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   **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
--- LING 69800   Research MA Thesis (for the thesis option only)

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:

Dept	No.	Title
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
		Cyber foren Mobile Embed Dev
		The Internet of Things
		Natural Language Technologies
		Network Forensics
		Prob In Natl Info Security
	62300†	Contemporary Computer Tech Problems
		Nat Lang Info Assur & Sec Sem
COM	55900	Current Trends in Mass Comm Research
	59000†	Directed Study of Special Problems
	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
	58000	Algorithm Design, Analysis, and Implementation
	59000†	Topics In Computer Sciences
		Intro to Arificial 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 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
	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

MGMT	54700§	Computer Communication Systems	PSY	57700§	Human Factors in Engineering
	59000†	Directed Readings In Management	STAT	50200	Experimental Statistics II
		Sem Tech Realztn Tpc II		51200	Applied Regression Analysis
		IT Project Management		51300	Statistical Quality Control
	68400	Information Security for Managers		51400	Design of Experiments
OBHR	68100	Behavior Organization		51700	Statistical Inference
	68300	Individual Behavior in Organizations	TECH	58100†	Workshop in Technology
PHIL	52400*	Contemporary Ethical Theory		62100†	Seminar in Technology
	58000†	Proseminar in Philosophy			
	62400†	Seminar in Ethics			
POL	62000†	Proseminar Public Policy			

Area C. Elective Courses

Any two of the following courses:

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

Courses from <u>at least three different graduate programs</u> 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.