</b>					<b>17</b>	
2 <sup>nd</sup> Semester	Course Code	Descriptive Title	Lec Units	Lab Units	Total Units	Pre / Co Requisite
	ME 421A	Mechanical Engineering Lab 3	0	2	2	ME 327
	ME EC 1	Enhancement 1	0	2	2	GRADUATING
	ME EC 2	Enhancement 2	0	2	2	GRADUATING
	ME EC 3	Enhancement 3	0	2	2	GRADUATING
	ME FR EL	Mechanical Engineering Elective	3	1	4	
TECHNO 101	Technopreneurship	3	0	3		
<b>Total</b>					<b>15</b>	

I. TECHNICAL COURSES:

A. Mathematics	12	units
B. Natural/Physical Sciences	8	units
C. Basic Engineering Sciences	20	units
D. Allied Courses	9	units
E. Fundamental ME Courses	51	units
F. Professional ME Courses	20	units
G. Elective Courses	4	units
H. Practicum	4	units
<b>SUB-TOTAL</b>	<b>128</b>	<b>units</b>

II. NON-TECHNICAL COURSES:

A. General Education Courses	50	units
<b>SUB-TOTAL</b>	<b>50</b>	<b>units</b>

III. INSTITUTIONAL, ENGINEERING BRIDGING & OTHER COURSES:

A. Institutional Course	3	units
B. Engineering Bridging Courses	9	units
C. Other Courses	6	units
<b>SUB-TOTAL</b>	<b>18</b>	<b>units</b>

GRAND TOTAL: **187** units (STEM Enrollees)  
 GRAND TOTAL: **196** units (Non-STEM Enrollees)

LIST OF ELECTIVES:

- ME ELECT IA Heating, Ventilating, Air Conditioning & Refrigeration
- ME ELECT 1B Mechatronics Engineering
- ME ELECT 2A Automotive Engineering
- ME ELECT 2B Computers & Computational Science
- ME ELECT 3A Energy Engineering & Management
- ME ELECT 3B Manufacturing Engineering

DR. RODEL T. NAVAL  
 BSME Chairman, UC Main

ENGR. GREG R. BELONGILOT  
 Dean, College of Engineering, UC Main

ENGR. ROLAND B. FERNANDEZ  
 Dean, College of Engineering, UC Lapu-Lapu Mandaue

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