Construction **TECHNOLOGY**



Construction Technology

Learn residential construction and have the opportunity to build or remodel a single-family residence, using foundation-to-finish carpentry skills. Develop cabinetmaking skills by learning all aspects of hand and power tools for furniture and custom cabinetry. Receive solar installation training in both photovoltaic and thermal solar systems, or work side-by-side with a licensed electrician as an electrician trainee.



- **94%** employers reported having a difficult time finding skilled constructions workers for their job openings in 2017.
- Solar Photovoltaic Installer will be the fastest growing job in the US over the next decade.
- **Electricians** can make over \$100,000 a year in California?

CONSTRUCTION TECHNOLOGY

About the program

Programs in this field provide general and specific educational opportunities for students seeking careers related to residential and commercial building construction and practical and artistic woodworking skills and techniques. The AS Degree in Construction is accredited by the Association for Technology, Management and Applied Engineering (ATMAE).

Degrees/Certificates within this program:

- Associate of Science Degree, Construction Technology
- Certificate of Achievement, Residential Construction I
- Certificate of Achievement, Residential Construction II
- Certificate of Recognition, Residential Wiring
- Certificate of Achievement, Cabinetmaking and Millwork
- Certificate of Achievement, Electrician Trainee

Examples of classes in this program include:

- Carpentry & Carpentry Theory
- Cabinetmaking and Millwork
- Construction Estimating
- Photovoltaic System Design and Installation
- Electrical Codes and Standards
- Residential Wiring
- Architectural Design Drafting Techniques
- Engineering Design Graphics

Similar Degrees/Certificates offered at CR:

- Associate of Science Degree, Drafting and 3D Modeling
- Certificate of Achievement, Drafting and 3D Modeling

COLLEGE REDWOODS

Career opportunities:

- Carpenter
- Construction Supervisor
- Building Contractor
- Building Inspector
- Construction Estimator
- Cabinetmaker
- Electrician
- Construction Laborer

FOR MORE INFORMATION

Derek Glavich, Professor, Construction Technology (707) 476-4344 or derek-glavich@redwoods.edu

Chia Hinchliff, Student Development Advisor, Career Education (707) 476-4150 or <u>Chia-Hinchliff@redwoods.edu</u>

www.redwoods.edu/constructiontech

Dental ASSISTING



Dental Assisting

Dental assisting offers good earning opportunities, excellent working conditions and the personal satisfaction of knowing you're helping someone by providing a valuable health service. Graduates qualify to take the examinations for state licensure as a Registered Dental Assistant (RDA) and/or Certified Dental Assistant (CDA).

Did you ???

- Demand for dental assistants is projected to grow 19 percent from 2016 to 2026, much faster than average.
- Dental assistants have flexible schedules that sometimes even include travel.
- Some of the top skills needed for dental assistants are compassion, attention to detail and problem solving.

DENTAL ASSISTING

About the program

Programs in this field prepare students for careers as dental assistants and for successful completion of the Registered Dental Assistant and Certified Dental Assistant Examinations. Program Applications are accepted each year February 1-August 1 on a first come, first served basis. 24 students are accepted each year. Applications can be downloaded at <u>www.redwoods.edu/dental</u>.

Degrees/Certificates within this program:

- Associate of Science Degree, Dental Assisting
- Certificate of Achievement, Dental Assisting

Examples of classes in this program:

- Dental Science
- Dental Materials and Procedures
- Dental Radiography
- Dental Assisting Fundamentals (Chairside)
- Dental Disease and Oral Health
- Dental Front Office Skills
- Nutrition

Similar Degrees/Certificates offered at CR:

- Associate of Science Degree, Licensed Vocational Nursing
- Certificate of Achievement, Licensed Vocational Nursing
- Associate of Science Degree, Registered Nursing
- Associate of Science Degree, Paramedic/LVN to RN
- Certificate of Achievement, LVN to RN
- Associate of Science Degree, North Coast Paramedic
- Certificate of Achievement, North Coast Paramedic

Career opportunities:

- Registered Dental Assistant
- Certified Dental Assistant
- Traveling Dental Assistant

CR COLLEGE THE REDWOODS

www.redwoods.edu/dental

FOR MORE INFORMATION

Hillary Reed, Professor, Dental Assisting (707) 476-4253 or <u>hillary-reed@redwoods.edu</u>

Counseling & Advising (707) 476-4150 or <u>counseling@redwoods.edu</u>

Early Childhood **EDUCATION**



Early Childhood Education

Students leave CR's Early Childhood Education program ready to join the workforce as licensed preschool teachers or day-care site directors, while others transfer to a university to continue training. In addition to the classroom, you'll also benefit from 100 hours of mentoring by a master teacher in our learning lab, the Child Development Center, which cares for children 18 months to 5 years of age.



- Early childhood education focuses on the time between birth and 8 years old.
- ECE teachers improve children's chances of doing well for their entire school experience.
- The need for ECE professionals is expected to grow rapidly in the next several years.

EARLY CHILDHOOD EDUCATION

About the program

Programs in this field prepare students for work with young children in a variety of settings including family child care and center-based child care settings licensed by the State of California. The scope of programs ranges from care for infants and toddlers to preschool and school-age children.

Degrees/Certificates within this program:

- Associate in Science Degree for Transfer, Early Childhood Education
- Associate of Science Degree, Early Childhood Education
- Certificate of Achievement, Early Childhood Education
- All levels of the California Child Development Permit from Assistant to the Site Supervisor

Examples of classes in this program:

- Child Growth and Development
- The Child in the Family and the Community
- Principles and Practices of Teaching Young Children
- Introduction to Early Childhood Curriculum
- Observation and Assessment in Early Childhood Education
- Field Experience in Early Childhood Education
- Child Health, Safety and Nutrition
- Teaching in a Diverse Society

Career opportunities:

- Licensed Family Child Care Provider
- Preschool Teacher
- Infant-Toddler Teacher
- School-Aged Child Care Teacher
- Mentor/Master Teacher
- Child Care Program Director
- Resource and Referral Specialist
- Respite Worker
- Home Visitor
- Family Services Worker
- Early Interventionist I (Special Needs Aide)
- Para-educators (public school classroom aides)

FOR MORE INFORMATION

Darius Kalvaitis, Assistant Professor, Early Childhood Education (707) 476-4338 or <u>darius-kalvaitis@redwoods.edu</u>

Chia Hinchliff, Student Development Advisor, Career Education (707) 476-4150 or <u>Chia-Hinchliff@redwoods.edu</u>

www.redwoods.edu/ece

COLLEGE REDWOODS

CR COLLEGE

Forestry & Natural **RESOURCES**



FORESTRY & NATURAL RESOURCES

The Forestry and Natural Resources (FNR) program at CR prepares you for a career managing public and/or private forested lands for economic, recreational, and conservation purposes. Field trips in and around Humboldt's forest ecosystems complement classroom discussions about forest ecology, fire and fuels management, inventory, surveying and wildlife biology.

Did you **P** KNOW

- The Earth has lost more than half its trees.
- Foresters balance the needs of people, the environment, and wildlife.
- Foresters use drones and other technology to map and study trees.
- Foresters earn an average of \$73,000 a year in California.

FORESTRY AND NATURAL RESOURCES

About the program

The program combines ecological and technical knowledge with experiential lab environments that introduce students to the wide range of skills and employment pathways possible in the profession. Students learn how to identify, measure, and analyze various aspects of the forest environment, including trees, water, wildlife, and geospatial components and can then use this knowledge in careers working in natural resources. Most of the FNR major courses articulate directly with Humboldt State University Forestry degrees, though students should consult Counseling and Advising for current articulation agreements and transfer opportunities.

Degrees/Certificates within this program:

- Associate of Science Degree, Forestry and Natural Resources Technology, Forest Technology
- Certificate of Achievement, Forest Technology
- Certificate of Recognition, Geomatics

Examples of classes in this program:

- Wildlife Biology and Conservation
- Dendrology
- Intro to Surveying
- Intro to Photogrammetry and Remote Sensing
- Intro to GIS & GPS
- Intro to Wildland Fire
- Intro to Watershed Management Forest Ecology and Management
- Timber Harvesting in California

Similar Degrees/Certificates offered at CR:

- Associate of Science Degree, Civil Design
- Certificate of Achievement, Civil Design

Career opportunities:

- Forester
- Conservation and Resource Manager
- Remote Sensing Technician
- Wildland Fire Ecologist
- Park Ranger / Interpreter
- Forest Road Technician
- Forestry Aide for CALFIRE

CR COLLEGE THE REDWOODS

www.redwoods.edu/forestry

FOR MORE INFORMATION

Tim Baker, Professor, Forestry (707) 476-4348 or <u>tim-baker@redwoods.edu</u>

Manufacturing **TECHNOLOGY**





MANUFACTURING TECHNOLOGY

In CR's Manufacturing Technology (MT) program, you'll learn to make parts, instruments, and tools from raw materials. It's specifically designed to prepare you for an entrylevel position at local manufacturing firms, which are continually in need of skilled professionals. If you have ideas for great projects, or you want to find a career where your skills will really pay off, then MT is for you.

Did you ?

- Off-Earth (Space!) Manufacturing is an up-and-coming job sector.
- Manufacturing offers diverse career opportunities including engineers, machinists, welders and robotics technicians.
- The average salary for entry-level manufacturing engineers is over \$60,000.

MANUFACTURING TECHNOLOGY

About the program

Programs in this field provide general and specific educational opportunities for students seeking careers in drafting and design for manufacturing, machining operations, computer-controlled manufacturing, process control, production, and supervision.

Degrees/Certificates within this program:

- Associate of Science Degree, CADD/CAM Design and Manufacturing
- Certificate of Achievement, CADD/CAM Design and Manufacturing
- Associate of Science Degree, Manufacturing Technology
- Certificate of Achievement, Manufacturing Technology

Examples of classes in this program:

- Engineering Design Graphics
- Computer-Aided Design & Drafting
- Basic Manufacturing Blueprint Reading
- Fundamentals of Manufacturing Technology
- Ferrous Metallurgy
- Mastercam 2D Programming
- Advanced Manufacturing Turning and Milling
- Hydraulics and Pneumatics

Similar Degrees/Certificates offered at CR:

- Associate of Science Degree, Drafting & 3D Modeling
- Certificate of Achievement, Drafting & 3D Modeling

COLLEGE REDWOODS

www.redwoods.edu/manufacturing

Certificate of Achievement, Welding Technology

Career opportunities:

- Machinists
- Tool & Die Makers
- Mechanical Engineers, after transferring to a four-year program
- Model Makers
- Computer Numerical Control Machine Programmers
- Electromechanical Maintenance Technicians
- Drafters and Designers

FOR MORE INFORMATION

Mike Peterson, Professor, Manufacturing Technology (707) 476-4350 or Mike-Peterson@redwoods.edu

Welding TECHNOLOGY



Skilled welders are always in demand, in almost every industry you can imagine. Our Welding Technology program provides training in both industrial and commercial welding as well as fabrication. Most of our classes have no pre-requisites, which means that anyone with any skill level is welcome. You'll learn to setup and operate hand and power tools and manual or semi-automatic welding equipment.

Did you KNOW

• Welders work as high up as the International Space Station and as far down as 2,000 ft. under the ocean.

57

- Traveling Welders can work all around the world.
- About 950 hours of welding and fabrication are spent on each NASCAR car before it hits the track.

WELDING TECHNOLOGY

About the program

Programs in this field provide general and specific educational opportunities for students seeking careers requiring knowledge of welding techniques and procedures.

Degrees/Certificates within this program:

- Associate of Science Degree, Welding Technology
- Certificate of Achievement, Welding Technology
- Certificate of Recognition, General Welding
- Certificate of Recognition, Electric Arc & Oxyacetylene
 Welding
- Certificate of Recognition, MIG & TIG Welding

Examples of classes in this program:

- Gas and Arc Welding
- General Gas, Braze Welding, and Soldering
- Weld Inspection, Testing, Resistance, and Pattern Cutting
- Welding (emphasis Cored Wire), Surfacing, Lancing, and Automated Cutting
- Welding Fabrication 2
- Gas Metal Arc and Gas Tungsten Arc Welding

Similar Degrees/Certificates offered at CR:

- Associate of Science Degree, CADD/CAM Design and Manufacturing
- Certificate of Achievement, CADD/CAM Design and Manufacturing
- Associate of Science Degree, Manufacturing Technology
- Certificate of Achievement, Manufacturing Technology

Career opportunities:

- Welding supervisors
- Welding inspectors
- Welding engineers
- Educators
- Drafters
- Equipment repair
- Self-Employment
- Material/equipment sales

$\mathbb{CR}^{\mathrm{COLLEGE}}_{\mathrm{REDWOODS}}$

www.redwoods.edu/welding

FOR MORE INFORMATION

Danny Walker, Professor, Welding (707) 476-4595 or danny-walker@redwoods.edu

Automotive **TECHNOLOGY**



AUTOMOTIVE TECHNOLOGY

Want to know what's going on "under the hood"? Get hands-on experience in our auto shop, working with the latest, state-ofthe-art equipment on an array of makes and models including hybrid electric vehicles.

Did you ???

- Automotive repair is a high-tech career that is always in demand and can't be outsourced overseas.
- A private program will cost you between \$30,000 and \$50,000 CR's is less than \$5,000.
- 100% of our Auto Tech graduates get hired.

AUTOMOTIVE TECHNOLOGY

About the program

Programs in this field provide basic and advanced educational opportunities for students seeking careers in the automotive service industry, including service technician, specialty technician, and parts or service manager.

Degrees/Certificates within this program:

- Associate of Science Degree, Automotive Technology
- Certificate of Achievement, Advanced Automotive Technology
- Certificate of Recognition, Basic Automotive Technology
- Certificate of Achievement, Automotive Maintenance
 and Light Repair

Examples of classes in this program:

- Automotive Braking Systems
- Manual Transmission/Transaxle & Drive Train
- Automotive Electrical Systems
- Automotive Engine Repair
- Automotive Suspension & Steering Systems

COLLEGE REDWOODS

www.redwoods.edu/automotive

- Automotive Electronics
- Advanced Engine Performance

Career opportunities:

- Service Technician
- Brake and Alignment Specialist
- Engine Performance Specialist
- Automatic Transmission Specialist
- Engine Repair Specialist
- A/C and Heating Specialist
- Manual Transmission/Driveline Specialist
- Maintenance and Light Repair Technician
- Service Advisor
- Parts Specialist
- Heavy Equipment Mechanic

FOR MORE INFORMATION

Mike Richards, Professor, Automotive Technology (707) 476-4345 or <u>Michael-Richards@redwoods.edu</u>