

















WEB APPLICATION/ MOBILE DEVELOPMENT, EMPHASIS








 - General Education Course

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

Major

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 <https://www.marshall.edu/gened/>.


Code	Title	Credit Hours
Core Curriculum		
<i>Core 1: Critical Thinking</i>		
FYS 100	First Yr Sem Critical Thinking	3
STA 225 	Introductory Statistics (CT)	3
	Critical Thinking Course	3
<i>Core 2</i>		
ENG 101 	Beginning Composition	3
ENG 201 	Advanced Composition	3
CMM 103 	Fund Speech-Communication	3
MTH 140 	Applied Calculus	3
NRE 111 	Living Systems	4
	or BSC 104  Introduction to Biology	
	Core II Humanities	3
	Core II Social Science	3
	Core II Fine Arts	3
<i>Additional University Requirements</i>		
	Writing Intensive	3
	Writing Intensive	3
	Multicultural or International	3
CIT 490 	Capstone Project in CIT	3
	or CIT 470  Internship in CIT	
Major-Specific		
IST 150	Spreadsheet & Database Prin	3
CS 105 	Expl World with Computing (CT)	3
CS 110	Computer Science I	3
CS 120	Computer Science II	3
CS 210	Data Structures and Algorithms	3
CIT 260 	Instrumentation	3
CIT 263 	Web Programming I	3
CIT 265	C# NET Programming	3
CIT 313 	Web Programming II	3
CIT 332 	Software Engineering I	3

CIT 333	Software Engineering II	3
CIT 352	Network Protocols and Admin	3
CIT 365 	Database Management	3
ART 214	Foundations: Grid/Chroma	3
	or ART 219 Foundations: Frame/Time	
MGT 320	Principles of Management	3
CIT 490 	Capstone Project in CIT (C)	3
	or CIT 470  Internship in CIT	
MTH 140 	Applied Calculus	3
STA 225 	Introductory Statistics (CT)	3
NRE 111 	Living Systems	4
	or BSC 104  Introduction to Biology	
NRE 212	Energy	3
	Physical/Natural Science Elective	4
Area of Emphasis-Specific		
CIT 410	Electronic Commerce	3
CIT 413	iOS Development	3
CIT 414	Android Development	3
CIT 416	Advanced Web Programming	3
CIT 466	Database Programming	3
DFIA 445	Mobile and Web Pen Testing	4
	Free Elective	3
	Free Elective	3

Major Information

- Students are required to know and track their degree requirements for graduation or for entrance to a professional school.
- Coursework listed as "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. For example, a writing intensive literature course could satisfy the Core II Humanities requirement as well as the University writing intensive requirement.
- 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 prerequisite mathematics and science courses.
- The Computer and Information Technology major is a four-year program that requires a minimum of 120 credit hours, 40 of which must be at the 300-400 level.

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Four Year Plan

A major in Computer and Information Technology provides a solid grounding in the information technology field. CIT is a cutting-edge program rooted and grounded in courses that are both highly theoretical while also extremely applied in nature. This area of emphasis allows students to specialize in developing web applications

and content using web-based development languages, and the effective design and organization of databases, including the development of fully functional web application systems. Courses in mobile application development will teach students how to build apps for Android and iOS while integrating those apps with web apps.

Course	Title	Credit Hours
First Year		
First Semester		
IST 150	Spreadsheet & Database Prin	3
ENG 101 🦋	Beginning Composition	3
NRE 111 🦋 or BSC 104 🦋	Living Systems or Introduction to Biology	4
Core II Fine Arts		3
CS 105 🦋	Expl World with Computing (CT)	3
UNI 100	Freshman First Class	1
Credit Hours		17
Second Semester		
CS 110	Computer Science I	3
CMM 103 🦋🎓	Fund Speech-Communication	3
ENG 201 🦋	Advanced Composition	3
FYS 100	First Yr Sem Critical Thinking	3
MTH 140 🦋	Applied Calculus	3
Credit Hours		15
Second Year		
First Semester		
CS 120	Computer Science II	3
CIT 260 🎓	Instrumentation	3
CIT 263 🎓	Web Programming I	3
MTH 220 🦋	Discrete Structures	3
Credit Hours		12
Second Semester		
ART 214 or ART 219	Foundations: Grid/Chroma or Foundations: Frame/Time	3
CIT 313 🎓	Web Programming II	3
CS 210	Data Structures and Algorithms	3
Multicultural or International (CT)		
STA 225 🦋	Introductory Statistics (CT)	3
Credit Hours		12
Third Year		
First Semester		
CIT 265	C# NET Programming	3
CIT 332 🎓	Software Engineering I	3
CIT 365 🎓	Database Management	3
Core II Social Science (CT)		3
Free Elective		3
Credit Hours		15
Second Semester		
CIT 333 🎓	Software Engineering II	3
CIT 410	Electronic Commerce	3
DFIA 445	Mobile and Web Pen Testing	4
Physical/Natural Science Elective		4

Writing Intensive	3	
Free Elective	3	
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Credit Hours	20	
Fourth Year		
First Semester		
CIT 352	Network Protocols and Admin	3
CIT 413	iOS Development	3
CIT 466	Database Programming	3
NRE 212	Energy	3
Writing Intensive	3	
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Credit Hours	15	
Second Semester		
CIT 414	Android Development	3
CIT 416	Advanced Web Programming	3
MGT 320	Principles of Management	3
Free Elective		2
CIT 490 🦋 or CIT 470 🦋	Capstone Project in CIT or Internship in CIT	3
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Credit Hours	14	
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Total Credit Hours	120	