**Folsom Lake College**

Phone: (916) 691 - 7344

Catalog: http://www.crc.losrios.edu/Documents/catalog/CRCCollegeCatalog2011-12\_JuneRevision.pdf

Website: www.flc.losrios.edu

**Computer Science – Associates (Transfer)**

**Program Information**

The Computer Science degree provides a comprehensive exposure to computer science in preparation for upper-division computer science courses. The program also prepares students for entry level employment in the computer and related industries. The Computer Science Associate in Science (A.S.) Degree may be obtained by completion of the required program, plus general education requirements

**Career Opportunities**

Programmer, Technician, Software Verification and Testing, Systems Analyst, Systems Designer, Software Engineer, Firmware Engineer, Software Architect, Computer Engineer, Computer Techologist, Technical Manager

**Upon completion of this program, the student will be able to:**

• Design, write, test and debug computer programs, using a low-level language, a structured language, and an object-oriented language.

• Evaluate various solutions to a proposed problem in terms of programming languages, software architecture, and other appropriate computer technologies.

• Demonstrate a fundamental knowledge of the basic concepts that define the discipline of computer science such as data structures, discrete mathematics, basic computer architecture, operating system internals, networking fundamentals, and programming languages.

**Energy – Classes**

**Program Information**

This course is an introduction to the science, technology, environmental impact, and economics of energy production and consumption. Topics include: the basic physics of energy, current and alternative energy generation systems, energy use in residential and commercial buildings, energy use in transportation systems, the economics of energy systems, and regulatory issues. Students will exercise their ability to make personal and professional decisions regarding energy systems so as to reduce energy costs and pollution footprints. Students may also be expected to attend and participate in an on-site visit of an energy industry organization.

**Engineering – Associates (Transfer)**

**Program Information**

FLC's program provides the foundation in mathematics, physics, and engineering necessary to transfer to a university and complete a bachelor's degree in engineering. Engineering involves the application of scientific and mathematical principles needed to solve practical technical problems. Although the first two years of engineering courses for all engineering degrees are similar, students should consult the lower division requirements of the institution to which they wish to transfer.

**Career Opportunities**

Aerospace Engineer, Architectural Engineer, Chemical Engineer, Civil Engineer, Computer Engineer, Electrical Engineer, Mechanical Engineer, and other types of engineers

**Upon completion of this program, the student will be able to:**

• Apply the principles of engineering.

• Identify, analyze, and solve technical problems.

• Plan, conduct, analyze, and interpret experiments.

• Communicate about engineering solutions effectively through speaking, writing, and graphics.