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

COMPUTER INFO & TECH GAME AND SIMULATION 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.

CORE 1: CRITICAL THINKING

CODE	COURSE NAME		HRS	GRADE
FYS 100	First Year Seminar	●	3	_____
STA 150	Critical Thinking Course	●	3	_____
CS 105	Critical Thinking Course	●	3	_____

Additional University Requirements

_____	Writing Intensive		3	_____
_____	Writing Intensive		3	_____
_____	Multicultural or International		3	_____
CIT 490/470	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	Applied Calculus	● ◆	3	_____
NRE 111 or BSC 104	Physical/Natural Science	● ◆	4	_____
_____	Core II Humanities	●	3	_____
_____	Core II Social Science	●	3	_____
_____	Core II Fine Arts	●	3	_____

MAJOR

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

CODE	COURSE NAME		HRS	GRADE
CIT 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 266	Applied C++ 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	_____

CODE	COURSE NAME		HRS	GRADE
CIT 365	Database Management	◆	3	_____
ART 214 or 219	Foundations: Grid/Chroma or Foundations: Frame/Time	◆	3	_____
MGT 320	Principles of Management	◆	3	_____
CIT 490/470	Senior Project or Internship (C)	◆	3	_____
MTH 140	Applied Calculus	● ◆	3	_____
STA 150	Foundations of Statistics	◆	3	_____
STA 150L	Foundations of Statistics Lab	◆	1	_____
NRE 111 or BSC 104	Living Systems or Introduction to Biology	◆	4	_____
NRE 212	Energy	◆	3	_____
MTH 220	Discrete Structures	● ◆	3	_____

AREA OF EMPHAS

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

CODE	COURSE NAME		HRS	GRADE
CIT 340	Game Development I	◆	3	_____
CIT 440	Computer Graphics for Gaming	◆	3	_____
CIT 441	Game Development II	◆	3	_____
CIT 443	Game Development III	◆	3	_____
CIT 446	3D Modeling and Animation	◆	3	_____

CODE	COURSE NAME		HRS	GRADE
CIT 447	Modeling/Simulation Development	◆	3	_____
CIT 448	Mobile Game Development	◆	3	_____
PHY 201	College Physics I	◆	3	_____
PHY 202	College Physics I Lab	◆	1	_____
_____	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.

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

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.

FOUR YEAR PLAN | COLLEGE OF ENGINEERING AND COMPUTER SCIENCES | 2023-2024 | MY ADVISOR'S NAME IS: _____

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 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.

YEAR ONE

FALL SEMESTER

CODE	COURSE NAME	HRS	GRADE
ENG 101	Beginning Composition	3	
NRE 111 or BSC 104/104L	Living Systems or Introduction to Biology w/ Lab	4	
CS 105	Expl World with Computing	3	
STA 150	Foundations of Statistics	3	
STA 150L	Foundations of Statistics Lab	1	
UNI 100	Freshman First Class	1	
TOTAL HOURS		**15**	

SPRING SEMESTER

CODE	COURSE NAME	HRS	GRADE
CS 110	Computer Science I	3	
ENG 201	Advanced Composition	3	
FYS 100	First Year Sem Crit Thinking	3	
MTH 140	Applied Calculus	3	
CIT 150	Spreadsheet & Database Prin	3	
TOTAL HOURS		**15**	

Summer Term (optional):

YEAR TWO

FALL SEMESTER

CODE	COURSE NAME	HRS	GRADE
CS 120	Computer Science II	3	
CIT 260	Instrumentation	3	
CIT 263	Web Programming I	3	
_____	Core II Fine Arts	3	
PHY 201	College Physics I	3	
PHY 202	College Physics I Lab	1	
TOTAL HOURS		**16**	

SPRING SEMESTER

CODE	COURSE NAME	HRS	GRADE
ART 214 or 219	Foundations: Grid/Chroma or Foundations: Frame/Time	3	
CS 210	Data Structures and Algorithms	3	
CIT 313	Web Programming II	3	
MTH 220	Discrete Structures	3	
CMM 103	Fund Speech Communication	3	
TOTAL HOURS		**15**	

Summer Term (optional):

YEAR THREE

FALL SEMESTER

CODE	COURSE NAME	HRS	GRADE
CIT 266	Applied C++ Programming	3	
CIT 332	Software Engineering I	3	
CIT 365	Database Management	3	
CIT 340	Game Development I	3	
_____	Core II Social Science (M/I)	3	
TOTAL HOURS		**15**	

SPRING SEMESTER

CODE	COURSE NAME	HRS	GRADE
CIT 333	Software Engineering II	3	
CIT 441	Game Development II	3	
CIT 446	3D Modeling and Animation	3	
_____	Core II Humanities	3	
_____	Free Elective	2	
TOTAL HOURS		**14**	

Summer Term (optional):

YEAR FOUR

FALL SEMESTER

CODE	COURSE NAME	HRS	GRADE
CIT 352	Network Protocols and Admin	3	
CIT 440	Computer Graphics for Gaming	3	
CIT 447	Modeling/Simulation Development	3	
NRE 212	Energy	3	
_____	Writing Intensive	3	
TOTAL HOURS		**15**	

SPRING SEMESTER

CODE	COURSE NAME	HRS	GRADE
CIT 443	Game Development III	3	
CIT 448	Mobile Game Development	3	
MGT 320	Principles of Management	3	
CIT 490/470	Senior Project or Internship	3	
_____	Writing Intensive	3	
TOTAL HOURS		**15**	

Summer Term (optional):

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

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.