



















COMPUTER SCIENCE, B.S.














 - 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
MTH 229 	Calculus/Analytic Geom I (CT)	5
	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 229  	Calculus/Analytic Geom I (CT)	5
	Sci w/Lab Core II Physical/Natural Science	4
	Core II Humanities	3
	Core II Social Studies	3
	Core II Fine Arts	3
<i>Additional University Requirements</i>		
	Writing Intensive	3
	Writing Intensive	3
	Multicultural or International	3
CS 490 	Senior Project	3
Major-Specific		
MTH 220 	Discrete Structures	3
MTH 229  	Calculus/Analytic Geom I (CT)	5
MTH 230	Calculus/Analytic Geom II	4
MTH 329 	Elementary Linear Algebra	3
STA 345	Applied Prob and Stat	3
CS 110 	Computer Science I	3
CS 120 	Computer Science II	3
CS 210 	Data Structures and Algorithms	3
CS 215	Adv Data Struct and Algorithms	3
CS 300 	Programming Languages	3
CS 305	Software Engineering	3
CS 310 	Software Engineering II	3
CS 320 	Internetworking	3
CS 330	Operating Systems	3
CS 360	Automata and Formal Languages	3
CS 402	Computer Architecture	3

CS 410	Database Engineering	3
CS 430 	Cyber Security	3
CS 490 	Senior Project	3
ENGR 221	Engineering Economy	3
ENG 354 	Scientific & Tech Writing	3
MGT 320 	Principles of Management	3
<i>CS Electives</i>		
Select two of the following:		6
CS 315	Software Quality Assurance	
CS 370	Computer Graphics	
CS 404	High Performance Computing	
CS 405	Computing for Bioinformatics	
CS 425	Computational Intelligence	
CS 435	Cyber Risk	
CS 440	Digital Image Processing	
CS 455	Systems Engineering	
CS 480	Special Topics	
CS 481	Special Topics	
CS 482	Special Topics	
CS 483	Special Topics	
<i>Science w/ Lab</i>		
Select three of the following with labs:		12
BSC 120 	Principles of Biology (or above)	
CHM 211  & CHM 217 	Principles of Chemistry I and Principles of Chem Lab I (or above)	
GLY 200  & GLY 210L 	The Dynamic Earth and Earth Materials Lab (or above)	
PHY 201  & PHY 202 	College Physics I and General Physics I Laboratory (or above)	
PHY 211  & PHY 202 	University Physics I and General Physics I Laboratory (or above)	
Free Elective		3
Free Elective		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.
- Course offerings and course attributes are subject to change each semester. Please consult each semester’s schedule of courses for availability and attributes.