

# Computer Security & Information Assurance Major

Print PDF Curriculum Map ([http://catalog.norwich.edu/residentialprogramscatalog/currmaps/cia/cia\\_1468855102282.pdf](http://catalog.norwich.edu/residentialprogramscatalog/currmaps/cia/cia_1468855102282.pdf))

## B.S. Computer Security & Information Assurance - Curriculum Map 2017-2018 Catalog

Students must declare either the Forensics Concentration, the Information Assurance Management Concentration, or both (see requirements below). Choice of concentration is typically declared no later than the end of the sophomore year in the CSIA program.

Freshman		
Fall	Cr. Spring	Cr.
CS 100 Foundations of Computer Science and Information Assurance	3 CS 140 Programming and Computing <sup>2</sup>	4
EN 101 Composition and Literature I	3 EN 102 Composition and Literature II	3
MA 107 Precalculus Mathematics <sup>1</sup>	4 General Education Arts & Humanities ( <a href="http://catalog.norwich.edu/residentialprogramscatalog/generaleducationgoals">http://catalog.norwich.edu/residentialprogramscatalog/generaleducationgoals</a> )	3
PY 211 Introduction to Psychology (General Education Social Science)	3 General Education History ( <a href="http://catalog.norwich.edu/residentialprogramscatalog/generaleducationgoals">http://catalog.norwich.edu/residentialprogramscatalog/generaleducationgoals</a> )	3
	Free Elective	3
Semester Total Credits	13 Semester Total Credits	16
Sophomore		
Fall	Cr. Spring	Cr.
CS 228 Introduction to Data Structures	3 CS 212 Assembly Language & Reverse Engineering	3
IA 241 Cyberlaw and Cybercrime <sup>3</sup>	3 CS 240 Database Management	3
MA 240 Introduction to Number Theory and Cryptology (General Education Math)	3 MA 318 Cryptology (General Education Math)	3
MG 341 Business Law I (General Education Ethics)	3 General Education Lab Science ( <a href="http://catalog.norwich.edu/residentialprogramscatalog/generaleducationgoals">http://catalog.norwich.edu/residentialprogramscatalog/generaleducationgoals</a> )	4
General Education Lab Science ( <a href="http://catalog.norwich.edu/residentialprogramscatalog/generaleducationgoals">http://catalog.norwich.edu/residentialprogramscatalog/generaleducationgoals</a> )	4 Free Elective	3
Semester Total Credits	16 Semester Total Credits	16
Junior		
Fall	Cr. Spring	Cr.
DF 242 Computer Forensics I	4 CS 260 Data Communications and Networks	3
EN 112 Public Speaking	3 IA 342 Management of Information Assurance	3
IA 340 Introduction to Information Assurance	3 QM 213 Business and Economic Statistics I	3
Concentration Elective (see below)	3 Concentration Elective (see below)	3
Free Elective	3 Concentration Elective (see below)	3
Semester Total Credits	16 Semester Total Credits	15
Senior		
Fall	Cr. Spring	Cr.
CS 301 Software Engineering	3 IA 456 Cyber Defense Practicum (Capstone)	3
IA 455 Contemporary Issues in Information Assurance	3 Concentration Elective (see below)	3
Concentration Elective (see below)	3 Concentration Elective (see below)	3
General Education Literature ( <a href="http://catalog.norwich.edu/residentialprogramscatalog/generaleducationgoals">http://catalog.norwich.edu/residentialprogramscatalog/generaleducationgoals</a> )	3 Free Elective	3
Free Elective	3 Free Elective	3
Semester Total Credits	15 Semester Total Credits	15
Total Credits For This Major: 122		

<sup>1</sup> Requires a math placement score of 2. Students scoring below 2 must successfully complete the appropriate necessary prerequisite math courses first. With a math placement score of 3, the MA107 requirement may be waived and the credit hours replaced with a free elective.

<sup>2</sup> Prerequisite: C or higher in IS 100 or CS 100, or instructor permission

<sup>3</sup> Cross-listed as CJ 341

## Concentrations

### Forensics Concentration 2017-2018 Catalog

All courses used to fulfill a concentration must be completed with a grade of C or higher.

#### Required Courses

DF 311	Network Forensics	3
DF 312	Malware Forensics	3
DF 411	Cyber Investigation	3

#### Elective Courses - Choose any non-duplicate three of the following courses:

CS 221	GUI Programming	3
CS 250	Virtual Systems Administration	3
CS 270	Operating Systems & Parallelism	3
CS 330	Ethics in Computing and Technology	3
CS 406	Special Topics in Computer Science *	3
CS 407	Politics of Cyberspace	3
CS 410	Computing Internship *	3
DF 423	Advanced Digital Forensics	3
IA 360	Network Security	3
MG 309	Management of Organizations	3
MG 346	Business Law II	3
MG 351	Organizational Behavior	3

PY 234	Forensic Psychology	3
Total Cr.		18

\* May be taken more than once for credit by approval, contingent on each section taken covering substantively different content.

#### Information Assurance Management Concentration 2017-2018 Catalog

All courses used to fulfill a concentration must be completed with a grade of C or higher.

##### Required Courses

CS 270	Operating Systems & Parallelism	3
IA 360	Network Security	3
MG 309	Management of Organizations	3
MG 351	Organizational Behavior	3

##### Elective Courses - Choose any non-duplicate two of the following:

CS 221	GUI Programming	3
CS 250	Virtual Systems Administration	3
CS 330	Ethics in Computing and Technology	3
CS 406	Special Topics in Computer Science *	3
CS 407	Politics of Cyberspace	3
CS 410	Computing Internship *	3
DF 311	Network Forensics	3
DF 312	Malware Forensics	3
DF 411	Cyber Investigation	3
DF 423	Advanced Digital Forensics	3
MG 346	Business Law II	3
PY 234	Forensic Psychology	3

Total Cr.		18
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\* May be taken more than once for credit by approval, contingent on each section taken covering substantively different content.