Interdisciplinary Masters' Program in Information Security

Department of Linguistics 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.

Courses are not taught every semester so your plan of study should take this into account.

Area A. Core Courses

--- CS 52600 Information Security **or** C&IT 55500 Advanced Network Security
--- CS 55500 Cryptography
--- PHIL 52400 Contemporary Ethical Theory **or** PHIL 62400† Seminar in Ethics **or** TECH 62100 Information Assurance Ethics
---May substitute PHIL 411 or PHIL 424 if PHIL 52400 is Not offered in a year
--- POL 62000† Proseminar in Public Policy **OR** --- TECH 62100 Tech & Policy
--- LING 69800 Research MA Thesis (for the thesis option only)

**PHIL 58000 is no longer available, but if you have already taken PHIL 58000, it will be recognized as meeting your requirements.

Area B. Recommended Courses

LING 68900 Natural Language Process (ECE 66900)

One of the following courses:

LING 52100 Syntax I: Syntactic Analysis
LING 53100 Semantics I: Lexical And Sentential Semantics

--SFS Students must take Applied Research Problems in National Information Security TECH 58100

One of the following courses:

AGEC	60800	Benefit-Cost Analysis
	69100†	Research in Agricultural Economics
AT	53200	Contemporary Issues in Transportation Sec
CNIT	42100	Small Scale Digital Device Forensics
	45500	Network Security
	45600	Wireless Network Security & Management
	49900†	Topics in Computer and Info 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
		File Systems Forensics
		Intro Assistive Tech & Robotics
		Mobile & Embedded Devie Foren
		The Internet of Things
		Natural Language Technologies
		Prob in Natl Info Security
	62300†	Contemporary Computer Tech Problems
		Applied Statistics in IT
	62300	Research Methods for Computing
COM	55900	Current Trends in Mass Comm Research
	59000†	Directed Study of Special Problems
		Communication Theory
		Communicaiton Pedagogy
	63200†	Seminar: Special Topics In Mass Comm
CS	50300	Operating Systems
	52700	Software Security
	52800	Network Security
	53600§	Data Communication and Computer Networks
	56500	Programming Languages
	59000†	Independent Study/Varibale Topics
		Advanced Machine Learning
		Computer Aided Prog Reasoning
		Network & Matrix Computations
		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 Tech
ECON	60600	Microeconomic Theory I
	61000	Advanced Game Theory
EDPS	53300	Intro to Educational Research I: Methodology
ENE	69500	Adv Topics in Engineering Education
IE	53000	Quality Control

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	53200	Reliability
	57700§	Human Factors in Engineering
	65900	Human Aspects of Computing
	67400	Computer And Communication Methods For Production Control
IT	53000	Biometric Tech Test Design, Performance, And Evaluation
	54000	Biometric Performance and Usability Analysis
	54500	Biometrics Technology And Applications
	58100†	Biometric Data Analysis
LING	59300†	Special Topics in Semantics
	68900†	Seminar in Linguistics
	69800	Natrl Language Processes
MGMT	54700§	Computer Communication Systems
	59000†	Directed Readings In Management
		Sem Tech Realztn Tpc II
		IT Project Management
	68400	Information Security for Managers
OBHR	68100	Behavior Organization
	68300	Individual Behavior in Organizations
PHIL	52400*	Contemporary Ethical Theory
	58000†	Proseminar in Philosophy
	62400†	Seminar in Ethics
POL	62000†	Proseminar Public Policy
PSY	57700§	Human Factors in Engineering
STAT	50200	Experimental Statistics II
	51200	Applied Regression Analysis
	51300	Statistical Quality Control
	51400	Design of Experiments
	51700	Statistical Inference
TECH	58100†	Workshop in Technology
	62100†	Seminar in Technology

Area C. Elective Courses

Any two of the following courses:

CNIT	58100†	Workshop in Computer Technology
CS	50200	Compiling and Programming Systems
	54100	Database Systems
	54200	Distributed Database Systems
	57300	Data Mining
ECE	54400	Digital Communications
	56200	Introduction to Data Management
	56500	Computer Architecture
	57000	Artificial Intelligence
	57300	Compilers And Translator Writing Systems
ECET	58100†	Workshop in Electrical and Computer Engineering Technology
		Selected Topics in Sensors
FNR	55800	Digital Remote Sensing and GIS
LING	50000	Introduction to Linguistics
	53100	Semantics I: Lexical And Sentential Semantics
	68900†	Seminar in Linguistics
MGMT	50500	Management Accounting II
	50600	Auditing
	54400	Database Management Systems
	54500	Systems Development
	56100	Logistics
	59000†	Directed Readings In Management
		Sem Tech Realztn Tpc II
		IT Project Management
	60000	Accounting for Managers
	60100	Managerial Accounting
	63000	Legal and Social Foundations of Management
	68300	Principles Of Information Systems
OBHR	64200	Compensation And Reward Systems I
	64300	Compensation And Reward Systems II
POL	62200	Research Seminar In Public Policy And Public Administration
STAT	69500†	Seminar in Mathematical Statistics

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 ECE 56000 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.