Information Technology

Director: Babak Forouraghi, Ph.D.

Overview
The Department of Computer Science at Saint Joseph’s University offers the following degrees: B.S. Computer Science, B.S. Information Technology and M.S. Computer Science.

B.S. Information Technology Goals and Objectives

Learning Goal 1: Graduates will succeed as practicing information technologists.

Students will be able to:
Objective 1.1: Solve business-related problems and implement their solutions in an appropriate computational environment.

Objective 1.2: Apply their knowledge of computer science and business to develop business-related software solutions.

Objective 1.3: Design systems, components, or processes to meet specified business requirements.

Objective 1.4: Work in teams to create various software systems, both large and small.

Objective 1.5: Communicate effectively, orally and in written form, individually and/or in teams.

Learning Goal 2: Graduates will adapt and evolve in complex technological environments such as those found in the workplace.

Students will be able to:
Objective 2.1: Solve business-related problems and implement their solutions in an appropriate computational environment.

Objective 2.2: Apply their knowledge of computer science and business to develop business-related software solutions.

Objective 2.3: Design systems, components, or processes to meet specified business requirements.

Learning Goal 3: Graduates will have a firm foundation in the computing and business principles that support the IT discipline.

Students will be able to:
Objective 3.1: Solve business-related problems and implement their solutions in an appropriate computational environment.

Objective 3.2: Apply their knowledge of computer science and business to develop business-related software solutions.

Objective 3.3: Design systems, components, or processes to meet specified business requirements.

Learning Goal 4: Graduates are careful, precise, mature thinkers, and take with them the intellectual preparation they need to apply what they have learned, communicate it to others, and continue their education for the rest of their lives.

Students will be able to:
Objective 4.1: Enter and succeed in graduate programs in computing, business, or information technology.

Objective 4.2: Solve business-related problems and implement their solutions in an appropriate computational environment.

Objective 4.3: Apply their knowledge of computer science and business to develop business-related software solutions.

Objective 4.4: Design systems, components, or processes to meet specified business requirements.

Objective 4.5: Articulate the social, professional, ethical and legal aspects of an IT environment.

Objective 4.6: Analyze contemporary issues related to the evolving discipline of IT.

Objective 4.7: Communicate effectively, orally and in written form, individually and/or in teams.

Requirements for the Information Technology Major
GEP Signature Courses (See Curricula): six courses

GEP Variable Courses (See Curricula): six to nine courses, including

Mathematics*:
MAT 155  Fundamentals of Calculus  
or  
MAT 161  Calculus I

Natural Science*:
One semester of any lab-based natural science course (see ILC below)

GEP Overlays (See Curricula): three courses

GEP Integrative Learning Component: three courses

ECN 101  Microeconomics,  
ECN 102  Macroeconomics, and any course in CAS.

GEP Electives: six courses

Major Concentration: sixteen courses including

Fourteen Required Core Courses:
ACC 101  Financial Accounting  
ACC 102  Managerial Accounting  
CSC 120  Computer Science I  
CSC 121  Computer Science II  
CSC 201  Data Structures  
CSC 202  Computer Architecture  
CSC 240  Discrete Structures I  
CSC 241  Discrete Structures II  
CSC 310  Computer Systems  
CSC 315  Software Engineering  
CSC 351  Database Systems  
CSC 353  Internet Applications  
CSC 354  Web Technologies  
CSC 495  Senior Project
Two additional electives: Any ACC, CSC, DSS, ECN, or FIN courses with advisor approval.

Minor in Information Technology
Advisor: Dr. Wei

With the approval of the Department, students may minor in Information Technology. Upon acceptance, the advisor will assist in selecting courses appropriate for their area of interest. Students who elect this minor must take six courses which include computer Science I, Computer Science II, Data Structures, and three Computer Science electives numbered 202 and above.

Learning Goals and Objectives for the minor in Information Technology

Goal 1: Graduates will be practicing information technologists.

Students will be able to:
Objective 1.1: Apply their knowledge of information technology and business to solve technical problems in an appropriate computational environment.

Goal 2: Graduates adapt and evolve in complex technological environments such as those found in the workplace.

Students will be able to:
Objective 2.1: Apply their knowledge of information technology and business to solve technical problems in an appropriate computational environment.

Objective 2.2: Analyze contemporary issues related to the evolving discipline of information technology.

Goal 3: Graduates have a firm foundation in the computing and business principles that support the IT discipline.

Student will be able to:
Objective 3.1: Apply their knowledge of information technology and business to solve technical problems in an appropriate computational environment.

College Honors Requirements
To receive College Honors credit, students undertake two consecutive semesters of course-based research and study that culminates in a senior thesis. For students in the Honors Program, these two courses may be counted toward the eight-course Honors requirement. To be eligible for College Honors a student must have a GPA of 3.5 or higher. If you are interested in completing the College Honors project during your senior year, please be in touch with the department chair early in the Spring of your junior year. Specific requirements for the College Honors thesis may be found under “Honors Program”.

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