This graduate certificate program provides knowledge, tools, and techniques to those who are working in or planning to work in software engineering but do not want to complete requirements for a master's degree in the field. The certificate may be pursued concurrently with any of the graduate degree programs in the Volgenau School. The graduate certificate may be pursued on a part-time or full-time basis.

Admissions & Policies

Admissions

Applicants must hold a baccalaureate degree from an accredited institution and have earned a GPA of 3.00 or higher in the last 60 credits. In addition, applicants must complete a self-assessment form, which can be obtained from the Computer Science Department. This form provides summary information concerning background and preparation for the program.

Applicants must possess knowledge equivalent to the following undergraduate courses: structured programming in a modern programming language, data structures, discrete mathematics, and machine organization. The level of knowledge may also be achieved by taking the following foundation courses at Mason:

- INFS 501: Discrete and Logical Structures for Information Systems
- SWE 510: Object-Oriented Programming in Java
- INFS 515: Computer Organization Course and Operating Systems
- INFS 519: Program Design and Data Structures

In addition, it is desirable, but not necessary, for applicants to have at least one year of appropriate work experience in building or modifying software systems.

Applicants must submit a one- to two-page statement of educational and work experience in the computing field that includes a statement of career goals in software engineering. Students not enrolled in a graduate degree program at Mason should apply for the certificate program through the Office of Graduate Admission. Students already enrolled in a Mason graduate degree program should apply to the department for admission into the certificate program. Admission into the certificate program does not guarantee acceptance into any MS program.

Policies

Students must complete four courses with an average grade of B or better for a total of 12 credits of graduate study.
Systems Analysis and Design and SWE 620 Software Requirements Analysis and Specification; only 3 credits will be awarded.

Students enrolled in the MS in Computer Science Program may obtain a certificate in software engineering by taking any four SWE courses. If CS 706 Concurrent Software Systems is included, it is possible to complete the MS in Computer Science and the certificate in software engineering in 30 hours.