MS in Computer Science
Applied Industry Experience Track

A career-focused graduate pathway designed to prepare students for industry roles through hands-on experience, internships, and real-world projects.

Initial Cohort: Fall 2026 (Pilot)

https://www.tntech.edu/engineering/programs/csc/

Why Choose This Track?

- Designed for students targeting careers in industry
- Includes a summer internship and industry-sponsored project (fall/spring)
- Potentially complete the track in about 16 months

What is this Track Designed to Provide?

- Direct engagement with industry partners
- Internship experience integrated into the degree
- Professional skills training
- Real company project for your Master's project

This does NOT change your specialization (i.e., AI, Cybersecurity, HPC, etc.) – this is just a pathway for a different experience

Program Timeline (Typical Pathway)

- Fall Year 1: CS coursework (9 hours)
- Spring Year 1: CS coursework (6 hours) + Professionalism in Industry course (3 hours)
- Summer: Industry Internship (3 hours)
- Fall Year 2: CS coursework (3 hours) + Industry-based Master's Project (6 hours)

Professionalism for Industry Course (CSC 6100)

- Develop the professional skills employers expect:
  - Technical and professional communication
  - Teamwork and collaboration
  - Mentorship and leadership skills
  - Project management
  - Responsible AI and technology ethics
- Open for anyone to take, but required prerequisite for Industry Internship (CSC 6900)

Industry Internship (CSC 6900)

- Students complete a supervised summer internship:
  - Work on real technical challenges
  - Apply advanced CS knowledge
  - Identify problems for future research or development
  - Gain valuable industry experience
- Prerequisite: CSC 6100 (Professionalism)

Master's Project with Industry (CSC 6980)

- Capstone experience working with a partner organization:
  - Define a real-world technical problem
  - Design and develop a computing solution
  - Work with faculty and industry mentors
  - Present and defend your project

- Just like the regular Master's project, students must meet regularly with their faculty advisor

Skills You Will Gain

- Advanced technical expertise in CS
- Real-world problem solving
- Communication with technical and non-technical audiences
- Project management skills
- Experience working with industry teams

Industry Collaboration

- The program connects students with companies through:
  - Internship placements
  - Industry-sponsored projects
  - Faculty and industry mentorship
  - Professional networking opportunities

Who Should Apply?

- This track is ideal for students who:
  - Want to work in industry rather than academia
  - Want practical experience during their MS
  - Enjoy solving real-world technical problems
  - Want to build a strong professional portfolio

Program Outcome

- Graduates earn:
  - Master of Science in Computer Science
  - Certificate in the Applied Industry Experience Track
  - Internship experience
  - Experience working on an Industry-sponsored (Master's) project

FAQ – Part I

✓ **How many companies/internships/projects do we need?**

As many as we have is how many students would be allowed to do this track.

✓ **Will all students who apply for this track be accepted?**

Not necessarily. Only students whose internship application is accepted by a company – OR the student is able to procure their own relevant industry internship - can be a part of this track. They can still be eligible for the Master's degree, just not in this track.

✓ **How does a student get selected for the internship?**

Students will submit their resume to the Internship Project Coordinator (through the portal), and companies/organizations will handle the interview and selection process. Students can also find their own internship, but must clear it with the Coordinator.

✓ **How does a student get on a company/government project?**

Same process as for the internship, and again, the student can also find their own company to do a project with (could come from their internship experience), but they must clear it with their Faculty Advisor and the Coordinator.

FAQ – Part II

- ✓ **What if a student's timeline is a bit different (e.g., fast-track)?**

As long as they complete the professionalism course (currently only offered in the spring), the internship, and the project with industry (in that order), they will have completed the track.

- ✓ **What if a student is able to do an internship but NOT a project with a company?**

They could still get their Master's degree, but they will NOT be able to complete the track in Applied Industry Experience, and thus would not receive the Certificate.

- ✓ **Can a student do a project with a company but NOT an internship?**

***For this track**, they cannot take on a project with a company without successfully completing an internship (does not have to be the same company); thus, they will NOT be able to complete the track in Applied Industry Experience or receive the Certificate.*

- ✓ **Where do I apply for the track (after being accepted into the MSCS program)?**

For the 2026-2027 academic year: https://tinyurl.com/TTU-MSCS-AIE-Student-Portal

Questions?

https://www.tntech.edu/engineering/programs/csc/

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