

Bachelor of Science in Software Engineering to Master of Science in Data Science Fast Track

About This Program

The Bachelor of Science in Software Engineering to Master of Science in Data Science Fast Track enables outstanding senior undergraduate Software Engineering students to receive dual undergraduate/graduate course credit for six or nine hours of coursework. These designated graduate courses satisfy both bachelor's and master's degree requirements. This program presentation includes both undergraduate and graduate requirements. The undergraduate degree will be conferred immediately upon completion of the undergraduate degree requirements. Interested students should contact a graduate advisor to learn how to apply and participate.

ASSOCIATED PROGRAMS

For detailed information about the programs associated with this Fast Track, refer to their individual degree pages.

Software Engineering BS (<https://catalog.uta.edu/engineering/computer/undergraduate/software-engineering-bs/>)

Data Science MS (<https://catalog.uta.edu/engineering/computer/graduate/data-science-ms/>)

Admissions Criteria

An interested undergraduate student should apply to the program when within 30 hours of completing the software engineering bachelor's degree. The student must have completed at least 30 hours at UT Arlington, achieving a GPA of at least 3.25 in those courses, and have an overall GPA of at least 3.25. Additionally, the student have completed at least 12 hours of specified undergraduate foundation courses that are listed below with a minimum GPA of 3.3 in these courses.

CSE 2315	DISCRETE STRUCTURES	3
CSE 3318	ALGORITHMS & DATA STRUCTURES	3
MATH 3313	INTRODUCTION TO PROBABILITY	3
or IE 3301	ENGINEERING PROBABILITY	
CSE 3320	OPERATING SYSTEMS	3

For automatic admission to the graduate program the student must meet the following requirements.

- Complete a minimum of 6 and maximum of 9 hours of graduate coursework from the list of core courses for SE students.
- Earn B or better in all graduate courses intended for both undergraduate and graduate credit.
- Maintain UTA undergraduate cumulative GPA of 3.25 or above.

Undergraduate Fast Track students must take a minimum of 2 and a maximum of 3 of the following graduate courses:

Required		3
DASC 5301	DATA SCIENCE	
Chose 1-2 of the following:		3-6
DASC 5304	MACHINE LEARNING	
DASC 5305	DATA VISUALIZATION	
DASC 5306	BIG DATA MANAGEMENT	
Total Hours		6-9

Curriculum

Software Engineering Foundations 70

Complete the UTA Core curriculum and BSSE pre-professional program per catalog.

BSSE Specialization (Professional Program)

IE 3301	ENGINEERING PROBABILITY	3
or MATH 3313	INTRODUCTION TO PROBABILITY	
CSE 3302	PROGRAMMING LANGUAGES	3
CSE 3310	FUNDAMENTALS OF SOFTWARE ENGINEERING	3
CSE 3311	OBJECT-ORIENTED SOFTWARE ENGINEERING	3
CSE 3314	PROFESSIONAL PRACTICES	3

CSE 3315	THEORETICAL CONCEPTS IN COMPUTER SCIENCE AND ENGINEERING	3
CSE 3320	OPERATING SYSTEMS	3
CSE 3330	DATABASE SYSTEMS AND FILE STRUCTURES	3
CSE 3380	LINEAR ALGEBRA FOR CSE	3
or MATH 3330	INTRODUCTION TO LINEAR ALGEBRA AND VECTOR SPACES	
CSE 4316	COMPUTER SYSTEM DESIGN PROJECT I	3
CSE 4317	COMPUTER SYSTEM DESIGN PROJECT II	3
CSE 4321	SOFTWARE TESTING & MAINTENANCE	3
CSE 4322	SOFTWARE PROJECT MANAGEMENT	3
CSE 4361	SOFTWARE DESIGN PATTERNS	3
CSE 4380	INFORMATION SECURITY	3
Technical Electives		9
Select three computer science courses with approval from advisor. Two to three of these courses may be graduate level.		
Select up to three CS masters core courses.		
Masters program in Data Science		
Complete requirements for Master of Science in Data Science per catalog.		21-24
Total Hours		145-148

Program Completion

CONTINUATION

Students in the Fast Track program must meet the following requirements to stay in and graduate from the program:

- Maintain an overall undergraduate GPA of at least 3.25 and graduate GPA of at least 3.0.
- Earn a grade of B or better in graduate courses.
- Must complete at least two graduate courses with grades of B or better before graduating with their bachelor's degree.
- During the entire undergraduate experience at UTA, including the period of membership in the Fast Track program, a student cannot repeat more than three courses, and cannot repeat any course more than once. This requirement applies only to undergraduate courses; graduate courses cannot be repeated.

If at any time an undergraduate Fast Track student does not meet any of the above requirements, the student will be removed from the Fast Track program. Any graduate credits earned will be applied only to the undergraduate degree, and none of the other benefits of membership in the Fast Track program will apply.

Students dismissed from the Fast Track program will be eligible to apply to the Data Science graduate program as a regular applicant. However, graduate courses taken for credit in the undergraduate program will not be applied towards a graduate degree. Students will have to pay the required fee for the application, as well as meet all the requirements of admission to graduate school as outlined in the Graduate Catalog.

Advising Resources

First time in college students meet with engineering advisors in the UAEC (UAECengineering@uta.edu). Transfer students are advised prior to New Maverick Orientation by the department. Students, please read all student emails carefully and consult the department advising webpage for additional contact information and answers to common questions.

Location:

ERB 6th Floor: ERB 643, ERB 644, ERB 645, ERB 646, ERB 622A

Email:

cseugadvising@uta.edu

Phone:

817-272-3785

Web:

Find our contact information, walk-in advising schedule, and virtual appointment links here (<https://www.uta.edu/academics/schools-colleges/engineering/academics/departments/cse/students/undergraduate-advising/>)