BS in Computer and Information Systems Security

• Entry: completion of AAS-T in Cybersecurity at Whatcom CC

• GPA \geq 2.5
Courses at Whatcom CC

• Core requirements
  – CIS 106, 110, 116
  – CS 140, 145
  – CIS 205, 214, 215, 216, 226, 227, 228, 229

• Support courses
  – MATH 141, 142, 151
  – ENGL& 101
  – Two of:
    • BUS& 201, PHIL 130, PHYS& 221, POLS& 202
Security Professional Roles

• Computer network security administration
  – System administration with emphasis on security
• Secure software development
  – Works with software development teams, advising on security threats and risk mitigation
• Reactive forensics
  – Investigation and recovery from attack
• Proactive forensics
  – Analysis of malware
Body of Knowledge

- Security management
- Physical security
- Assets, access, integrity
- Legal and ethical
- Cryptography
- Security threats
- Defense tools and techniques
- Forensic analysis and recovery
- Software reverse engineering and dynamic analysis
Required CISS Courses

- CISS 247 “Computer Systems I”
- CISS 301 “Formal Languages”
- CISS 349 “Computer System Administration”
- CISS 360 “Operating System Concepts”
- CISS 461 “Computer Security”
- CISS 495 “Computer Security Project”
Required Support Courses

- ENG 302 “Technical Writing”
- MATH 125 “Calculus 2”
- MATH 341 “Probability and Statistics”
- PHYS 161 “Physics with Calculus I”
  – or PHYS& 221 taken at WCC
- PHYS 162 “Physics with Calculus II”
CISS Electives

Select 4 from this list:

- CISS 346 “Secure Software Development”
- CISS 421 “Computer Forensics”
- CISS 422 “Dynamic Analysis of Software”
- CISS 423 “Software Reverse Engineering”
- CISS 464 “Penetration Testing”
- CISS 469 “Advanced Network System Security”
- CISS 478 “Cryptographic Techniques”
Recommended GUR Courses

- JOUR 190 “Introduction to Mass Media”
- JOUR 375 “Diversity, Mass Media and Social Change”
- LIBR 325 “Surveillance, Voyeurism and the Culture of Suspicion”
- MGMT 271 “Law and the Business Environment”
- PHIL 112 “Introduction to Philosophy”
- PHIL 360 “Society, Law and Morality”
- PLSC 250 “The American Political System”
- PLSC 346 “The Politics of Inequality”
- Science GUR course
## Credit Hour Totals

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<tr>
<th>Category</th>
<th>Upper-division</th>
<th>Credits</th>
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<td>Courses taken at WCC</td>
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<tr>
<td>Required WWU CSCI and CISS courses</td>
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<td>Recommended GUR courses</td>
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