

# Network Security Design

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| Credits:         | 3 (2/1/0)   |
| Description:     | This course will give the student the opportunity to conduct a vulnerability analysis on a network in order to practice or refine the attack methodologies with the hacker tools and techniques that the student was exposed to during the various program courses. The student must demonstrate the ability to design, plan and execute a vulnerability analysis against an organization network. The student must prepare a written report and mode of the security design, attack methodology, tools and techniques.   |
| Prerequisites:   | CSEC2204  |
| Corequisites:    | CSEC2210  |
| Competencies:    | <ol style="list-style-type: none"> <li>1. Identify components of network security planning.</li> <li>2. Describe components of systems life cycle management.</li> <li>3. Conduct a network vulnerability analysis using current best practices.</li> <li>4. Implement a computer network.</li> <li>5. Construct a secure network framework.</li> <li>6. Implement security countermeasures using current best practices.</li> <li>7. Demonstrate ability to secure a network client to current best practices.</li> <li>8. Demonstrate ability to secure network resources to current best practices.</li> <li>9. Demonstrate ability to secure network server to current best practices.</li> <li>10. Implement a demilitarized zone.</li> <li>11. Demonstrate ethical behavior.</li> </ol> |
| MnTC goal areas: | None  |