



The BS in Data Science is offered in three focus areas through two colleges. Students electing the computer science focus earn their degree from the College of Engineering. Students electing either the mathematics focus or the statistics focus earn their degree from the College of Arts and Science. The choice of a focus area allows students to take specialized coursework in whichever of the three areas they have the most interest. The degree, BS in Data Science, is the same for all three focuses.

The BS in Data Science is an interdisciplinary degree built on a core triad of fields: statistics, mathematics, and computer science. Students in this program will learn how to acquire, analyze, communicate, and develop models from data through application of statistical, mathematical, and computer science skills. They will also learn data ethics and governance, including legitimate use and algorithmic fairness, as well as privacy, security, and stewardship. In their final year, students will demonstrate their ability to apply knowledge and skills and integrate them into a major data science project. The program allows students to complete their major and general education requirements with room for additional minors or certificates to further prepare them for careers or advanced study. With careful planning, students are also able to complete a second major in the affiliated triad disciplines (CS, Math, Statistics) or in Information Technology. Students who complete the BS in Data Science are prepared for careers in virtually every sector of industry, government, and academia, as well as advanced degrees.

Major Program Requirements - The BS in Data Science requires a total of 120 credit hours for completion. Within the major proper, all students must complete a total of 60 hours, consisting of the following four parts: 1) a core curriculum of 10 required courses (30 credits); 2) four intermediate-level core courses (12 credits) from a restricted list of six; 3) four advanced courses (12 credits) within the chosen focus area of Computer Science, Mathematics, or Statistics; and 4) 6 credits of experiential coursework consisting of case studies, internships, research, and/or thesis, 3 credits of which meet the MU capstone requirement. Students may meet the 6-credit requirement through a combination of such experiential coursework.

Students who complete the degree with the Computer Science focus will receive their degree from the College of Engineering; those who complete in Mathematics or Statistics will receive their degree from the College of Arts and Science.

Students earning a Bachelor of Science in Data Science are required to complete [University, general education](#), and [College of Arts and Science](#) requirements, students must also meet the following major program requirements. All major requirements in the College of Arts and Science must be completed with grades of C- or higher unless otherwise indicated. Selected foundational courses, which may fulfill some University general education requirements.

Refer to [JCCC/MU General Education guide](#) for equivalent courses.

Transfer Students - Students wishing to transfer to MU from an accredited college or university are subject to University regulations described in this catalog. The College of Engineering cooperates with many colleges through articulation agreements that help students transfer to MU with maximum ease and minimum loss of credits. A student may contact the College of Engineering Admissions Office to determine if their home institution participates in an agreement with the College of Engineering. Students who have completed all courses specified in the articulation agreement will be admitted into their desired degree program. All other transfer students are admitted on program discretion. Typically, transfer students with freshmen status must satisfy the same requirements as students entering college for the first time. Other students are admitted only after review of their transcript.

To be recommended for a BS degree from the College of Engineering, a student transferring from an accredited institution must complete at least 30 upper-level credits in the degree program at a UM System campus. At least 21 of the 30 credits must be upper-level engineering courses approved by the department awarding the degree.

A student transferring with senior standing from another UM System campus must complete the last 15 credits in residence on the campus where the degree program is located. Twelve of these 15 credits must be in engineering and approved by the department awarding the degree.

Any student whose enrollment in any college-level academic program resulted in dismissal, departure or who is on probation will not be admitted to the College of Engineering.

International Admission - International undergraduate students interested in studying in the College of Engineering can find information on academic and English language admission requirements on the website of the [MU Office of International Admissions](#). Any questions regarding international student admissions can be directed to that office at inter@missouri.edu.

GPA Requirements for Graduation from the College of Engineering:

- GPA of record of at least 2.0
- GPA of at least 2.0 in all engineering courses offered by one of the four campuses of the UM System. "Engineering courses" include all courses that are offered through the College of Engineering or its equivalent on the four campuses, or that have "Engineering" in the curricular designator. Only the last grade in a repeated course will be used in the calculation.

MU Requirements	Hrs	JCCC Equivalents	Hrs
Core Courses			
MATH 1400 Calculus for Social and Life Sciences I OR MATH 1500 Analytic Geometry and Calculus I	3	MATH 231 Business and Applied Calculus I* OR MATH 241 Calculus I*	3 5
MATH 2320 Discrete Mathematical Structures	3	CS 210 Discrete Structures I* AND CS 211 Discrete Structures II*	3 3
Intermediate Courses			
MATH 1700 Calculus II	3	MATH 242 Calculus II*	5

* JCCC course has a prerequisite or corequisite.

It is the STUDENT’S RESPONSIBILITY to check for updates to all transfer information. This transfer guide is provided as a service and is updated as needed. Degree requirements at the four-year colleges are subject to change by those institutions. To ensure you have the most accurate up to date information about the program, it is imperative you meet with an advisor at the transfer institution.