

Fast Track Bachelors + Masters Computer Science

The Fast-Track Bachelors + Masters degree program allows undergraduate students in the Computer Science program to begin coursework towards the non-thesis option of the Master of Science in Computer Science program during their senior year at East Texas A&M University. Students can earn a B.S. and M.S. degree in five years upon completion of degree requirements for both degrees. For this Fast-Track Bachelors + Masters program, 6 credits of graduate coursework can be applied to the undergraduate degree. To be admitted to the Fast-Track Bachelors + Masters program in Computer Science, the candidate must be a Computer Science major with an overall Undergraduate GPA of 3.25. Students must apply for the Fast-Track Bachelors + Masters program during the semester they will earn 90 semester hours or more towards their bachelors program. Once admitted, the BS/MS candidate must maintain a 3.25 Undergraduate GPA.

Core Curriculum Courses

See the Core Curriculum Requirements (<https://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
plus 18 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 II	3
PHYS 2425	University Physics I *	
or PHYS 2426	University Physics II	

Graduate Core Courses

CSCI 520A	Data Structures and Algorithm Analysis	4
CSCI 532A	Algorithm Design	3

Total Hours 120

* 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 with the exception of the Support Course a grade of "D" is acceptable.

Master of Science in Computer Science - (Accelerated BS/MS) Option II Non-Thesis

The BS-MS accelerated degree program allows undergraduate students in the Computer Science program to begin coursework towards the non-thesis option of the Master of Science in Computer Science program during their senior year at Texas A&M University-Commerce. Students can earn a B.S. and M.S. degree in five years upon completion of degree requirements for both degrees. For this accelerated program, 6 credits of graduate coursework can be applied to both the BS and MS degrees. Once admitted, the BS/MS candidate must maintain a 3.25 Undergraduate GPA. In the final semester of the student's undergraduate program, a new online Apply Texas Application for the master's Accelerated program must be submitted to gain admission and continue taking classes to complete the master's program.

Research (3 semester hours)

CSCI 595	Research Literature and Techniques	3
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Required Core Courses (16 Semester Hours)

CSCI 520A	Data Structures and Algorithm Analysis *	4
CSCI 530	Operating Systems	3
CSCI 532A	Algorithm Design *	3
CSCI 549	Automata Theory	3
Choose One of the Following: (3 Semester Hours)		
AI 500	Foundations of Artificial Intelligence	4
AI 510	Seminar in Artificial Intelligence Ethics	3
CSCI 556	Data Analysis & Visualization	3

Students must complete one of the following tracks

Unused track courses may be taken as electives

Software Engineering and Big Data Track (Choose two - 6 semester hours)

CSCI 524	Analysis & Design Softwr Sys	3
CSCI 548	Software Testing	3
CSCI 573	Big Data Computing and Analytics	3

Computer Networks & Cyber Security Track (Choose two - 6 semester hours)

CSCI 534	Networking - Routers and Switches	3
CSCI 563	Information Security	3
CSCI 554	Digital Forensics	3

Artificial Intelligence Track (Choose two - 6 semester hours)

CSCI 538	Artificial Intelligence Using Python	3
CSCI 574	Machine Learning	3
CSCI 560	Neural Networks and Deep Learning	3

Electives (12 Semester Hours)

Any graduate level CSCI courses except the pre-requisite courses (CSCI 515 & CSCI 516) or an appropriate supporting field with approval of the graduate advisor. Requirements for a minor will be determined by evaluating a student's background in computer science.

Total Hours	37
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* Courses shared with BS

Note: Successful completion of the Comprehensive Exam is required of all students.

First Year

Fall	Hours
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	0
Total Hours: 0	