

MAJOR MAP

WHO WE ARE



- The Department of Computer Science is dedicated to providing high-quality education, conducting both theoretical and applied research in critical areas of computer science, and offering service to its constituents. Students will acquire technical skills and analytical mindsets to resolve problems by creating computing-based solutions. They will be taught modern techniques for analyzing issues, potential resolutions, and development that will enable them to lead and assist the workforce. The department also places emphasis on lifelong learning and on promoting transferable skills that can be used to tackle future challenges.
- Computer science students are encouraged to develop their skills through coursework, extracurricular activities, internships, and competitions.
- Students will be able to build computing-based solutions (such as software, networking for mobile devices, etc.) that address various needs, whether for an individual, group, industry, or society.

What skills will students learn throughout this program?

- Analyze the requirements for a software solution to determine its specifications.
- Develop software solutions in currently utilized programming languages and development environments.
- Communicate with technical and non-technical audiences about the solutions to computing problems.
- Students will understand and communicate the societal impacts of computing solutions, including ethical considerations, access, and availability.



CAREER OUTCOMES:

- Software Developer
- AI/Machine Learning Engineer
- Information Security Analyst
- Cloud Developer
- User Experience
- Data Analyst
- Robotacist



AREAS OF STUDY:

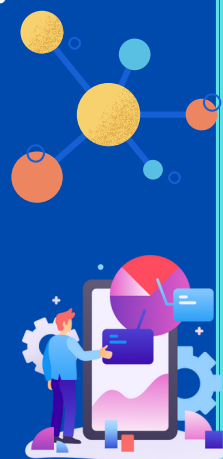
- Data Science
- Cybersecurity and Networking
- Bioinformatics



The program offers a minor in Computer Science.

WHAT SKILLS ARE YOUR FUTURE EMPLOYERS LOOKING FOR?

- Programming Proficiency
- Problem-Solving Skills
- Communication Skills
- Database Management
- Web Development
- Operating Systems
- Networking
- Cybersecurity
- Version Control Systems
- Continuous Learning
- Teamwork



For more information, [click here](https://www.tnstate.edu/computer_science/)
https://www.tnstate.edu/computer_science/

Undergraduate Experiential Major Map: Computer Science



First Year/Freshman

- Complete your Handshake Profile.
- Complete your four-year educational plan in UNIV 1000 during the fall semester.
- Focus on your studies and earn good grades.
- Visit the [Office of Student Success \(OSS\)](#) and connect with your advisor for help navigating college life and your classes. Make an appointment using the student planner app and view the OSS page for other hours and services.
- First Generation students connect with your [First Generation Specialist](#).
- Get to know professors. The best time to connect outside of class is during their office hours.
- Visit the [Academic Achievement and Retention Center](#) for access to study tips, connecting to academic coaches, tutoring, and other helpful resources.
- Attend the Career Fair (Sponsored by the [Career Development Center](#))
- Get involved - Attend organizational fairs, special/corporate events, and volunteer on and off campus.

Sophomore & Junior

- Update your resume and remove high school activities. Have it critiqued by the [Career Development Center](#).
- Review and update LinkedIn and Handshake profiles.
- Attend the Career Fair (Sponsored by the [Career Development Center](#))
- Explore graduate school options.
- Begin preparing for GRE, LSAT, MCAT, GMAT, and other exams for graduate school admissions.
- Begin building your professional wardrobe.
- Meet with your [departmental academic advisor](#) to confirm degree progress and discuss your future academic and career goals.
- Attend institutional and departmental internship workshops.

Senior

- Meet with your [departmental academic advisor](#) to confirm degree progress and discuss your future academic and career goals.
- Apply for [Graduate and Professional School](#) or jobs that fit your interests, skills, and career goals. Follow up on applications and keep a record of the status of each.
**pay attention to due dates*
- Draft a cover letter that can be adapted for a variety of employers. Have it critiqued.
- Complete the Senior Exit Exam and First Destination Survey. ([Testing Center](#))

Academic Success Checklist

- Book an appointment with your academic advisor for pre-registration and advising.
- Discover library resources.
- Visit the math, reading, writing, and tutoring center.
- Complete FAFSA and academic scholarship applications.

Educational Planning Checklist

- Ask your academic advisor about High Impact Practices
- Participate in at least two High Impact Practices at TSU
- Join a student group.

Career Development Checklist

- Create your HandShake Profile.
- Visit [What Can I Do With This Major](#)
- Attend the career fair to expand your network.
- Attend Academic Department workshops and seminars.
- Visit the [Academic Pathways & Partnerships](#)

Think

Engaging in critical thinking and inquiry inside the classroom.

Work

Pursue experiences that will allow you to grow as a leader and professional.

Serve

Explore opportunities to contribute to the broader community and global marketplace.