# GRADUATE CERTIFICATE IN TRUSTWORTHY AI FOR DECISION MAKING SYSTEMS (STEM)

Artificial Intelligence tools are being developed at a blistering pace and deployed into an environment where value maximization precedes regulation. Policymakers, engineers, and technical managers are being asked to make mission-critical decisions about which emerging tools to adopt and how best to deploy them while balancing concerns about system safety, security, and efficacy. This graduate certificate is designed to give you the tools to make those decisions with confidence, through foundations in machine learning, decision system design, special topics in AI and trust, and a depth or application elective to support unique learning needs.

This is a STEM designated program.

## REQUIREMENTS

The following requirements must be fulfilled: 12 credits, including 9 credits in selected courses and one 3-credit elective course. Students may need to complete prerequisite coursework to take courses that count toward the certificate.

| Code | Title | Credits |
|---|---|---|
| **Required** | | |
| One course selected from the following: | | |
| CSCI 6907 | Special Topics (in Trustworthy AI in Systems) | |
| EMSE 6992 | Special Topics (in Trustworthy AI in Systems) | |
| One course in data analytics or machine learning selected from the following: | | |
| CSCI 6364 | Machine Learning | |
| EMSE 6575 | Applied Machine Learning for Analytics | |
| One course in sociotechnical system design selected from the following: | | |
| CSCI 6532 | Information Policy | |
| EMSE 6001 | The Management of Technical Organizations | |
| **Elective** | | |
| One 3-credit course selected with the approval of the academic advisor. Most students will take a course in one of the following areas: machine learning and artificial intelligence; security and privacy; safety and verification; bias and risk; regulation and policy; and interaction with human behavior. | | |