CURRICULUM PLAN COLLEGE OF ENGINEERING AND COMPUTER SCIENCES 2023-2024 MY ADVISOR'S NAME IS:

COMPUTER INFO & TECH GAME AND SIMULATION DEVELOPMENT

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: CRITICAL THINKING						CORE 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			
Additiona	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				
1	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	Living Systems or Introduction	•	4	
	CIT 333	Software Engineering II	•	3			BSC 104	to Biology			
	CIT 352	Network Protocols and Admin	•	3			NRE 212	Energy	•	3	
	C 352			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.

FOUR YEAR PLAN COLLEGE OF ENGINEERING AND COMPUTER SCIENCES 2023-2024

COMPUTER INFO & TECH GAME AND SIMULATION DEVELOPMENT

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 applica-

		FALL SEMESTER						SPRING SEMESTER			
	CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRAD
	ENG 101	Beginning Composition	•	3			CS 110	Computer Science I	•	3	
	NRE 111 d	or Living Systems or Introduction	• •	4			ENG 201	Advanced Composition	•	3	
	BSC 104/	104L to Biology w/ Lab					FYS 100	First Year Sem Crit Thinking	•	3	
	CS 105	Expl World with Computing	•	3			MTH 140	Applied Calculus	• •	3	
	STA 150	Foundations of Statistics	•	3			CIT 150	Spreadsheet & Database Prin	•	3	
	STA 150L	Foundations of Statistics Lab	•	1							
	UNI 100	Freshman First Class		1							
	TOTAL H	DURS		15			TOTAL HO	DURS		15	
Sun	nmer Term (o	otional):									
	_	FALL SEMESTER					-	SPRING SEMESTER			
	CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRAD
	CS 120	Computer Science II	•	3			ART 214 o	r Foundations: Grid/Chroma or	•	3	
**	CIT 260	Instrumentation	•	3			219	Foundations: Frame/Time			
**	CIT 263	Web Programming I	•	3			CS 210	Data Structures and Algorithms	•	3	
		Core II Fine Arts	•	3		***	CIT 313	Web Programming II	•	3	
	DI IV. 0.04	Callaga Dhugias I	_	3			MTH 220	Discrete Structures	• •	3	
	PHY 201	College Physics I	•	3		6.4				_	

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TOTAL HOURS

			FALL SEMESTER						SPRING SEMESTER			
		CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRADE
		CIT 266	Applied C++ Programming	•	3		₹	CIT 333	Software Engineering II	•	3	
r-1	**	CIT 332	Software Engineering I	•	3			CIT 441	Game Development II	•	3	
田田	₹	CIT 365	Database Management	•	3			CIT 446	3D Modeling and Animation	•	3	
HR		CIT 340	Game Development I	•	3				Core II Humanities	•	3	
			Core II Social Science (M/I)	•	3				Free Elective		2	
AR												
ΥE												
		TOTAL HO	OURS		15		TOTAL HOURS				14	

TOTAL HOURS

		FALL SEMESTER						SPRING SEMESTE	R		
	CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRADE
	CIT 352	Network Protocols and Admin	•	3			CIT 443	Game Development III	•	3	
	CIT 440	Computer Graphics for Gaming	•	3			CIT 448	Mobile Game Development	•	3	
UR	CIT 447	Modeling/Simulation Development	•	3			MGT 320	Principles of Management	•	3	
0	NRE 212	Energy	•	3			CIT	Senior Project or Internship	• •	3	
R F		Writing Intensive	•	3			490/470				
A								Writing Intensive	•	3	
ΧE											
	TOTAL HOURS			15			TOTAL HOURS			15	
	Summer Term (op	tional):									

Summer Term (optional):

INVOLVEMENT OPPORTUNITIES

- Student Government Association
- Campus Activity Board
- JMELI
- · Commuter Student Advisory Board
- Community Engagement Ambassadors
- Club Sports
- · Religious Organizations
- Political Organizations
- · Residence Hall Association
- Cultural Organizations
- National Society of Leadership and Success
- · Greek Life

RELATED MAJORS

- Computer Science
- Digital Forensics
- · Computer and Information Security
- Mechanical/Civil Engineering.

GRADUATION REQUIREMENTS

- Have a minimum of 120 credit hours (some colleges or majors require more);
- · Have an overall and Marshall Grade Point Average of 2.00 or higher;
- Have an overall Grade Point Average of 2.00 or higher in the major area of study;
- Have earned a grade of C or better in English 201 or 201 H;
- Have met all major(s) and college requirements;
- Have met the requirements of the Core Curriculum
- · Have met the residence requirements of Marshall University, including 12 hours of 300/400 level coursework in the student's college (see section entitled "Residence Requirements" in the undergraduate catalogue);
- Be enrolled at Marshall at least one semester of the senior year;
- Have transferred no more than 72 credit hours from an accredited West Virginia twoyear institution of higher education.

Colleges and specific programs may have unique requirements that are more stringent than those noted above. Students are responsible for staying informed about and ensuring that they meet the requirements for graduation.

This academic map is to be used as a guide in planning your coursework toward a degree. Due to the complexities of degree programs, it is unfortunate but inevitable that an error may occur in the creation of this document. The official source of degree requirements at Marshall University is DegreeWorks available in your myMU portal. Always consult regularly with your advisor.

YEAR ONE



Stay on the Herd Path and come Have questions? Need to talk? You to class! Class attendance is more already have a Friend-At-Marshall important to your success than ready to help you succeed. Find your FAM Peer Mentor here: www.marshall.edu/fam

Develop relationships with professors

who can serve as future references by

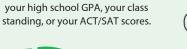
attending their office hours.

Join or create a club or organization

on campus about a particular issue

you care about. Marshall has more

than 200 student organizations.





In order to graduate on time, you need to take an average of 15 credits per semester. Are you on track? Take 15 to Finish!



Declare an area of emphasis within CIT before your 30th hour. Participate in a Career Exploration Experience (job shadow) to help decide career goals.



Sign up for Handshake! Handshake is the #1 place to launch a career with no connections, experience, or luck required. The platform connects up-and-coming talent with 650,000+ employers.

YEAR TWO



Are you completing enough credits to graduate on time? Dropping or failing a class can put you behind. Use summer terms to quickly get back on track.

Join professional associations in your

field, like ACM or IEEE.

College is a great time to experience

the world! Consider studying abroad

in the summer, during Spring Break,

or for an entire semester.



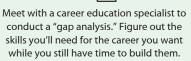
Take a Community Based Learning (CBL) class that connects course content to the community. Stay engaged and make a difference.



Think about who can help you grow as a student and a professional professors, advisors, alumni, etc. and ask at least one to be your mentor.



Have you considered adding a minor? Think about personal areas of interest you'd like to explore or how you might enhance your major with a related skill set.



YEAR THREE



Team up with a faculty mentor and apply for the John Marshall Scholars Award.



CIT - GAME AND SIMULATION DEVELOPMENT - 2023-2024

Be at the top of your professional game! Prepare a final resume and practice your interview skills with a career coach in Career Education.



Join the Marshall Mentor Network and connect with professionals in your field to discuss your major, career path, and more.



No need to wait until graduate school. Discuss undergraduate research opportunities with faculty in your major right now.



Are you on track to graduate? Meet with your advisor for your Junior Eval to make sure you know what requirements you have left.



Networking is key! Attend a Career Expo to seek employment opportunities and network with employers in your field.



Wanting to learn about a topic outside of those we offer? Consider an independent study.

YEAR FOUR



This is it! Are you on track to graduate? Meet with your advisor for your Senior Eval to see what requirements you have left.



Did you do really well in a hard course? Become a Tutor or a Supplemental Instructor.



Take a pulse check. Know what you need to do every year to keep your grants, scholarships, or federal financial aid.



Don't enter your field with zero experience! Secure an internship related to your field of study.



Apply to be a New Student Orientation Leader or a Campus Tour Guide.





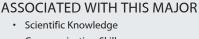
Talk to faculty about pursuing optional professional certifications.



Want to continue your education and increase your opportunities? Talk to a faculty member about whether graduate school fits your career goals.



Marshall University College of Engineering and **Computer Sciences** One John Marshall Drive Huntington, WV 25755 1-304-696-5453 cecs@marshall.edu marshall.edu/cecs



· Communication Skills

TRANSFERABLE SKILLS

 Technology Literacy Flexibility

Problem Solving

· Needs Assessment

Integration of Technologies

• Ability to Work as Part of a Team

ASSOCIATED CAREERS

Product Development

Process Development

Systems Analysis

· Quality Assurance/Control

· Environmental Analyses

Forensics

Medicine

· Materials Science

Education

Healthcare

 Sales Marketing

Software Solutions

· Application Development

• Project Management