



**Master of Science in Computer Science
(CAE Cybersecurity & Defense CSD specialization)
Naval Postgraduate School**

Core Computer Science Courses

- CS2011 Computing System Principles (4-0)
- CS3040 Low-Level Programming I (4-2)
- CS3001 Formal Foundation of Computer Science (4-2)
- CS3021 Intermediate Programming & Data Structures (4-2)
- CS3060 Database Systems (3-1)
- CS3070 Operating Systems (3-2)
- CS3101 Theory of Formal Languages and Automata (4-2)
- CS3140 Low-Level Programming II (3-2)
- CS3150 Design and Analysis of Algorithms (4-0)
- CS3200 Computer Architecture (3-2)
- CS3310 Artificial Intelligence (4-1)
- CS3315 Introduction to Machine Learning and Big Data (3-1)
- CS3502 Computer Communications & Networks (4-2)
- CS3600 Introduction to Computer Security (4-2)
- CS4900 Technology and Transformation 1
- CS4903 Research Methods in CS (2-0)
- CS4924 Seminar Series in Computer Science and Cyber Operations (1-0)
- OS3307 Modeling Practices for Computing (4-1)
- CS0810 Thesis Research (0-8) – 3 to 4 instances of this course comprise total thesis time

Cybersecurity and Defense Specialization Courses

- CS3670 Secure Management of Systems (3-2)
- CS3690 Network Security (4-1)
- CS4600 Secure Computer Systems (3-2)
- CS4684 Cybersecurity Incident Response and Recovery

Note: All of the courses listed above must be completed to qualify for certification that the student has fulfilled the requirements of the National Centers of Academic Excellence in Cybersecurity Program. This list of courses is more than sufficient to receive the Master of Computer Science degree; however, it may be a subset of those courses required of certain students in Computer Science program. Examples include Joint Professional Military Education courses required of certain military students.