

DRLT 270 Advanced Construction Techniques**Units:** 1.5 **Hours:** 1.0 Lecture and 35.0 Laboratory

This course covers safety, materials, principles and theory of advanced construction techniques. Topics include following written and verbal directions, construction directly from blueprints, and research techniques. This course has the option of a letter grade or pass/no pass.

DRLT 290 Occupational Work Experience / Drywall - Lathing**Units:** 1.0 TO 4.0 **Hours:** 3.3 TO 16.7 Laboratory

Occupational work experience for students who have a job related to their major. A training plan is developed cooperatively between the employer, college and student. (P/NP grading) 75 hours per semester paid work = 1 unit. 60 hours non-paid (volunteer) work per semester = 1 unit. Student repetition is allowed per title 5 section 55253. Minimum 2.00 GPA. **REQUIRED:** Declared vocational major. **PREREQUISITE:** DRLT 200.

Early Childhood Education: see Child Development

Earth Science: see Geology, Geography

ECOLOGY

ECOL 1 Conservation of Natural Resources**Units:** 4.0 **Hours:** 3.0 Lecture and 3.0 Laboratory**Transferable:** CSU, UC; CSU-GE:B2, B3, IGETC:5B, 5C, GAV-GE:B2, B3

This course examines the fundamentals of ecology (the study of the relationships between organisms and their environment) with special emphasis on human effects on the environment. Topics of discussion will include ecosystem dynamics, resources, pollution, population growth, and the clash between economic and political policy and the environment. **ADVISORY:** Eligible for English 250 and English 260.

ECONOMICS

ECON 1 Principles of Macroeconomics**Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU; CSU-GE:D, IGETC:4B, GAV-GE:D2

Introduction to the principles of macroeconomic analysis, economic institutions, and economic policy; supply and demand, determinants and distribution of output, income, and welfare through the market system; international trade and globalization. Measurement, determinants of, and policies relating to long-run economic growth, business cycle fluctuations, unemployment, and inflation. This course has the option of a letter grade or pass/no pass. (C-ID: ECON 202) **PREREQUISITE:** MATH 430 or MATH 205

ECON 2 Principles of Microeconomics**Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU, UC; CSU-GE:D, IGETC:4B, GAV-GE:D2

Introduction to microeconomic principles, theory, and analysis. Topics include scarcity and resource allocation, specialization and exchange, and the determinants and distribution of output, income, and welfare through the market system, as well as elasticity, production and cost theory, and market failure caused by externalities and asymmetric information. Includes consumer choice and utility maximization, as well as profit maximization in various competitive settings. This course has the option of a letter grade or pass/no pass. (C-ID: ECON 201) **PREREQUISITE:** MATH 430 or MATH 205

ECON 11 Statistics for Business and Economics**Units:** 4.0 **Hours:** 4.0 Lecture**Transferable:** CSU, UC; CSU-GE:B4, IGETC:2A, GAV-GE:B4

The use of probability techniques, hypothesis testing, and predictive techniques to facilitate decision-making. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests; statistical analysis including the interpretation of the relevance of the statistical findings. Applications using data from disciplines including business, social science, psychology, life science, health science, and education. Additional and more extensive case studies from business and economics, emphasizing statistical results that provide guidance for business decisions or suggest solutions to contemporary business and economic problems; use of larger data sets analyzed with computer software programs. (C-ID: MATH 110) **PREREQUISITE:** Math 233, or Math 233A and Math 233B, or Math 235, or Math 240, or Math 242 with a grade of "C" or better.

ECON 14 Personal Finance**Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU

This course is designed to assist individuals to analyze their financial affairs for lifelong decision making. Elements and concepts of financial planning and decision making in the areas of budgeting, taxes, borrowing, money management, insurance, investments, retirement, and estate planning will be examined. This course is also listed as BUS 14. This course has the option of a letter grade or pass/no pass. **ADVISORY:** Math 400

**Education: see Child Development, Liberal Arts with
Elementary Education Emphasis**

ENGINEERING

ENGR 1 Graphical Communication and Design**Units:** 3.0 **Hours:** 2.0 Lecture and 3.0 Laboratory**Transferable:** CSU, UC

An introduction to the graphical and visual communication of the engineering design process. Topics will include the design process, visualization, free-hand sketching, instrument drawing, scales, orthographic projection, section views, auxiliary views, and dimensioning and tolerancing. Computer based drafting will be used in conjunction with traditional methods to highlight the strengths of multiple communication methodologies. **ADVISORY:** MATH 1A; may be concurrent.

ENGR 2 Statics**Units:** 3.0 **Hours:** 3.0 Lecture**Transferable:** CSU, UC

Vector treatment of two- and three-dimensional force systems acting on particles and engineering structures in equilibrium. Topics include forces, moments, couples, resultants, equilibrium conditions, trusses, centroids, moment of inertia, beams, shear and moment diagrams, cables, fluids and friction. **PREREQUISITE:** Mathematics 1A and Mathematics 1B and Physics 4A with a grade of 'C' or better.

ENGR 3 Electric Circuit Analysis**Units:** 4.0 **Hours:** 3.0 Lecture and 3.0 Laboratory**Transferable:** CSU, UC

An introduction to the theory of electric circuits. Topics include resistive circuits, voltage and current sources, network theorems, op-amp circuits, energy storage elements, RC, RL, and RLC circuits. **PREREQUISITE:** Mathematics 2C (may be taken concurrently) and Physics 4B with a grade of 'C' or better.