#### **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 enhances a degree program that provides a solid core curriculum and a broad range of electives. All courses are offered alternately day and evening so that students may complete their programs by enrolling at either time exclusively.

#### **Graduation with Honors**

An undergrad student may be a candidate for graduation with Honors in Computer Science provided he or she meets the following criteria:

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

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

# **Academic Advising**

Faculty guidance in the development of career goals and program planning to achieve goals is available to all majors. Completion of elective courses (beyond the required list) to reach a total of a minimum of 120. General Education Requirements (56-62 units) Students entering the Computer Technology program must complete the following:

- Earn and overall grade point average of 2.0
  or better in courses taken outside of the
  department.
- 2. Earn a grade of "C" or better in each course taken within the department.
- Students must take Capstone course CTC 492 at CSUDH.



## **Department of Computer Science**

College of Natural and Behavioral Sciences Chair: Mohsen Beheshti

> NSM A-132 Phone: (310) 243-3398 http://csc.csudh.edu

# **Preparation**

Students entering the computer technology program should have completed high school mathematics through trigonometry. Remediation is available but will delay the students' progress towards a Computer Technology Degree.

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

# **Career Possibilities**

Bachelor of Arts in Computer Technology is a comprehensive program that will consist of the following tracks: General Track, Homeland Security and Professional. This program is intended to provide students with the technology base skills set required immediately after degree completion to enter the work force within the following areas related to computer technology: Manufacturing, Repair, Trouble Shooting, Lab Technician, Public Service, Government Agencies, Consultants, Software Version Control, Domain Expert, Technician, and other computer/software technology related fields. Feedback from members of our Industry Advisory Board indicates the need for professionals with the balance of practical and theoretical knowledge that extends beyond conventional information technology curricula.

# CALIFORNIA STATE UNIVERSITY DOMINGUEZ HILLS

# BACHELOR OF ARTS COMPUTER TECHNOLOGY

# **Program Description**

Computer 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 arguably the key to obtaining ascendancy in any field.

Computer Technology is an ever evolving, expanding field. The proposed Computer Technology Program will provide students with the background, knowledge and skills they'll need to adapt to the dynamic nature of the marketplace. Program faculty will consist of traditional academics as well as industry professionals to provide curricular content that is on the cutting edge of industry trends.

The BACT degree provides a high-quality degree program in computer technology that will prepare students for lifelong learning as they pursue professional careers in computer technology and leadership roles in the society in which they serve. It provides our students with a strong foundation 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 knowledge of the liberal arts, and on commitment to services to others. CT provides opportunities for students to contribute to the body of knowledge that serves the profession, by engaging in activities which support their interests and are in agreement with the goals and objectives of the College and the University.

# **Bachelor of Arts in Computer Technology**

The following courses, or their approved transfer equivalents, are required of all candidates for this degree

#### **BACT: HOMELAND SECURITY TRACK (68 units)**

#### A. Lower Division Requirements (40 units)

CSC 101 – Intro to Computer Education (3)

CSC 111 - Intro to Computer (3)

**CSC 116** – Intro to Computer Hardware & Tools (3)

**CSC 255** – Intro to Dynamic Web Programming (3)

**CSC 115** – Intro to Programming Concepts (3)

CSC 121 - Intro to Comp. Science & Prog. I (4)

CSC 123 - Intro to Comp. Science & Prog. II (4)

CSC 221 - Assem. Lang. & Intro to Comp. Org. (3)

CTC 218 - Digital Logic Design

CTC 228 – Intro to Op. Systems & Network (4)

MAT 131 – Elementary Stats and Probability (3)

MAT 153 - College Algebra & Trigonometry (4)

#### B. Upper Division Requirements (25 units)

CSC 301 – Computer and Society (3)

CTC 310 – Software Project Management (3)

CTC 316 – O/S and Networking Support (3)

**CTC 328** – PC Forensic (4)

CTC 362 - Communication System Security (3)

CTC 428 - OS Security (3)

CTC 452 - Network Sec. & Hack Prevention (3)

CTC 492 - Senior Project (3)

CTC/CSC Elec. Upper Division Elective (3)

#### BACT: GENERAL TRACK (68 units)

#### A. Lower Division Requirements (37 units)

CSC 101 – Intro to Computer Education (3)

CSC 111 - Intro to Computer (3)

CSC 116 – Intro to Comp. Hardware & Tools (3)

CSC 255 - Intro to Dynamic Web Prog. (3)

**CSC 115** – Intro to Programming Concepts (3)

CSC 121 - Intro to Comp. Science & Prog. I (3)

CTC 218 - Digital Logic Design (3)

CTC/CSC Elect. Lower Division Elective (8)

MAT 131 – Elementary Stats and Probability (3)

MAT 153 - College Algebra and Trigonometry (4)

#### B. Upper Division Requirements (31 units)

CSC 301 – Computer and Society (3)

CTC 310 – Software Project Management (3)

CTC 316 – O/S and Network Support (3)

CTC 452 - Network Sec & Hacking Prevention (3)

CTC 492 - Senior Project (3)

CTC/CSC Elec. Upper Division Elective (16)

#### BACT: PROFESSIONAL TRACK (68 units)

#### A. Core Requirements (34 units)

1. Lower Division (19 units)

CSC 101 – Intro to Computer Education (3)

CSC 111 - Intro to Computer (3)

**CSC 116** – Intro to Computer Hardware and Tools

CSC 255 – Intro to Dynamic Web Programming (3)

MAT 131 – Elementary Statistics and Probability (3)

MAT 153 - College Algebra & Trigonometry (4)

#### 2. Upper Division (15 units)

CSC 301 – Computer and Society (3)

CTC 310 - Software Project Management (3)

CTC 316 – O/S and Networking Support (3)

CTC 452 - Network Sec. & Hacking Prevention (3)

CTC 492 – Senior Project (3)

#### B. Professional Track Requirements (34 units)

#### 1. Specific Domain:

a). Associate Degree, or

**b).** Minor in another program, or

**c).** Concentration courses – with the consultation of computer science dept.

2. Upper division Electives (as needed)

### Minor in Computer Technology (21 units)

#### A. Lower Division Requirements (9 units)

CSC 111 - Intro to Computer & Basic Prog. (3)

CSC 116 - Intro to Comp. Hardware & Tools (3)

**CSC 255** – Dynamic Web Programming (3)

#### B. Upper Division Requirements (12 units)

Required Courses (6 units)

CSC 301 - Computers & Society (3)

CTC 310 – Software Project Management (3)

#### 2. Select two courses from the following (6 units)

CTC 316 – O/S and Networking Support (3)

CTC 328 - PC Forensic (4)

CTC 362 - Comm. Systems Security (3)

**CTC 428** – OS Security (3)

CTC 452 - Network Sec. & Hacking Prevention (3)

#### Certificate in Computer Technology (15 units)

1. Computer Basics (3 units)

**CSC 101** – Introduction to Computer Education (3)

2. Programming (3 units) – Select one course

CSC 111 – Introduction to Computers & Basic Programming (3)

**CSC 115** – Introduction to Programming Concepts (3)

3. <u>Basic Hardware (3 units)</u>

**CSC 116** – Introduction to Computer Hardware & Tools (3)

4. Web Design and Security (3 units)

CSC 255 – Dynamic Web Programming (3)

5. Computer Ethics (3 units)

CSC 301 – Computer and Society (3)

# **Other Computer Science Programs**

- Bachelor of Science in Computer Science (BSCS)
- Bachelor of Science in Information Technology (BSIT)
- Master of Science in Computer Sciences (MSCS)

# Clubs and Student Organizations

 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