NAVAL SCIENCE, BNS

The College of Engineering recommends candidates for the Bachelor of Naval Science degree.

Earning both the BNS degree and the B.S. degree in the field of engineering may require five years. Engineering students in an ROTC program may require four and one-half to five years to complete both degree and commissioning requirements.

For additional information see the Officer Education (http://guide.wisc.edu/undergraduate/#officereducationtext) section of the *Guide*.

HOW TO GET IN

The Naval Science BNS is not a stand-alone degree. Students interested in pursuing this degree should consult with the Navy ROTC:
1610 University Ave, Madison, WI 53726 | 608-262-3794 | nrotc@aviation.wisc.edu (nrotc.aviation@wisc.edu)

REQUIREMENTS

The College of Engineering recommends candidates for the Bachelor of Naval Science degree. Requirements for the degree are:

1. A total of 136 credits including no fewer than 100 credits of elected and required courses in one of the engineering curricula.
2. Completion of these additional requirements as approved by the Department of Naval Science: English, two semesters; American Military Affairs/National Security Policy, one semester (see below).

Earning both the BNS degree and the B.S. in the field of engineering may require five years. Engineering students in an ROTC program may require four and one-half to five years to complete both degree and commissioning requirements.

REQUIRED COURSES:

Code	Title	Credits
Naval Laboratory (1 cr each):		8-10
NAV SCI 175	Introductory Naval Laboratory I	
NAV SCI 176	Introductory Naval Laboratory II	
NAV SCI 275	Elementary Naval Laboratory I	
NAV SCI 276	Elementary Naval Laboratory II	
NAV SCI 375	Intermediate Naval Laboratory I	
NAV SCI 376	Intermediate Naval Laboratory II	
NAV SCI 475	Advanced Naval Laboratory I	
NAV SCI 476	Advanced Naval Laboratory II	
NAV SCI 575	Professional Naval Laboratory I [1]	
NAV SCI 576	Professional Naval Laboratory II [1]	
NAV SCI 101	Introduction to Naval Science	2
NAV SCI 102	Seapower-Maritime Affairs [2]	3
NAV SCI 201	Naval Leadership and Management	3
NAV SCI 402	Naval Leadership and Ethics	3
Six credits of English. Must be writing-intensive and focus on areas of grammar and composition. Accepted courses include those designated COM A or COM B		6
Three credits of American Military History or National Security Policy. Accepted courses include:		3
POLI SCI 104	Introduction to American Politics and Government	
POLI SCI 140	Introduction to International Relations	
POLI SCI 160	Introduction to Political Theory	
POLI SCI/ LEGAL ST 217	Law, Politics and Society	
POLI SCI 347	Terrorism	
POLI SCI 348	Analysis of International Relations	
POLI SCI 356	Principles of International Law	
POLI SCI 377	Nuclear Weapons and World Politics	
HISTORY 427	The American Military Experience to 1902	
HISTORY 428	The American Military Experience Since 1899	
MIL SCI 491	American Military History	
Completion of one of the following tracks:		
Navy-Option Track:		
NAV SCI 202	Navigation	
NAV SCI 301	Naval Engineering	
NAV SCI 302	Naval Weapons	
NAV SCI 401	Naval Operations	
Six credits of calculus to include a first- and second-semester course [3]		
Six credits of calculus-based physics to include a first- and second-semester course [3]		
Three credits of World Culture and Regional Studies. Must have an emphasis on regions encompassed by Sub-Sahara Africa, North Africa, Central Asia, East Asia, South Asia, Southwest Asia, Southeast Asia, Central America, Middle East, or Russia/Eastern Europe		
Marine Corps-Option Track:		
NAV SCI 350	Fundamentals of Maneuver Warfare	
NAV SCI 351	Land Campaigns	

1

Add NAV SCI 575 Professional Naval Laboratory I if taking a 9th semester, NAV SCI 576 Professional Naval Laboratory II if taking a 10th semester.

2

May substitute HISTORY 428 The American Military Experience Since 1899.

3

AP/IB/Transfer credits accepted only for first-semester course.

Also, to be conferred a BNS degree, the candidate must satisfy the degree requirements for *any* Engineering major, and the above-stated Naval Science requirements.

LEARNING OUTCOMES

1. Understand and apply the fundamentals and principles of Naval Science.
2. Understand and apply Naval Science professional knowledge and core competencies.
3. Be prepared to perform successfully in the technical and critical reasoning requirements of their careers and pursue continuing education in a field of application within the Naval Service.
4. Understand and demonstrate a strong sense of personal integrity, honor, and individual responsibility and associated ethical leadership required of military officers.

FOUR-YEAR PLAN

SAMPLE FOUR YEAR PLANS

The Bachelor of Naval Science degree is not a stand-alone degree. The plans below must be integrated with a student's undergraduate College of Engineering major plan. See your engineering advisor and Naval ROTC program staff with questions.

NAVY SCHOLARSHIP/COLLEGE PROGRAMMER

First Year

Fall	Credits	Spring	Credits
NAV SCI 175	1	NAV SCI 176	1
Calculus 1/Math 1	3-5	Calculus 2/Math 2	3-5
English 1	3	English 2	3-5
NAV SCI 101	2	HISTORY 428 (in place of NAV SCI 102)	3-4
	9-11		**10-15**

Second Year

Fall	Credits	Spring	Credits
NAV SCI 275	1	NAV SCI 276	1
Physics 1/Physical Science 1	3-5	Physics 2/Physical Science 2	3-5
NAV SCI 201	3	NAV SCI 202	3
	7-9		**7-9**

Third Year

Fall	Credits	Spring	Credits
NAV SCI 375	1	NAV SCI 376	1
World Culture	3	Amer Mil History/ National Security Policy	3
NAV SCI 301	3	NAV SCI 302	3
	7		**7**

Fourth Year

Fall	Credits	Spring	Credits
NAV SCI 475	1	NAV SCI 476	1
NAV SCI 401	3	NAV SCI 402	3
	4		**4**

Total Credits 55-66

MARINE SCHOLARSHIP/COLLEGE PROGRAMMER

First Year

Fall	Credits	Spring	Credits
NAV SCI 175	1	NAV SCI 176	1
NAV SCI 101	2	HISTORY 428 (in place of NAV SCI 102)	3-4
English 1	3	English 2	3
	6		**7-8**

Second Year

Fall	Credits	Spring	Credits
NAV SCI 275	1	NAV SCI 276	1
NAV SCI 201	3	NAV SCI 350 or 351	3
	4		**4**

Third Year

Fall	Credits	Spring	Credits
NAV SCI 375	1	NAV SCI 376	1
Amer Mil History/ National Security Policy	3	NAV SCI 350 or 351	3
	4		**4**

Fourth Year

Fall	Credits	Spring	Credits
NAV SCI 475	1	NAV SCI 476	1
		NAV SCI 402	3
	1		**4**

Total Credits 34-35

ADVISING AND CAREERS

Naval Science BNS students should meet with the Navy ROTC for advising:
1610 University Avenue Madison, WI 53726;
608-262-3794; nrotc.aviation@wisc.edu

PEOPLE

Naval Science—Professor, CAPT Barnett; Associate Professor, CDR Choquette; Assistant Professors LT Hippe, LT Fox, Gunnery Sgt Smith, and Marine Capt. Hoffman. The assistant professors act as undergraduate advisors and may be contacted through the department office.