

# Master of Science

## Computer Science (MS)

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This program is designed for students with a strong background in computer science. ODU's Department of Computer Science supports in-depth study at the graduate level in areas such as data science, machine learning, bioinformatics, web science and digital libraries, high performance computing, cyber security, data mining, networking, software engineering, and computational foundations.

The department's MS degrees are available *both on-campus and online*.

### Admission

#### Entrance Requirements

Students entering the Master of Science program in computer science should meet the minimum university graduate admission requirements (<https://www.odu.edu/admission/graduate> (<https://www.odu.edu/admission/graduate/>)). In addition, an applicant must have a strong background in computer science. Students who do not have a sufficient background in computer science may enter the graduate program as provisional students and make up for their deficiencies by taking appropriate courses. Applicants are required to take the GRE general test. For the Information & Communications Technology concentration (described below), the GMAT aptitude test may be used. Two letters of recommendation from faculty members of academic institutions are required in addition to all transcripts at the postsecondary level. For students whose native language is not English, either a TOEFL score of 550 (paper-based) and 79 (internet-based) or IELTS score of 6.5 is also required.

#### Curriculum Requirements

The departmental requirements for the Master’s degree are described below. All these requirements must be satisfied in addition to the University requirements outlined under the University Requirements for Graduate Degrees & Certificates section of this Catalog.

#### Core Courses

The following core courses are required:

CS 665	Computer Architecture	3
and one of the following:		3
CS 500	Foundations of Computing	
CS 600	Algorithms and Data Structures	
<b>Total Credit Hours</b>		<b>6</b>

MS students in the thesis option are required to take CS 665 and CS 600 to satisfy the core requirement.

#### Colloquium

Each student is required to take a one-credit CS 690 (Computer Science Colloquium) and attend at least 10 departmental colloquiums during their MS study.

#### Course Options

Three options are available for candidates for master’s degrees:

- thesis option,
- project option, and
- course-only option.

#### Thesis Option

Course work	24
Thesis research	6

Colloquium	1
<b>Total Credit Hours</b>	<b>31</b>

A minimum of 31 credit hours is required. The candidate is required to write a thesis and make an oral presentation of the results.

#### Project Option

Course work	30
Project work	3
Colloquium	1
<b>Total Credit Hours</b>	<b>34</b>

A minimum of 34 credit hours is required. The candidate is required to prepare a written report on the project and to present it orally.

#### Course-Only Option

Course work	33
Colloquium	1
<b>Total Credit Hours</b>	<b>34</b>

A minimum of 34 credit hours is required. In addition, the candidate is required to complete an exit examination that requires a comprehensive written report and an oral examination.

#### Course Restrictions

A maximum of four 500-level courses can be applied to the program.

All credit hours must be in computer science unless recommended by the student’s MS thesis or project advisor and approved by the GPD.

At least three credits counted toward the computer science degree must be taken at the 700-level from courses other than CS 791 and CS 796.

Since internship is not a degree requirement, the courses CS 667, CS 668, and CS 669 *do not* count towards MS course requirements.

No more than nine credits total of the following courses may be counted towards the degree: CS 697, CS 791, and CS 796.

Although 800-level courses are primarily meant for PhD students, these courses may count as 700-level courses for the purposes of MS credit requirements.