Information Systems—Online, MSIS

The Online Master of Science in Information Systems from the College of Engineering at Northeastern University is designed to teach students to use technology to address the challenges facing people in businesses, organizations, and communities across the world.

The online MSIS offers you an opportunity to obtain the technical skills and business management expertise to drive digital transformation in any organization. You'll study deep applied knowledge across a range of technological fields, including UX design, software development, data analytics, and digital business processes.

If you desire, you may choose to follow a curated Focus Areas in Cyber and Information Security; Product Management & DevOps Leadership; and Software Testing and Quality Assurance. These courses have been selected to ensure that you have the skills you need to enter the workforce in these critical and growing areas.

Along the way, you'll have an opportunity to learn business leadership best practices. With a strong working knowledge of quality assurance, data management, agile methodologies, and marketing assessment, you'll be ready for leadership in almost any organization or industry.

With this unique and flexible set of must-have skills, you'll be ideally positioned to step into a diverse range of tech leadership roles including IT project manager, systems administrator, software developer, information security analyst, and more.

Program Requirements

Complete all core and elective requirements listed below unless otherwise indicated.

Core Requirements

Code	Title	Hours
INFO 5100 and INFO 5101	Application Engineering and Development and Lab for INFO 5100	4

Electives

Code	Title	Hours
Complete 28 semester hours from the following:		28
CSYE 6225	Network Structures and Cloud Computing	
CSYE 6255	Software Testing for Engineers	
CSYE 7280	User Experience Design and Testing	
CSYE 7400	Responsible Software Engineering and AI	
DAMG 6210	Data Management and Database Design	
DAMG 7330	Cybersecurity Audit and Compliance	
DAMG 7350	Systems and Cybersecurity Fundamentals	
INFO 6105	Data Science Engineering Methods and Tools	
INFO 6150	Web Design and User Experience Engineering	
INFO 6245	Planning and Managing Information Systems Development	
INFO 6255	Software Quality Control and Management	
INFO 6350	Smartphones-Based Web Development	
INFO 7245	Agile Software Development	
INFO 7260	Business Process Engineering	
TELE 5600	Linux/UNIX Systems Management for Network Engineers	
TELE 6300	Communication and Network Security	

Program Credit/GPA Requirements

32 total semester hours required
Minimum 3.000 GPA required

Plan of Study
Sample Plans of Study
CYBER AND INFORMATION SECURITY FOCUS AREA

Year 1

Fall	Hours	Spring	Hours	Summer Full Semester	Hours
INFO 5100	4	CSYE 7400	4	TELE 6300	4
INFO 5101	0	CSYE 6225	4	DAMG 7350	4
DAMG 6210	4	TELE 5600	4	DAMG 7370	4
	8		12		12

Total Hours: 32

SOFTWARE TESTING & QUALITY ASSURANCE FOCUS AREA

Year 1

Fall	Hours	Spring	Hours
INFO 5100	4	CSYE 7400	4
INFO 5101	0	DAMG 6210	4
INFO 6205	4		
	8		8

Year 2

Fall	Hours	Spring	Hours
INFO 6245	4	INFO 6255	4
CSYE 6255	4	CSYE 6225	4
	8		8

Total Hours: 32

PRODUCT MANAGEMENT & DEVOPS LEADERSHIP FOCUS AREA

Year 1

Fall	Hours	Spring	Hours	Summer Full Semester	Hours
INFO 5100	4	CSYE 7400	4	CSYE 7280	4
INFO 5101	0	INFO 6245	4	INFO 7260	4
INFO 7245	4				
	8		8		8

Year 2

Fall	Hours
INFO 6150	4
INFO 6255	4
	8

Total Hours: 32