| ECON 295 | Directed Study in Economics | 3 |
| IBUS 100 | Intro to Int'l Business Management | 3 |

Group II (Select 7-8 units)

MATH 110	College Algebra	4
MATH 120	Elementary Statistics	3
MATH 130	Calculus for the Social Sciences	4

Group III (Select 3 units)

| CSIT 105 | Computer Concepts and Applicatons | 3 |
| PHIL 115 | Critical Thinking | 3 |

TOTAL UNITS   **22 - 23**

COURSE OFFERINGS

ECON 100   Basic Economics   (3)
3 hours lecture
Note: Not intended for programs which require Principles of Economics ECON 101 and/or 102
Transfer acceptability: CSU; UC – no credit if taken after ECON 101 or 102
A study of the American economic system as it affects the decision making of the individual as income earner, taxpayer, and voter. Emphasis is on application of the analyses of supply and demand, productivity, wages and the labor force, the money and banking system, the role of government, and domestic and international economic issues.

ECON 101   Principles of Economics (Macro)   (3)
3 hours lecture
Transfer acceptability: CSU; UC; CAN ECON 2
Descriptive analysis of the structure and functioning of the economy of the United States. Emphasizes national income, problems of inflation and unemployment, the role of government, money supply, and economic growth.

ECON 102   Principles of Economics (Micro)   (3)
3 hours lecture
Transfer acceptability: CSU; UC; CAN ECON 4
Descriptive analysis of behavior of specific units and individuals. Examines market structures and resource markets under varying degrees of competition. Includes international trade and finance.

ECON 110   Comparative Economic Systems   (3)
3 hours lecture
Transfer acceptability: CSU; UC
A study of various types of economic institutions and decision making systems. Emphasis is given to the theories of capitalism, Marxian economics, and the various types of social market economies. The theories will be applied to the study of several countries, including the former Soviet Union, Japan, China, Mexico, and a Western European country, as they compare to the United States.

ECON 115   Economic History of the United States   (3)
3 hours lecture
Transfer acceptability: CSU; UC
Development of the United States economy from the colonial period to the present. Emphasis will be on the evolution of such institutions as labor unions, business, banking, and government. Economic theory will be used to analyze historical problems.

ECON 197   Economics Topics   (.5-4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.
Note: May be taken 4 times
Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.
Topics in Economics. See Class Schedule for specific topic offered. Course title will designate subject covered.

ECON 295   Directed Study in Economics   (1,2,3)
3, 6, or 9 hours laboratory
Prerequisite: Approval of project or research by department chairperson
Note: May be taken 4 times

Transfer acceptability: CSU; UC – Credit determined by UC upon review of course syllabus.
Independent study for students who have demonstrated a proficiency in economics subjects and have the initiative to work independently on projects or research that does not fit into the context of regularly scheduled classes. Students will work under the personal supervision of an instructor.

Education (ED)

Contact Reading Services for further information.
(760) 744-1150, ext. 2568
Office: RC-1

COURSE OFFERINGS

ED 200   Careers in Teaching   (3)
3 hours lecture
Transfer acceptability: CSU; UC
An overview of the teaching profession for those students contemplating a career in education. Foundations of education, critical issues in the classroom, and the history and philosophy of education are addressed.   Effective and active learning, diversity in the classroom and teaching profession standards are discussed. Guided classroom observations (45 hours) of a K-12 classroom in a variety of subject areas are a requirement for this course.

ED 201   Literacy Instruction   (3)
3 hours lecture
Transfer acceptability: CSU
This course is designed for both the student who is considering a career in teaching as well as the prospective literacy tutor. The basic process of literacy acquisition is presented as well as literacy strategies for the emerging and developing reader. The literacy dynamics of a multicultural learning environment will also be presented. 20 hours of literacy training required.

Electro-Mechanical Equipment Technician (EMET)

Contact Occupational & Noncredit Programs for further information.
(760) 744-1150, ext. 2284
Office: AA-138

Certificates of Achievement -
Certificate of Achievement requirements are listed in Section 6 (green pages).
• Electro-Mechanical Equipment Technician

PROGRAM OF STUDY

Electro-Mechanical Equipment Technician

Specifically for individuals employed or seeking employment in a medium to large distribution center and to prepare candidates to pass the mail processing equipment (EMET) technician's examination.

CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
CI 105	Electrical Codes I	3
CI 106	Electrical Codes II	3
CSIT 105	Computer Concepts and Applications	3
DT 140	Electrical Drafting and Design	3
ECHT 100	Electronic Components and Circuits	4.5
EMET 50	Servicing Electro-Mechanical Equipment	3
EMET 51	Mail Equipment Mechanic Exam Prep	3

Electives (Select 6 units)		
ECHT 203	Digital/Computer Electronics	4.5
IT 100	Technical Mathematics	3
WELD 100	Welding I	3
CE 100*	Cooperative Education	1-4

TOTAL UNITS   **28.5**
* Cooperative Education must be related to this major.

To satisfy a prerequisite, the student must have earned a letter grade of A, B, C or CR in the prerequisite course, unless otherwise stated.

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

EMET 50   Basic Mechanics for Servicing Electro-
**   Mechanical Equipment   (3)**
3 hours lecture
Recommended preparation: Knowledge of simple algebraic equations; different number systems; different types of gears; mechanical advantage; and fluid dynamics
Provides students with a basic overview of the maintenance process for postal service electro-mechanical equipment. Topics of study include levers and lever assemblies, gears and gear trains, sprockets and pulleys, basic hydraulics.

EMET 51   Mail Processing Equipment Mechanic
**   Exam Preparation   (3)**
3 hours lecture
Recommended preparation: Technical Mathematics-Ability to perform simple algebraic equations; Electricity-Understand DC and AC fundamentals; Electronics-Understand basic electronic principles; Mechanics-Understand basic mechanic fundamentals; Digital Electronics-Understand basic digital electronic principles. Designed to prepare students for the U.S. Postal Service Maintenance Mechanic, MPE-7 Entrance Examination. Highly recommended for students interested in a U.S. Postal Service Career focusing on equipment maintenance. Topics will cover all the aspects of mail processing equipment (MPE) maintenance, such as mechanics, electrical, and basic electronic systems.

Electronics and Computer Hardware Technology (ECHT)

Contact Occupational & Noncredit Programs for further information.
(760) 744-1150, ext. 2284
Office: AA-138

COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.
Courses numbered under 100 are not intended for transfer credit.

ECHT 20   Supplemental Instruction for Electronics
**   and Computer Hardware Technology   (1)**
2 hours lecture/laboratory
Note: May be taken 4 times
Instructor coordinated informal peer assisted study sessions in which students compare notes, discuss readings, review homework, perform laboratory experiments, and work on projects that are associated with any ECHT course. Instructor will provide mini-lessons in direct response to small group assessed needs.

ECHT 100   Electronic Components and Circuits   (4.5)
3 hours lecture-3 hours lecture/laboratory
Transfer acceptability: CSU
Fundamentals of DC and AC: Ohm's Law, Kirchoff's Laws, Thevenin's Theorem, magnetism, transformers, capacitance, inductance, and tuned circuits. Laboratory covers application of theory, use of test equipment, circuit design, construction techniques, and troubleshooting carried out through traditional workstation procedures and by computer simulation programs.

ECHT 101   Discrete Electronic Circuits   (4.5)
3 hours lecture-3 hours lecture/laboratory
Prerequisite: ECHT 100
Transfer acceptability: CSU
Fundamentals of discrete semiconductors, linear and non-linear, analog: diodes, power supplies, transistors, and amplifiers. Laboratory covers application of theory, use of test equipment, circuit design, reconstruction techniques, and troubleshooting carried out through traditional workstation procedures and by computer simulation programs.

ECHT 102   Integrated Electronic Circuits   (4.5)
3 hours lecture-3 hours lecture/laboratory
Prerequisite: ECHT 101

Transfer acceptability: CSU
Fundamentals of linear and non linear, analog, integrated circuits: thyristors, frequency effects, operational amplifiers, feedback, non linear OPAMPS, oscillators, power supplies, and communication circuits. Laboratory covers application of theory, use of test equipment, circuit design, construction techniques, and troubleshooting.

ECHT 126   Introduction to Electrical and
**   Computer Engineering   (4)**
3 hours lecture-3 hours laboratory
Prerequisite: Math 140
Note: Cross listed as ENGR 126
Transfer acceptability: CSU
Introductory concepts covering a broad range of topics in Electrical and Computer Engineering presented in an integrated approach at a hands-on level. Students work in small teams to analyze, build, and test a small programmable robot for competition at the end of the semester. Provides basic understanding and skills for students to later build their theoretical understanding in more advanced physics and engineering courses.

ECHT 160   Electronics for Everyone   (3)
3 hours lecture
Transfer acceptability: CSU
Overview course designed and taught so anyone can understand the basic concepts and applications of electronics. Topics covered are direct and alternating current, Ohm's Law, magnetism, transformers, capacitance, inductance, tuned circuits, diodes, transistors, amplifiers, oscillators, power supplies and computers.

ECHT 162   Electronic Printed Circuit Board Assembly
**   and Equipment Troubleshooting   (3)**
2 hours lecture-2 hours lecture/laboratory
Note: May be taken 4 times
Transfer acceptability: CSU
Fundamentals of printed circuit board assembly: workmanship standards and forms, surface mount and through hole technology, and solder training. Hands-on training on the repair and troubleshooting of electronic equipment.

ECHT 197   Electronics and Computer Hardware
**   Technology Topics   (.5-3)**
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.
Note: May be taken 4 times
Transfer acceptability: CSU
Topics in Electronics and Computer Hardware Technology. See Class Schedule for specific topic offered. Course title will designate subject covered.

ECHT 203   Digital/Computer Electronics   (4.5)
3 hours lecture-3 hours lecture/laboratory
Recommended preparation: ECHT 100
Transfer acceptability: CSU
Fundamental logic functions of AND'ing, OR'ing, and inverting will be studied in various combinational and sequential logic circuits such as: encoders, decoders, multiplexers, demultiplexers, flip-flops, registers, counters, clocks, memories, and microprocessors. The architecture and programming of the digital microprocessor will be emphasized. The primary components required for proper operation of a PC (personal computer) will be addressed. Designing, testing, and troubleshooting of computers and special projects.

ECHT 204   Microcomputer Architecture and Interfacing   (4.5)
3 hours lecture-3 hours lecture/laboratory
Prerequisite: ECHT 203
Transfer acceptability: CSU
Advanced computer electronic concepts and applications using digital circuits and systems. Interfacing of microprocessors and PC's (personal computers) to peripherals. Upgrading of desktop PC's. Designing, testing, and troubleshooting of computer systems and special projects.