

Master of Science in Information Science (MS in INSC)

Required and Elective Courses

The Master of Science in Information Science degree will be awarded upon successful completion of the 33-credit program, and completion of <u>SARI</u>.* The courses are not listed in sequential order. All module course work is subject to change as new courses are developed or renumbered.

Note: The capstone course, INSC 594, is only offered in Fall semesters and is to be taken at or near the end of all coursework.

If you have any questions throughout your studies, please email **EngHelp@psu.edu**.

18-Credit Required Curriculum			
Course #	Course Title	Semester	Grade
INSC 831	Contemporary Information Systems Architecture		
INSC 526	Business Process Management & Integration		
INSC 539	Information Science Emerging Topics		
INSC 561	Web Security and Privacy		
DAAN 545	Data Mining (formerly SWENG 545) (INSC 521 is <u>NOT</u> a required prerequisite.)		
SWENG 568	Enterprise Integration		
	12-Credit Elective Curriculum		
Course #	Course Title	Semester	Grade
3-Credit Required Capstone (to be taken near end of the program) The Capstone Course is only offered in Fall Semesters			
INSC 594	Research Topics		
Preparatory Cours	es (only for those notified that prep courses are req	uired for adm	ission)
IST 140	Introduction to Application Development		
Sch	olarship and Research Integrity (SARI) Requirem	ient	
SARI Module - Required Online Activity		Semester Completed	
Note: The SARI M	odule is only offered in Spring & Fall semesters.		

<u>NOTE:</u> Students must maintain a minimum grade point average of 3.0 (B) throughout the program. A 3.0 cumulative GPA is required to graduate. All course work toward the Master of Science in Information Science degree must be completed within eight years of admission to the program.

<u>Questions & Advising</u>: Students should contact their assigned faculty advisor with any questions or for advice on course selection. Course Descriptions are available at this <u>link</u>.



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Program Electives

12-Credit Elective Courses (Choose 4 courses from the following list)		
Course #	Course Title	
CSE 543	Computer Security	
DAAN 825	Large-Scale Database and Warehouse (INSC 521 is <u>NOT</u> a required prerequisite.)	
DAAN 862	Analytics Programming in Python (Required Prerequisite: STAT 500)	
DAAN 871	Data Visualization for Analytics	
DAAN 881	Data-Driven Decision Making (Required Prerequisite: STAT 500)	
DAAN 897	Enterprise Analytics Strategies	
IE 575	Foundations of Predictive Analytics (Required Prerequisite: STAT 500)	
INSC 497	Special Topics: Business Intelligence	
INSC 497	Special Topics: Fundamentals of Telecommunications	
INSC 521	Database Design Concepts	
DAAN/INSC 846	Network and Predictive Analytics for Socio-Technical Systems	
INSC 897	Ethical Hacking	
IST 454	Computer and Cyber Forensics	
IST 516	Web and Internet Information Retrieval	
STAT 500	Applied Statistics	
STS 589	Ethics and Values in Science and Technology	
SWENG 510	Secure Software Engineering	
SWENG 541	Advanced Database Design	
	(Required Prerequisite: INSC 521 or Division Approval)	
SWENG 569	Service-Oriented Architecture	
SWENG 586	Requirements Engineering	
SWENG 826	Applied Human-Computer Interaction	
SWENG 837	Software System Design (Requires Division approval)	
SYSEN/SWENG 805	Technical Project Management (formerly SYSEN/SWENG 505)	
SYSEN 536	Decision and Risk Analysis in Engineering	
SYSEN 850	Creativity and Problem Solving I (previously SYSEN 550)	
SYSEN 552	Creativity and Problem Solving II (Required Prerequisite: SYSEN 550)	
SYSEN 555	Invention and Creative Design	

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