

# CYBER FORENSICS AND SECURITY

## REQUIREMENTS

### CORE CURRICULUM

The Core Curriculum is designed to foster critical thinking skills and introduce students to basic domains of thinking that transcend disciplines. The Core applies to all majors. Information on specific classes in the Core can be found at [marshall.edu/gened](http://marshall.edu/gened).

#### CORE 1: CRITICAL THINKING

CODE	COURSE NAME	HRS	GRADE
FYS 100	First Year Seminar	3	_____
_____	Critical Thinking Course	3	_____
_____	Critical Thinking Course	3	_____
<b>Additional University Requirements</b>			
CFS 440	Writing Intensive	3	_____
CFS 460	Writing Intensive	3	_____
_____	Multicultural or International	3	_____
CFS 490	Capstone	3	_____

#### CORE 2:

CODE	COURSE NAME	HRS	GRADE
ENG 101	Beginning Composition	3	_____
ENG 201	Advanced Composition	3	_____
CMM 103	Fund Speech-Communication	3	_____
MTH 140	Core II Mathematics	3	_____
FSC 224	Core II Physl/Natural Science	4	_____
_____	Core II Humanities	3	_____
CJ 200	Core II Social Science	3	_____
_____	Core II Fine Arts	3	_____

### MAJOR-SPECIFIC

All Cyber Forensics and Security majors are required to take the following courses:

CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE
NRRM 200	Analytical Methods: Statistics	4	_____	CFS 357	Network Penetration and Attack	4	_____
MTH 140	Applied Calculus	3	_____	CFS 400	Intro to Cyber Forensics	3	_____
FSC 224	Intro to Forensic Science	4	_____	CFS 440	Digital Forensics (WI)	4	_____
_____	Phys/Nat Science Elec Sequence 1	4	_____	CFS 448	Multimedia Forensics	3	_____
_____	Phys/Nat Science Elec Sequence 2	3	_____	CFS 454	Network Defense	4	_____
CS 110	Computer Science I	3	_____	CFS 460	Applied Cyber Forensics (WI)	4	_____
CIT 263	Web Programming I	3	_____	CFS 462	Network Forensics	4	_____
CIT 352	Network Protocols and Admin	3	_____	CFS 467	Mobile Device Forensics	4	_____
CIT 365	Database Management	3	_____	CFS ____	CFS Technical Elective	3	_____
CJ 200	Intro to Criminal Justice	3	_____	CFS ____	CFS Technical Elective	3	_____
CJ 314	Crime Scene & Investigations	3	_____	CFS 490	Senior Project	3	_____
CJ 424	Computer Crime	3	_____	_____	Free Elective	3	_____
CFS 200	Introduction to CFS	3	_____	_____	Free Elective	3	_____
CFS 261	Intro to Linux	3	_____	_____	Free Elective	3	_____
CFS 305	Open Source Intelligence	3	_____	_____	Free Elective	2	_____

## MAJOR INFORMATION

- Students are required to know and track their degree requirements for graduation or for entrance to a professional school.
- Coursework listed as "free elective" may vary for each student. Students are encouraged to use elective hours toward a minor or toward prerequisites.
- Students are strongly encouraged to select courses that meet two or more Core or College requirements.
- Course offerings and course attributes are subject to change semesters. Please consult each semesters schedule of courses for availability and attributes.
- Math is based on an ACT Mathematics score of 24 or higher. Students with an ACT Mathematics score less than 24 will be placed in the appropriate mathematics and science courses.
- Prior to entering their junior year, students are required to pass a background check (no arrests or convictions) and supply two letters of reference that attest to the student's character. Under certain very limited circumstances, this requirement may be waived. That decision will be made by a review committee comprised of the university digital forensic and information assurance faculty along with the department chair. The background check is done at the student's expense.
- For the CFS technical elective students may choose between the following classes: CFS 420: Incident Response (3 cr.), CFS 430: Exploit Development (3 cr.), DFIA 445: Mobile and Web Pen Testing (3 cr.), CFS 461: Cyber Warfare (3 cr.), or CFS 464: Network Security and Cyber Crime (3 cr.) or CFS 480: Special Topics (3 cr.).

General Education Requirement  
 College Requirement  
 Major Requirement  
 Area of Emphasis

Milestone Course: This is a key success marker for your major. See your advisor to discuss importance of this course in your plan of study.

# CYBER FORENSICS AND SECURITY

The Bachelor of Science in Cyber Forensics and Security prepares students to meet the challenges of today's cyber threats. Cyber Forensics and Security skills are in high demand in law enforcement, business, government, defense, intelligence, and the private sector. The program has a solid foundation in science, technology, and communication skills. Students learn to conduct forensic analysis on a variety of devices and systems, defend a network, testify in court, and conduct penetration tests among other skills.

YEAR ONE	FALL SEMESTER				SPRING SEMESTER			
	CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE
	ENG 101	Beginning Composition	● 3	_____	CS 110	Computer Science I	◆ 3	_____
	FYS 100	First Year Seminar	● 3	_____	CJ 200	Intro to Criminal Justice	●◆ 3	_____
	_____	Multicultural or International	● 3	_____	ENG 201	Advanced Composition	● 3	_____
	_____	Core II Fine Arts	● 3	_____	🌳 CFS 200	Introduction to CFS	◆ 3	_____
	_____	Free Elective	3	_____	_____	Free Elective	3	_____
	UNI 100	Freshman First Class	1	_____				
	<b>TOTAL HOURS</b>		<b>16</b>		<b>TOTAL HOURS</b>		<b>15</b>	
	Summer Term (optional):							

YEAR TWO	FALL SEMESTER				SPRING SEMESTER			
	CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE
	CIT 352	Network Protocols and Admin	◆ 3	_____	🌳 CIT 263	Web Programming I	◆ 3	_____
	CFS 400	Intro to Cyber Forensics	◆ 3	_____	🌳 CFS 261	Intro to Linux	◆ 3	_____
	NRRM 200	Analytical Methods: Statistics	◆ 4	_____	CMM 103	Fund Speech Communication	● 3	_____
	_____	Physical/Natural Sci Elective - Seq 1	◆ 3	_____	🌳 MTH 140	Applied Calculus	●◆ 3	_____
	_____	Core II Humanities (CT)	● 3	_____	_____	Physical/Natural Sci Elective - Seq 2	◆ 4	_____
	<b>TOTAL HOURS</b>		<b>16</b>		<b>TOTAL HOURS</b>		<b>16</b>	
	Summer Term (optional):							

YEAR THREE	FALL SEMESTER				SPRING SEMESTER			
	CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE
	CIT 365	Database Management	◆ 3	_____	CJ 424	Computer Crime	◆ 3	_____
	CFS 305	Open Source Intelligence	◆ 3	_____	CFS 454	Network Defense	◆ 4	_____
	CFS 357	Network Penetration and Attack	◆ 4	_____	CFS 462	Network Forensics	◆ 4	_____
	CFS 460	App Dig Evidence and eDisc (WI)	●◆ 4	_____	_____	Free Elective	3	_____
					_____	Free Elective	2	_____
	<b>TOTAL HOURS</b>		<b>14</b>		<b>TOTAL HOURS</b>		<b>16</b>	
	Summer Term (optional):							

YEAR FOUR	FALL SEMESTER				SPRING SEMESTER			
	CODE	COURSE NAME	HRS	GRADE	CODE	COURSE NAME	HRS	GRADE
	CJ 314	Crime Scene & Investigations	◆ 3	_____	CFS 440	Digital Forensics (WI)	●◆ 4	_____
	🌳 CFS 467	Mobile Device Forensics	◆ 4	_____	CFS 490	Capstone	●◆ 3	_____
	CFS 448	Multimedia Forensics	◆ 3	_____	_____	CFS Technical Elective (CFS 420, 430, 461, 464, 480 or DFIA 445)	◆ 3	_____
	FSC 224	Intro to Forensic Science	●◆ 4	_____				
	_____	CFS Technical Elective (CFS 420, 430, 461, 464, 480 or DFIA 445)	◆ 3	_____				
	<b>TOTAL HOURS</b>		<b>17</b>		<b>TOTAL HOURS</b>		<b>10</b>	
	Summer Term (optional):							

● General Education Requirement  
 ■ College Requirement  
 ◆ Major Requirement  
 ● Area of Emphasis

🌳 Milestone Course: This is a key success marker for your major. See your advisor to discuss importance of this course in your plan of study.