

Erik Jonsson School of Engineering and Computer Science

Bachelor of Science in Data Science



Data Science is an emerging discipline that lies at the intersection of computer science, mathematics, and statistics. With data being collected everywhere, including from smart phones, computers and televisions, there is a growing need to have qualified scientists who can identify and apply algorithms and statistical models to interpret big data. More than just analyzing information, data scientists utilize machine learning and software tools to process and manipulate data to help organizations visualize and find meaning in their data.

Career Potential

Data science is a rapidly growing sector of analytics and graduates seek positions in public and private industry where big data is needed to provide guidance and support to decision makers. In business sectors from finance, technology, healthcare and retail to manufacturing, data scientists are in high demand. Graduates may pursue job titles such as Data Scientist, Data Mining Engineer, Data Analyst, Decision Scientist, Machine Learning Scientist, Data Manager and Data Architect.



Data Science at UT Dallas

The BS in data science is an interdisciplinary degree that is jointly offered by the Department of Mathematical Sciences in the School of Natural Sciences and Mathematics and the Department of Computer Science in the Jonsson School of Engineering and Computer Science. Its curriculum provides a solid foundation in the disciplines of computer science, mathematics and statistics, and includes a capstone project. Our program prepares students for data scientist or related positions in industry, business and government, and also for graduate study in any of the three disciplines.

Students must earn 120 hours to graduate: 42 hours from the University's core curriculum, 65-67 hours in the major, plus 11-13 elective requirements where students can tailor their learning experience more closely to their interests. Visit catalog.utdallas.edu for the most current requirements and courses offered.

High School Preparation

Data science requires a strong high school preparation in mathematics and computer science. A minimum of elementary algebra and geometry should be completed, while trigonometry and calculus are highly recommended. Any Advanced Placement courses in computer science, mathematics or statistics are highly beneficial.

Contact Information

Office of Admission and Enrollment

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Erik Jonsson School of Engineering and Computer Science



The Jonsson School is strategically located in the Telecom Corridor, home of the second-largest high-tech economy in the U.S. The School recently completed a major public-private initiative that greatly expanded its capabilities, including construction of a new state-of-the-art 220,000-square-foot interdisciplinary research building, and this year is opening a 200,000-square-foot engineering building. With more than 165 tenured/tenure-track faculty members, 7,400 students, and \$53 million in research funding, the Jonsson School has six academic departments:

Bioengineering	Computer Engineering	Computer Science
Materials Science and Engineering	Mechanical Engineering	Systems Engineering

The school also offers a minor in nanoscience and technology.

Degrees Offered

Bachelor of Science: Biomedical engineering, computer engineering, computer science, electrical engineering, mechanical engineering, software engineering

Master of Science: Biomedical engineering, computer engineering, computer science, electrical engineering, materials science and engineering, mechanical engineering, software engineering, systems engineering and management*, telecommunications engineering

Doctor of Philosophy: Biomedical engineering, computer engineering, computer science, electrical engineering, materials science and engineering, mechanical engineering, software engineering, telecommunications engineering

*Joint program between Jindal School of Management and Erik Jonsson School of Engineering and Computer Science.

Research

Research efforts underway at the school involve such cutting-edge technology as:

Medical imaging	Speech Recognition	Materials characterization	Cochlear implant technology
Cybersecurity	Organic electronics	Physical, chemical and biosensors	Wireless networking
Carbon nanotubes	Micro-electromechanical systems	Semiconductor design	

Additional Facts

The Jonsson School's recent growth surge has helped propel its undergraduate programs into *U.S. News & World Report's* annual rankings of the nation's top schools of engineering.

The school's graduate program has continued its rise through the national *U.S. News* rankings, now placing among the top 25 public university graduate programs and ranking third in Texas.

The Jonsson School has significantly increased the size of its faculty in recent years, hiring top recent graduates of Stanford University, Cornell University, Purdue University, Georgia Tech and UCLA, as well as seasoned professionals from Rutgers University, University of Southern California, University of California, Davis, Sandia National Laboratories, Freescale Semiconductor and Texas Instruments.

The Jonsson School features a variety of student organizations that are actively involved in both academic and social activities. Completely student-run, these include the Association for Computing Machinery, the Game Development Group, the National Society of Black Engineers, a chapter of the scientific research society Sigma Xi, the Society of Hispanic Professional Engineers and the Society of Women Engineers.

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