

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

| Name: | Date Started/First Enrolled: | |
|------------|------------------------------|--|
| ID Number: | Expected Date of Graduation: | |

| | ECH-SES | M AND SHOOM S FI | RST YEAR | Net let le | | E 312D Machine Elements |
|-------------------|-------------|---|-----------|------------|-------------|--|
| | Course Code | Descriptive Title | Lec Units | Lab Units | Total Units | Pre / Co Requisite |
| | SOCIO 101 | The Contemporary World | 3 | 0 | 3 | than cast educated 55 miles |
| | HUM 101 | Art Appreciation | 3 | 0 | 3 | personal desired and the second |
| | MATH 100E | College Mathematics | 3 | 0 | 3 | |
| Je. | MATH 101E | Mathematics in the Modern World | 3 | 0 | 3 | wat such such |
| Semester | EMATH 111 | Calculus 1 | 3 | 0 | 3 | EBR 101(For Non-Stern Only) |
| Sen | BES 101 | Engineering Drawing | 0 | 1 | 1 | heray's nome applied 10" |
| 181 | ME 101 | Mechanical Engineering Orientation | 1 | 0 | 1 | only - harrings |
| | CHEM 111 | Chemistry for Engineers | 3 | 1 | 4 | EBR 102 (For Non-Stem Only) |
| | PE 101 | Movement Competency Training (PATHFit 1) | 2 | 0 | 2 | prove the province of the second |
| | NSTP 101 | National Service Training Program 1 | 3 | 0 | 3 | ne re zolin a w |
| | NEW P | Total Total | | | 26 | Service Relationships To Vice B |
| | 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 | |
| | HUM 102 | Philippine Popular Culture | 3 | 0 | 3 | HUM 101 |
| - | STS 101 | Science, Technology and Society | 3 | 0 | 3 | MUNICIPAL CAPALITY |
| Semester | PHILO 101 | Ethics | 3 | 0 | 3 | |
| em | EMATH 121 | Calculus 2 | 3 | 0 | 3 | EMATH 111 |
| 2 nd S | PHYS 121 | Physics for Engineers | 3 | 1 | 4 | EMATH 111, EBR 103 (For Non- Stem Only) |
| | BES 102A | Computer-Aided Drafting | 0 | 1 | 1 | BES 101 |
| | 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 |
| | | Total | | 2.110 | 28 | |

 Engineering Bridging Courses for Non-STEM:

 EBR 101 – Pre-Calculus
 3
 0

 EBR 102 – General Chemistry
 2
 1

 EBR 103 – General Physics
 2
 1

| Course Code | Descriptive Title | Lec Units | Lab Units | Total Units | Pre / Co Requisite |
|----------------------|--|-----------|-----------|-------------|---------------------|
| ENGL 101 | Purposive Communication | 3 | 0 | 3 | TO THE PROPERTY AS |
| BES 103 | Computer Programming | 0 | 2 | 2 | TOTAL TOTAL |
| EMATH 211 | Differential Equations | 3 | 0 | 3 | EMATH 121 |
| EMATH 122 | Engineering Data Analysis | 3 | 0 | 3 | EMATH 111 |
| EMATH 122 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 |
| E PART HERE | Total Average | 23 | | | |
| 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 | NO. |
| EMATH 222B | Advanced Mathematics for ME | 3 | 0 | 3 | EMATH 211 |
| BES 104 | Engineering Economics | 3 | 0 | 3 | Magnific le |
| ECE 212C | Basic Electronics | 2 | 1 | 3 | EE 211C |
| AS 103 MECH 223 | 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 |
| | Total | | | 27 | |

| | | TI | HIRD YEAR | | | |
|----------|-------------------------------|--|-----------|-----------|-------------|--|
| | 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 |
| her | MECH 311 | Fluid Machinery | 3 | 0 | 3 | MECH 222 |
| Semester | RES 101C | Methods of Research for ME | 1 | 0 | 1 | ENGL 101 |
| Sem | 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 1000 | BES 103 |
| | ME 315B | Mechanical Engineering Lab 1 | 0 | 1 | 1 | AS 102 |
| | Total | | | | | to matth a great |
| | 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 |
| Semester | ME 324 | ME Project Study 1 | 0 | 1 | 1 | RES 101C |
| eme | ME 325 | Control Engineering | 2 | 1 | 3 | ECE 212C |
| | ME 326 | Material Science and Engineering for ME | 2 | 1 | 3 | MECH 224C/ CHEM 111 |
| 7 | 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 |
| | Total | | | | 24 | free and the state of the state |
| ler | Course Code | Descriptive Title | Lec Units | Lab Units | Total Units | Pre / Co Requisite |
| Summer | ME 410 | On-The-Job Training | 3 | 1 | 4 | BES 105/ ME 327 |
| Su | | Total | | 4 | 89.15 | |

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| | Course Code | Descriptive Title | Lec Units | Lab Units | Total Units | Pre / Co Requisite |
|----------|-------------|--|-----------|-----------|-------------|--------------------|
| | BES 107 | Engineering Management | 2 | 0 | 2 | The statement will |
| | ME 411 | Manufacturing & Industrial Processes with Plant Visits | 1 | 1 | 2 | |
| Semester | ME 412C | Air Conditioning and Ventilation Systems | 2 | 1 | 3 | ME 323C |
| eme | ME 416B | ME Project Study 2 | 0 | 1 | 1 | ME 324 |
| 1st S | ME 417A | ME Laws, Ethics, Contracts, Codes & Standards | 2 | 0 | 2 | ME 410 |
| | ME 413C | Machine Design 2 | 2 | 1 2 | 3 | ME 329 |
| | ME 418C | 18C Industrial Plant Engineering | | 1 | 4 | ME 328 |
| | Total | | | | | |
| | Course Code | Descriptive Title | Lec Units | Lab Units | Total Units | Pre / Co Requisite |
| | ME 421A | Mechanical Engineering Lab 3 | 0 | 2 | 2 | ME 327 |
| ter | ME EC 1 | Enhancement 1 | 0 | 2 | 2 | GRADUATING |
| Semester | ME EC 2 | Enhancement 2 | 0 | 2 | 2 | GRADUATING |
| Sen | ME EC 3 | Enhancement 3 | 0 | 2 | 2 | GRADUATING |
| 2nd | ME FR EL | Mechanical Engineering Elective | 3 | 1 | 4 | |
| | TECHNO 101 | Technopreneurship | 3 | 0 | 3 | |
| | | Total | | | | |

| A. Mathematics | 12 |
|-------------------------------|----|
| B. Natural/Physical Sciences | 8 |
| C. Basic Engineering Sciences | 20 |
| D. Allied Courses | 9 |
| E. Fundamental ME Courses | 51 |
| F. Professional ME Courses | 20 |
| G. Elective Courses | 4 |
| | |

units units units units units 20 units units units 128 units 50 50 units

units

III. INSTITUTIONAL, ENGINEERING BRIDGING & OTHER COURSES: A. Institutional Course
B. Engineering Bridging Courses
C. Other Courses units 9 units units units SUB-TOTAL

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

LIST OF ELECTIVES:

I. TECHNICAL COURSES:

1. ME ELECT IA Heating, Ventilating, Air Conditioning 1. ME ELECT 1A Heating, Vertiliating, All Conditioning & Refrigeration
2. ME ELECT 1B Mechatronics Engineering
3. ME ELECT 2A Automotive Engineering
4. ME ELECT 2B Computers & Computational Science
5. ME ELECT 3A Energy Engineering & Management
6. ME ELECT 3B Manufacturing Engineering

II. NON-TECHNICAL COURSES:
A. General Education Courses
SUB-TOTAL

H. Practicum

SUB-TOTAL

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

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

DR. YOLANDA C. SAYSON
VC for Academic Affairs/ Curriculum Director

DR. RODEL T. NAVAL BSME Chairman, UC Main