

**University of Pittsburgh
School of Information Sciences**

MSIS PLAN OF STUDIES

Student Name _____

Undergraduate Major _____

Expected MSIS Graduation Date _____

E-Mail Address _____

Full-Time Student [] Part-Time []

PREREQUISITES - One 3-credit course from each area listed below (9 credits total) or equivalent experience. All prerequisite courses are in addition to the 36 credits required for the degree.

Area	Course Name & Number	School	Date
Mathematics	_____		
Statistics (or comparable coursework)	_____		
Structured Programming Language (C or C++ recommended)	_____		

MSIS PLAN OF STUDIES (36 credits required)

COURSES (3 credits unless otherwise specified)	PREREQUISITES	DATE PLANNED	DATE COMPLETED
Foundations (6 credits required) INFSCI 2000 and 2020 recommended			
INFSCI 2000 Introduction to Information Science			
INFSCI 2020 Mathematical Foundations for Information Science			
INFSCI 2040 Research Design	INFSCI 2060 or equivalent		
INFSCI 2060 Statistics in Information Science	Introductory statistics course		
INFSCI 2120 Information & Coding Theory	math, statistics		
INFSCI 2130 Decision Anal & Decision Support			
INFSCI 2140 Information Storage & Retrieval	Introductory course in logic and statistical analysis, & hi-level programming language		
INFSCI 2150 Introduction to Security	TELCOM 2000 or equivalent, or permission of Instructor		
INFSCI 2160 Data Mining	INFSCI 2020 or permission of Instructor		
TELCOM 2130 Queuing Theory	TELCOM 2120, 2310		
INFSCI 2170 Cryptography	Alg., college math, digital logic, programming, TELECOM		
INFSCI 2180 Knowledge Representation and the			
INFSCI 2910 Indep Study (Foundations)	permission of fac advisor & fac sponsor		
INFSCI 2915 Spec Topics (Foundations)			
Profession (no minimum requirement)			
INFSCI 2210 Information Ethics			
INFSCI 2220 Information Policy			
INFSCI 2821 Intro to Biomedical Informatics	Permission of instructor		
INFSCI 2825 Probabilistic Methods of Computer-based Decision Support	Permission of instructor		
LIS 2184 Legal Issues in Information Handling			
TELCOM 2420 Project Management	Advanced standing		
TELCOM 2510 US Telecommunications Policy	TELCOM 2000/2100		
INFSCI 2980 Practicum	18 credits and permission of advisor		
Cognitive Science (6 credits required) INFSCI 2300 and 2350 recommended			
INFSCI 2300 Human Information Processing <i>Not open to students who have taken INFSCI 1042</i>			
INFSCI 2350 Human Factors in Systems			
INFSCI 2930 Indep Study (Cognitive Sci)	permission of fac advisor & fac sponsor		
INFSCI 2935 Spec Topics (Cognitive Sci)			

COURSES (3 credits unless otherwise specified)		PREREQUISITES	DATE PLANNED	DATE COMPLETED
Cognitive Science & Systems These courses meet the systems or cognitive requirement with permission of the advisor				
INFSCI 2410	Intro to Neural Networks	INFSCI 2300, math, 1 programming language		
INFSCI 2420	Natural Language Processing	INFSCI 2300, 2500 (2610) or permission of instructor		
INFSCI 2440	Artificial Intelligence	INFSCI 2300, 2500 (2610) or permission of instructor		
INFSCI 2450	AI Programming Tools	INFSCI 2440 or permission of instructor		
INFSCI 2460	Spatial Reasoning for GIS	INFSCI 2300		
INFSCI 2470	Interactive System Design	INFSCI 2300, 2710, C		
Systems and Technology (18 credits required including either INFSCI 2500 or 2592)				
Systems and Technology: Systems Design, Development, and Implementation				
INFSCI 2500	Data Structures	Programming Language		
INFSCI 2510	Information Systems Analysis			
INFSCI 2511	Information Systems Design	INFSCI 2510, Object-oriented programming course.		
INFSCI 2540	Software Engineering			
INFSCI 2550	Client-Server Systems	TELCOM 2300 or C & Unix), INFSCI 2500		
INFSCI 2560	Web Technologies & Standards			
INFSCI 2570	Management Information Systems	INFSCI 2510. Co-requisite: database course		
INFSCI 2591	Algorithm Design	INFSCI 2500 (2610)		
INFSCI 2592	Architectures & Assembler Language	Programming Language		
INFSCI 2593	Operating Systems	INFSCI 2500 (2610), INFSCI 2592 (2630)		
INFSCI 2950	Indep Study (Systems)	permission of fac advisor & fac sponsor		
INFSCI 2955	Spec Topics (Systems)			
TELCOM courses may be used to meet the Systems and Technology Requirement with permission of the advisor.				
Systems and Technology Tracks: Networks and Security				
TELCOM 2000	Intro to Telecommunications	Algebra, advisor's approval		
TELCOM 2110	Network Design	TELCOM 2000/2100		
TELCOM 2300	Software Tools & Techniques	Structured programming language		
INFSCI 2620	Developing Secure Systems	INFSCI 2150		
INFSCI 2621	Security Management	INFSCI 2150, TELCOM 2821		
INFSCI 2629	Capstone in Security	INFSCI 2150/TELCOM 2810, TELCOM 2821		
INFSCI 2640	Programming Languages and Environments	INFSCI 2500 (2610), a high-level programming		
Systems and Technology Tracks: Database and Web				
INFSCI 2710	Database Management	INFSCI 2500 (2610)		
INFSCI 2711	Advanced Topic in Database Management	INFSCI 2710		
INFSCI 2730	E-Business	INFSCI 2560 (2870), 2710, and either 2511 or 2470;		
INFSCI 2731	Security in E-Commerce	INFSCI 2150 and 2560 (2870)		
INFSCI 2739	Web Services and Distributed Computing	INFSCI 2550, 2560 (2870) and 2730 (2872)		
INFSCI 2780	Interactive Graphics	INFSCI 2500 (2610), linear algebra, C		
Systems and Technology Tracks: Human-Centered				
INFSCI 2801	Geospatial Information Systems (GIS)	INFSCI 2500 (2610)		
INFSCI 2802	Internet-based and Interoperable GIS	INFSCI 2801 (2720)		
INFSCI 2809	Spatial Modeling and Analysis	INFSCI 2801 (2720)		
TELCOM courses may be used to meet the Systems and Technology Requirement with permission of the advisor.				
THESIS				
INFSCI 2995	Thesis	24 credits and permission of advisor		