

INFORMATION TECHNOLOGY

College of Natural and Behavioral and Sciences
Department of Computer Science

Program Description

Information Technology forms the technological infrastructure of modern commerce. It's the driving force of every industry and permeates everyday life. The ability to combine the power of computing with the management of multimedia information is arguable the key to obtaining ascendancy in any field.

Information Technology is an ever-evolving, expanding field. The Information Technology Program will provide students with the background, knowledge, and skills they will need to adapt to the dynamic nature of the marketplace.

The BSIT degree provides a high-quality science degree program in information technology that will prepare the student for lifelong learning as they pursue professional careers in informational technology and leadership roles in the society in which they serve. It provides our students with a strong foundational base, state-of-the-art techniques, methodologies, and tools to specify, design, and develop technology-based solutions to complex system problems. This program prepares our students to communicate well, both orally and in writing, on moral and ethical development, in the knowledge of the liberal arts, and on the commitment to services to others. IT provides opportunities for students to contribute to the body of knowledge that serves the profession, by engaging in activities that support their interests and are in agreement with the goals and objectives of the College, and the university.

Features

The University's location in the South Bay area of greater Los Angeles provides direct access to many major government contractors, manufacturers, and international centers of commerce and finance. This provides excellent opportunities for work-study and early job placement.

Our highly qualified full-time faculty are supplemented by talented and dedicated part-time faculty drawn from local firms and schools. Good teaching and easy on-campus access to professional quality computing systems enhance a degree program that provides both a solid core curriculum and a broad range of electives.

All courses are offered alternatively day and evening so that students may complete their programs by enrolling at either time exclusively.

Graduation with Honors

An undergraduate student may be a candidate for graduation with Honors in Information Technology provided he or she meets the following criteria:

1. A minimum of 36 units in residence at CSU Dominguez Hills at least 24 of which taken in Computer Science major;
2. A minimum GPA of 3.5 in all upper division courses in the Computer Science major completed in residence at CSUDH; 3. Recommendation by Information Technology faculty.

Students who achieve Honors in Information Technology will have the information recorded on their transcripts and diplomas.

Academic Advisement

Faculty guidance in the development of career goals and program planning to achieve those goals is available to all majors.

Preparation

Students entering the Information Technology program should have completed high school mathematics through trigonometry. Remediation is available but will delay the student's progress toward an Information Technology degree.

This is a program that places a premium on the student's initiative and effort.

Student Organizations

Contact departmental office for membership information, or visit the websites:

Association for Computing Machinery (ACM) ACM@csudh.edu

Institute of Electrical and Electronics Engineers (IEEE) IEEE@csudh.edu

Cyber Security CyberSec@csudh.edu

Computing Alliance of Hispanic-Serving Institutions (CAHSI)

CAHSI@csudh.edu

Career Possibilities

Bachelor of Science in Information Technology is a comprehensive program that is intended to provide students with the technology based skill set required immediately after degree completion to enter the workforce or a graduate program. Feedback and letters of support from members of our Industry Advisory Board indicate the need for professionals with the balance of practical and theoretical knowledge that extends beyond conventional information technology curricula.

Undergraduate Programs

Bachelor

- Information Technology, Bachelor of Science (<https://catalog.csudh.edu/academics/information-technology/information-technology-bs/>)

Faculty

Mohsen Beheshti, Department Chair

Jianchao (Jack) Han, Marek Suchenek, Bin Tang, Amlan Chatterjee, Liudong Zuo, Alireza Izaddoost, Brad Hollister, Kkondaker Salehin

Emeriti Faculty

William B. Jones, Kazimierz Kowalski

Staff

Violeta Diaz, Administrative Assistant
Ken Leyba, IT Consultant

Department Office: NSM A-132, (310) 243-3398
<http://csc.csudh.edu>

Courses

ITC 101. Introduction to Information Technology. (3 Units)

Designed to introduce the fundamentals of information technology. This includes, introduction to a variety of computer tools and computer concepts with an emphasis on information technology
Offered Fall, Spring

ITC 251. System Programming in C and Unix. (3 Units)

Prerequisite: CSC 121 is required. Provides a substantial exposure to the C programming language and the Unix programming environment for students with some prior programming experience but minimal exposure to C.
Offered Fall, Spring

ITC 300. Security in a Digital Society. (3 Units)

This course provides students with an understanding of what is involved in the journey of positioning the computer, security, privacy, internet, and cloud as a valuable service provide to the business and personal life of the digital society.
Offered Fall, Spring

ITC 310. IT Project Management. (3 Units)

Prerequisite: CSC 301 is required. Aims to provide students with the basic skills, knowledge and competence to effectively understand and manage information technology projects. This course prepares students to gain a practical and theoretical foundation for managing IT projects.
Offered Fall, Spring

ITC 395. Selected Topics in Information Technology. (1-3 Units)

Prerequisite: Consent of Instructor. Content varies. Topics in computer technology not covered by current course offerings. May be used for elective credit in departmental programs. Subject to approval.
Offered As needed

ITC 399. IT Practicum. (3 Units)

Prerequisite: Consent of instructor is required. The information technology internship program allows students to gain hands-on experience in a technology environment by spending one semester as an intern in the Information Technology Division or a related area. The internship program provides students with the opportunity to gain technical experience related to their studies and to prepare them for future career opportunities in the field. CR/NC grading only.
Offered Fall, Spring

ITC 453. Database Management Systems (DBMS). (3 Units)

Prerequisite: CSC 311 is required. Covers the design methodology process for databases and how to verify its structural correctness. Students will learn how to implement databases and applications software, primarily in the relational model. This is through using querying languages, primarily SQL, and other database supporting software; and applying the theory behind various database models and query languages. It also includes implementing security and integrity policies relating to databases working in group settings during design.
Offered Fall, Spring

ITC 459. IT Security. (3 Units)

Prerequisite: CSC 311 or consent of instructor is required. Information Technology Security aims at securing systems that remain dependable in the face of malice, error or mischance. This course covers a number of principles, methods, tools and good practices to secure systems.
Offered Fall, Spring

ITC 492. Senior Design. (3 Units)

Prerequisite: ITC 453 is required. Intensive study under the guidance of a member of the Information Technology (IT) faculty to complete a research project from start to end. Students will study system design and total project planning and management. A formal written report and oral presentation will be required.
Offered Fall, Spring