Master of Liberal Studies
Information Assurance
Fort Hays State University

Fort Hays State University (FHSU) is pleased to offer a Master of Liberal Studies (MLS) degree with a concentration in Information Assurance. This concentration includes developing a mastery of information practices, network security software and hardware applications, and of operating systems. It includes coursework certified by the United States Government’s Committee Information Assurance Curriculum Certification by the National Security Administration Committee on National Security Systems for CNSS 4011 and 4013E Standards 2008-2013. The concentration offers two options:

- Network Security
- Security Management

The Information Assurance Concentration is offered through the Department of Information Networking and Telecommunications. All required courses are offered through distance learning and do not require campus visits.

The Masters of Liberal Studies is a 31-hour interdisciplinary graduate program that is offered on-campus and online. It consists of a 10-hour core, an 18-hour customized plan of study and a 3-hour culminating project.

Core Masters of Liberal Studies Courses:

The core is built around the theme "Ways of Knowing: A Foundation for Understanding and Exploring the Emerging Knowledge Society." This theme is explored in the following courses:

- IDS 801 Introduction to Graduate Liberal Studies (1 hour)(F, S, S virtual, F on-campus)
- IDS 802 Ways of Knowing in Comparative Perspective (3 hours)(F, S, U virtual, S on-campus)
- IDS 803 Emerging Knowledge Society (3 hours)(S, S, F, S on-campus)
- IDS 804 Information Literacy (3 hours)(S, S, F virtual, F on-campus)

(F=Fall, S=Spring, U=Summer)

Network Security Option:

Undergraduate Leveling

The Information Assurance Network Security option is designed to prepare professionals with advanced knowledge and skills in protecting networks. It assumes a fundamental expertise in network design and implementation. Students who do not have this expertise may develop it by taking non-graduate leveling courses in Internetworking.

- INT 291 Internetworking I* (Potential non-grad leveling course)(F, S, U virtual and on-campus)
- INT 292 Internetworking II* (Potential non-grad leveling course)(F, S, U virtual and on-campus)
- INT 293 Internetworking III* (Potential non-grad leveling course)(F, S, U virtual and on-campus)

Network Security Core:

- INT 684 Foundations of Information Systems Security (F virtual only)(CISSP Overview)(CNSS Certified Curriculum)
- INT 685 Fundamentals of Network Security (F virtual only)
- INT 686 Intermediate Network Security (S virtual only)
- INT 696 Securing Converged WANS (S virtual and on-campus)**
- INT 678 Seminar in INT: Management of Information Security (S virtual only)
- INT 891 Capstone in Information Assurance (S virtual only)#

Information Assurance Electives (one elective needed):

Distance Learning Electives

- MIS 605 Principles of Computer Security (F & S virtual only)
- INT 654 Introduction to Web-Enabled Databases: Oracle (F virtual and on-campus)
- INT 655 Web-Enabled Database Administration: Oracle (S virtual and on-campus)
INT 658 Law of Cyberspace (F on-campus)(F, S, U virtual)
INT 662 Modern Telephony (F virtual only)
INT 671 Linux for Networks (S virtual only)
INT 672 Advanced Linux for Networks (F virtual only)
INT 678 Seminar in INT: Unix Administration (S virtual only)
INT 872 Readings in INT: Information Assurance
INT 695 Advanced Routing (Fall virtual and on-campus)**
INT 697 Advanced LAN Switching (F virtual and on-campus)**
INT 698 Optimizing Converged Networks (S virtual and on-campus)**
INT 678 Seminar in INT/INT Project Management (S virtual only)

On-Campus Electives

INT 664 Wireless and Cellular Systems (S on-campus only)
CSCI 663 Introduction to Cryptography (S on-campus only)

*Internetworking I, II, & III courses are the courses providing preparation for the Cisco Certified Network Associate (CCNA) certification exam.
** Advanced Routing, Securing Converged WANS, Advanced LAN Switching, and Optimizing Converged Networks are the courses providing preparation for the Cisco Certified Network Professional (CCNP) exam. To take these courses a student must have completed INT 291, 292, and 293 or passed the CCNA examination.
# This course typically serves as the culminating course for the masters degree. Students are urged to contact Dr. Keyu Jiang (kjiang@fhsu.edu) to discuss potential culminating projects in advance of enrolling in the class. Students intending to pursue a doctorate degree may want to complete a thesis in substitution of other elective courses.

Security Management Option:

The Information Security Management Option is designed to prepare professionals to plan, administer, and manage Information Assurance within an organization. While no specific technical background is required, typical students are working professionals who have a technical background and whom are seeking additional knowledge and skills allowing them to take Information Assurance leadership roles in their organization or to provide career advancement. Most, but not all students have Computer Networking and Telecommunications, Management Information Systems, Computer Information Systems, or Computer Science undergraduate degrees.  (F=Fall, S=Spring, U=Summer)

MIS 605 Principles of Computer Security (F & S virtual only)
INT 684 Foundations of Information Systems Security (F virtual only)(CISSP Overview)(CNSS Certified Curriculum)
INT 678 Seminar in INT/Management of Information Security
INT 876 Professional Topics in INT/Risk Management and Disaster Recovery
INT 891 Capstone in Information Assurance (S virtual only)#

Information Assurance Electives (two electives needed):

Distance Learning Electives

INT 685 Fundamentals of Network Security (F virtual only)%
INT 686 Intermediate Network Security (S virtual only)%
INT 696 Securing Converged WANS (S virtual and on-campus)%**
INT 654 Introduction to Web-Enabled Databases: Oracle (F virtual and on-campus)
INT 655 Web-Enabled Database Administration: Oracle (S virtual and on-campus)
INT 658 Law of Cyberspace (F on-campus)(F, S, U virtual)
INT 662 Modern Telephony (F virtual only)
INT 671 Linux for Networks (S virtual only)
INT 672 Advanced Linux for Networks (F virtual only)
INT 678 Seminar in INT: Unix Administration (S virtual only)
INT 872 Readings in INT: Information Assurance
INT 695 Advanced Routing (Fall virtual and on-campus)**
INT 697 Advanced LAN Switching (F virtual and on-campus)**
INT 698 Optimizing Converged Networks (S virtual and on-campus)**
INT 678 Seminar in INT/INT Project Management (S virtual only)

# This course typically serves as the culminating course for the masters degree. Students are urged to contact Dr. Keyu Jiang (kjiang@fhsu.edu) to discuss potential culminating projects in advance of enrolling in the class. Students intending to pursue a doctorate degree may want to complete a thesis in substitution of other elective courses.

%These courses require INT 291 Internetworking I, INT 292 Internetworking II, INT 393 Internetworking III, passage of the CCNA certification, or the instructor’s permission based on years of network engineering or support.

Overall Information

The number of course offerings will continue to grow to fit industry and student needs. Each of the distance learning courses listed is offered fully on-line and does not require a physical presence on-campus. Most of the course activities are completed when the student chooses to study and work on academic projects. Each of the courses will have specific deadlines for projects, labs, tests and other activities. Students taking on-line courses will benefit substantially from having high-speed Internet access such as: DSL, Cable, or Ethernet. Additional offerings are available on-campus. Students taking on-campus courses will benefit from having a laptop or tablet computer.

For more information on the INT Department visit the following web site: http://www.fhsu.edu/int/. For questions about course offerings, contact the Fort Hays State University Department of Information Networking and Telecommunications. For information about admission procedures or administration, contact the Director, Master of Liberal Studies Program.

   Dr. Mark Bannister – markbannister@fhsu.edu
Department of Information Networking and Telecommunications
   Fort Hays State University
   Hays, Kansas 67601-4099
   Telephone (785) 628-5373, Web site for INT: http://www.fhsu.edu/int

To discuss course content and potential advising, please contact:

   Dr. Keyu Jiang – kjiang@fhsu.edu
Department of Information Networking and Telecommunications
   Fort Hays State University
   Hays, Kansas 67601-4099
   Telephone (785) 628-4684, Web site for INT: http://www.fhsu.edu/int

For more information regarding the MLS program, please contact:

   Dr. Art Morin, Director, Master of Liberal Studies – amorin@fhsu.edu
Center for Interdisciplinary Studies, Davis Hall 206
   Fort Hays State University
   Hays, Kansas 67601-4099
   Telephone (785) 628-5950, Web site for MLS: http://www.fhsu.edu/mls

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