



## 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

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| <ul style="list-style-type: none"> <li>AGEC 60800 Benefit-Cost Analysis</li> <li>    <b>69100†</b> Research in Agricultural Economics</li> <li>ASM 59100† Special Topics</li> <li>AT 53200 Contemporary issues in Transportation Sec</li> <li>CNIT 42100 Small Scale Digital Device Forensics</li> <li>    45500 Network Security</li> <li>    45600 Wireless Network Security &amp; Management</li> <li>    <b>49900†</b> Topics in Computer and Information Technology</li> <li>    51100 Foundations in Homeland Security</li> <li>    51200 Managing Resources and Applications for Homeland Security</li> <li>    55600 Basic Computer Forensics</li> <li>    55700 Advanced Cyberforensics</li> <li>    55800 Bioinformatics Computing And Systems Integration</li> <li>    <b>58100†</b> Workshop in Computer Technology<br/>                 Prob in Natl Info Security<br/>                 Cyberforensics of Malware<br/>                 Cyberforensics Apple Eco Syst<br/>                 Homeland Security Seminar</li> <li>CNIT <b>62300†</b> Contemporary Computer Tech Problems<br/>                 Nat Lang Info Assur &amp; Sec Sem</li> </ul> | <ul style="list-style-type: none"> <li>COM 55900 Current Trends In Mass Comm Research</li> <li>    <b>59000†</b> Directed Study Of Special Problems</li> <li>    <b>63200†</b> Special Topics in Mass Communication</li> <li>CS 50300 Operating Systems</li> <li>    53600\$ Data Communication and Computer Networks</li> <li>    56500 Programming Languages</li> <li>    58000 Algorithm Design, Analysis, and Implementation</li> <li>    <b>59000†</b> Topics In Computer Sciences<br/>                 Fault Tolerant Comp Sys Dsgn</li> <li>    62600 Advanced Information Assurance</li> <li>    63600 Internetworking</li> <li>    65500 Advanced Cryptology</li> <li>CSR 63100 Consumer Behavior Theory</li> <li>ECE 56500 Computer Architecture</li> <li>ECET 52500 Applications in Forensic Engineering Technology</li> <li>ECON 60600 Microeconomic Theory I</li> <li>    61000 Advanced Game Theory</li> </ul> |
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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	PHIL	68300 Individual Behavior in Organizations
	54000	Biometric Performance and Usability Analysis		52400* Contemporary Ethical Theory
	54500	Biometrics Technology And Applications		58000† Proseminar in Philosophy
	58100†	Biometric Data Analysis		62400† Seminar in Ethics
LING	68900†	Seminar in Linguistics	POL	62000† Proseminar Public Policy
MGMT	54700§	Computer Communication Systems	PSY	57700§ Human Factors in Engineering
	59000†	Directed Readings in Management	STAT	51400 Design of Experiments
		Design: Soc Networks & Engmts		51700 Statistical Inference
	68400	Information Security for Managers	TECH	58100† Workshop in Technology
OBHR	68100	Behavior Organization		62100† Seminar in Technology

### Area C. Breadth Courses

IT 50700 Measurement and Evaluation in Industry and Technology

#### 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 **If Course Title Relevant**

€ not offered in recent years due to staff shortages.