

# COMPUTER SCIENCE

[gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/transfer-credit/](https://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/transfer-credit/).

## Degree Requirements

### Master of Science (M.S.)

Requirements listed here are in addition to Graduate Council policies listed under GCAC-600 Research Degree Policies. (<https://gradschool.psu.edu/graduate-education-policies/>)

A total of 30 credits (400-, 500-, 600-, or 800-level) is required for the Master of Science in Computer Science. Students are required to take the following courses:

Code	Title	Credits
<b>Required Courses</b>		
COMP 505	Theory of Computation	3
COMP 511	Design and Analysis of Algorithms	3
COMP 512	Advanced Operating Systems	3
COMP 519	Advanced Topics in Database Management Systems	3
<b>Total Credits</b>		<b>12</b>

Additionally, students are required to complete either a thesis or a paper according to one of the two options described below. Students who believe that they have completed a course substantially similar to one of the specific course requirements may apply to have their previous work evaluated for the purpose of exemption to that requirement. If the exemption is granted, another approved course shall be taken in place of that required course. The remaining 18 credits must be completed according to one of the following options:

#### Thesis Option

*Research into a specific computer science problem, development of a scholarly written paper, and an oral defense. This option requires:*

Code	Title	Credits
COMP 600	Thesis Research	6
3 credits from approved 500-level electives in computer science, mathematics, engineering, and information systems courses		3
9 credits from approved 400- and 500-level electives in computer science, mathematics, engineering, and information systems courses		9
<b>Total Credits</b>		<b>18</b>

#### Paper Option

*In-depth study of specific computer science problems, development of a written paper or project, and an oral defense. This option requires:*

Code	Title	Credits
COMP 594	Master's Studies	3
9 credits from approved 500-level electives in computer science, mathematics, engineering, and information systems courses		9
6 credits from approved 400- and 500-level electives in computer science, mathematics, engineering, and information systems courses		6
<b>Total Credits</b>		<b>18</b>

A maximum of 9 transfer credits will be allowed for course work completed as a graduate student at another institution, subject to restrictions outlined in GCAC-309 Transfer Credit (<http://>