

# INFORMATION ASSURANCE CONCENTRATION

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The information assurance concentration is intended for students who wish to specialize in the security aspects of the computer science field. The concentration focuses on fundamental principles, worked examples, theory, and skills necessary to analyze, design, and construct secure information systems. The courses in this concentration address fundamental technologies, security policy, assurance, and ethics involved in the protection of the information systems. Hands-on experience is gained through numerous programming exercises associated with each course.

Code	Title	Credits
<b>Required Courses</b>		
CYBR 3600	INFORMATION SECURITY POLICY AND AWARENESS	3
CYBR 4360	FOUNDATIONS OF CYBERSECURITY	3
CSCI/CYBR 4380	DIGITAL FORENSICS	3
<b>Electives Courses <sup>1</sup></b>		
Select 9 hours from the following:		9
CYBR 2600	SYSTEM ADMINISTRATION	
CSCI/CYBR 3450	NATURAL LANGUAGE PROCESSING	
CYBR 4390	MOBILE DEVICE FORENSICS	
CSCI/CYBR 4430	QUANTUM COMPUTING AND CRYPTOGRAPHY	
CYBR 4440	INDUSTRIAL CONTROL SYSTEM SECURITY	
CYBR 4450	HOST-BASED VULNERABILITY DISCOVERY	
CYBR 4460	NETWORK-BASED VULNERABILITY DISCOVERY	
CIST/CYBR 4540	COMPUTER SECURITY MANAGEMENT	
CSCI/MATH 4560 or CYBR 3570	NUMBER THEORY & CRYPTOGRAPHY CRYPTOGRAPHY	
<b>Total Credits</b>		<b>18</b>

<sup>1</sup> This list of electives is not exhaustive. Students can take other relevant courses as electives with the approval of the Computer Science Undergraduate Program Committee.

Note: CSCI majors may complete the above concentration and apply selected courses toward the computer science core extension requirement.