

Bachelor of Science in Naval Architecture & Marine Engineering (BSNAME)

| FIRST YEAR | | | | | | | |
|----------------|---------------|-------------------------------------|-----------|-----------|-------|----------------|---------------|
| | Course Number | Descriptive Title | Lec Hours | Lab Hours | Units | Pre-requisites | Co-requisites |
| First Semester | ENGL 1R | Remedial English | 3 | | 3 | | |
| | ENGL 1 | Study and Thinking Skills | 3 | | 3 | | |
| | EMath 11A | College Algebra | 3 | | 3 | | |
| | EMath 11B | Plane and Spherical Trigonometry | 3 | | 3 | | |
| | CHEM 1H | General Inorganic Chemistry 1 lec | 3 | | 3 | | CHEM 1HL |
| | CHEM 1HL | General Inorganic Chemistry 1 lab | | 3 | 1 | | CHEM 1H |
| | BES 11A | Engineering Drawing 1A | | 3 | 1 | | |
| | BES 11B | Engineering Drawing 1B (CAD) | | 3 | 1 | | |
| | NA 101 | Orientation to NAME | 1 | | 1 | | |
| | PE 1 | Self-Testing Activities | [2] | | [2] | | |
| | NSTP 1 | National Service Training Program 1 | [3] | | [3] | | |
| | | | 16/21 | 9 | 19/24 | | |

| | Course Number | Descriptive Title | Lec Hours | Lab Hours | Units | Pre-requisites | Co-requisites |
|-----------------|---------------|-------------------------------------|-----------|-----------|-------|---------------------|---------------|
| Second Semester | ENGL 2 | Writing in the Discipline | 3 | | 3 | ENGL 1 | |
| | EMath 12A | Advanced Algebra | 2 | | 2 | EMath 11A | |
| | EMath 12B | Solid Mensuration | 2 | | 2 | EMath 11A,EMath 11B | |
| | EMath 12C | Analytic Geometry | 3 | | 3 | EMath 11A,EMath 11B | |
| | PHYS 1A | College Physics 1 lec | 3 | | 3 | EMath 11A,EMath 11B | PHYS 1AL |
| | PHYS 1AL | College Physics 1 lab | | 3 | 1 | EMath 11A,EMath 11B | PHYS 1A |
| | BES 12A | Engineering Drawing 2A | | 3 | 1 | BES 11A | |
| | BES 12B | Engineering Drawing 2B (CAD) | | 3 | 1 | BES 11B | |
| | BES 60A | Safety Management | 1 | | 1 | | |
| | PE 2 | Rhythmic Activities | [2] | | [2] | PE 1 | |
| | NSTP 2 | National Service Training Program 2 | [3] | | [3] | NSTP 1 | |
| | | | 14/19 | 9 | 17/22 | | |

At the end of First Year, the student is qualified to take the Competency Assessment leading to the National Certificate (NC II – Technical Drafting)

| SECOND YEAR | | | | | | | |
|----------------|---------------|-----------------------------------|-----------|-----------|-------|-------------------------------|---------------|
| | Course Number | Descriptive Title | Lec Hours | Lab Hours | Units | Pre-requisites | Co-requisites |
| First Semester | ENGL 24 | Technical Report Writing | 3 | | 3 | ENGL 2 | |
| | ECON 1 | Basic Economics w/ TLR | 3 | | 3 | | |
| | PSYCH 1 | General Psychology | 3 | | 3 | | |
| | EMath 21A | Differential Calculus | 4 | | 4 | EMath 12A,EMath 12B,EMath 12C | |
| | PHYS 2A | College Physics 2 lec | 3 | | 3 | PHYS 1A,PHYS 1AL | PHYS 2AL |
| | PHYS 2AL | College Physics 2 lab | | 3 | 1 | PHYS 1A,PHYS 1AL | PHYS 2A |
| | NATVET 21 | Workshop Theory and Practice 11-A | 1 | 6 | 3 | 2nd Year Standing | |
| | NA 21A | Introduction to NAME | 3 | 3 | 4 | NA 101 | |
| | PE 3 | Fundamentals of Games and Sports | [2] | | [2] | PE 2 | |
| | | | 20/22 | 12 | 24/26 | | |

| | Course Number | Descriptive Title | Lec Hours | Lab Hours | Units | Pre-requisites | Co-requisites |
|-----------------|---------------|---|-----------|-----------|-------|-------------------|---------------|
| Second Semester | ENGL 3 | Speech Communication | 3 | | 3 | ENGL 2 | |
| | PHILO 2 | Logic | 3 | | 3 | | |
| | EMath 22A | Integral Calculus | 4 | | 4 | EMath 21A | |
| | BES 20A | Computer Fundamentals and Programming | | 6 | 2 | 2nd Year Standing | |
| | AS 20B | Basic Electrical Engineering | 2 | 3 | 3 | PHYS 2A,PHYS 2AL | |
| | NATVET 22 | Workshop Theory and Practice 11-B | 1 | 6 | 3 | NATVET 21 | |
| | MarE 22A | Marine Engineering 1 | 3 | 3 | 4 | NA21 A | |
| | PE 4 | Recreational Activities and Team Sports | [2] | | [2] | PE 3 | |
| | | | 16/18 | 18 | 22/24 | | |

At the end of Second Year, the student is qualified to take the Competency Assessment leading to the National Certificate (NC I –Shielded Metal Arc Welding)

| THIRD YEAR | | | | | | | |
|----------------|---------------|---|-----------|-----------|-------|----------------------------|---------------|
| | Course Number | Descriptive Title | Lec Hours | Lab Hours | Units | Pre-requisites | Co-requisites |
| First Semester | POL SCI 6 | Politics & Governance w/ Phil. Constitution | 3 | | 3 | | |
| | LIT 3 | Philippine Literature | 3 | | 3 | | |
| | EMath 31A | Differential Equations | 3 | | 3 | EMath 22A | |
| | MECH 10A | Engineering Mechanics (Static) | 3 | | 3 | EMath 22A,PHYS 1A,PHYS 1AL | |
| | BES 30A | Engineering Economy | 3 | | 3 | 3rd Year Standing | |
| | BES 40A | Engineering Management | 3 | | 3 | 3rd Year Standing | |
| | AS 10B | Thermodynamics 1 | 3 | | 3 | PHYS 2A,PHYS 2AL,EMath 22A | |
| | NA31A | Ship Hydrostatics | 3 | 3 | 4 | 3rd Year Standing | |
| | | | 24 | 3 | 25 | | |

| Second Semester | Course Number | Descriptive Title | Lec Hours | Lab Hours | Units | Pre-requisites | Co-requisites |
|-----------------|---------------|----------------------------------|-----------|-----------|-------|----------------|---------------|
| | MECH 20A | Engineering Mechanics (Dynamics) | 2 | | 2 | MECH 10A | |
| | MECH 30A | Mechanics of Materials | 5 | | 5 | MECH 10A | |
| | MECH 40B | Mechanics of Fluids | 3 | 3 | 4 | EMath 31A | MECH 20A |
| | AS 40A | DC and AC Machinery | 3 | 3 | 4 | AS 20B | |
| | ME 32A | Thermodynamics 2 | 3 | | 3 | AS 10B | |
| | NA32A | Intact Stability | 3 | 3 | 4 | NA31A | |
| | MarE 41A | Marine Engineering 2 | 3 | 3 | 4 | MarE 22A | |
| | | 22 | 12 | 26 | | | |

SUMMER

| Course Number | Descriptive Title | Lec Hours | Lab Hours | Units | Pre-requisites | Co-requisites |
|---------------|----------------------------------|-----------|-----------|-------|-------------------|---------------|
| NA 400 | On-the-Job Training /Practicum 1 | | 15 | 5 | 4th Year Standing | |

FOURTH YEAR

| First Semester | Course Number | Descriptive Title | Lec Hours | Lab Hours | Units | Pre-requisites | Co-requisites |
|----------------|---------------------------|---------------------------------------|-----------|-----------|-------------------|-----------------------------|---------------|
| | FIL 1D | Komunikasyon sa Akademikong Filipino | 3 | | 3 | | |
| | HUM 1 | Art Appreciation | 3 | | 3 | | |
| | EMath 32B | Advanced Engineering Math | 3 | | 3 | EMath 31A | |
| | CE 41A | Structural Theory 1 | 3 | 3 | 4 | MECH 30A | |
| | ME 314 | Machine Elements 1 | 2 | 3 | 3 | PHYS 2A, PHYS 2AL, BES 12A | |
| | ME 414A | Refrigeration System | 3 | | 3 | ME 32A | |
| | ME 415 | Heat Transfer & Thermal System Design | 2 | | 2 | AS 10B, MECH 40B, EMath 31A | |
| | NA 41B | Damage Stability | 3 | 6 | 5 | NA32A | |
| MarLaw 41A | Maritime Laws (with PMMR) | 3 | | 3 | 4th year standing | | |
| | | 25 | 12 | 29 | | | |

| Second Semester | Course Number | Descriptive Title | Lec Hours | Lab Hours | Units | Pre-requisites | Co-requisites |
|-----------------|-------------------------|---|-----------|-----------|-------------------|----------------|---------------|
| | FIL 2J | Pagbasa at Pagsulat Tungo sa Pananaliksik | 3 | | 3 | | |
| | EMath 32A | Probability and Statistics | 3 | | 3 | Emath 12A | |
| | AS 30A | Basic Electronics 1 | 2 | 3 | 3 | AS 20B | |
| | ME 423B | Air-Conditioning & Ventilation System | 2 | 3 | 3 | ME141A | |
| | ME 321A | Combustion Engineering | 3 | | 3 | ME 32A, ME 415 | |
| | NA 42A | Ship Structural Analysis and Design 1 | 2 | 3 | 3 | CE 41A | |
| | NA 42B | Ship Resistance | 3 | 3 | 4 | NA 41B | |
| MarE 32A | Marine Auxiliary System | 3 | | 3 | 4th Year Standing | | |
| | | 21 | 12 | 25 | | | |

SUMMER

| Course Number | Descriptive Title | Lec Hours | Lab Hours | Units | Pre-requisites | Co-requisites |
|---------------|----------------------------------|-----------|-----------|-------|-------------------------------|---------------|
| NA 500 | On-the-Job Training /Practicum 2 | | 15 | 5 | 5 th Year Standing | |

FIFTH YEAR

| First Semester | Course Number | Descriptive Title | Lec Hours | Lab Hours | Units | Pre-requisites | Co-requisites |
|----------------|---------------|---------------------------------------|-----------|-----------|-------------------|-------------------|---------------|
| | HIST 1 | Philippine History | 3 | | 3 | | |
| | RIZAL | Life & Works of Dr. Jose Rizal | 3 | | 3 | | |
| | MECH 422 | Fluid Machinery | 3 | | 3 | MECH 40B | |
| | NA 51A | Ship Structural Analysis and Design 2 | 1 | 3 | 2 | NA 42A | |
| | NA 51B | Ship Design 1 | 2 | 3 | 3 | 5th Year Standing | |
| | NA 51C | Shipyards Process and Management | 2 | 3 | 3 | 5th Year Standing | |
| | NA 51D | Motion in Waves | 2 | | 2 | EMath 32B | |
| | MarE51A | Ship Propulsion and Design 2 | 3 | 3 | 4 | MarE 32A | |
| NA Elective 1 | NA EL ____* | 3 | | 3 | 5th Year Standing | | |
| | | 22 | 12 | 26 | | | |

| Second Semester | Course Number | Descriptive Title | Lec Hours | Lab Hours | Units | Pre-requisites | Co-requisites |
|-----------------|---------------|--------------------------------|-----------|-----------|-------------------|-------------------|---------------|
| | BES 50A | Environmental Engineering | 2 | | 2 | CHEM 1HL, BES 11A | |
| | ME 515A | Power Plant Engineering | 4 | 3 | 5 | MECH 422 | |
| | NA 52A | Contracts and Specifications | 3 | | 3 | 5th Year Standing | |
| | NA 52B | Ship Design 2 | | 6 | 2 | NA 51B | |
| | NA 52C | Marine Inspections and Surveys | 2 | 3 | 3 | 5th Year Standing | |
| | NARev 52A | NAME Review 1 | 3 | | 3 | Graduating | |
| | NARev 52B | NAME Review 2 | 3 | | 3 | Graduating | |
| NA Elective 2 | NA EL ____* | 3 | | 3 | 5th Year Standing | | |
| | | 20 | 12 | 24 | | | |

Summary:

| | |
|---------------------------------|------|
| A. General Education Subjects | 45 |
| B. Technical Courses | 87 |
| C. Core Subjects | 109 |
| D. Electives | 6 |
| E. Other Subjects (PE and NSTP) | [14] |

*Technical Electives

| | |
|----------|---|
| NA EL 1A | CAD and Construction |
| NA EL 2A | Welding Technology |
| NA EL 3A | Special Topics (innovation for hull design, ship's efficeincy design) |

TOTAL 247/261