# TELECOMMUNICATIONS FORENSICS AND SECURITY GRADUATE CERTIFICATE

Banner Code: VS-CERG-TFAS

## Academic Advising

MSN 2B5  
4400 University Drive  
Fairfax, VA 22030

Phone: 703-993-3810  
Email: tcom@gmu.edu  
Website: ece.gmu.edu/graduate-certificates/certificate-program-telecommunications-forensics-and-security

This graduate certificate is to provide an in-depth understanding of security and forensics as they apply to networks and digital storage media.

The graduate certificate may be pursued on a part-time or full-time basis.

## Requirements

### Certificate Requirements

Total credits: 15

#### Core Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCOM 562</td>
<td>Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>or ISA 562</td>
<td>Information Security Theory and Practice</td>
<td></td>
</tr>
<tr>
<td>TCOM 515</td>
<td>Internet Protocol Routing: Lecture and Laboratory Course</td>
<td>3</td>
</tr>
<tr>
<td>or TCOM 561</td>
<td>Security, Privacy, and Applied Cryptography for Telecommunications</td>
<td></td>
</tr>
</tbody>
</table>

Select one from the following:  

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCOM 660</td>
<td>Network Forensics</td>
<td>1</td>
</tr>
<tr>
<td>TCOM 661</td>
<td>Digital Media Forensics</td>
<td>1</td>
</tr>
<tr>
<td>TCOM 663</td>
<td>Operations of Intrusion Detection and Forensics</td>
<td>1</td>
</tr>
<tr>
<td>TCOM 664</td>
<td>Incident Response Forensics</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Credits: 9

1 May not be taken twice for credit. If any of these courses is taken in the core element, it cannot be taken again in the elective element.

#### Electives

Select 6 credits from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISA 562</td>
<td>Information Security Theory and Practice</td>
</tr>
<tr>
<td>TCOM 660</td>
<td>Network Forensics</td>
</tr>
<tr>
<td>TCOM 661</td>
<td>Digital Media Forensics</td>
</tr>
<tr>
<td>TCOM 662</td>
<td>Advanced Secure Networking</td>
</tr>
<tr>
<td>TCOM 663</td>
<td>Operations of Intrusion Detection and Forensics</td>
</tr>
<tr>
<td>TCOM 664</td>
<td>Incident Response Forensics</td>
</tr>
</tbody>
</table>

Total Credits: 6