



TEXAS A&M
Institute of
Data Science



TEXAS A&M UNIVERSITY
College of Arts
& Sciences



TEXAS A&M UNIVERSITY
Engineering

Texas A&M

Master of Science in Data Science

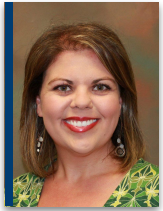
Fall 2024 Information Session

Who are we?

tx.ag/MSDS



Nick Duffield, PhD FACM FIEEE FIET
Director, Texas A&M Institute of Data Science (TAMIDS)
Professor, Electrical and Computer Engineering



Christi Retzer, MBA
Program Manager (TAMIDS)



Drew Casey
Assistant Director for Program Engagement (TAMIDS)

Why study data science!

tx.ag/MSDS



Data science explores the potential of data to derive valuable insights for society.

Connect elements from engineering, technology, science, computing, and the humanities.

Data Science Highlights

- Uses interdisciplinary approaches
- Informs wider social challenges
- Necessary for our growing data-rich world
- Data Scientist is #3 on the *50 Best Jobs in America for 2022* (Glassdoor, 2022)

"I know that for the rest of my professional career I will be able to look back and say that making the decision to apply and receive my degree in the MSDS program was one of the best decisions for me..."

Benjamin Klein, Statistical Analyst at Medpace, MSDS Graduate 2022

Program Structure

tx.ag/MSDS



Colleges



TEXAS A&M UNIVERSITY
College of Arts
& Sciences



TEXAS A&M UNIVERSITY
Engineering

Coordination



TEXAS A&M
Institute of
Data Science

Program Tracks

STAT
MATH

CSE
ECE

Program Organization

tx.ag/MSDS



Master of Science in Data Science degree is an on-campus, 30 credit hour interdisciplinary program

Each of the four academic departments offers a track in the program: CSE, ECE, Math, and Statistics.

Students will be admitted to an individual track which they will maintain for the duration of their study.

Academic Departments

- Computer Science and Engineering
- Electrical and Computer Engineering
- Mathematics
- Statistics

Additional Elective Department

- Industrial and System Engineering

YOU MAY NOT SWITCH TRACKS

Curriculum



Students typically take four (**4**) common core courses in the first semester, and then take three (**3**) elective courses in each of the two subsequent semesters.

Common Core

- **MATH 677** *Mathematical Foundations for Data Science*
- **STAT 650** *Statistical Foundations for Data Science*
- **STAT 624** *Databases and Computational Tools Used in Big Data*
- **ECEN 758 / STAT 639 / CSCE 676** *Data Mining and Analysis*

Students choose six (**6**) elective courses from the list of courses offered by five (**5**) different departments.

- Can take the remainder of their elective courses from any department
- Required to take three (**3**) elective courses from your track department

Why three semesters?



Build essential skills and knowledge

Practical application and experience

First Semester

Four (4)
common
courses

Second Semester

Enter Track
CSE, ECE, Math,
or Statistics

Three (3)
elective courses

Summer

Internship
[OPTIONAL]

Third Semester

Three (3)
elective courses

Capstone
[OPTIONAL]

Tuition and Fees

tx.ag/MSDS



Estimated tuition and fees for three (3) semesters (total 30 credit hours).

| | In-State | Out of State | These are estimated cost of attendance based on 2023–2024 tuition and required fees. |
|-------------------|-----------------|---------------------|---|
| Tuition and fees | \$13,110 | \$29,355 | |
| Program fee total | \$12,000 | \$12,000 | |
| TOTAL COST | \$26,268 | \$42,675 | |

This does not include living expenses. Detailed information regarding tuition and fees at Texas A&M University is available from [Student Business Service](#).

Funding Opportunities

tx.ag/MSDS



First-Year Scholarship

TAMIDS offers a \$1,000 competitive scholarships to all first-year MSDS students. All admitted students are considered for the scholarship and recipients qualify for the *Non-resident Tuition Waiver*.



Research Assistantships

MSDS students may also seek support from faculty to assist in research projects, teaching, or other administrative activities.

<https://grad.tamu.edu/funding-your-education>

Internships

tx.ag/MSDS



Internships may be taken starting in the Summer semester.

Internships taken in the Fall or Spring must be remote.

Additional opportunities to connect with industry representatives and leading experts in data science

Lunch-and-Learn Industry Talks

“Texas A&M University's Data Science program offers so many opportunities for the students to develop and build their career upon.”

Yutae Lee, Business Analytics Specialist at Atlanta Braves, MSDS Graduate 2022

TAMIDS's Industry Affiliates



How to apply

tx.ag/MSDS



Apply online through the TAMU's [GraduateCAS](#)

Required prior coursework:

- *Math*: calculus and linear algebra*
- *Statistics*: college level introduction to statistics
- Some programming experience in at least one of languages (R, Python, C++).

Application Dates for Fall 2024:

September 1, 2023–February 1, 2024

NO SPRING INTAKE

Applicants with a bachelor's degree in *computer science*, *statistics*, *mathematics*, *electrical engineering*, *industrial engineering*, or similar fields should have the sufficient background (additional degrees are acceptable).

GRE is not required

* TAMIDS & the Math Learning Center provide optional online math workshops for incoming students.



TEXAS A&M
Institute of
Data Science

How to apply

tx.ag/MSDS



Welcome to the Texas A&M University GraduateCAS

Texas A&M University GraduateCAS is the Centralized Application Service (CAS™) for most graduate programs at Texas A&M University.

The 2023-2024 application cycle is now open. If you're seeking to apply to Summer 2024, Fall 2024, and Spring 2025 terms, you can find your program selections and complete your application starting August 1, 2023 onward. Note that you're limited to one application per college per entry term.

If you're interested in admission for the Fall 2023 or Spring 2024 terms, go to <https://texasam2023.liasoncas.com>.

For information regarding specific programs and scholarships, visit <https://grad.tamu.edu/prospective-students>.

Sign in with your username and password below. First time here? Select Create an Account to get started.

[Forgot your username or password?](#)
[Reapplying to Texas A&M UniCAS?](#)



Click or scan the QR code to apply!

texasam2024.liasoncas.com

You are applying for Fall 2024 and must create a new account if you have not applied for another 2024 graduate program.

NO SPRING INTAKE

Graduation and Careers

tx.ag/MSDS



You will graduate with the college which your program track falls under.

Math and **Stat** *College of Arts and Sciences*

ECE and **CSE** *College of Engineering*

“I liked the opportunity to be able to apply my skills and education to industry research during the course of the program and get a chance to collaborate with faculty and industry professionals to bring solutions to real-world problems.”

Aisha Aslam, Data Analyst II at Intuit, MSDS Graduate 2022

Growing Career Opportunities

- Technology Companies
- Industrial Data Science
- Applied Sciences
- Financial Technology
- Healthcare and Pharmaceutical
- Business Consulting
- Government Agencies
- Transportation & Urban Studies
- Power and Energy Industry
- PhD Research in Data Science

TAMIDS Activities

tx.ag/MSDS



TAMIDS helps students excel in data science!

- **Data Science STEW** (Seminars, Tutorials, and Educational Webinars)
- **Student Competitions and Hackathons**
- **Research Support and Travel Grants**
- **Lunch-and Learn Industry Talks**
- **A network with over 1,000 undergraduate and graduate students**

Our Mission

TAMIDS pursues new approaches to data science education, research, operations, and partnerships.

We create multidisciplinary opportunities that connect elements from engineering, technology, science, and the humanities, and inform broader social challenges.

Visit TAMIDS Website tamids.tamu.edu and join our mailing list.



TAMIDS Thematic Labs

tx.ag/MSDS



- Research opportunities for MS DS students with Thematic Labs faculty.
- Thematic Labs faculty transition research into new MSDS elective courses



“My research and coursework at TAMIDS directly contributed to my selection as an NLP Engineering Intern at Nvidia, and subsequently, as an AI/ML Engineer at PayPal.”

Sree Kiran Prasad Vadaga, AI/ML Engineer at PayPal, MSDS Graduate 2022

Janvita Reddy

tx.ag/MSDS



MS in Data Science, Computer Science & Engineering Track

Undergraduate degree in Mechanical Engineering from the National Institute of Technology, Surat, India.

Janvita's research interests include Machine Learning with a focus on Computer Vision. She currently assists TAMIDS research program in AI for Agriculture.

She worked with an astronomy research group which resulted in the publication of a paper in *The Monthly Notices of the Royal Astronomical Society* journal.

Isaias Negassi

tx.ag/MSDS



MS in Data Science, Electrical & Computer Engineering Track

Undergraduate degree in Electrical and Electronics Engineering from the Higher Colleges of Technology, Abu Dhabi, United Arab Emirates.

Isaias currently assists research in TAMIDS Operational Data Science Lab, working on Machine Learning and Computer Vision applications.

As an undergraduate student, he developed a smart car plate recognition gate that was later published in IEEE.



TEXAS A&M
Institute of
Data Science



TEXAS A&M UNIVERSITY
College of Arts
& Sciences



TEXAS A&M UNIVERSITY
Engineering

Texas A&M

Master of Science in Data Science



tx.ag/MSDS

Application Dates for Fall 2024:
September 1, 2023–February 1, 2024

Christi Retzer

Program Manager, MS Data Science
ceretzer@tamu.edu

