

# Program of Study and Check List

Students in the program earn a Masters of Business Administration (MBA) with a specialization in Cybersecurity.

### **Program Outcomes:**

Upon successful completion of this program, students should be able to:

- 1. Demonstrate attainment of the cybersecurity body of knowledge
- 2. Demonstrate attainment of the management body of knowledge
- 3. Demonstrate critical thinking combining cybersecurity and management
- 4. Contribute to an interdisciplinary cybersecurity team

### Program Courses:

In addition to regular MBA coursework students admitted to the National Science Foundation Scholarship for Service (SFS) program at Idaho State University are required to complete coursework shown below.

- INFO 5511 Intermediate Information Assurance
- INFO 5512 Systems Security for Senior Management
- INFO 5513 Systems Security Administration
- INFO 5514 Systems Security Management
- INFO 5515 System Certification
- INFO 5519 Practicum in Informatics

## Certificates In Information Assurance

CNSS/NSA offer professional certificates in the following areas through the IRI/SFS

#### CNSS 4011

Certificate National Training Standard for Information Systems Security (INFOSEC) Professionals

To receive the CNSS 4011 certificate students must complete INFO 4411 and all pre-requisites with a B or better. In addition, they must complete at least two of the other certificate courses (4412, 4413, 4414, 4415), a minimum of 6 hours of Practicum across 5 semesters (INFO 4419) and at least one additional 4000 level course in Informatics.

#### CNSS 4012

Certificate National Information Assurance Training Standard for Senior Systems Managers Students certifying for 4012 should complete

- $\nabla$  INFO 5511,
- $\nabla$  INFO 5512,
- $\nabla$  INFO 5513,
- $\nabla$  INFO 5514,
- ∇ INFO 5515

#### CNSS 4013

Certificate National Information Assurance Training Standard For System Administrators Students certifying for 4013 must complete

- $\nabla$  INFO 5511,
- $\nabla$   $\,$  INFO 5513, and
- abla INFO 5585 or Saturday 4419 Classes

#### CNSS 4014

Certificate Information Assurance Training Standard for Information Systems Security Officers Students Certifying for 4014 must complete

- abla INFO 5511,
- abla INFO 5513, and
- $\nabla$  INFO 5514

#### CNSS <u>4015</u>

Certificate National Training Standard for Systems Certifiers Students Certifying for 4015 must complete

- abla INFO 5511,
- $\nabla$   $\,$  INFO 5514 and
- $\nabla$  INFO 5515

## Additional Certifications DoD 8570 / 8140

All Scholarship for Service students are required to take either the SSCP (Systems Security Certified or Security Plus during their first year.

- $\nabla$  SSCP
- $\nabla$  Security+

Upon completion of their coursework, they are required to take the

 $\nabla$  CISSP (Certified Information Systems Security Professional)

### **IRI/SFS Educational Philosophy**

The original nation-wide NSA/NSF Centers of Academic Excellence (CAE) program was based on training standards the National Security Agency (NSA) created with the assistance of ISU's Corey D. Schou and James Frost using ISU's Simplot Decision Support Center between 1991 and 2005.

The IRI/SFS program at Idaho State University was one of the first seven universities in the United States to receive the CAE designation.

From its inception, IRI/SFS was built with the objective of creating interdisciplinary cybersecurity leaders for the federal government. As such, participants are full-time MBA students who dedicate up to 20 hours a week creating educational materials based on their cybersecurity research. Because the program of study is an MBA, it accepts motivated students from a variety of undergraduate degrees, including business, science, engineering, and the arts.

The program is based on the educational philosophy of simulation – that effective and efficient learning occurs when key conditions closely represent the environment into which the student will soon be placed. Students come to think of IRI/SFS as an edu-professional experience.

The IRI/SFS program requires students to wear badges, keep track of time spent on particular tasks, maintain research/professional journals, form teams, set objectives, manage complex projects, work in teams, formally teach one another, mentor younger students, cope with a high degree of ambiguity, raise funds, require accountability of team members, and produce products and experiences for external customers.

The program has graduated nearly 100 students, who have gone to work in federal agencies including the NSA, CIA, DISA, DoD, DHS, Department of Education, Federal Reserve System, Department of Energy, and others. Graduates Steven Hernandez (US Dept. of Education) and Alma Cole (Customs and Border Patrol) have become Chief Information Security Officers at federal agencies. Graduates Ross Young (Caterpillar Finance) and Michael Mellor (Adobe) have achieved similar positions in private industry after federal service. Graduates Bryce Kunz and Sean McBride left federal service to start successful cybersecurity companies. Graduate Jeremy Brown was selected as SC Magazine's 2020 Security Innovator of the Year.