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| **BACHELOR OF SCIENCE IN MARINE ENGINEERING** |
| *(Curriculum applicable to students who entered as freshmen beginning school year 2010-2011)* |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Year** | **Term** | **Code** | **Title** | **Lec Hrs** | **Lab Hrs** | **Total Units** | **Prerequisites** | **Co-requisites** | **Servicing College/Dept.** |
| 1 | 1 | MATH011 | ALGEBRA | 4.5 |  - | 3.0 |  |  | CAS |
| 1 | 1 | FIL011 | FILIPINO 1 | 3.0 |  - | 2.0 |  |  | CAS |
| 1 | 1 | ENG011 | ENGLISH FOR ACADEMIC STUDIES 1 | 3.0 |  - | 2.0 |  |  | CAS |
| 1 | 1 | IT011L | I.T. FUNDAMENTALS 1 (LAB) |  - | 3.0 | 1.0 |  |  | CIT |
| 1 | 1 | DRAW015W | ENGINEERING DRAWING 1 (DRAW) |  - | 3.0 | 1.0 |  |  | CAS |
| 1 | 1 | CHM015 | CHEMISTRY | 4.5 |  - | 3.0 |  |  | CAS |
| 1 | 1 | CWTS011 | OVERVIEW OF THE NATIONAL SERVICE TRAINING PROGRAM | 3.0 |  - | 2.0 |  |  | CSRO |
| 1 | 1 | MT101P | SHIPS, SHIP ROUTINES AND CONSTRUCTON (PAIRED) | 3.0 | 4.5 | 3.0 |  |  | CMET |
| 1 | 1 | PE021 | PHYSICAL EDUCATION 1: PHYSICAL FITNESS & GYMNASTICS |  - | 2.5 | 1.5 |  |  | CAS |
| 1 | 1 | VE011 | VALUES EDUCATION 1 | 1.5 |  - | 1.0 |  |  | CAS |
|  |  |  | **TOTAL** | **22..5** | **13.0** | **19.5\*** |   |   |  |
|  |  |  |  |  |  |  |  |  |  |
| **Year** | **Term** | **Code** | **Title** | **Lec Hrs** | **Lab Hrs** | **Total Units** | **Prerequisites** | **Co-requisites** | **Servicing College/Dept.** |
| 1 | 2 | FIL012 | FILIPINO 2 | 3.0 |  - | 2.0 | FIL 011 |  | CAS |
| 1 | 2 | ENG012 | ENGLISH FOR ACADEMIC STUDIES 2 | 3.0 |  - | 2.0 | ENG 011 |  | CAS |
| 1 | 2 | DRAW016L | COMPUTER-AIDED DRAFTING AND DESIGN (LAB) |  - | 3.0 | 1.0 | DRAW015W |  | CAS |
| 1 | 2 | MATH012 | PLANE AND SPHERICAL TRIGONOMETRY  | 4.5 |  - | 3.0 | MATH 011 |  | CAS |
| 1 | 2 | MT131P | BASIC SAFETY | 3.0 | 4.5 | 3.0 |  |  | CMET |
| 1 | 2 | ME101 | ENGINEERING MATERIALS | 4.5 |  - | 3.0 | CHM 015 |  | MITL |
| 1 | 2 | CHM015L | CHEMISTRY LABORATORY |  - | 3.0 | 1.0 |  | CHM 015 | CAS |
| 1 | 2 | CWTS014 | CIVIC WELFARE AND MILITARY SERVICE TRAINING COURSE - I | 3.0 |  - | 2.0 | CWTS011 |  | CSRO |
| 1 | 2 | PE022 | PHYSICAL EDUCATION 2: DANCE & MARTIAL ARTS |  - | 2.5 | 1.5 | PE 021 |  | CAS |
|  |  |  | **TOTAL** | **22.5** | **13.0** | **18.5\*** |   |   |  |
|  |  |  |  |  |  |  |  |  |  |
| **Year** | **Term** | **Code** | **Title** | **Lec Hrs** | **Lab Hrs** | **Total Units** | **Prerequisites** | **Co-requisites** | **Servicing College/Dept.** |
| 1 | 3 | FIL013 | FILIPINO 3 | 3.0 |  - | 2.0 | FIL 012 |  | CAS |
| 1 | 3 | ENG013 | ENGLISH FOR ACADEMIC STUDIES 3 | 3.0 |  - | 2.0 | ENG 012 |  | CAS |
| 1 | 3 | IT012L | I.T. FUNDAMENTALS 3 (LAB) |  - | 3.0 | 1.0 | IT 011L |  | CIT |
| 1 | 3 | ME104-1P | MACHINE SHOP 1 (PAIRED) | 1.5 | 9.0 | 3.0 | ME 101 |  | MITL |
| 1 | 3 | MARE101 | INTRODUCTION TO NAVAL ARCHITECTURE | 3.0 |  - | 2.0 | DRAW 016L, MT101P |  | CMET |
| 1 | 3 | CWTS015 | CIVIC WELFARE AND MILITARY SERVICE TRAINING COURSE - II | 3.0 |  - | 2.0 | CWTS014 |  | CSRO |
| 1 | 3 | CHM017 | INDUSTRIAL CHEMISTRY | 3.0 |  - | 2.0 | CHM 015, CHM 015L |  | CAS |
| 1 | 3 | MATH013 | ANALYTIC GEOMETRY | 4.5 |  - | 3.0 | MATH 012 |  | CAS |
| 1 | 3 | PE027 | PHYSICAL EDUCATION 3: BASIC SWIMMING |  - | 2.5 | 1.5 |  |  | CAS |
|  |  |  | **TOTAL** | **21.0** | **14.5** | **18.5\*** |   |   |  |
|  |  |  |  |  |  |  |  |  |  |
| **Year** | **Term** | **Code** | **Title** | **Lec Hrs** | **Lab Hrs** | **Total Units** | **Prerequisites** | **Co-requisites** | **Servicing College/Dept.** |
| 1 | 4 | SS020 | GENERAL PSYCHOLOGY WITH PADAMS, AIDS PREVENTION & FAMILY PLANNING | 4.5 |  - | 3.0 |  |  | CAS |
| 1 | 4 | EC011 | STCW'78 as amended and The MARITIME LABOR CONVENTION of 2006 | 3.0 |  - | 2.0 |  |  | CAS |
| 1 | 4 | MATH017 | SOLID MENSURATION FOR MARITIME PROGRAMS | 4.5 |  - | 3.0 | MATH012 |  | CAS |
|  |  |  | **TOTAL** | **12.0** | **0.0** | **8.0\*** |  |   |  |
|  |  |  |  |  |  |  |  |  |  |
| **Year** | **Term** | **Code** | **Title** | **Lec Hrs** | **Lab Hrs** | **Total Units** | **Prerequisites** | **Co-requisites** | **Servicing College/Dept.** |
| 2 | 1 | ENG017 | MARINE VOCABULARY AND TERMS (MARITIME ENGLISH) | 4.5 |  - | 3.0 | ENG 013 |  | CAS |
| 2 | 1 | MATH020 | BASIC CALCULUS | 4.5 |  - | 3.0 | MATH 013 |  | CAS |
| 2 | 1 | EE151 | ELECTROTECHNOLOGY 1 | 3.0 |  - | 2.0 |  |  | MITL |
| 2 | 1 | EE151L | ELECTROTECHNOLOGY 1 (LAB) |  - | 4.5 | 1.0 |  | EE 151 | MITL |
| 2 | 1 | ME104-2P | MACHINE SHOP 2 (PAIRED) | 1.5 | 9.0 | 3.0 | ME 104-1P |  | MITL |
| 2 | 1 | EC012 | SHIP MANAGEMENT SYSTEMS | 3.0 |  - | 2.0 |  |  | CMET |
| 2 | 1 | EC 013 | OCEAN USE MANAGEMENT | 3.0 |  - | 2.0 |  |  | CMET |
| 2 | 1 | PE028 | PHYSICAL EDUCATION 4: ADVANCED SWIMMING |  - | 2.5 | 1.5 | PE 027 |  | CAS |
|  |  |  | **TOTAL** | **19.5** | **16.0** | **17.5\*** |   |   |  |
|  |  |  |  |  |  |  |  |  |  |
| **Year** | **Term** | **Code** | **Title** | **Lec Hrs** | **Lab Hrs** | **Total Units** | **Prerequisites** | **Co-requisites** | **Servicing College/Dept.** |
| 2 | 2 | IT 013L | IT FUNDAMENTALS 3 (LAB) |  - | 3.0 | 1.0 | IT 012L |  | CIT |
| 2 | 2 | ENG016 | ENGLISH FOR THE WORKPLACE | 4.5 |  - | 3.0 | ENG013 |  | CAS |
| 2 | 2 | PHY 001 | FUNDAMENTAL OF PHYSICS 1 | 4.5 |  - | 3.0 | MATH012 |  | CAS |
| 2 | 2 | PHY 001L | FUNDAMENTAL OF PHYSICS 1 LABORATORY |  - | 3.0 | 1.0 | MATH012 | PHY 001 | CAS |
| 2 | 2 | ME 104-3P | MACHINE SHOP 3 (PAIRED) | 1.5 | 9.0 | 3.0 | ME 104-2P |  | MITL |
| 2 | 2 | EE 152 | ELECTROTECHNOLOGY 2 | 4.5 |  - | 3.0 | EE 151 |  | MITL |
| 2 | 2 | EE 152L | ELECTROTECHNOLOGY 2 (LAB) |  - | 4.5 | 1.0 | EE 151, EE 151L | EE 152 | MITL |
| 2 | 2 | PE 025 | PHYSICAL EDUCATION 5: TEAM SPORTS |  - | 2.5 | 1.5 |  |  | CAS |
| 2 | 2 | VE 012 | VALUES EDUCATION 2 | 1.5 |  - | 1.0 | VE 011 |  | CAS |
|  |  |  | **TOTAL** | **16.5** | **22.0** | **17.5\*** |   |   |   |
|  |  |  |  |  |  |  |  |  |  |
| **Year** | **Term** | **Code** | **Title** | **Lec Hrs** | **Lab Hrs** | **Total Units** | **Prerequisites** | **Co-requisites** | **Servicing College/Dept.** |
| 2 | 3 | MARE111 | WATCHKEEPING FOR ENGINE OFFICERS | 1.5 |  - | 1.0 |  | ME105-1, ME162 | CMET |
| 2 | 3 | ME105-1 | AUXILIARY MACHINE 1 | 4.5 |  - | 3.0 | ME 104-3P, CHM 017 |  | MITL |
| 2 | 3 | ME 105-1L | AUXILIARY MACHINE 1 (LAB) |  - | 4.5 | 1.0 | ME 104-3P, CHM 017 | ME105-1 | MITL |
| 2 | 3 | ME 162 | MARINE POWER PLANT – DIESEL | 4.5 |  - | 3.0 |  |  | MITL |
| 2 | 3 | ME 162L | MARINE POWER PLANT - DIESEL (LAB) |  - | 4.5 | 1.0 |  | ME 162 | MITL |
| 2 | 3 | PHY 002 | FUNDAMENDATLS PHYSICS 2 | 4.5 |  - | 3.0 | PHY 001 |  | CAS |
| 2 | 3 | PHY 002L | FUNDAMENTALS PHYSICS 2 (LAB) |  - | 3.0 | 1.0 | PHY 001, PHY 001L | PHY 002 | CAS |
| 2 | 3 | PE 026 | PHYSICAL EDUCATION 6: ADVANCED TEAM SPORTS |  - | 2.5 | 1.5 | PE 025 |  | CAS |
|  |  |  | **TOTAL** | **15.0** | **14.5** | **14.5\*** |   |   |   |
|  |  |  |  |  |  |  |  |  |  |
| **Year** | **Term** | **Code** | **Title** | **Lec Hrs** | **Lab Hrs** | **Total Units** | **Prerequisites** | **Co-requisites** | **Servicing College/Dept.** |
| 3 | 1 | MARE 199R | MARE SHIPBOARD TRAINING 1 |  - | 180.0 | 40.0 | MT 131P |  | CMET |
| 3 | 2 |
| 3 | 3 |
|  |  |  | **TOTAL** |  | **180.0** | **40.0\*** |  |   |   |
|  |  |  |  |  |  |  |  |  |  |
| **Year** | **Term** | **Code** | **Title** | **Lec Hrs** | **Lab Hrs** | **Total Units** | **Prerequisites** | **Co-requisites** | **Servicing College/Dept.** |
| 4 | 1 | EE 153 | ELECTROTECHNOLOGY 3 | 4.5 |  - | 3.0 | EE 152 |  | MITL |
| 4 | 1 | EE 153L | ELECTROTECHNOLOGY 3 (LAB) |  - | 4.5 | 1.0 | EE 152, EE 152L | EE 153 | MITL |
| 4 | 1 | ME 106-1 | MECHANICS AND HYDROMECHANICS 1 | 3.0 |  - | 2.0 |  |  | MITL |
| 4 | 1 | ME 111-1 | THERMODYNAMCIS | 3.0 |  - | 2.0 | PH002, PHY002L, MATH020 |  | MITL |
| 4 | 1 | MARE 121 | MARINE POLLUTION AND PREVENTION | 4.5 |  - | 3.0 |  |  | MITL |
| 4 | 1 | ME 105-2P | AUXILIARY MACHINERY PAIRED | 3.0 | 4.5 | 3.0 | ME105-1, ME105-1L |  | MITL |
| 4 | 1 | VE 013 | VALUES EDUCATION 3 | 1.5 |  - | 1.0 | VE 011 |  | CAS |
| 4 | 1 | MARE 198-1 | MARE CORRELATION 1 |  - | 3.0 | 1.0 | PHY 002, PHY 002L, MATH 020 |  | CMET |
|  |  |  | **TOTAL** | **19.5** | **12.0** | **16.0\*** |   |   |   |
|  |  |  |  |  |  |  |  |  |  |
| **Year** | **Term** | **Code** | **Title** | **Lec Hrs** | **Lab Hrs** | **Total Units** | **Prerequisites** | **Co-requisites** | **Servicing College/Dept.** |
| 4 | 2 | EC 016 | SHIP AUDITING  | 3.0 |  - | 2.0 |  |  | CMET |
| 4 | 2 | ME 112-1 | ADVANCED THERMODYNAMICS | 3.0 |  - | 2.0 | ME 111-1 |  | MITL |
| 4 | 2 | ME 106-2 | MECHANICS AND HYDRODYNAMICS 2 | 3.0 |  - | 2.0 | ME 106-1 |  | MITL |
| 4 | 2 | ECE 132-1 | MARINE AUTOMATION | 4.5 |  - | 3.0 | EE 153 |  | MITL |
| 4 | 2 | ECE 132L-1 | MARINE AUTOMATION (LAB) |  - | 4.5 | 1.0 | EE 153, EE 153L | ECE 132 | MITL |
| 4 | 2 | ME 163 | MARINE POWER PLANT – STEAM | 4.5 |  - | 3.0 | ME 162 |  | MITL |
| 4 | 2 | ME 163L | MARINE POWER PLANT - STEAM (LAB) |  - | 4.5 | 1.0 | ME 162, ME 162L | ME 163 | MITL |
|  |  |  | **TOTAL** | **18.0** | **9.0** | **14.0\*** |   |   |   |
|  |  |  |  |  |  |  |  |  |  |
| **Year** | **Term** | **Code** | **Title** | **Lec Hrs** | **Lab Hrs** | **Total Units** | **Prerequisites** | **Co-requisites** | **Servicing College/Dept.** |
| 4 | 3 | MT 164 | MARITIME LAW | 4.5 |  - | 3.0 |  |  | CMET |
| 4 | 3 | MT 162 | SHIPBOARD PERSONNEL MANAGEMENT | 4.5 |  - | 3.0 |  |  | CMET |
| 4 | 3 | SS 019 | PHILIPPINE HISTORY, GOVERNMENT & CONSTITUTION | 4.5 |  - | 3.0 |  |  | CAS |
| 4 | 3 | VE 014 | VALUES EDUCATION 4 | 1.5 |  - | 1.0 | VE 013 |  | CAS |
| 4 | 3 | MAREELEC | MARE ELECTIVE | 4.5  |  - | 3.0 |  |  |  |
| 4 | 3 | ECE 132-2 | MARINE INSTRUMENTATION & CONTROL | 4.5  |  - | 3.0 | ECE132-1 |  |  |
| 4 | 3 | MARE 198-2 | MARE CORRELATION 2 |  - | 3.0 | 1.0 | MARE 198-1, ME 112-1 |  | CMET |
|  |  |  | **TOTAL** | **24** | **3.0** | **17.0\*** |   |   |   |
|  |  |  |  |  |  |  |  |  |  |
| **Year** | **Term** | **Code** | **Title** | **Lec Hrs** | **Lab Hrs** | **Total Units** | **Prerequisites** | **Co-requisites** | **Servicing College/Dept.** |
| 4 | 4 | EC 014 | RISK MANAGEMENT and INCIDENT INVESTIGATION and ROOT CAUSE ANALYSIS | 3.0 |  - | 2.0 |  |  | CMET |
| 4 | 4 | EC 015 | LEADERSHIP and MANAGEMENT FOR MARITIME OFFICERS | 3.0 |  - | 2.0 |  |  | CMET |
| 4 | 4 | SS 014 | JOSE RIZAL AND THE DEVELOPMENT OF FILIPINO NATIONALISM | 4.5 |  - | 3.0 |  |  | CAS |
| 4 | 4 | HUM018 | CONTEMPORARY WORLD GEOGRAPHY & CULTURE | 4.5 |  - | 3.0 |  |  | CAS |
|  |  |  | **TOTAL** | **15.0** | **0.0** | **10.0\*** |   |   |   |
|  |  |  |  |  |  |  |  |  |  |
| **TECHNICAL ELECTIVES** |
|  |  |  |  |  |  |  |  |  |  |
| **Year** | **Term** | **Code** | **Title** | **Lec Hrs** | **Lab Hrs** | **Total Units** | **Prerequisites** | **Co-requisites** | **Servicing College/Dept.** |
|  |  | MARE 160 | INTRODUCTION TO SHIP BUSINESS MANAGEMENT | 4.5 |  - | 3.0 |   |   |  CMET |
|  |  | MARE 161 | INTRODUCTION TO MARINE SURVEYING | 4.5 |  - | 3.0 |   |   |  CMET |
|  |  |  | **TOTAL** | **9.0** | **0.0** | **6.0** |  |   |   |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | *\*PE, NSTP, VE and CORRELATION units are not considered in the computation of TWA and maximum load per term.*  |
| **TOTAL NO. OF UNITS: 211.0** |  |  |  |  |  |  |
| **LESS NON-ACADEMIC UNITS: 190.0** |  |  |  |  |  |  |