Post-Baccalaureate Certificate in Decision Analytics

About This Program

The Industrial Engineering graduate certificates are designed to allow students to develop their skills in key application areas. Students enrolled in the Decision Analytics Graduate Certificate may also apply to the Master of Science in Industrial Engineering program at the same time. Courses completed as part of certificate will also satisfy requirements for the Master of Science program.

Competencies

1. Upon completion, students will be able to acquire, clean, and prepare structured and unstructured data from various sources.
2. Upon completion, students will be able to apply foundational statistical methods to interpret data.
3. Upon completion, students will be able to create clear, compelling visualizations using tools like Tableau, Power BI, or Python/R libraries.
4. Upon completion, students will be able to use data analytics tools like Python, R, Excel, or SAS for data analysis.

Admissions Criteria

UNCONDITIONAL ADMISSION

Applicants meeting the following criteria may be admitted without conditions.

- A GPA of at least 3.0 in the last 60 hours of undergraduate coursework.
- A GPA of at least 3.0 in all prior graduate work.
- A minimum score of 155 on the GRE Quantitative section and 146 on the GRE Verbal section.
- A BS or MS in Engineering or Science.

Remedial course work may be required if an applicant does not have an engineering or science background.

GRE WAIVER

Applicants may request a GRE Waiver (https://common.forms.uta.edu/view.php?id=71616.) if they meet all other admission criteria, they have graduated from an ABET accredited institution, and have a minimal of two years of relevant work experience post-degree.

Curriculum

Foundations		
IE 5317	INTRODUCTION TO PROBABILITY AND STATISTICS	3
IE 5301	INTRODUCTION TO OPERATIONS RESEARCH	3
Specialization		
Select 2 from the following:		6
IE 5303	QUALITY SYSTEMS	
IE 5305	LINEAR OPTIMIZATION	
IE 5306	DYNAMIC OPTIMIZATION	
IE 5311	DECISION ANALYSIS	
IE 5318	APPLIED REGRESSION ANALYSIS	
IE 5322	SIMULATION AND OPTIMIZATION	
IE 6308	DESIGN OF EXPERIMENTS	
IE 6318	DATA MINING & ANALYTICS	
Select one graduate course from engineering or science, or a course from the College of Business approved by advisor.		3
Total Hours		**15**

Program Completion

CONTINUATION

In order to continue in the program toward graduation, each graduate student must:

- Maintain at least a 3.0 overall GPA in all coursework taken as a graduate student and in their program, and
- Demonstrate suitability for professional practice.

If questions are raised by graduate faculty regarding either of the above, the student will be notified and will be provided the opportunity to respond to the Committee on Graduate Studies in the Department. The Committee on Graduate Studies will review the student's performance and make a recommendation concerning the student's eligibility to continue in the program. Appeal of a decision on continuation may be made through normal procedures outlined in the section of this catalog entitled "Grievances Other than Grades."

Advising Resources

New M.S. Students will attend a departmental orientation and receive advising for first-semester courses. Fast-Track M.S. Students must talk to an M.S. program advisor when enrolling at the beginning of each semester. New Ph.D. students will receive email communications from the Ph.D. program advisor on course requirements, course waivers, diagnostic exam, and other policies as appropriate. Students are welcome to contact program advisors via email with any questions.

Location:

420 Woolf Hall

Email:

imseinfo@uta.edu

Phone:

817-272-3092

Web:

Contact a graduate advisor (https://www.uta.edu/academics/schools-colleges/engineering/academics/departments/industrial/students/grad-advising/advisor-contact/)