

# Computer Science

## Master of Science

### Description

The Master of Science (MS) in Computer Science program is designed to deepen expertise in cutting-edge areas like cybersecurity, computer systems, and software methodology. Tailored for those aiming to excel in high-growth tech fields, this program emphasizes practical and theoretical knowledge. Students develop sophisticated software projects, gain in-depth understanding of modern computer systems, and master advanced algorithms and methods. A 6-credit project or thesis caps off your learning, showcasing your ability to tackle real-world challenges. Prepare to be at the forefront of technological innovation and advancement.

### Admissions Requirements

- A bachelor's degree or equivalent from a recognized institution
- Credentials earned outside of the US must be evaluated by an approved agency
- GPA of 2.7 or higher
- Official transcripts from all previously attended institutions
- Completed application with Carolina University

### Graduation Requirements

- Shall have maintained a minimum cumulative GPA of 3.0;
- Shall have passed all courses in the curriculum and made a C or better professional core courses;
- Shall have completed at least six of the final nine hours with Carolina University.

### Courses

#### Professional (Waivable) – 18 hours

[CSC 510 - Programming I](#)

3 Credit Hours

[CSC 520 - Programming II](#)

3 Credit Hours

[CSC 530 - Algorithms & Data Structures](#)

3 Credit Hours

[CSC 540 - Algorithms & Data Structures II](#)

3 Credit Hours

[CSC 550 - Networking](#)

3 Credit Hours

[CSC 560 - Operating Systems](#)

3 Credit Hours

#### Professional Core

**Software Methodology (3 hours): 1 of the following courses**

[CSC 600 - Web-Database Application Development](#)

3 Credit Hours

[CSC 605 - Web-Oriented Principles and Practice](#)

3 Credit Hours

[CSC 610 - iOS Development](#)

3 Credit Hours

[CSC 615 - Rapid Software Development](#)

3 Credit Hours

[CSC 620 - OOP Analysis and Design](#)

3 Credit Hours

[CSC 625 - Java Programming](#)

3 Credit Hours

**Theory and Analysis (3 hours): 1 of the following courses**

[CSC 650 - Advanced Database Systems](#)

3 Credit Hours

[CSC 655 - Cryptography and Data Security](#)

3 Credit Hours

[CSC 660 - Structure of Programming Languages](#)

3 Credit Hours

[CSC 665 - Artificial Intelligence](#)

3 Credit Hours

[DCS 635 - Machine Learning](#)

3 Credit Hours

**Computer Systems (3 hours): 1 of the following courses**

[CSC 550 - Networking](#)

3 Credit Hours

[CSC 555 - Unix Network Administration](#)

3 Credit Hours

[CSC 560 - Operating Systems](#)

3 Credit Hours

[CSC 565 - Enterprise Network Design](#)

3 Credit Hours

**7 courses (21 hours) of any ANA, CSC, CYB, or DCS course**

[CSC 530 - Algorithms & Data Structures](#)

3 Credit Hours

[CSC 535 - Introduction to Script Programming/Python](#)

3 Credit Hours

[CSC 540 - Algorithms & Data Structures II](#)

3 Credit Hours

[CSC 699 - Special Topics](#)

3 Credit Hours

**Master's Thesis/Project**

[CSC 690 - Project/Thesis I](#)

3 Credit Hours

[CSC 695 - Project/Thesis II](#)

3 Credit Hours