The Department of Computer Science at North Carolina State University offers a highly ranked master’s degree program with three tracks to choose from.

1. **Security**
   As information technology continues to become ingrained in society, there are real-world impacts whenever the security or privacy of these systems fail.

   The Master’s Track in Security teaches students the skills necessary to build, analyze, and reason about secure and private systems. Topics include both an overview of computer and network security and a variety of more in-depth topics, including systems security, software security, privacy, and cryptography. The track can be customized to be more practice-oriented or theoretically oriented based on the interests of the student.

2. **Data Science**
   Data Science has become increasingly important in nearly every industry sector and academic field, and the discovery and forecasting of insightful patterns from “Big Data” is at the core of analytical intelligence in government, industry, and science.

   The Master’s Track in Data Science instills in students the skills essential to knowledge discovery efforts to identify standard, novel and truly differentiated solutions and decision making, including skills in managing, querying, analyzing, visualizing, and extracting meaning from extremely large data sets.

3. **Software Engineering**
   As software becomes increasingly important to our day-to-day lives, building and maintaining high quality software is critical.

   The Master’s Track in Software Engineering teaches students the skills necessary to build and maintain such software systems. Topics include both an overview of software engineering and a variety of more in-depth topics, including software security, testing, and DevOps. The track has offerings both in the state-of-the-practice and state-of-the-art software engineering, with a special focus on evidence-based practice.

[www.csc.ncsu.edu/academics/graduate](http://www.csc.ncsu.edu/academics/graduate)