

SFS scholars pursuing the MS degree programs in the **Electrical and Computer Engineering department** will be required to take the following blocks of courses (30 credits):

1. Fundamentals in Computer Engineering - 12 credits.
 - a. ECE 560 Computer Systems Performance Evaluation (3 credits)
 - b. ECE 562 Advanced Computer Architecture (3 credits)
 - c. ECE 565 Operating Systems (3 credits)
 - d. A graduate math course from the approved list (3 credits)

2. Cybersecurity concentration - 6 credits.
 - a. ECE 548 Cyber Threats and Security Management (3 credits)
 - b. ECE 549 Network Security (3 credits)

3. Cybersecurity elective courses - 6 credits. A selection from:
 - a. ECE 520 Wireless Networks and Mobile Security (3 credits)
 - b. ECE 620 Dependable and Secure Computing (3 credits)
 - c. CIS 542 Digital Forensics (3 credits)
 - d. CIS 543 Applied Cryptography (3 credits)
 - e. CIS 544 Cyber Defense and Operations (3 credits)
 - f. CIS 546 Secure Software Development (3 credits)
 - g. CIS 547 Network Security and Data Assurance (3 credits)

4. Other courses – 6 credits
 - MS Thesis Track:
 - ECE 600 Master’s Thesis (6 credits; must be supervised by a faculty member specializing in cybersecurity)
 - MS Project Track:
 - ECE 501 Master’s Project (3 credits; must be supervised by a faculty member specializing in cybersecurity)
 - One elective course (3 credits)