FOOTHILL COLLEGE
12345 El Monte Road ■ Los Altos Hills, CA ■ 94022-4599
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COMPUTERS, TECHNOLOGY & INFORMATION SYSTEMS DIVISION

COMPUTER SCIENCE

Associate in Science Degree Requirements

COMPUTER SCIENCE
The Computer Science major has been developed for the student intending to transfer for a four-year degree in Computer Science and/or Gaming Development. It also serves to provide career enrichment for the working professional. It provides an excellent foundation in computer programming languages, problem solving tools, and mathematics through calculus. The gaming track being provided offers an entrée into one of the many excellent and emerging bachelors programs in game development and interactive simulation.

CAREER OPPORTUNITIES
The need for qualified computer programmers, software developers & system administrators continues. Experienced Computer Programmers are needed for research, engineering and many phases of medical & associated health sciences.

UNITS REQUIRED FOR MAJOR: 54-55

ASSOCIATE DEGREE REQUIREMENTS:
- English proficiency: ENGL 1A, ESL 26 or equivalent.
- Mathematics proficiency: MATH 103/105 or equivalent.

A minimum of 90 units required to include:
- All General Education requirements
- Core courses (35 Units)
- Elective courses (19-20 Units)
- Other graduation requirements as appropriate.

NOTE: All courses pertaining to the major must be taken for a letter grade. In addition, a GPA of 2.0 or higher is required in all Core and Support courses for the Degree or Certificates. 50% of the major units must be taken within Computers, Technology and Information Systems Division.

Prerequisite: MATH 49 or equivalent

CORE COURSES: 35 Units
Select one language (C++ or JAVA)
CIS 15A Computer Science I: C++ (5 units)
CIS 15B Computer Science II: C++ (5 units)
CIS 15C Computer Science III: C++ (5 units)
or
CIS 27A Computer Science I: JAVA (5 units)
CIS 27B Computer Science II: JAVA (5 units)
CIS 27C Computer Science III: JAVA (5 units)
and
MATH 1A Calculus (5 units)
MATH 1B Calculus (5 units)
MATH 1C Calculus (5 units)
MATH 22 Discrete Mathematics (5 units)

ELECTIVE COURSES: 19-20 Units
CIS 12A Fundamentals of Visual Basic.NET Programming (5 units)
CIS 19A Introduction to Programming with C# (5 units)
CIS 27P JAVA for Programmers (5 units)
CIS 27D JAVA Advanced Features (5 units)
CIS 52A Introduction to Data Management Systems (5 units)
CIS 52B Oracle SQL (5 units)
CIS 68A Introduction to Linux & UNIX (5 units)
CIS 68B Linux & UNIX Shell Programming (5 units)
CIS 78 Software Engineering (5 units)
CNET 54A Network Fundamentals & the TCP/IP Protocol Suite (CCNA I) (5 units)
MATH 1D Calculus (5 units)
MATH 2A Differential Equations (5 units)
MATH 2B Linear Algebra (5 units)
PHYS 4A General Physics (Calculus) (6 units)

Academic Year 2008-2009