**Modesto Junior College**

Phone: (209) 575-6550

Catalog: http://www.mjc.edu/common/catalog/pdfs/1112/FullCat2011\_12\_WEB2.pdf

Website: http://www.mjc.edu

**Computer Science – Associates (Transfer)**

**Program Information**

This program is a comprehensive exposure to programming languages, algorithms and problem solving in preparation for upper division computer science courses. The Computer Science degree includes substantial course work in mathematics as is required by most university computer science programs.

**Career Opportunities**

Technical positions include computer operator, computer program­mer, system analysts, database administrators, computer support, or help desk specialists, Web developers, and application develop­ers.

Opportunities in networking include network support specialists, network administrators and technicians, network security special­ist, computer forensics specialist, Webmasters, Web developers, and Web site designers.

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

• Evaluate various programming language solutions to a pro-posed problem.

• Recommend tools and techniques for each step in the development of a computer program.

• Integrate the basic mathematical knowledge that is fundamental to Computer Science into the solutions of proposed problems.

• Evaluate the theories and core techniques of computer science using scientific methods.

**Industrial Electronics – Associates, Certificate**

**Program Information**

The Electronics Technology Program prepares students to enter industry as Electronics Technicians or to transfer to a four-year university program. An Industrial Electronics study option and a Computer Electronics study option are available. Students receive theoretical and laboratory instruction in electrical/electronic principles, analog and digital devices, electrical/electronic systems, computer hardware, industrial equipment and control systems.

**Career Opportunities**

This degree or certificate provides students with the knowledge to successfully enter a variety of electronics and telecommunication careers. Working closely with our industry partners and contacts ensures our curriculum is relevant and meets the current and future needs of the Electronics and Telecommunications Industry.

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

• Design and build several of the most common circuits used in electronic communication systems.

• Develop skills in building, testing, analyzing, and troubleshooting electronic communication systems.

• Apply theory and mathematics for evaluating the design, operation, and troubleshooting of integrated amplifier circuits such as comparators and operational amplifiers.

• Interpret data from a variety of test and measurement equipment used in analysis of electronic control systems.

• Identify and diagram schematic symbols used in electric and electrical industrial applications.

**Engineering / Engineering Technology – Associates (Transfer)**

**Program Information**

The Engineering and Engineering Technology programs prepare students to transfer to four-year college and university programs. Most universities have several common undergraduate core classes regardless of the student’s eventual area of specialization (i.e. civil, mechanical, electrical/electronic, aeronautical, agricultural, chemical, industrial, etc.)

**Career Opportunities**

Graduates typically find careers in facilities and plant operations, testing, technical sales and positions as mechanical, manufacturing and computer technicians.

**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.