



DIVISION OF ADVANCED TECHNOLOGY AND APPLIED SCIENCE

ADVANCED MANUFACTURING • 949.582.4427

Advanced Manufacturing addresses the competencies required by technical, engineering, and management professionals working in industry where products are designed and developed, with specific emphasis on manufacturing and model making, using Additive and Subtractive Manufacturing. The program is designed to develop a solid educational foundation for graduates to work closely with engineers, designers, and professionals in multiple industries, using additive processes for product development, 3D visualization, art, entertainment, architecture, and medical modeling. Classroom work in project design is combined with learning laboratory experience utilizing project-based learning. Students will gain valuable hands-on experience using some of the most advanced equipment available.

ARCHITECTURAL DRAFTING • 949.582.4704 or 4427

Prepare yourself for a profession in which design ideas become physical reality. The certificate program stresses the importance of understanding the natural and human environment, conceptual thinking, problem-solving, and people skills. The Associates Degree in Architecture prepares students for transfer to a baccalaureate program and for professional employment. The curriculum covers a broad range of subjects, including materials and methods of construction, design and planning, computer-aided drafting (CAD), professional practice, and the history of architecture. **Construction Inspection** focuses on code requirements, inspection procedure, and testing techniques for residential and commercial units. This is an excellent program for people who want to transition from builder/construction worker to inspector.

AUTOMOTIVE TECHNOLOGY • 949.582.4996

If you're mechanically inclined and enjoy challenges, Auto Tech has courses and certificate programs for you. Classroom work is combined with hands-on training in a modern, well-equipped lab to give students a solid foundation in the servicing repair and maintenance of all types of automobiles. The Auto Tech programs are designed to prepare both male and female students for employment in the automotive industry. Students may also complete their Associate in Science Degree requirements and prepare to transfer to a four-year college. Coursework emphasizes the understanding and diagnosis of malfunctions in on-board computer controls, suspension, transmission, electrical, air-conditioning, fuel, engine, emission, alternative propulsion and brake systems. The following five certificate options are available: **Automotive Chassis Specialist · Automotive Engine Service Specialist · Automotive Engine Performance Specialist · Alternative Fuel Vehicle Specialist · General Automotive Technician.**

COMPUTER MAINTENANCE TECHNOLOGY • 949.582.4879

This program gives students an overview and basic understanding of computers, computer software, including Windows operating system, and hands-on experience installing and maintaining computer hardware. Job prospects are strong for entry level computer technologists and computer technicians in companies involved in the manufacture, installation, repair, maintenance, upgrading, or sales of personal computers and hardware for personal computers and computer networks.

COSMETOLOGY • 949.582.4541

Cosmetologists make people look beautiful and feel better about themselves. They cut and style hair, give permanent waves, hair straightening, and provide various hair color techniques. With additional training, they can specialize in facials, makeup application, style wigs and hairpieces, manicures, pedicures, and acrylic nail application. Our comprehensive cosmetology program requires 1,600 hours of training and can be completed in one year. Program graduates are then eligible to take the State Board of Cosmetology Licensing exam and begin their careers. A 600-hour course preparing students to become an **esthetician** is also offered through Saddleback College. Estheticians offer skin care treatments, such as microdermabrasion, anti-aging skin masks, acne care, face and body waxing, and makeup application. Successful completion of this course and successful completion of the State Licensing Examination will allow the graduate to work as a licensed esthetician. Call for more information.

CULINARY ARTS • 949.582.4354 or 4568

Culinary Arts, Advanced Culinary Arts, Catering, and Foods- Join the exciting world of food-related careers through hands-on coursework and choice of various specialized certificate programs. Prepare for work in restaurant, hotel and hospitality operations, catering, and the promotion of foods, equipment and products. Employment opportunities include Chef, Cook Specialty and Ethnic Restaurant Operation, Food and Beverage Service, Recipe Development Technician, Fast Foods Operations, and Food Service in schools, hospitals and day-care centers for the young and elderly. The program also offers coursework for professional improvement as well as transfer courses for students pursuing a Bachelor's degree in Family & Consumer Science with a Foods emphasis.

DRAFTING TECHNOLOGY • 949.582.4427

The Drafting Technology curriculum develops a comprehensive understanding of basic drafting principles and the technical skills needed to design and create sketches and drawings with computer-aided drafting (CAD) systems. For people who like precision work that involves making sketches and drawings, a drafting career offers many possibilities in manufacturing, architectural and construction firms, public utilities, and governmental agencies. All coursework in the drafting technology program is reflective of industry standards.

ECOLOGICAL RESTORATION • 949.582.4624

The certificate in Ecological Restoration trains students for a practical ecological application of appropriate techniques for a variety of ecological restoration projects. The projects may be carried out by industry or government agencies and may have specific legal requirements for implementation and proof of success. Students completing the certificate may be hired by local, county, state, or federal government; private consulting firms; or subcontractors hired by any of these agencies.

ELECTRONIC TECHNOLOGY • 949.582.4879

Electronics and computers are fast-growing, evolving technical fields requiring a highly skilled, well-trained workforce. The applications of electronics and computers are almost limitless, extending to the fields of biomedical instruments and devices, audio, video and communication equipment, computer systems, military and aerospace systems, automotive and industrial control, electric power distribution, and others. Electronic Technology combines classroom work in the fundamental principles of electronics with extensive hands-on lab sessions. The following three certificate options are available: **General Electronic Technology · Analog and Digital Circuit Electronic Technology · Digital Electronic Technology.**

ENVIRONMENTAL STUDIES • 949.582.4624

Earn an Associate Degree in this interdisciplinary program that provides students with an integrated and critical knowledge of the natural environment and the relationships and interactions humans have with it. The Program provides students with the understanding that environmental challenges face every aspect of society, and it provides them with the skills needed to help solve these complex problems through cooperation and negotiation with the different and often competing stakeholders. The program combines classroom, laboratory, and field study instruction giving students a well-rounded preparation in the field of environmental studies. The department also offers a Sustainability Studies Occupational Skills Award, which educates students on the importance of sustainability and trains them how to become sustainable not only in their everyday lives, but in their careers as well. Students will be prepared to transfer to sustainability related programs at the university level, advantaged for jobs in the coming green economy, positioned to develop new business and other employment opportunities, and become more engaged citizens.

FAMILY AND CONSUMER SCIENCES • 949.582.4568

Family and Consumer Sciences offers employment opportunities that help people to help themselves in improving the quality of their lives. Career opportunities include Independent Living Services, At-Risk Youth Programs, Programs for Older Adults, Self-Improvement Education, Product Sales, Manufacture's Representative, Customer Service Representative, and Store Manager. Recent research shows an FCS teacher shortage in California and

the U.S. Further coursework and credentialing in FCS education can lead to teaching. **Consumer Services** prepares students for entry into the Consumer Affairs professional field. Employment opportunities link the consumer, business, and government and improve communication among all three groups. Career opportunities include Consumer Advisor, Consumer Energy Specialist, community and volunteer organizations, credit counselor, customer service - call center, product representative, public relations, and programs for older adults.

FASHION • 949.582.4949

Fashion Design and **Advanced Fashion Design and Apparel Manufacturing certificates** prepare students for positions as designers, design room assistants, pattern makers, graders, sample makers, apparel manufacturing and fashion entrepreneurs, and for employment in the design, dressmaking/tailoring, and theater/costuming sourcing and production fields. Many of the clothing classes can be utilized as transfer courses for those wanting a Bachelor's degree in Fashion Design or Home Economics with a clothing and textiles emphasis. **Fashion Merchandising/Visual Fashion Merchandising certificates** offer professional training for individuals entering the fashion industry. The curriculum emphasizes the development of an individual's fashion sense and creativity. The program offers a comprehensive analysis of the manufacturing, distribution, buying and merchandising of fashion apparel, and emphasizes fashion promotion, coordination, visual merchandising and fashion show/events.

GRAPHIC COMMUNICATIONS • 949.582.4626

This certificate program prepares students for positions in the printing industry that will require the planning, creation, production and troubleshooting of graphic information destined for print and/or the web. Courses are designed to cover printing processes (including screen-printing, letterpress and offset lithography), their terminology, capabilities and limitations; graphic art areas of design/layout and composition; photo conversion; and, printing and binding.

GRAPHIC DESIGN • 949.582.4696

Graphic designers shape our visual environment with words and images. The Saddleback graphic design program prepares students for continued studies in design as well as for practicing graphics design in public or private institutions or as entrepreneurs. Our program teaches students to visualize concepts, solve problems and skillfully design projects. The curriculum is designed to provide students with knowledge and skills necessary for employment opportunities with graphic design studios, advertising agencies, printing companies, manufacturing industries, newspapers, and businesses with in-house graphics operations. The program focuses on the integration of computer graphics technology with the media of traditional art disciplines such as drawing, design, color, illustration, printing, and photography. Students use state-of-the-art hardware and software as they learn the necessary skills needed to work in the design industry. Certificates are offered in three areas of concentration: **Graphic Design • Computer Graphics • Illustration/Animation.**

HORTICULTURE and LANDSCAPE DESIGN • 949.582.4310 or 6180

The **Horticulture** program prepares students for careers related to the production and care of plants commonly used in landscape design, retail and wholesale nurseries, as well as in park departments. **Landscape Design** students study a curriculum for careers in landscape design and maintenance, with specific attention paid to employment with municipal and county parks departments, industrial and commercial firms, residential construction companies, and private businesses.

www.saddleback.edu/atas/horticulture

HOSPITALITY • 949.582. 4354 or 4568

Often hard work pays off in the form of a promotion, but work gets too busy to train employees properly and work becomes trial by fire! This program prepares students for positions of management in the hospitality industry that requires knowledge of production, costing, hospitality law as well as leadership, training and supervision.

INTERIOR DESIGN • 949.582.4615

Saddleback College offers an interdisciplinary Interior Design curriculum providing multilevel, accredited courses that prepare students with the competencies required to enter the Interior Design profession. The following three beginning to advanced levels: **Interior Merchandising (Level I) • Interior Design Assistant (Level II) • or Interior Design Professional (Level III)** provide a variety of choice for the design student to receive multiple certificates. Acquiring an **Associate Degree** and/or transferring to a 4-year institution for a **Bachelor Degree** are also available Interior Design options. The Interior Design curriculum emphasizes both residential and commercial design. Theory and skills application related to color, space planning, lighting, products and materials, green design, computer-aided design, design elements and principles, professional practice, and design specialties such as kitchen, bath and hospitality are highlighted.

www.saddleback.edu/atas/interior-design

MARINE SCIENCE TECHNOLOGY • 949.582.4624

This program prepares students for employment in the marine sciences and maritime trades. Classroom work is combined with hands-on lab and field activities. Field excursions may put to sea on board oceanographic vessels or under sail utilizing many innovative instructional opportunities. The college maintains a fleet of sailboats, contracts with local marine outfitters for large, ocean-going vessels, and houses a new aquarium facility circulating over 2,200 gallons of seawater. **Marine Science Technician certificate** trains students to work closely with marine scientists and researchers in their endeavors to manage this huge natural resource. The **Seamanship certificate** prepares students as operators of ocean-going vessels and to take Coast Guard licensing examinations.

NUTRITION • 949.582.4598 or 4568

Explore a field that can have lifelong benefits for you and your family, as well as offer an exciting career. Nutrition-related careers include Dietary Aide, Wellness Instructor, Lifestyle Coach, Sports Nutrition, Gyms/Health Clubs Nutrition Expert, Weight Management Counselor, Day Care for the Youth and Elderly, Non-medical Senior Care, Independent Living Service, After School Programs, At-Risk Youth Programs, Community and Volunteer Organizations and Nutrition Product Sales. The program also offers an Associate in Science Degree as well as transfer courses for students pursuing a Bachelor's degree in Family & Consumer Science with a Nutrition emphasis. Students may transfer to 4-year institutions to become Registered Dietitians Nutritionists (RDN) or Dietetic Technicians (DT).

TRAVEL AND TOURISM • 949.582.4615

The Travel and Tourism curriculum prepares students for careers related to ticketing, reservations, major tourist destinations, fares and routes, tour promotion and planning, and modes of travel including air, ship, rail and automobile. This exciting, challenging and rapidly-growing field offers many opportunities for the well-trained individual who has earned a certificate or Associate degree in the program.

www.saddleback.edu/atas/travel-and-tourism

WATER RESOURCES AND CONSERVATION • 949.582.4624

Water Resources and Conservation provides students with an integrated background and critical knowledge of water resources and conservation issues. Students will gain skills and practical application of those skills to design, implement, and evaluate water conservation programs that address current and future water issues at a local, national, and global level. The program combines classroom, laboratory, and field study instruction providing students with a well-rounded preparation in the water resources and conservation field. The goal of the program is to train and prepare students for a career in the water field as water efficiency/conservation technicians, coordinators, or specialists, or as water resources specialists and technicians. The program will also prepare students for water conservation certification examinations administered by professional associations within the water industry.

- **Preparing Students for AA/AS Degree and Occupational Certificates**
 - **Offering Occupational Programs for Employment and Transfer**
 - **Providing Professional Skills Upgrading**
 - **State-of-the-Art Equipment and Facilities**
 - **Lifelong Learning Opportunities**

For more information about these programs, please contact the:
DIVISION OF ADVANCED TECHNOLOGY AND APPLIED SCIENCE at
949.582.4541 or scatas@saddleback.edu
Visit our home page at www.saddleback.edu/atas

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