

Select one (1) from the following:

Prin/Pract of Tchg Yng Children	EC	A155	(3)
Guidance for Young Children	EC	A157	(3)
Creativity for Children	EC	A131	(3)
Science for Young Children	EC	A132	(3)

(3)

Total: (23)

ASSOCIATE DEGREES

Complete the Certificate of Achievement and the Associate in Science Graduation Requirements as outlined in the Graduation Requirements section of the catalog.

SCHOOL-AGE CHILD CARE

This certificate, for students who want to work with children ages 6-12 in after-school programs, provides developmentally based courses designed to teach students how to provide competent after-school care for school-age children.

Program Outcome

The objective of the program is to meet the needs of the local child care programs by preparing students for entry level employment as a professional and competent preschool teacher.

CERTIFICATE OF SPECIALIZATION

Required Courses

Course			Units
Current Issues in E C	EC	A199	(.5)
School-Age Creative Activities	EC	A229	(3)
School-Age Field Experience	EC	A231	(3)
Emergency Medical Care-Children	EMT	A145	(1)
Family-School-Community	HMDV	A190	(3)
Middle Childhood Development & Guidance	HMDV	A182	(3)

Subtotal: (13.5)

Select one (1) of the following:

Cross Cult Persp on Chid Dev	EC	A126	(3)
Creativity for Children	EC	A131	(3)
Science for Young Children	EC	A132	(3)
Prin/Pract of Tchg Yng Children	EC	A155	(3)

Early Primary Curriculum: Materials & Methods	EC	A230	(3)
Language/Literacy Development	HMDV	A280	(3)

(3)

Total: (16.5)

FAMILY CHILDCARE PROVIDER

Program Outcome

The objective of the program is to meet the needs of the local child care programs by preparing students for entry level employment as a professional and competent family child care provider.

CERTIFICATE OF SPECIALIZATION

Required Courses

Course			Units
Prin/Pract of Tchg Yng Children	EC	A155	(3)
Emergency Medical Care-Children	EMT	A145	(1)
Life Cycle Nutrition: Children	FN	A145	(1)
Child Development	HMDV	A180	(3)
Family-School-Community	HMDV	A190	(3)

Subtotal: (11)

Select one (1) of the following:

Preschool Programs-Curriculum	EC	A200	(3)
School-Age Creative Activities	EC	A229	(3)
Infant Development & Relationships	HMDV	A184	(3)

(3)

Total: (14)

ELECTRONICS TECHNOLOGY

The Electronics Engineering Technology Program at Orange Coast College prepares students for employment and career advancement in the diverse fields and industries that apply electrical and electronic technologies.

The program trains students from a broad range of skill levels. Some of these students will embark on career paths; others will earn career advancement skills. These students include High School juniors, seniors and graduates, post-secondary re-entry, assemblers and operators seeking a Certificate of Achievement, technicians earning an Associates of Science, Technologist, Engineers, Scientist and project management professionals seeking or with earned Baccalaureate, Graduate and Post-Doctoral degrees.

The EET student that earns a certificate of achievement inculcates life-long learning as a necessary career skill. Therefore, the EET program at OCC encourages all students to earn an associate of science degree and or transfer to the four year universities for advanced degrees.

The EET graduate is prepared to confidently take third party certification exams recognized nationally and globally recognized by these diverse industry sectors the certifications include but are not limited to:

1. CompTia, Certified A+ Technician
2. International Systems Automation Society, Certified Control Systems Technician
3. ETA-International, Certified Electronics Technicians
4. ETA-I, Biomedical Electronics Technician – BMD
5. FCC, General Radio Operators License
6. IPC J-STD 001 Electronic Assembler Workmanship Certification
7. IPC J-STD 001 Electronic Soldering Workmanship Certification

Program Outcomes

Students successfully completing the Electronics Technology Program at Orange Coast College will be able to compete for employment opportunities and take third party certification exams that are recognized nationally and globally. The employment outlook in Orange County and surrounding continues to be excellent. Employment opportunities also exist in many related fields, such as computer networking, communication systems, automation & motor control, heating, ventilation and air conditioning, avionics, biomedical instrumentation, and engineering. Orange Coast College offers individual certificates of Specialization and Achievement in the specialized service areas of maintenance, assemblers, engineering tech, computer hardware, automation & motor controls, and communication.

ELECTRONICS MAINTENANCE

CERTIFICATE OF SPECIALIZATION

These core courses prepare students for entry-level employment in industry sectors that require skills in the basic fundamentals of electricity, electronics, schematic reading, assembly and test instruments used to manufacture, maintain and operate electronic and electrical systems. These core courses make up the foundation for the certificates of achievement offered by the Electronics Technology Program.

Required Courses

Course			Units
Elec Problem Solving	ELEC	A047*	(3)
Intro to Digital Logic	ELEC	A135	(3,5)
Intro to Basic Computer Installation	ELEC	A146	(3)
D.C. Circuits	ELEC	A150	(3)
A.C. Circuits	ELEC	A155	(3)
Total:			(15.5)

*A basic college math course in algebra and trigonometry may be substituted.

ELECTRONICS ASSEMBLER

CERTIFICATE OF SPECIALIZATION

This option prepares the student for employment as an electronic assembler and Quality Assurance inspector. These courses develop a foundation in electronics that is well recognized by all electronic manufacture and service industries. These courses develop diagnostic skills and prepare the student for employment as a level 1 (systems) Diagnostic Technician. Upon completion of the required courses the student is encouraged to take the CEA (Certified Electronics Assembler) exam administered by a third party agency well recognized by the electronics industry.

Course			Units
Electronics Maintenance Core			(15.5)
Electronic Laboratory	ELEC	A170	(1)
Total:			(16.5)

ELECTRONICS ENGINEERING TECHNICIAN

CERTIFICATE OF ACHIEVEMENT

This option prepares the student to perform level 3 technician diagnostics: troubleshooting and repair at level 1 (systems), level 2 (sub assembly), and level 3 (component). Students completing this course of study will be successful in any electronic related field. Upon completion the student is encouraged to take the CET (Certified Electronics Technician) exam administered by a third party agency well recognized by the electronics industry.

Course			Units
Electronics Maintenance Core			(15.5)
Electronic Laboratory	ELEC	A170	(1)
Applied Digital Circuits	ELEC	A245	(4)
Automation II Semiconductor			
Motor Control Circuits	ELEC	A260	(4)
Subtotal:			(24.5)

Select three (3) units from the following:

G.R.O.L. & Avionics Rules & Regulations	AMT	A188	(1.5)
Computer Use in Technology	CHT	A100	(3)
Computer Installation & Repair	ELEC	A246	(3)
Automation 1- Programmable Logic controllers	ELEC	A253	(4)
Electronic Troubleshooting	ELEC	A290	(3)
Total:			(27.5-28.5)

ASSOCIATE DEGREE

Complete the Certificate of Achievement and Associate in Science Graduation Requirements as outlined in the Graduation Requirements section of the catalog.

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ELECTRONICS COMPUTER HARDWARE TECHNICIAN

CERTIFICATE OF ACHIEVEMENT

This certificate option develops level 2 (sub assembly) technician skills. The student will learn how to install, configure, modify, diagnose, and repair computer systems. Upon completion the student is encouraged to take the "A+" Computer Hardware Technician exam administered by a third party agency well recognized by the electronics industry.

Course			Units
Electronics Maintenance Core			(15.5)
Applied Digital Circuits	ELEC	A245	(4)
Computer Installation & Repair	ELEC	A246	(3)
Total:			(22.5)

Suggested electives:

Computer Use in Technology	CHT	A100	(3)
Intro to Info Sys & Microcomputer App	CIS	A100	(3)
Intro to Computer Info Systems	CIS	A111	(3)

AUTOMATION AND MOTOR CONTROL

CERTIFICATE OF ACHIEVEMENT

This certificate option develops level 2 (sub assembly) technician skills. The student will learn how to install, configure, modify, diagnose, and repair automation control systems. This field includes robotic assembly, automated inventory control, and hearing ventilation and air conditioning systems.

Course			Units
Electronics Maintenance Core			(15.5)
Automation 1-Programmable Logic Control	ELEC	A253	(4)
Subtotal:			(19.5)

Select three (3) units from the following:

Computer Installation & Repair	ELEC	A246	(3)
Automation II Semiconductor Motor Control Circuits	ELEC	A260	(4)
Internship Academy – Level 2	ITRN	A392	(3)
Total:			(25-26)

ELECTRONIC COMMUNICATIONS TECHNICIAN

CERTIFICATE OF ACHIEVEMENT This certificate option develops level 2 (sub assembly), technician skills. The student will learn how to install, calibrate, modify, diagnose, and repair Radio Frequency (RF) systems. Upon completion the student is encouraged to take

the General Radio Operator License (GROL) Technician exam administered by the Federal Communications Commission (FCC).

Course			Units
Electronics Maintenance Core			(15.5)
G.R.O.L. & Avionics Rules & Regulations	AMT	A188	(1.5)
Communications systems	ELEC	A215	(3)
Automation II Semiconductor Motor Control Circuits	ELEC	A260	(4)
Subtotal:			(24)

Select three (3) units from the following:

Computer Installation & Repair	ELEC	A246	(3)
Electronic Troubleshooting	ELEC	A290	(3)
Internship Academy – Level 2	ITRN	A392	(3)
Total:			(27)

EMERGENCY MEDICAL TECHNICIAN—1/BASIC

EMT-1/Basic certification is required to work for an ambulance service or in an emergency department and may be required for lifeguards, ski patrol and fire fighters. The EMT-1/Basic provides the care necessary to preserve life and to prevent disability among the acutely ill and the seriously injured and assist and communicate with other healthcare providers with a higher scope of practice.

The EMT-1 must have basic knowledge of anatomy and physiology, medical terminology and sterile techniques. The course of study emphasizes treating traumatic injuries and medical emergencies, as well as treating minor disorders and emotional problems. Specialized areas include obstetrical and pediatric emergencies and extricating entrapped persons. Special emphasis is placed on proper patient moving techniques and transport to definitive and appropriate medical care.

Successful completion of the EMT-1 course qualifies the student to sit for the National Registry of Emergency Medical Technicians' certifying examination, and therefore obtain EMT Basic certification in any California County.

Program Outcome

The graduate of the Emergency Medical Technology program will be prepared for entry-level employment as a professional and competent Emergency Medical Technologist and meet the needs of the local health care community.

The EMT-1/Basic course is a prerequisite for paramedic training. Job opportunities are good.

CERTIFICATE OF SPECIALIZATION

Required Prerequisite: Valid American Heart Association Healthcare Provider CPR

Program Recommended Preparation: EMT A100

Required Courses

Course			Units
EMT-1/Basic*	EMT	A150	(6)
EMT Clinical Internship	EMT	A151	(.5)
Orange County EMT Accreditation	EMT	A180	(.5)
Total:			(7)

Suggested electives:

Medical Terminology	ALH	A111	(3)
Anatomy-Physiology	BIOL	A221	(4)
Interpersonal Communication	CMST	A100	(3)

**Note: American Heart Association Healthcare Provider CPR or successful completion of EMT A100 within the last fourteen (14) months is a prerequisite for EMT A150. Concurrent enrollment in EMT A151 is required. The ability to read, write and comprehend English at the English A100 level is highly desirable and will help the student succeed.*

ENTERTAINMENT TECHNOLOGY

The Orange Coast College Entertainment Technology certificate program is designed to give the student two years of extensive technical experience in the process of creating the scenery, costumes, lighting, or sound effects common to all aspects of the entertainment industry.

Through an intensive program of production work in the OCC Theatre Arts Department, combined with classes throughout the college, the student will acquire the theory, applied training, and work-based experience needed to gain entry-level positions in this highly competitive industry.

Program Outcomes

Upon completion of this certificate students will be able to:

1. Analyze, research and discuss a play in terms of technical and production requirements.
2. Collaborate with others to produce a live stage performance.
3. Demonstrate the ability to complete assignments in his/her area of technical expertise safely and accurately.

CORE CURRICULUM

Required Courses

Course			Units
Intro to Theatre	THEA	A100	(3)
Stage Crew Activity	THEA	A170*	(2)
OCC Theatre Repertory	THEA	A141*	(6)
Arts Internship	THEA	A181	(2)
And any two (2) of the following:			
Summer Theatre Festival	THEA	A144	(4)
(Or)			
Play Production	THEA	A171	(2)
(Or)			
Elizabethan Play Wkshp & Production	THEA	A172	(3)
(Or)			
Classic American Play Production	THEA	A173	(2)
(Or)			
Children's Theatre Wkshp & Prdctn	THEA	A174	(2)
(Or)			
Rehearsal & Performance	THEA	A215	(2)

Total: (17-20)

(*2 semesters required)

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