

MINOR IN NAVAL ENGINEERING CHECKSHEET

Students must maintain a 2.0 in-Minor GPA with a minimum grade of C– or better in all courses that the student counts towards the minor. Indicate grade () in the boxes below:

Student Name _____ **Student PIN** _____

Student Major: _____ **GPA:** _____ **Expected Graduation (M/Y):** _____

Registered for NEEC at <http://goneec.org/> (Y) _____

1. Required courses: (9 units)

Course	Term (ex: Fall 2011)	Units	Grade
AOE 2204 - Intro to Ocean Engineering or AOE 3204 - Naval Architecture		3	
AOE 4264 - Principles of Naval Engineering		3	
XXX 4994 UG Research or (for non-OE majors) design project w/Naval Engineering application		3	

Naval Engineering UG Research or Project Title and Instructor _____

2. Complete additional 9 units from the following list with a minimum grade of C– or better:

Course	Term (ex: Fall 2011)	Units	Grade

AOE 4265 ()* Ship Design (3)

AOE 4266 ()* Ship Design (3)

____ 4994 ()* UG Research w/Naval Engineering application (3)

* may substitute similar capstone design course, project or research in student's major

AOE 3204 () Naval Architecture (3)

AOE 4244 () Marine Engineering (3)

AOE 5314 () Naval Ship System Design (3)

AOE 3264 () Resistance and Propulsion of Ships (3)

AOE 3104 () Aircraft Performance (3)

AOE 3134 () Stability and Control (3)

AOE 4234 () Aerospace Propulsion Systems (3)

AOE 4140 () Spacecraft Dynamics and Control (3)

CHE 2164 () Chemical Engineering Thermodynamics (3)

CHE 3184 () Chemical Reactor Analysis and Design (3)

CEE 3104 ()	Introduction to Environmental Engineering (3)
CS 3724 ()	Introduction to Human-Computer Interaction (3)
CS 3114 ()	Data Structures and Algorithms (3)
CS 3204 ()	Operating 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 3574 ()	Applied Software Engineering (3)
ECE 2704 ()	Signals and Systems (3)
ECE 3504 ()	Digital Design I (4)
ECE 2500 ()	Computer Organization & Architecture (3)
ESM 2204 ()	Mechanics of Deformable Bodies (3)
ESM 3015 ()	Fluid Mechanics I, II (3)
ESM 3054/3064 ()	Mechanical Behavior of Materials (3)
ESM 4044 ()	Mechanics of Composite Materials (3)
ESM 4734 ()	An Introduction To The Finite Element Method (3) (AOE 4024)
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)
ISE 4005 ()	Project Management and System Design (3)
ME 3124 ()	Thermodynamics (3)
ME 3304 ()	Heat and Mass Transfer (3)
ME 3404 ()	Fluid Mechanics (3)
ME 3514 ()	System Dynamics (3)
ME 4124 ()	CAD of Fluid-Thermal Systems (3)
MSE 4164 ()	Principles of Materials Corrosion (3)
MSE 4034 ()	Thermodynamics of Materials (3)
MSE 3054/3064 ()	Mechanical Behavior of Materials (2)
MSE 4354 ()	Strength and Fracture (1)

Hidden prerequisites may apply – see your advisor

3. Total Units _____ (18 required)
4. Minor Program Approval (prior to completion)
- 5.

Dr. Alan Brown, AOE, albrow5@vt.edu

Date

6. Minor Program Complete (for award)

Dr. Alan Brown, AOE, albrow5@vt.edu

Date

This minor supports the requirements of the Naval Engineering Education Consortium (NEEC) in which students may also participate. The consortium provides opportunities for industry and US Navy mentors, projects, internships, co-ops and job opportunities.