

SOFTWARE DEVELOPMENT & ENGINEERING, MS

Campus: NYC, Westchester, Online

Although competency in programming is required for admission into the program, any student lacking knowledge of the objectoriented paradigm will be required to take SE 602 Fundamental Computer Science I with Java. Credits taken for the preparatory course do not count toward the degree. However, the grade earned is computed into the student's GPA.

| Code | Title | Credits |
|--|---|-----------|
| Preparatory Courses | | |
| SE 602 | Fundamental Computer Science I with Java | (4) |
| Core Requirements | | |
| SE 616 | Introduction to Software Engineering | 4 |
| SE 673 | Software Design Methodologies | 4 |
| SE 675 | Requirements Engineering | 3 |
| SE 677 | Software Reliability & Quality Assurance | 3 |
| SE 679 | Contemporary Software Engineering Theory and Practice | 4 |
| Recommended Electives | | |
| Select 12 credits of the following: | | 12 |
| <i>Software Engineering Electives</i> | | |
| SE 700 | Independent Study in Software Engineering | |
| SE 741 | Formal Software Development | |
| SE 765 | Distributed Software Development | |
| SE 770 | Software Risk Management | |
| <i>Other Electives</i> | | |
| IS 637 | Information Systems Project and Change Management | |
| IS 639 | Information Systems Planning and Policy | |
| CS 639 | Mobile Application Development | |
| CS 653 | Cryptography and Computer Security | |
| IT 660 | Network Security | |
| IT 662 | Web and Internet Security | |
| Capstone | | |
| Select six credits from the following options: | | 6 |
| <i>Option 1</i> | | |
| SE 000 | SE-Advanced Elective | |
| SE 785 | Software Engineering Studio | |
| <i>Option 2</i> | | |
| SE 701 | Software Development Thesis I | |
| SE 702 | Software Development Thesis II | |
| <i>Option 3</i> | | |
| SE 000 | SE-Advanced Elective | |
| IEEE 000 | IEEE Certification ¹ | |
| Total Credits | | 36 |

¹ IEEE Certification is equivalent to 3 credits of graduate-level coursework.