Department of Information Technology

The department promotes Information Technology as a profession and as an academic discipline. In pursuit of the program mission, world-class educational programs prepare students for a range of careers or graduate study. IT professionals focus on meeting the needs of users within an organizational and societal context through the selection, creation, application, integration and administration of computing technologies. They must, therefore, have a good understanding of the various information technologies and the type of activity in which the organization is involved. Our students are required to complete a series of major core courses, an internship experience and an IT specialization area. Students and faculty also conduct innovative research in all aspects of IT and its applications and participate in consulting and economic development activities that support the mission of Georgia Southern University.

Information Technology Degrees


**IT 5090G Selected Topics in Information Technology**  
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.  
Provides an opportunity for in-depth study of selected topics or emerging areas in information technology. Graduate students will be given an extra assignment determined by the instructor that undergraduates will not be required to do.  
**Prerequisite(s):** Permission of Instructor.  
**Cross Listing(s):** IT 5090.

**IT 5135G Data Analytics**  
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.  
This course covers the basic issues involved in building and populating a data mart to support the planning, designing and building of business intelligence applications and data analytics. Core concepts related to business intelligence and analytics are covered. For graduate students a significant research project will be assigned as a culminating experience.  
**Prerequisite(s):** A minimum grade of "C" in IT 3233 or BUSA 3131 and CISM 4134.  
**Cross Listing(s):** IT 5135.

**IT 5235G Advanced Web Interfaces**  
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.  
This course provides an introduction and application of human-computer interaction theories to web-based applications. It covers the evaluation of user interfaces using various techniques including heuristic evaluation and user testing. For graduate students a significant research project will be assigned as a culminating experience.  
**Prerequisite(s):** A minimum grade of "C" in IT 2430 or IT 3130 and IT 3132.  
**Cross Listing(s):** IT 5235, IT 5235H.

**IT 5236G Interactive Web Design and Development**  
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.  
This course explores the infrastructure which forms the basis of commercial, web-enabled applications on mobile and small devices, as well as personal computers. The course will focus on designing mobile web applications that provide a high level of security, reliability, scalability, and availability. Through this course, students will develop proficiencies in current web technologies employed by businesses. Graduate students will be required to complete individual advanced level research in an area beyond the scope of the undergraduate requirements that demonstrates a higher level of mastery in the subject matter with additional required deliverables representative of graduate level work, as determined by the instructor.  
**Prerequisite(s):** A minimum grade of "C" in IT 2431 or IT 3131.  
**Cross Listing(s):** IT 5236.

**IT 5433G Information Storage and Management**  
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.  
This course covers modern storage infrastructure technology and management including: challenges and solutions for data storage and data management, intelligent storage systems, storage networking, backed up, recovery, and archive, business continuity and disaster recovery, security and virtualization, managing and monitoring the storage infrastructure. Best practices for security policies of cloud resources including permissions, privileges and storage management are analyzed and performed. For graduate students a significant research project will be assigned as a culminating experience.  
**Prerequisite(s):** A minimum grade of "C" in CISM 3134 and IT 2333.  
**Cross Listing(s):** IT 5433.

**IT 5434G Network Security Fundamentals**  
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.  
This course is intended to serve the needs of individuals interested in understanding the field of network security and how it relates to other areas of information technology. The course will take a broad look at network security and provide the knowledge necessary to prepare students for further study in specialized security areas or used as a capstone course to those interested in acquiring a general knowledge of the field. Graduate students will be required to complete individual advanced level research in an area beyond the scope of the undergraduate requirements that demonstrates a higher level of mastery in the subject matter with additional required deliverables representative of graduate level work, as determined by the instructor.  
**Prerequisite(s):** Permission of instructor.  
**Cross Listing(s):** IT 5434.

**IT 6130 Theoretical Foundations for Network Analysis**  
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.  
This course will provide a detailed review of fundamental relevant to the study of telecommunications, and data communications. Topics covered will include Shannon’s Theorem, elements of Graph theory, Queuing Theory, Probability, Number Systems, Matrices and more. Students will complete several exercises using MATLAB and Microsoft Excel to reinforce topics covered in lecture by solving network related problems. Discrete event simulations software (OPNET) will also be used to observe and analyze concepts and behaviors in communications networks.

**IT 7090 Selected Topics in Information Technology**  
1-3 Credit Hours. 1-3 Lecture Hours. 0 Lab Hours.  
This course provides the student with an opportunity for in-depth study of selected topics in information technology.  
**Prerequisite(s):** Permission of Instructor.

**IT 7360 Intgrt Tech School Learn Envir**  
3 Credit Hours. 3 Lecture Hours. 0 Lab Hours.