

# So which major is right for me?

	<b>Computer Science (SCS)</b>	<b>Information Technology (SIT)</b>	<b>Cyber Operations (SCY)</b>
Summary	Focus on scientific foundations of computing, including design & implementation of programming languages, program efficiency, and limits of computation.	Focus on applications of computing including web & internet programming, databases, and computer & network security.	Provides a foundation of computers, programming, and networks, and then broadens out to a view of cyber which includes legal issues, policy, hacktivism, social factors.
Tradeoffs	Deeper foundational material on computing (in exchange for less coverage of applications)	More depth on applications (in exchange for less foundational material on computing)	Favor breadth of topics over depth (e.g., control systems, EM spectrum, ethics, policy, law, and human factors)
In-major Courses	Technical: 15 to 16 courses Non-technical: 0 to 1 courses	Technical: 15 to 16 courses Non-technical: 0 to 1 courses	Technical: 10 to 12 courses Non-technical: 3 to 5 courses
Electives	Artificial Intelligence, Robotics, Natural Language Processing, Graphics, Cryptography, Network Attack & Defense	Mobile computing, Forensics, Adv. Web, Adv. Information Assurance, Network Attack & Defense	Cyber-Physical Systems, History of Cyber-warfare, Cyber Defense Strategies, Applied Cryptography, Applied Forensics
Internship Options	NSA, DISA, NRO, Draper Labs, NPS, NRL, Cyber Warfare Development Group, CYBERCOM, CACI		

**(see reverse for a comparison of matrices)**

# What will my semesters look like?

	3/C Fall	3/C Spring	2/C Fall	2/C Spring	1/C Fall	1/C Spring
<b>SCS</b>	IC210 Intro to Computing	IC211 Obj. Oriented Programming	IC312 Data Structures	IC411 Operating Systems	IC470 Software Engineering	IC480 Research/Capstone
		IC220 Computer Architecture	IC322 Computer Networks	SI335 Computer Algorithms	SI413 Programming Languages	
		IC221 Systems Programming	SI340 Theory of Computing	FR EL Free Elective		
				MJ EL1 Major Elective I	MJ EL2 Major Elective II	MJ EL3 Major Elective III
<b>SIT</b>	IC210 Intro to Computing	IC211 Obj. Oriented Programming	IC312 Data Structures	IC411 Operating Systems	IC470 Software Engineering	IC480 Research/Capstone
		IC220 Computer Architecture	IC322 Computer Networks	IT360 Applied Database Systems		
		IC221 Systems Programming	IT350 Web/Internet Programming	IT430 IA and Network Security	FR EL Free Elective	
				MJ EL1 Major Elective I	MJ EL2 Major Elective II	MJ EL3 Major Elective III
<b>SCY</b>				SY304 Information Ops, Social Eng.	SY403 Cyber Planning & Policy	SY406 Cyber Law/Ethics
	SY201 Cyber Fundamentals I	SY202 Cyber Systems Engineering	SY301 Data Struct. for Cyber Ops	SY306 Web & Database Cyber Ops	SY401 Cyber Operations I	SY402 Cyber Operations II
		SY204 Systems Prog. & OS Fund.	SY303 Cyber Systems Architecture	SY308 Security Fund. Principles		
				SY310 Networking & Mob. Comp.	SY4XX Major Elective I	SY4XY Major Elective II

**(see reverse for a qualitative comparison)**