

# Computer Science B.S.

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## Core Curriculum Courses

See the Core Curriculum Requirements (<http://coursecatalog.tamuc.edu/undergrad/core-curriculum-requirements/>) 42

## Required courses in the major

COSC 1436	Introduction to Computer Science and Programming	4
COSC 1437	Programming Fundamentals II	4
COSC 2325	Introduction to Machine Language and Digital Logic.	3
COSC 2336	Data Structures and Algorithms	3
CSCI 303	Technical Communication for Computing Professionals	3
CSCI 340	Database	3
CSCI 359	Systems Analysis & Design	3
CSCI 380	Web Programming and Interface Design	3
CSCI 415	Ethics, Law & Cybersecurity	3
CSCI 428	Object Oriented Design	3
CSCI 430	Operating Systems	3
CSCI 434	Computer Networks	3
CSCI 440	App Software Project Dev	3
CSCI 450	Computer Architecture	3

**Specialization Tracks in the Major (Optional)** 0

### Artificial Intelligence

CSCI 338	Introduction to Artificial Intelligence with Python	
CSCI 371	Natural Language Processing	
CSCI 377	Image Processing and Computer Vision	

### Data Science

CSCI 333	Applied Data Analytics with Python	
CSCI 371	Natural Language Processing	
CSCI 373	Data Engineering	

### Cybersecurity

CSCI 310	Cybersecurity	
CSCI 345	Data Security and Privacy	
CSCI 352	Digital Forensics	

plus 9 semester hours of advanced CSCI courses 18

## Required support courses

MATH 2318	Linear Algebra	3
MATH 2413	Calculus I *	
MATH 2414	Calculus II *	
MATH 2305	Discrete Mathematics	3
MATH 403	Mathematical Statistics	3
PHYS 2425 & PHYS 2426	University Physics I and University Physics II *	

Up to 7 SCH of advisor approved electives if any of science sequence courses or Math support courses are counted for CORE requirements. 7

**Total Hours** 120

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This course should be used to satisfy the Core Curriculum Requirements.

A grade of "C" or higher must be earned in all courses in this major.