Interdisciplinary Masters’ Program in Information Security
School of Technology Requirements

In addition to the courses listed in the requirement areas, the various departments and programs occasionally offer new courses and courses on specific topics that may meet area requirements, especially when they are taught by CERIAS principals and fellows. These include TECH 621 (when taught by Prof. Dark), CNIT 623 and 499 (Prof. Taylor), CNIT 581, LING 689 (Prof. Raskin), some CS 590 offerings, and others. The INSC program administration will announce such courses when they are available, but students are welcome to ask about any courses that might not be otherwise listed."

Area A. Core Courses

--- CS 52600 Information Security or CNIT 55500 Advanced Network Security
--- CS 55500 Cryptography
--- PHIL 52400 or PHIL 58000† or TECH 62100†
Contemporary Ethical Theory Proseminar in Philosophy Information Assurance Ethics
--- POL 62000† Proseminar in Public Policy or TECH 62100 Tech & Policy
--- TECH 69800 (for the thesis option only; e.g. C&IT 69800 or IT 69800)

Area B. In-Depth Courses

One of the following courses:
STAT 50200 Experimental Statistics II
51200 Applied Regression Analysis
51300 Statistical Quality Control

Any two of the following courses:

--SFS Students must take Applied Research Problems in National Information Security TECH 58100 as one of the two

AGEC 60800 Benefit-Cost Analysis
69100† Research in Agricultural Economics
ASM 59100† Special Topics
AT 53200 Contemporary issues in Transportation Security
CNIT 42100 Small Scale Digital Device Forensics
45500 Network Security
45600 Wireless Network Security & Management
49900† Topics in Computer and Information Technology
51100 Foundations in Homeland Security
51200 Managing Resources and Applications for Homeland Security
55600 Basic Computer Forensics
55700 Advanced Cyberforensics
55800 Bioinformatics Computing And Systems Integration
58100† Workshop in Computer Technology
Cyber forens Mobile Embed Dev
The Internet of Things
Natural Language Technologies
Network Forensics
Prob In Natl Info Security
56500 Programming Languages
58000 Algorithm Design, Analysis, and Implementation
59000† Topics In Computer Sciences
Intro To Artificial Intellignc
Topics In Big Data Management
Fault Tolerant Comp Sys Dsgn
Passwords & Human Authenticatn
Security Analytics
62600 Advanced Information Assurance
63600 Internetworking
65500 Advanced Cryptology
CSR 63100 Consumer Behavior Theory
ECE 56500 Computer Architecture
ECET 52500 Applications in Forensic Engineering Technology
ECON 60600 Microeconomic Theory I
61000 Advanced Game Theory
IE 53000 Quality Control
53200 Reliability
57700§ Human Factors in Engineering
65900 Human Aspects of Computing
67400 Computer And Communication Methods
For Production Control
IT 53000 Biometric Technology Test Design, Performance and Evaluation
54000 Biometric Performance and Usability Analysis
54500 Biometrics Technology And Applications
58100† Biometric Data Analysis
68900† Seminar in Linguistics
LING MGMT 54700§ Computer Communication Systems
59000† Directed Readings in Management
Area C. Breadth Courses


AND
CNIT  62300  Research Methods for Computing (replaces TECH 64600) EDPS 53300 and ENE 69500 are currently replacements for CNIT 62300 (It is preferable to take this research methods class before the 4th semester and your thesis work):

Courses from at least three different graduate programs should be taken between Areas B and C. Other courses, often under variable numbers and offered on a one-time or occasional basis, may be of interest. Students are encouraged to bring those courses to the attention of their advisors, who may recommend these to other students and approve the substitution of these courses for some courses listed above.

Under the thesis option, the master’s thesis must be completed and defended in an oral examination administered by the Advisory Committee. Under the examination option, a 3-hour written examination is administered by the student’s Advisory Committee. This option is rarely employed and only in unusual circumstances.

§ Note: May take one or the other of the following but not both:
CS 53600 or MGMT 54700
PSY 57700 or IE 57700

* unless taken under Area A
† When content is appropriate
€ not offered in recent years due to staff shortages.