INFORMATION TECHNOLOGY MINOR

Banner Code: INFT

Academic Advising

5400 Nguyen Engineering Building
Fairfax Campus

101 Bull Run Hall
Science and Technology Campus

Phone: 703-993-3565
Email: bsit@gmu.edu
Website: ist.gmu.edu/programs/undergraduate-programs/

The minor is designed primarily for students who desire to augment the knowledge gained through their major-related courses with a foundation of information technology (IT) topics and their application within organizations to achieve organizational objectives. Completing this minor provides students with the necessary skills to improve their attractiveness to employers in our technology-driven society.

The minor requires a minimum of 18 credits, including 12 credits of core courses. Beyond these requirements, students must select two additional technical focus courses (6 credits) of which one course must be at the upper 300- or 400-level. Minimum 2.5 GPA is needed in completed 100- and 200-level IT core and foundation courses, and a minimum C in IT 106 or IT 109 is required in order to declare the IT minor. Minimum "C" grade in all IT courses is required to earn the IT minor. Students pursuing the IT minor should consult with an advisor to select their additional courses.

Admissions & Policies

Admissions

Declaration of Minor

Mason students interested in declaring the Information Technology Minor must earn a C or higher in (IT 106 or IT 196 or IT 109 or CS 112) and earn an average of 2.50 across any courses attempted from (IT 102 or MATH 125), IT 104, IT 105, (IT 106 or IT 196 or IT 109 or CS 112), and any technical focus courses being applied to the IT minor. Grades in approved course substitutions taken at Mason will be included.

Note: IT courses at the 300 and 400 level are restricted to students who have declared an Information Technology major, minor, or undergraduate certificate, and to students in the BAS or BIS program. IT 293 Applied IT: Junior Transition and IT 343 IT Project Management are restricted to students who have declared an Information Technology major. Students who have declared an Information Technology Minor will not be permitted to take IT 293 or IT 343.

Policies

Grades

Students must have a C or better in any course that satisfies a prerequisite for an IT course. To graduate with the Information Technology Minor, students must have a GPA of 2.00 or better across all courses applied to the Information Technology minor. Additionally, if a technical focus course requires a minimum B in a specified course, students will be held to meeting this prerequisite. Eight credits of coursework must be unique to the minor.

For policies governing all minors, see the Undergraduate Policies (http://catalog.gmu.edu/policies/academic/undergraduate-policies/) section of this catalog.

Requirements

Minor Requirements

Total credits: 18

Core Courses

Code	Title	Credits
IT 102	Discrete Structures	3
or MATH 125	Discrete Mathematics I (Mason Core) (http://catalog.gmu.edu/mason-core/)	
IT 104	Introduction to Computing (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
IT 105	IT Architecture Fundamentals	3
IT 106	Introduction to IT Problem Solving Using Computer Programming	3
or IT 109	Introduction to Computer Programming	
Total Credits		12

Technical Focus Courses

Code	Title	Credits
Select 6 credits from Technical Focus Courses (at least 3 upper division credits)		6
Total Credits		6

Students must satisfy all prerequisites and other requirements in order to take any of the courses listed below. Courses chosen for the technical focus must be chosen with a coordinator in the Information Sciences and Technology department. Not all courses are offered each semester.

Code	Title	Credits
IT 206	Object Oriented Techniques for IT Problem Solving	3
or IT 209	Introduction to Object Oriented Programming	
IT 207	Applied IT Programming	3
IT 213	Multimedia and Web Design	3
IT 214	Database Fundamentals	3
IT 223	Information Security Fundamentals	3
IT 300	Modern Telecommunications	3
IT 306	Data Structures and Algorithms in Java	3
IT 309	Data Structures and Algorithms in Python	3
IT 314	Database Programming	3
IT 315	Mobile Development	3
IT 322	Health Data Challenges	3
IT 324	Health Information Technology Fundamentals	3
IT 331	Web I: Web Development	3

IT 332	Web Server Administration	3
IT 335	Web Development using Content Management Systems	3
IT 341	Data Communications and Network Principles	3
IT 352	Security Administration of Linux Systems	3
IT 353	Information Defense Technologies	3
IT 357	Computer Crime, Forensics, and Auditing	3
IT 366	Network Security	3
IT 369	Data and Application Security	3
IT 390	Rapid Development of Scalable Cloud Applications	3
IT 409	Python Web Programming	3
IT 410	Web Programming	3
IT 414	Database Administration	3
IT 415	Information Visualization	3
IT 429	Security Accreditation of Information Systems	3
IT 431	Web II: Advanced Web Development	3
IT 442	Cloud Infrastructure	3
IT 445	Advanced Networking Principles	3
IT 451	Cloud Services Management	3
IT 455	Wireless Communications and Networking	3
IT 461	Application Development in Cloud	3
IT 462	Applied Cyber Threat Analysis	3
IT 466	Foundations of Cryptography and Security	3
IT 467	Network Defense	3
IT 471	Big Data on Cloud Systems	3
IT 481	Cloud Security	3
IT 484	Voice Communications Technologies	3
IT 488	Fundamentals of Satellite Communications	3