

## Opportunities

### Summer Internships

- Fully funded internships with...
- North Atlantic Treaty Organization, Brussels, Belgium
  - National Security Agency
  - Naval Research Lab
  - Naval Warfare Development Cmd
  - plus many more...

### Double Major in CS & IT

- 13 of our current students are pursuing a double major in both CS and IT.
- Only 5 additional courses required for a double major!

### Graduate Education

- Recent CS & IT graduates have been recognized with...
- Marshall scholarship to London
  - Rhodes to Oxford
  - Pownall to Cambridge
  - Mitchell to Ireland
  - Olmstead Scholar
  - The John's Hopkins University
  - Naval Postgraduate School

### Information Professional (IP) Community Service Assignment

- The Navy's community of Information Warriors with expertise in information, command & control and space systems.
- IPs operate, maintain, secure, plan and acquire the Naval network and the systems that support Navy operations and business processes.

## Cutting Edge Curriculum with Real-world Applications



CISCO Technology Truck  
(April 2008)

Artificial Intelligence  
Computer Security  
Web and Internet Programming  
Simulation and Computer Games  
Applied Database Systems  
Robotics  
Computer Graphics  
Human Computer Interaction

### Elective Areas of Study



Game Night  
(Feb 2008)



## Computer Science & Information Technology

Leading the Way  
in the Next Generation  
of Naval Warfare, Cyber  
Operations and Cyber  
Defense



Cyber-Defense Exercise  
sponsored by the  
National Security Agency

For more information, see [www.cs.usna.edu](http://www.cs.usna.edu)  
or contact  
CAPT Logue, CS Department Chair  
([tlogue@usna.edu](mailto:tlogue@usna.edu))  
CDR Osborn, CS Associate Chair  
([osborn@usna.edu](mailto:osborn@usna.edu))

## What is CS and IT?

## Why CS or IT?

## Computer Science Department

- **Both majors provide a strong computing foundation for technical or management responsibilities and graduate study**
  - Java and C++ programming, Windows and Unix operating systems, computer architecture, networks and data structures
- **Both majors allow electives from either CS or IT**
- **CS emphasizes the expansion of the body of computing knowledge with:**
  - Computer algorithms, artificial intelligence, robotics, computer graphics and the study of programming languages
- **IT emphasizes application of the existing body of science with:**
  - Web and internet programming, databases and computer security

- **Skills can be immediately applied in the fleet**
- **Fastest growing segment of our economy: CS & IT consistently dominate the top 10 list of fastest growing jobs**
- **The future of joint warfare lies in the cyber-operations arena**



**Computer Science Matrix**

Fall 3/C		Spring 4/C		Fall 3/C		Spring 3/C		Fall 2/C		Spring 2/C		Fall 1/C		Spring 1/C	
NS101	2	NN101	2	NE203	3	NN200	2	NS300	3	NL310	1	NL400	2	NS42x	1
SC111	4	NL110	2	SP211	4	SP212	4	EE301	4	EE303	3	HM SS2	3	ES300	3
SM121	4	SM122	4	SM223	4	HH216	3	SM242	4	HM SS 1	3	EM300	4	ES360	1
HE111	3	HE112	3	HH215	3							Free Elective	3	EA/N4XY	4
HH104	3	FP130	3												
		SC112	4												
<b>Computer Science</b>				IC210 Intro to Computing 3-2-4	4	IC211 Object-Oriented Programming 2-2-3	3	IC312 Data Structures 3-0-3	3	SI335 Computer Algorithms 3-0-3	3	SI413 Programming Languages 2-2-3	3	IC480 Capstone 1-4-3	3
						IC220 Comp Arch & Organization 3-0-3	3	IC322 Computer Networks 2-2-3	3	SI336 Software Engineering 2-2-3	3	SI4XX Major Elective 2-2-3	3	SI4XX Major Elective 2-2-3 or 3-0-3	3
						IC221 Systems Programming 2-2-3	3	SI340 Theory of Computing 3-0-3	3	SI4XX Major Elective 2-2-3 or 3-0-3	3				

**Information Technology Matrix**

<b>Information Technology</b>		IC210 Intro to Computing 3-2-4	4	IC211 Object-Oriented Programming 2-2-3	3	IC312 Data Structures 3-0-3	3	IT360 Applied Database Systems 2-3-3	3	IT440 Systems Analysis and Design 2-2-3	3	IC480 Capstone 1-4-3	3
				IC220 Comp Arch & Organization 3-0-3	3	IC322 Computer Networks 2-2-3	3	IT430 Info Assurance & Network Security 2-2-3	3	IT4XX Major Elective 2-2-3	3	IT4XX Major Elective 2-2-3 or 3-0-3	3
				IC221 Systems Programming 2-2-3	3	IT350 Web and Internet Programming 2-2-3	3	IT4XX Major Elective 2-2-3 or 3-0-3	3				