Computer Science Core Curriculum (Master of Science)

Advanced Cyber Security / Cyber Operations Career Focus (2021-22)

Aligned with ACM Cybersecurity Curriculum, NSA/DHS Cyber Ops Curriculum and NIST National Initiative for Cybersecurity Education Framework

Required Courses:

CS 5250 Advanced Computer Architecture (3)
CS 5300 Advanced Algorithm Design and Analysis (3)
CS 5800 Advanced Software Engineering (3)
CS 6640 Graduate Seminar (1)

Required Elective Courses:

CS 5500 Advanced Information Security (3)
CS 5990 Data Privacy and Security (3)
CS 5990 Machine Learning for Cyber Security (3)
CS 4600 Cryptography and Information Security (3)
CS 4990 Software Security and Reverse Engineering (3)
CS 5650 Advanced Computer Networks (3) for Project option only.

Required Project or Thesis:

CS 6910 Directed Study in *Cyber Security/ Cyber Operations topics* (1)
CS 6950 Master's Degree Project in *Cyber Security/ Cyber Operations topics* (1)
or
CS 6910 Directed Study in *Cyber Security/ Cyber Operations topics* (2)
CS 6960 Master's Degree Thesis in *Cyber Security/ Cyber Operations topics* (3)

Students completing the Advanced Cyber Security/ Cyber Operations Career Focus Electives will receive the Advanced PolySec Cyber Warrior Digital Badges. Please e-mail polysec@cpp.edu for more information.