MINOR IN NAVAL ENGINEERING (NAVE) CheckSheet

Department of Aerospace and Ocean Engineering

College of Engineering

For students entering under Catalog 2023-24

Naval Engineering is defined as a field of study and expertise that includes all engineering and sciences as applied in the research, development, design, construction, operation, maintenance and logistic support of surface and subsurface ships, craft, aircraft, and vehicles (manned and autonomous) used by the Navy for the Nation's defense. It inherently includes multiple engineering disciplines, and hence it is open to all students in the College of Engineering who meet the following requirements.

A minor in Naval Engineering consists of not less than 18 semester-credit-hours. For successful completion of the Minor, students must maintain a 2.0 in-Minor GPA.

Required:

AOE	**2204**	**Introduction to Ocean Engineering**	**3**
AOE	**4264**	**Principles of Naval Engineering**	**3**
AOE	**4244**	**Naval and Marine Engineering Systems Design**	**3**
		Total Credits from Required Courses	**9**
		Credits Remaining from Below	**9**
		Total Required Credits	**18**

Choose a minimum of nine additional credit hours from the following courses. The broad range and large number of these courses reflects the multiple engineering disciplines inherent in Naval Engineering.

AOE	**4265**	**Ocean Vehicle Design with approved NE focus**	**3**
AOE	**4266**	**Ocean Vehicle Design with approved NE focus**	**3**
XXX	**4994**	**Undergraduate Research w/NE focus**	**3**
AOE	**3134**	**Air Vehicle Dynamics****	**3**
AOE	**3124**	**Aerospace Structures****	**3**
AOE	**3154**	**Astromechanics****	**3**
AOE	**3164**	**Aerothermo and Propulsion ****	**3**
AOE	**3224**	**Ocean Structures****	**3**
AOE	**3234**	**Ocean Vehicle Dynamics****	**3**
AOE	**3264**	**Thermodynamics and Marine Propulsion****	**3**
AOE	**4234**	**Aerospace Propulsion Systems ****	**3**
CEE	**3104**	**Introduction to Environmental Engineering**	**3**
CHE	**2164**	**Chemical Engineering Thermodynamics**	**3**
CHE	**3184**	**Chemical Reactor Analysis and Design****	**3**

CS	**3724**	**Introduction to Human-Computer Interaction****	**3**
CS	**3114**	**Data Structures and Algorithms****	**3**
CS	**3214**	**Computer Systems****	**3**
CS	**3304**	**Comparative Languages****	**3**
ECE	**3054**	**Electrical Theory****	**3**
ECE	**3304**	**Introduction to Power Systems****	**3**
ECE	**4224**	**Power Electronics****	**3**
ECE	**3504**	**Digital Design**	**3**
ECE	**2500**	**Computer Organization & Architecture**	**3**
ESM	**2204**	**Mechanics of Deformable Bodies**	**3**
ESM	**3015**	**Fluid Mechanics I, II**	**3**
ESM	**3054**	**Mechanical Behavior of Materials**	**2**
ESM	**4044**	**Mechanics of Composite Materials****	**3**
ESM	**4734 (AOE 4024)**	**Introduction to The Finite Element Method****	**3**
ISE	**3614**	**Intro to Human Factors Engineering**	**3**
ISE	**2014**	**Engineering Economy**	**2**
ISE	**2404**	**Deterministic Operations Research**	**3**
ISE	**3414**	**Probabilistic Operations Research****	**3**
ISE	**3624**	**Industrial Ergonomics**	**3**
ME	**2134**	**Thermodynamics**	**3**
ME	**3304**	**Heat Transfer**	**3**
ME	**3414**	**Fluid Dynamics**	**3**
ME	**3514**	**System Dynamics**	**3**
MSE	**4034**	**Thermodynamics of Materials****	**3**
MSE	**3054/3064**	**Mechanical Behavior of Materials**	**3**
MSE	**4354**	**Strength and Fracture****	**1**

**** Prerequisites may apply – see your advisor**