

Information Assurance

Professors Michael Battig, Mich Kabay and Huw Read; Associate Professors Matthew Bovee, Jeremy Hansen, and Charles Snow; Assistant Professor Ahmed Abdeen Hamed; Lecturer Kris Rowley.

Assuring the security and integrity of information assets is now widely recognized as a critical function. Information is one of the most valuable, fragile, and irreplaceable, assets possessed or owned by an individual or organization. The Information Assurance minor provides students in any major with the knowledge and skills for practical work and further study in information assurance, and for information assurance specialization within their major field. This includes: general knowledge of computer information systems; a programming language; introductory digital forensics; data communications; networks and network security; information-assurance fundamentals; and the management of information assurance.

Goals:

Provide students with:

- An understanding and appreciation of computer science, computer security, and information-assurance fundamentals;
- Knowledge and basic facility with a high-level programming language;
- Understanding of and ability to use data-communication concepts and terminology;
- Foundational understanding and skills in digital forensics, cyber-investigation, and information assurance;
- Understanding of the multi-disciplinary, multi-jurisdictional regulations and standards that govern and guide information assurance, and their appropriate application;
- The foundation for practical work and further study in information assurance;
- The ability to intelligently and usefully discuss information-assurance topics at a management level; and,
- An understanding of the high ethical, personal and professional standards associated with information assurance for individuals, organizations, and society

Outcomes:

Upon graduation successful students will competently demonstrate:

- Use of fundamental computing and data-communication terminology, concepts and practices;
- Appropriate application of essential cyber-crime and digital-forensic concepts, techniques and procedures;
- The ability to recognize, define or explain, and use the technical terminology of information assurance;
- Application of the fundamentals of information assurance, information-assurance management, and their application in organizational contexts; and
- High ethical, personal and professional standards, especially in regards to information assurance and its impact on individuals, organizations, and society.

Careers for this Minor:

Information assurance is critical to all fields, all organizations, and all individuals. Depending on the student's major, augmenting it with the minor in Information Assurance prepares the student for further study and for specialization within their chosen field in:

- Information assurance
- Management of information assurance
- Management of information systems and information technology

- Cyber-warfare assignments in military and national-security organizations
- Legal studies and careers in law

Minor

Information Assurance Minor 2021-2022 Catalog

A Computer Security & Information Assurance major is ineligible to declare the minor. Approval of the School Director is required to declare this minor.

Complete all courses below with a grade of C or higher.

CS 140	Programming and Computing	4
CS 260	Data Communications and Networks	3
DF 395	Cyber Criminalistics	3
IA 340	Introduction to Information Assurance	3
IA 342	Management of Information Assurance	3
IA 360	Network Security	3
Total Cr.		19