The Master of Science (M.S.) in Cybersecurity program at Norfolk State University provides a quality graduate education to students, especially those from underrepresented sectors of the population, by strengthening analytic skills, offering valuable research experiences, and promoting professional development in cybersecurity.

The M.S. in Cybersecurity is a non-thesis degree that consists of 36 graduate credit hours of course work and a capstone project (6 credits). All degree requirements must be completed within four calendar years. No more than 6 graduate credits may be transferred from other graduate schools. Full-time students should expect to complete the degree in 1-1/2 to 2 years.

**Expected Learning Outcomes**

- Students will have the ability to work with a team of individuals to analyze and solve an assigned problem scenario.
- Students will be able to identify vulnerabilities, assess threats, and implement security controls to protect an IT environment.
- Students will be able to explain the fundamentals of digital forensics for both computers and mobile devices and the use of popular digital forensics software and tools.
- Students will be able to use ethical hacking techniques to assess the security of enterprise systems.
- Students will be able to apply knowledge gained in previous courses to conduct in-depth research into a specific Cybersecurity topic, including finding and integrating relevant research results of others.
- Students will analyze the security challenges of operating an e-commerce venture; specifically, securing the data, ensuring safe transactions, and suggesting feasible solutions.
- Students will demonstrate knowledge of security policies as an important complement to security technology.
- Students will demonstrate knowledge of the challenges involved in managing the security of enterprise information systems.

**Summary of Graduation Requirements**

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Requirements</td>
<td>36</td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td>36</td>
</tr>
</tbody>
</table>

**Curriculum**

The curriculum for the M.S. in Cybersecurity degree requires 36 hours of course work including a six hour capstone course CYS 795 Cybersecurity Capstone. All courses are required.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CYS 697</td>
<td>Ethical Hacking and Penetration Testing</td>
<td>3</td>
</tr>
<tr>
<td>CYS 721</td>
<td>Database Security</td>
<td>3</td>
</tr>
<tr>
<td>CYS 755</td>
<td>Healthcare Information Security</td>
<td>3</td>
</tr>
<tr>
<td>CYS 765</td>
<td>Advanced Topics in Cybersecurity</td>
<td>3</td>
</tr>
<tr>
<td>CYS 795</td>
<td>Cybersecurity Capstone</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

**NOTE:** Effective Fall 2022, CYS 795 Cybersecurity Capstone is replaced with the two-course sequence CYS 798 and CYS 799.

**Admissions**

Apply online and mail your official transcript to:

Norfolk State University
School of Graduate Studies and Research Suite 602
McDemmond Center for Applied Research
700 Park Avenue
Norfolk, VA 23504
Phone: (757) 823-8015

The Graduate School will review your file and forward information to the Computer Science Graduate Program. The Departmental Graduate Admissions Committee makes the final selection for admissions and for assistantship and scholarship awards.

**Academic Preparation**

An undergraduate degree from a regionally accredited 4-year college or university is required to be eligible to apply. Generally, the overall undergraduate major GPA should be at least 2.8/4.0.

**English Proficiency**

The TOEFL will be waived if a student has completed at least one year of full-time study at a college or university in an English-speaking country. The TOEFL score should be at least 550 on the written test or 213 on the computer-based test with no section score of less than 13.

**GRE**

GRE scores may be required of all applicants seeking assistantships and scholarships. GRE scores should be sent to the School of Graduate
Studies and Research. Generally, the minimum GRE score is 152 or better on Verbal, and 155 or better on Quantitative. The Graduate Admissions Committee may waive GRE requirements if an applicant majored in computer science or computer engineering and has a GPA of 3.2 or higher in computer courses.

Financial Assistance
Financial assistance can include standard federal and state financial aid. A limited number of assistantships are awarded each year.

Tuition assistance awards do not renew automatically and are subject to annual review and available funding. Normally the length of support does not exceed two academic years.