

COMBINED B.S./M.S. IN COMPUTER SCIENCE

The CIS department offers a combined B.S. and M.S. program in Computer Science, designed to allow students to complete both undergraduate and graduate degrees in a shortened time frame. Students accepted into the program begin graduate course work in their senior year that is double-counted toward both the B.S. and M.S. degrees. Up to three graduate courses (9 units) may be taken during their undergraduate study, leaving 24 units (of the 33 units required for the M.S. degree) to be completed during their graduate study. All students in the combined program are required to do a master's thesis (6 units). A bachelor's degree will be awarded after all degree requirements for the B.S. in Computer Science are met. Students who do not complete the bachelor's portion of the program or who do not maintain a required 3.3 GPA may not remain in the combined program. Students must earn a "B" or better in the graduate level, double-counted courses.

Admission Requirements

In order to be considered for admission to the combined B.S.-M.S. computer science program, students must have:

- completed COSC 336, Data Structures and Algorithm Analysis, with a grade of B or better
- an overall average GPA of 3.3 or better
- two recommendation letters from faculty members at Towson University, at least one of which must be from a faculty member in the CIS department
- completed a proposed Degree Completion Plan (DCP) that satisfies the combined major requirements
- a written statement of purpose for applying to the program

All computer science majors, regardless of track are eligible to be admitted to the combined program. There is no expectation that students completing a specific undergraduate track would continue that track in the graduate portion of the combined program.

After being accepted into the combined B.S.-M.S. program, students must maintain a 3.3 GPA to remain eligible for admission to the graduate program. Additionally, students in the program must request approval of the 9 graduate level units of double-counted courses *before* they are taken. These courses will not be approved retroactively.

During the final term of their undergraduate studies, an official application to the master's program must be submitted to University Admissions. Applications will be reviewed for the required GPA and successful completion of the required 9 units of pre-approved double-counted courses. Students intending to apply to the program are encouraged to discuss this with their academic adviser. Please see the detailed M.S. degree requirements (<https://catalog.towson.edu/graduate/degree-certificate-programs/jess-mildred-fisher-science-mathematics/computer-science-ms>) in the Graduate Catalog.

Degree Requirements

Below are the required and elective graduate level, overlap courses that can be taken in the combined major:

Code	Title	Units
Required Courses		
COSC 519	OPERATING SYSTEMS PRINCIPLES (substitutes for COSC 439)	3
COSC 578	DATABASE MANAGEMENT SYSTEMS I (substitutes for COSC 457)	3
One of the following courses:		3
COSC 600	ADVANCED DATA STRUCTURES AND ALGORITHM ANALYSIS (substitutes for COSC 483)	
COSC 612	SOFTWARE ENGINEERING I (substitutes for COSC 412)	
COSC 645	APPLIED CRYPTOLOGY (substitutes for MATH 314)	
COSC 716	OBJECT-ORIENTED METHODOLOGY (substitutes for COSC 436)	
Total Units		9

Recommended schedule for a one year completion of the M.S. degree (including a summer term):

- Fall Term: 9 units (three courses)
- Spring Term: 9 units (three courses)
- Summer: COSC 897 (Computer Science Thesis) 6 units

NOTE: The thesis may be started in an earlier semester (COSC 898 for 3 units) and completed in the summer (for an additional 3 units).