



ANNA UNIVERSITY
Chennai-25.
Curriculum

Degree Name: B.E.(Full Time) **Specialization:** Marine Engineering

Regulations 2001

Semester No: 1

Theory

| Course Code | Course Title | L | T | P | C |
|--------------------|------------------------------|----------|----------|----------|----------|
| MV104 | Applied Chemistry-I | 3 | 0 | 0 | 3 |
| MV103 | Applied Physics - I | 3 | 0 | 0 | 3 |
| MV106 | Basic Electrical Engineering | 3 | 0 | 0 | 3 |
| HS041 | English I | 3 | 1 | 0 | 4 |
| MA131 | Mathematics I | 3 | 1 | 0 | 4 |

Practical

| Course Code | Course Title | L | T | P | C |
|--------------------|---------------------|----------|----------|----------|----------|
| GE132 | Computer Practice I | 1 | 0 | 3 | 3 |
| GE133 | Workshop Practice | 0 | 0 | 4 | 2 |

Total : 22

Semester No: 2

Theory

| Course Code | Course Title | L | T | P | C |
|--------------------|-------------------------------|----------|----------|----------|----------|
| MV204 | Applied Chemistry-II | 3 | 0 | 0 | 3 |
| MV203 | Applied Physics-II | 3 | 0 | 0 | 3 |
| MV206 | Basic Electronics Engineering | 3 | 0 | 0 | 3 |
| MV205 | Basic Mechanical Engineering | 3 | 0 | 0 | 3 |
| HS042 | English II | 3 | 1 | 0 | 4 |
| MA132 | Mathematics II | 3 | 1 | 0 | 4 |

Practical

| Course Code | Course Title | L | T | P | C |
|--------------------|---|----------|----------|----------|----------|
| GE135 | Computer Practice II | 1 | 0 | 3 | 3 |
| GE134 | Engineering Graphics | 1 | 0 | 3 | 3 |
| MV208 | Physical Sciences Lab (Physics and Chemistry) | 0 | 0 | 4 | 2 |

Total : 28

Semester No: 3

Theory

| Course Code | Course Title | L | T | P | C |
|--------------------|----------------------------|----------|----------|----------|----------|
| MV305 | Applied Mechanics | 3 | 0 | 0 | 3 |
| MV303 | Electrical Technology | 3 | 0 | 0 | 3 |
| MV302 | Engineering Thermodynamics | 3 | 0 | 0 | 3 |

Semester No: 3

Theory

| Course Code | Course Title | L | T | P | C |
|--------------------|---------------------------------------|----------|----------|----------|----------|
| MV304 | Material Science and Metallurgy | 3 | 0 | 0 | 3 |
| MA231 | Mathematics III | 3 | 1 | 0 | 4 |
| MV307 | Seamanship and Elements of Navigation | 4 | 0 | 0 | 4 |
| MV306 | Strength of Materials | 3 | 0 | 0 | 3 |

Practical

| Course Code | Course Title | L | T | P | C |
|--------------------|--|----------|----------|----------|----------|
| MV308 | Mechanics of Materials and Applied Mechanics Lab | 0 | 0 | 5 | 2 |
| MV309 | Welding Techniques, Lathe and Special Machine Shop | 0 | 0 | 6 | 3 |

Total : 28**Semester No: 4**

Theory

| Course Code | Course Title | L | T | P | C |
|--------------------|--|----------|----------|----------|----------|
| MV402 | Fluid Mechanics and Machinery | 3 | 1 | 0 | 4 |
| MV406 | Manufacturing Technology | 3 | 0 | 0 | 3 |
| MV404 | Marine Electrical Technology | 3 | 1 | 0 | 4 |
| MV403 | Marine Heat Engines and Applied Thermodynamics | 3 | 1 | 0 | 4 |
| MV405 | Mechanics of Machines - I | 3 | 1 | 0 | 4 |

Practical

| Course Code | Course Title | L | T | P | C |
|--------------------|---|----------|----------|----------|----------|
| MV408 | Fluid Mechanics/Fluid Machinery Lab | 0 | 0 | 3 | 2 |
| MV409 | Heat Engines Lab and Boiler Chemistry Lab | 0 | 0 | 5 | 2 |
| MV407 | Machine Drawing | 1 | 0 | 4 | 3 |

Total : 26**Semester No: 5**

Theory

| Course Code | Course Title | L | T | P | C |
|--------------------|------------------------------|----------|----------|----------|----------|
| MV501 | Computational Methods | 3 | 0 | 0 | 3 |
| MV502 | Marine Auxiliary Machinery I | 3 | 0 | 0 | 3 |
| MV503 | Marine Electronics | 3 | 0 | 0 | 3 |
| MV507 | Mechanics of Machines - II | 4 | 0 | 0 | 4 |
| MV504 | Naval Architecture I | 3 | 1 | 0 | 4 |
| MV505 | Ship Construction | 4 | 0 | 0 | 4 |

Semester No: 5

Practical

| Course Code | Course Title | L | T | P | C |
|--------------------|---|----------|----------|----------|----------|
| MV508 | Electrical Engineering Lab, Electronics Lab and Micro Processor Lab | 0 | 0 | 4 | 2 |
| MV506 | Marine Engineering Design and Drawing | 1 | 0 | 4 | 3 |
| MV509 | Measurements Lab, Instrumentation Lab and Refrigeration Lab | 0 | 0 | 4 | 2 |

Total : 28**Semester No: 6**

Practical

| Course Code | Course Title | L | T | P | C |
|--------------------|--|----------|----------|----------|----------|
| MV601 | Marine Workshop Practicals and Afloat Training | 0 | 0 | 26 | 8 |

Total : 8**Semester No: 7**

Theory

| Course Code | Course Title | L | T | P | C |
|--------------------|---|----------|----------|----------|----------|
| MVE1* | Elective I | 3 | 0 | 0 | 3 |
| MVE2* | Elective II | 3 | 0 | 0 | 3 |
| MV703 | Marine Auxiliary Machinery II | 3 | 0 | 0 | 3 |
| MV704 | Marine I.C. Engines and Boilers | 3 | 0 | 0 | 3 |
| MV702 | Marine Machinery System and Marine Machinery Design | 4 | 0 | 0 | 4 |
| MV705 | Naval Architecture II | 3 | 1 | 0 | 4 |
| MV701 | Ship Management and Commercial Practice | 4 | 0 | 0 | 4 |

Practical

| Course Code | Course Title | L | T | P | C |
|--------------------|--|----------|----------|----------|----------|
| MV708 | Fire Fighting Lab, Control s Lab and Simulator Lab | 0 | 0 | 4 | 2 |
| MV709 | Marine Power Plant Operation Lab | 0 | 0 | 6 | 2 |

Total : 28**Semester No: 8**

Theory

| Course Code | Course Title | L | T | P | C |
|--------------------|---|----------|----------|----------|----------|
| MVE3* | Elective III | 3 | 0 | 0 | 3 |
| MVE4* | Elective IV | 3 | 0 | 0 | 3 |
| MV802 | Marine Control Engineering and Automation | 4 | 0 | 0 | 4 |
| MV803 | Marine Statutory Regulations | 3 | 0 | 0 | 3 |
| MV801 | Principles of Management and Organizational behaviour | 3 | 0 | 0 | 3 |

Semester No: 8

Theory

| Course Code | Course Title | L | T | P | C |
|-------------|--------------|---|---|---|---|
|-------------|--------------|---|---|---|---|

Practical

| Course Code | Course Title | L | T | P | C |
|-------------|--------------------|---|---|---|---|
| MV807 | Comprehension Test | 0 | 0 | 2 | 1 |
| MV806 | Project Work | 0 | 0 | 8 | 4 |

Total : 21

TOTAL CREDITS TO BE EARNED FOR THE AWARD OF THE DEGREE : 189

List of Electives

| Course Code | Course Title | L | T | P | C |
|-------------|---|---|---|---|---|
| MV001 | Ship Fire Prevention and Control | 3 | 0 | 0 | 3 |
| MV002 | Tribology | 3 | 0 | 0 | 3 |
| MV003 | Vibration and Noise Control | 3 | 0 | 0 | 3 |
| MV004 | Design of Heat Transfer Equipment | 3 | 0 | 0 | 3 |
| MV005 | Marine Refrigeration and Air Conditioning | 3 | 0 | 0 | 3 |
| MV006 | Super charging and Scavenging | 3 | 0 | 0 | 3 |
| MV007 | Non Destructive Testing | 3 | 0 | 0 | 3 |
| MV008 | Energy Engineering and Management | 3 | 0 | 0 | 3 |
| MV009 | Special duty vessels operation, Fire and safety regulations | 3 | 0 | 0 | 3 |
| MV010 | Marine Engineering Knowledge | 3 | 0 | 0 | 3 |
| MV011 | Finite Element Technique | 3 | 0 | 0 | 3 |
| MV012 | Fluid Power Control | 3 | 0 | 0 | 3 |
| MV013 | Safe Watch keeping and Class IV Preparation | 3 | 0 | 0 | 3 |
| MV014 | Maritime Economics | 3 | 0 | 0 | 3 |
| MV015 | Maritime law and commerce | 3 | 0 | 0 | 3 |
| MV016 | Ship Safety and Environmental protection and personnel care | 3 | 0 | 0 | 3 |