

Master's Degree M.S. in Information Security Engineering

This is intended as a guide for you to start planning your progress in the master's program. You and your student advisor will develop a more in-depth plan during your New Student Orientation meeting. In the meantime, you can compare this with the waiver evaluation included in your admission letter. Courses within a block can be shifted in order, but all must be completed before moving onto the next block.

BLOCK 1

| Course # | Course Name | SANS Class | Course Assessments | Course Term | Credits | Tuition |
|----------|--|------------|--------------------|-------------|---------|----------|
| ISE 5101 | Enterprise Information Security | SEC 401 | GSEC Exam | 3 Months | 3 | \$4,500 |
| ISE 5201 | Hacking Techniques & Incident Response | SEC 504 | GCIH Exam | 3 Months | 3 | \$4,500 |
| ISE 5601 | IT Security Leadership Competencies | MGT 514 | GSTRT Exam | 3 Months | 3 | \$4,500 |
| | | | | Total: | 9 | \$13,500 |

BLOCK 2

| Course # | Course Name | SANS Class | Course Assessments | Course Term | Credits | Tuition |
|----------|---|------------------|------------------------------------|-------------|---------|----------|
| ISE 6255 | Defensible Security Architecture & Engineering | SEC 530 | GDSA Exam | 3 Months | 3 | \$4,500 |
| ISE 5300 | Managing Human Risk | MGT 433 | SSAP Exam, Security Awareness Plan | 45 Days | 1 | \$1,500 |
| ISE 5401 | Advanced Network Intrusion Detection & Analysis | SEC 503 | GCIA Exam | 3 Months | 3 | \$4,500 |
| ISE 5701 | Situational Response Practicum | SEC 402, SEC 405 | Written Report | 45 Days | 1 | \$1,500 |
| ISE 6200 | Core Comprehensive Exam | | Core Comp Exam | 1 Month | 1 | \$1,500 |
| | | | | Total: | 9 | \$13.500 |

BLOCK 3

| Course # | Course Name | SANS Class | Course Assessments | Course Term | Credits | Tuition |
|----------|--------------------------------|------------|--------------------|-------------|---------|----------|
| ISE 5800 | IT Security Project Management | MGT 525 | GCPM Exam | 3 Months | 3 | \$4,500 |
| ISE 6 | Elective | SANS Class | GIAC Exam | 3 Months | 3 | \$4,500 |
| ISE 6 | Elective | SANS Class | GIAC Exam | 3 Months | 3 | \$4,500 |
| | | | | Total: | 9 | \$13.500 |

BLOCK 4

| Course # | Course Name | SANS Class | Course Assessments | Course Term | Credits | Tuition |
|----------|---|------------|----------------------------------|-------------|---------|-------------|
| ISE 5900 | Research Methods | | Bibliography, Proposal Worksheet | 6 Months | 1 | \$1,500 |
| ISE 6 | Elective | SANS Class | GIAC Exam | 3 Months | 3 | \$4,500 |
| ISE 6300 | NetWars Continuous Practicum | | Core NetWars Continuous | 2 Months | 1 | \$1,500 |
| ISE 6101 | Security Project Practicum | SEC 403 | Written Report, Presentation | 30 Days | 1 | \$1,500 |
| ISE 5901 | Adv. Technical Research & Communication Practicul | m— | Whitepaper, Presentation | 5 Months | 3 | \$4,500 |
| | | | | Total: | 9 | \$13,500 |
| | | | | | | |

This example plan is subject to change due to curriculum adjustments, student's coursework & potential tuition increases. Degree Total: 36

\$54,000



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Master's degree students choose 3 electives from this list. Each elective course is 3 credit hours and has a course term of 3 months. Students may choose any 3 electives or may work with their advisor to select courses within one of five Focus Areas: Cyber Defense Operations, Incident Response, Industrial Control Systems, Penetration Testing, or Security Management. An additional 2 electives (for a total of 5 electives) can be taken in the MSISE program, but only 3 are required for degree completion.

| Course # | Course Name | SANS Class | Course Assessments |
|----------|--|------------|--------------------|
| ISE 6001 | Implementing & Auditing the Critical Security Controls | SEC 566 | GCCC |
| ISE 6215 | Advanced Security Essentials | SEC 501 | GCED |
| ISE 6230 | Securing Windows with the Critical Security Controls | SEC 505 | GCWN |
| ISE 6240 | Continuous Monitoring & Security Operations | SEC 511 | GMON |
| ISE 6245 | SIEM with Tactical Analytics | SEC 555 | GCDA |
| ISE 6250 | Purple Team Tactics & Kill Chain Defenses | SEC 599 | GDAT |
| ISE 6315 | Web App Penetration Testing & Ethical Hacking | SEC 542 | GWAPT |
| ISE 6320 | Network Penetration Testing & Ethical Hacking | SEC 560 | GPEN |
| ISE 6325 | Mobile Device Security | SEC 575 | GMOB |
| ISE 6330 | Wireless Penetration Testing | SEC 617 | GAWN |
| ISE 6445 | Mac and iOS Forensic Analysis and Incident Response | FOR 518 | GIME |
| SE 6350 | Automating Information Security with Python | SEC 573 | GPYC |
| ISE 6360 | Advanced Penetration Testing | SEC 660 | GXPN |
| ISE 6420 | Computer Forensics Investigations – Windows | FOR 500 | GCFE |
| ISE 6425 | Adv. Computer Forensic Analysis & Incident Response | FOR 508 | GCFA |
| ISE 6440 | Adv. Network Forensics & Analysis | FOR 572 | GNFA |
| ISE 6442 | Enterprise Cloud Forensics and Incident Response | FOR 509 | GCFR |
| ISE 6445 | Cyber Threat Intelligence | FOR 578 | GCTI |
| ISE 6450 | Advanced Smartphone Forensics | FOR 585 | GASF |
| ISE 6460 | Malware Analysis & Reverse Engineering | FOR 610 | GREM |
| ISE 6515 | ICS/SCADA Security Essentials | ICS 410 | GICSP |
| ISE 6520 | ICS Active Defense & Incident Response | ICS 515 | GRID |
| ISE 6525 | Essentials for NERC Critical Infrastructure Protection | ICS 456 | GCIP |
| ISE 6610 | Cloud Security Essentials | SEC 488 | GCLD |
| ISE 6612 | Public Cloud Security: AWS, Azure, and GCP | SEC 510 | GPCS |
| SE 6615 | Defending Web Applications Security Essentials | SEC 522 | GWEB |

| ISE 6630 | Cloud Penetration Testing | SEC 588 | GCPN |
|----------|--|---------|------|
| ISE 6650 | Cloud Security and DevOps Automation | SEC 540 | GCSA |
| ISE 6700 | Building and Leading Security Operations Centers | MGT 551 | GSOM |
| ISE 6715 | Auditing Networks, Perimeters & Systems | AUD 507 | GSNA |
| ISE 6720 | Law of Data Security & Investigations | LEG 523 | GLEG |

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