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ON DEVELOPMENT

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.

ORE 1: CRIT	TICAL THINKING				COF	RE 2:				
CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRADE
FYS 100	First Year Seminar	•	3			ENG 101	Beginning Composition	•	3	
STA 150	Critical Thinking Course	•	3			ENG 201	Advanced Composition	•	3	
CS 105	Critical Thinking Course	•	3			CMM 103	Fund Speech-Communication	•	3	
						MTH 140	Applied Calculus	• •	3	
Addition	al University Requirements Writing Intensive		3			NRE 111 or BSC 104	Physical/Natural Science	• •	4	
	Writing Intensive		3				Core II Humanities	•	3	
	Multicultural or International		3				Core II Social Science	•	3	
CIT 490/470	Capstone		3				Core II Fine Arts	•	3	

MAJOR

All Computer Information Technology majors are required to take the following courses:

CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
CIT 150	Spreadsheet & Database Prin	•	3		CIT 365	Database Management	•	3	
CS 105	Expl World with Computing (CT)	•	3		ART 214 or	Foundations: Grid/Chroma or	•	3	
CS 110	Computer Science I	•	3		219	Foundations: Frame/Time			
CS 120	Computer Science II	•	3		MGT 320	Principles of Management	•	3	
CS 210	Data Structures and Algorithms	•	3		CIT	Senior Project or Internship (C)	•	3	
CIT 260	Instrumentation	•	3		490/470				
CIT 263	Web Programming I	•	3		MTH 140	Applied Calculus	• •	3	
CIT 266	Applied C++ Programming	•	3		STA 150	Foundations of Statistics	•	3	
CIT 313	Web Programming II	•	3		STA 150L	Foundations of Statistics Lab	•	1	
CIT 332	Software Engineering I	•	3		NRE 111 or	3 /	•	4	
CIT 333	Software Engineering II	•	3		BSC 104	to Biology			
CIT 352	Network Protocols and Admin	•	3		NRE 212	Energy	•	3	
			-		MTH 220	Discrete Structures	• •	3	

AREA OF EMPHAS

Students who wish to add an area of emphasis in Web and Mobile Applications Development must take the following specific courses:

CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
CIT 340	Game Development I	•	3		CIT 447	Modeling/Simulation Development	•	3	
CIT 440	Computer Graphics for Gaming	•	3		CIT 448	Mobile Game Development	•	3	
CIT 441	Game Development II	•	3		PHY 201	College Physics I	•	3	
CIT 443	Game Development III	•	3		PHY 202	College Physics I Lab	•	1	
CIT 446	3D Modeling and Animation	•	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 "elective" may vary for each student. Students are encouraged to use elective hours toward a minor or toward prerequisities.
- 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 3xx-4xx level.
- PHY 201 College Physics I is based on an ACT Mathematics score of 27 or higher. Students with an ACT Mathematics score less than 27 will be placed in the appropriate prerequisite mathematics courses.

🗬 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.

Major Requirement

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.

Summer Term (optional):

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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. Game development combines sound principles of computer application development with computer game development. This connection better serves students who are coming to Marshall University with aspirations of developing computer, console, and mobile games.

PATE 110 re Living Systems or Introduction BSC 104/104L be Biology w/ Lab SSC 104/104L to Biology w/ Lab SSC 104/104L to Biology w/ Lab STA 150 Foundations of Statistics TOTAL HOURS Summer Term (optional): STA 150 Foundations of Statistics Lab INI 100 Freshman First Class IDINI 100 Freshman First	ng com	puter, console,	and mobile games.									
ENG 101 Beginning Composition			FALL SEMESTER						SPRING SEMESTER			
NRE 111 or Living Systems or Introduction BSC 104/104L to Biology w/ Lab		CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRAD
BSC 104/104L to Biology w/ Lab CS 105 Expl World with Computing STA 150 Foundations of Statistics STA 150 Foundations of Statistics by 1 UNI 100 Freshman First Class 1 TOTAL HOURS Summer Term (optional): FALL SEMESTER CODE COURSE NAME CS 120 Computer Science II		ENG 101	Beginning Composition	•	3			CS 110	Computer Science I	•	3	
CS 105 Expl World with Computing \$3		NRE 111 or	3 ,	• •	4			ENG 201	Advanced Composition	•	3	
STA 150 Foundations of Statistics 3	1	BSC 104/10						FYS 100	First Year Sem Crit Thinking	•	3	
STA 150 Foundations of Statistics 3	5	CS 105						MTH 140	Applied Calculus	• •	3	
TOTAL HOURS Summer Term (optional): FALL SEMESTER CODE COURSE NAME CS 120 Computer Science II	1							CIT 150	Spreadsheet & Database Prin	•	3	
TOTAL HOURS Summer Term (optional): FALL SEMESTER CODE COURSE NAME CS 120 Computer Science II	i 🗌			•								
Summer Term (optional): FALL SEMESTER	١.	UNI 100	Freshman First Class		1							
FALL SEMESTER CODE COURSE NAME CS 120 Computer Science II		TOTAL HO	URS		15			TOTAL HO	DURS		15	
CODE COURSE NAME CS 120 Computer Science II S 2 ART 214 or Foundations: Grid/Chroma or CIT 260 Instrumentation CIT 260 Instrumentation CIT 263 Web Programming I COR II Fine Arts S 3 CIT 313 Web Programming II PHY 201 College Physics I PHY 202 College Physics I I COMB PHY 203 Fund Speech Communication TOTAL HOURS Summer Term (optional): FALL SEMESTER CODE COURSE NAME CIT 266 Applied C++ Programming	S	ummer Term (opt	tional):									
CS 120 Computer Science II			FALL SEMESTER						SPRING SEMESTER			
CIT 260 Instrumentation		CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRAD
CIT 263 Web Programming I Core II Fine Arts 3 CIT 313 Web Programming II PHY 201 College Physics I PHY 202 College Physics I Lab 1 CIT 313 Web Programming II PHY 202 College Physics I Lab 1 CIT 314 CIT 315 Prince Elective FALL SEMESTER CODE COURSE NAME CIT 365 Database Management CIT 360 Game Development I CIT 340 Game Development I COTAL HOURS TOTAL HOURS 15 TOTAL HOURS 16 SPRING SEMESTER CIT 340 Game Development I CIT 352 Network Protocols and Admin CIT 340 Computer Graphics for Gaming CIT 344 Mobile Game Development II CIT 345 CODE COURSE NAME CIT 352 Network Protocols and Admin CIT 346 Mobile Game Development III		CS 120	Computer Science II	•	3			ART 214 o	or Foundations: Grid/Chroma or	•	3	
Core Fine Arts 3	•	CIT 260	Instrumentation	•	3			219	Foundations: Frame/Time			
PHY 201 College Physics I Lab 1	•	CIT 263	Web Programming I	•	3			CS 210	Data Structures and Algorithms	•	3	
PHY 201 College Physics I Lab 1			Core II Fine Arts	•	3		***	CIT 313	3 3	•	3	
TOTAL HOURS Summer Term (optional): FALL SEMESTER CODE COURSE NAME CIT 266 Applied C++ Programming		PHY 201	College Physics I	•	3		**	MTH 220	Discrete Structures	• •	3	
Summer Term (optional): FALL SEMESTER	ŀ	PHY 202	College Physics I Lab	•	1			CMM 103	Fund Speech Communication	•	3	
CODE COURSE NAME CIT 266 Applied C++ Programming 3 CIT 333 Software Engineering II CIT 332 Software Engineering I CIT 340 Game Development I CIT 340 Game Development I CODE II Social Science (M/I) TOTAL HOURS TOTAL HOURS Summer Term (optional): FALL SEMESTER CODE COURSE NAME CIT 343 Software Engineering II CIT 441 Game Development II CIT 446 3D Modeling and Animation COOF II Humanities Free Elective TOTAL HOURS Summer Term (optional): FALL SEMESTER CODE COURSE NAME CIT 352 Network Protocols and Admin CIT 443 Game Development III CIT 440 Computer Graphics for Gaming CIT 448 Mobile Game Development	S				16			TOTAL HO	DURS		15	
CIT 266 Applied C++ Programming			FALL SEMESTER						SPRING SEMESTER			
CIT 332 Software Engineering I		CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRAI
CIT 365 Database Management		CIT 266	Applied C++ Programming	•	3		₹	CIT 333	Software Engineering II	•	3	
TOTAL HOURS Summer Term (optional): FALL SEMESTER CODE COURSE NAME HRS GRADE CIT 352 Network Protocols and Admin CIT 440 Computer Graphics for Gaming TOTAL HOURS SPRING SEMESTER CODE COURSE NAME I CIT 443 Game Development III	•	CIT 332	Software Engineering I	•	3			CIT 441	Game Development II	•	3	
TOTAL HOURS Summer Term (optional): FALL SEMESTER CODE COURSE NAME CIT 352 Network Protocols and Admin CIT 440 Computer Graphics for Gaming TOTAL HOURS TOTAL HOURS SPRING SEMESTER CODE COURSE NAME CIT 443 Game Development III	•	CIT 365	Database Management	•	3			CIT 446	3D Modeling and Animation	•	3	
TOTAL HOURS Summer Term (optional): FALL SEMESTER CODE COURSE NAME CIT 352 Network Protocols and Admin CIT 440 Computer Graphics for Gaming TOTAL HOURS TOTAL HOURS SPRING SEMESTER CODE COURSE NAME CIT 443 Game Development III		CIT 340	Game Development I	•	3				Core II Humanities	•	3	
TOTAL HOURS Summer Term (optional): FALL SEMESTER CODE COURSE NAME HRS GRADE CODE COURSE NAME I CIT 352 Network Protocols and Admin 3 CIT 443 Game Development III CIT 440 Computer Graphics for Gaming 3 CIT 448 Mobile Game Development TOTAL HOURS SPRING SEMESTER CODE COURSE NAME I CIT 443 Game Development III CIT 440 Computer Graphics for Gaming TOTAL HOURS			Core II Social Science (M/I)	•	3				Free Elective		2	
FALL SEMESTER CODE COURSE NAME HRS GRADE CIT 352 Network Protocols and Admin Olive CIT 440 Computer Graphics for Gaming SPRING SEMESTER CODE COURSE NAME I CIT 443 Game Development III CIT 440 Computer Graphics for Gaming Olive CIT 448 Mobile Game Development		TOTAL HO	URS		15			TOTAL HO	DURS		14	
CODE COURSE NAME HRS GRADE CODE COURSE NAME I CIT 352 Network Protocols and Admin ♦ 3 CIT 443 Game Development III ♦ CIT 440 Computer Graphics for Gaming ♦ 3 CIT 448 Mobile Game Development ♦	S	ummer Term (opt	tional):									
CIT 352 Network Protocols and Admin 3 CIT 443 Game Development III CIT 440 Computer Graphics for Gaming 3 CIT 448 Mobile Game Development			FALL SEMESTER						SPRING SEMESTER			
CIT 440 Computer Graphics for Gaming • 3 CIT 448 Mobile Game Development •		CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRAI
		CIT 352	Network Protocols and Admin	•	3			CIT 443	Game Development III	•	3	
CIT 447 Modeling/Simulation Development NRE 212 Energy Writing Intensive MGT 320 Principles of Management CIT Senior Project or Internship 490/470 Writing Intensive Writing Intensive Writing Intensive Writing Intensive Writing Intensive Writing Intensive MGT 320 Principles of Management Writing Intensive Writing Intensive Writing Intensive MGT 320 Principles of Management Which is a senior Project or Internship Writing Intensive MGT 320 Principles of Management Which is a senior Project or Internship Writing Intensive MGT 320 Principles of Management Which is a senior Project or Internship Writing Intensive Writing Intensive Writing Intensive Writing Intensive MGT 320 Principles of Management		CIT 440	Computer Graphics for Gaming	•	3			CIT 448	Mobile Game Development	•	3	
NRE 212 Energy ◆ 3		CIT 447	Modeling/Simulation Development	. •	3			MGT 320	Principles of Management	•	3	
Writing Intensive Writing Intensive		NRE 212	•						Senior Project or Internship	• •	3	
			which g intensive		J				Writing Intensive	•	3	
											15	