ARTIFICIAL INTELLIGENCE, BS

The impact of Artificial Intelligence (AI) on our world today is profound, as AI is transforming countless aspects of our life. AI is fundamentally rooted in computer science due to the strong foundational and applied connection between AI and computer science. To succeed in a career as an AI professional, knowledge is required in core topics in computer science and AI, as well as mathematics and statistics. Trained professionals with knowledge of AI are needed to understand existing techniques, as well as how to advance the field of AI in such career paths as machine learning engineer, data scientist, robotics engineer, AI for healthcare specialist, etc. Studying AI with a computer science foundation empowers students to develop technologies that can make a meaningful difference in the world.

Students earning the Bachelor of Science (BS) degree majoring in Artificial Intelligence must complete all University, College and departmental degree requirements for a total of 121 credits. These include General Education requirements and the following major requirements and ancillary requirements. Additional information, including a semester-by-semester flowchart of degree requirements, can be found on the departmental website. Students completing the Bachelor of Science (BS) degree majoring in Artificial Intelligence must comply with all College of Engineering academic policies and requirements.

Major and Ancillary Requirements		Hours
Major Courses		
ENGR 101	The World of Engineering	1
ENGR 104	Fundamentals of Engineering	3
CS 100 or	CS I for Majors	4
CS 110	Honors CS I for Majors	
CS 101 or	CS II for Majors	4
CS 111	Honors CSII for Majors	
CS 201	Data Structures and Algorithms	4
CS 247	Cyber Law and Ethics	3
CS 265	Intro to AI and Data Science	3
CS 301	Database Management Systems	3
CS 423	Python for Big Data	3
CS 465	Artificial Intelligence	3
CS 470	Computer Algorithms	3
CS 483	Comp Foundations of ML	3
CS 495	Capstone Computing (AI Section)	3
AI 400-Level Elective (choose 4)		12
CS 451, CS 452, CS 455, CS 456, CS 460, CS 461, CS 463, CS 464, CS 466, CS 481, CS 484		
	Credit Hours Subtotal:	52
Ancillary Courses		
GES 255	Engineering Statistics I	3
MATH 125 or	Calculus I	4
MATH 145	Honors Calculus I	
MATH 126 or	Calculus II	4
MATH 146	Honors Calculus II	
MATH 227 or	Calculus III	4
MATH 247	Honors Calculus III	
MATH 237	Introduction to Linear Algebra	3
MATH 301	Discrete Mathematics	3
MATH 355	Theory Of Probability	3
Approved Natural Science		8
Any core curriculum Natural Science designated course except BSC 108, BSC 109, CH 104, CH 105, or PH 115.		
Approved Cognitive or Neuroscience		3
PY 381 or BSC 305		
Free electives		12
Mathematics courses below MATH 125, US and Global Citizenship designated courses, and courses already completing degree requirements cannot be used to fulfill this requirement.		
	Credit Hours Subtotal:	47
General Education Courses		
The specific courses each student completes in order to fulfill the University of Alabama's general education requirements will depend upon the particular degree program in which the student is enrolled. To determine how these general education requirements are integrated into your program of study, review your semester-by-semester flowchart and discuss with your academic advisor.		

Artificial Intelligence majors cannot complete an additional major in Computer Science.