



# Addendum

2021-2022

Catalog

# CREDIT COURSES

## **ACCTG 50**

### **ACCOUNTING INTERNSHIP**

**Recommended Preparation:** ENGL 100 or ESL 141.

## **ADMJ 160 (NEW)**

### **COMMUNITY AND THE JUSTICE SYSTEM**

3.0 Units

ADMJ 160 examines the complex, dynamic relationship between communities and the justice system. While studying the theoretical concepts of law enforcement, students learn the history of multiculturalism in the U.S. and discuss the key issues that plague communities of color such as implicit bias, racism and excessive force. Students have opportunities to explore better strategies for policing multi-cultural communities, including but not limited to, alternatives to incarceration. Lecture 3 hours. **Prerequisite:** ENGL 100 or ESL 141. **Recommended Preparation:** ETH S 121 and SOC 101. Transfer credit: CSU.

## **ANTHR 101 (Summer 2022)**

### **PHYSICAL ANTHROPOLOGY WITH LAB**

**Recommended Preparation:** ENGL 100 or ESL 151.

## **ANTHR 102 (Summer 2022)**

### **CULTURAL ANTHROPOLOGY**

**Recommended Preparation:** ENGL 100 or ESL 151.

## **ANTHR 102H (Summer 2022)**

### **HONORS CULTURAL ANTHROPOLOGY**

**Recommended Preparation:** ENGL 100 or ESL 151.

## **ANTHR 103**

### **PREHISTORY**

**Recommended Preparation:** ENGL 100 or ESL 151.

## **ANTHR 104**

### **MAGIC, RELIGION, AND WITCHCRAFT**

**Recommended Preparation:** ENGL 100 or ESL 151.

## **ANTHR 105 (Summer 2022)**

### **CULTURE AND COMMUNICATION**

ANTHRO 105 is an introductory course that uses a cross-cultural approach to examine language use. Through the study of linguistic anthropology, students learn how different culture groups contextualize language. Students examine how language is acquired as part of socialization and explore how linguistic variations occur in contemporary nation states according to class, gender, ethnicity and nationality. Additional topics include multilingualism, African American Vernacular English, Spanglish, paralanguage, proxemics, creoles, genderlects, and endangered indigenous languages. **Recommended Preparation:** ENGL 100 or ESL 151.

## **ANTHR 114**

### **GENDER, SEXUALITY, AND CULTURE**

**Recommended Preparation:** ENGL 100 or ESL 151.

**ANTHR 150**  
**ARCHAEOLOGY**

*Recommended Preparation:* ENGL 100 or ESL 151, or equivalent.

**ARCH 109**  
**SKETCHING TECHNIQUES FOR ARCHITECTS AND INTERIOR DESIGNERS**

*Recommended Preparation:* ARCH 101 or equivalent.

**ARCH 143**  
**COMMERCIAL INTERIOR DESIGN**

*Recommended Preparation:* ARCH 141 or equivalent.

**ARMEN 101**  
**BEGINNING ARMENIAN I**

*Recommended Preparation:* ENGL 100 or ESL 141.

**AT 119 (NEW)**  
**PRIVATE PILOT AIRPLANE PRACTICAL TEST PREPARATION**

2.0 Units

**NON-DEGREE APPLICABLE**

AT 119 is a ground training course designed for the student who is receiving flight training toward the private pilot certificate (license) with an airplane single engine land rating. Students will study in more depth the concepts presented during ground and flight training and learn how to apply them in real-world situations. The course includes oral practice answering scenario-based questions to prepare the student for the oral portion of the FAA practical test for the private pilot airplane certificate. Lecture 2 hours. *Recommended Preparation:* AT 120 or equivalent.

**BIOL 115**  
**HUMAN BIOLOGY**

*Recommended Preparation:* ENGL 100 or ESL 151.

**BIOL 122**  
**INTRODUCTION TO BIOLOGY**

*Recommended Preparation:* ENGL 100 or ESL 151, or equivalent.

**BIOL 123**  
**EVOLUTION**

*Recommended Preparation:* ENGL 100 or ESL 151.

**BIOL 123H**  
**HONORS EVOLUTION**

*Recommended Preparation:* ENGL 100 or ESL 151.

**BIOL 125**  
**MARINE BIOLOGY**

*Recommended Preparation:* ENGL 100 or ESL 151.

**BIOL 125H**  
**HONORS MARINE BIOLOGY**

*Recommended Preparation:* ENGL 100 or ESL 151.

**BIOL 298****UNDERGRADUATE RESEARCH IN MICROBIOLOGY AND MOLECULAR BIOLOGY**

*Prerequisite:* BIOL 101 or BIOL 102, or equivalent. *Recommended Preparation:* ENGL 100 or ESL 151.

**BUSAD 112****APPLIED WORKPLACE ETHICS**

BUSAD 112 covers contemporary and controversial ethical issues facing the business world today. Real-world scenarios and situations are discussed to aid students in developing their own ethical decision-making framework for the responsibilities and obligations that members of the workforce face as it pertains to the insurance world.

**BUSAD 116****PRINCIPLES OF LIFE AND HEALTH INSURANCE**

BUSAD 116 is intended to help individuals learn basic information regarding life and health insurance for employment as insurance professionals in entry-level and higher positions. It covers insurance fundamentals, including the types of insurers, institutions that provide insurance, how it is regulated, and the measurement of financial performance.

**BUSAD 144****HUMAN RESOURCES I**

BUSAD 144 introduces students to the functions and roles of human resources (HR) management and how to apply what they learn to current trends and issues in the organization. Topics include: recruitment and selection, compensation, employment law, employee/labor relations and risk management. This course will help prepare students for Professional Human Resources (PHR) and Senior Professional Human Resources (SPHR) certifications.

**CAM 210****COMPUTER AIDED MANUFACTURING BASIC MILLING**

Lecture 1 hour/Laboratory 6 hours. *Recommended Preparation:* ENGL 100 or ESL 141.

**CAM 220****COMPUTER AIDED MANUFACTURING, BASIC LATHE**

Lecture 1 hour/Laboratory 6 hours. *Recommended Preparation:* ENGL 100 or ESL 141.

**CAM 230****BASIC MASTERCAM MILL****3.0 Units**

CAM 230 is a Mastercam mill course that introduces the Mastercam mill interface and uses milling toolpaths to machine 2-Axis Mill parts. Machining processes include a combination of face Milling, profile Milling, pocket Milling, drilling, reaming, tapping, and high speed milling toolpaths. This course also explores stock model operations. Lecture 1 hour/Laboratory 6 hours. *Recommended Preparation:* CAM 210 or equivalent.

**CAM 231****ADVANCED MASTERCAM MILL****3.0 Units**

CAM 231 is an advanced Mastercam mill course which covers the advanced programming aspects of CNC milling, how to configure the Mastercam workspace, properly orient the part geometry, and complete the job setup. This class explores how to create more complex 3D geometry and advanced 3-Axis toolpaths, and covers high-speed dynamic milling, tool definition, axis combinations, and tool plane setup. Lecture 1 hour/Laboratory 6 hours.

*Recommended Preparation:* CAM 230 or equivalent.

**CAM 232 (NEW)****CNC MILL COMPUTER AIDED MANUFACTURING LABORATORY**

1.0 Units

CAM 232 provides practice using computer-aided manufacturing (CAM) software, which will allow students to complete complex computer numerical control (CNC) milling machine projects of their own choosing to further develop their CAM and CNC milling machine setup and programming skills. Laboratory 3 hours. **Recommended Preparation:** CAM 231 or equivalent.

**CAM 240****BASIC MASTERCAM LATHE**

3.0 Units

CAM 240 is a Mastercam lathe course. Students will be introduced to the Mastercam lathe interface and creating geometry. Turning toolpaths, available in Mastercam, will be used to machine 2-Axis Lathe parts. Machining processes include a combination of Turning Face, Turning Profile, Profile Groove, Single Groove, Chamfer, Part off, and Threading Toolpaths. Stock flip operations will also be discussed. Lecture 1 hour/Laboratory 6 hours. **Recommended Preparation:** CAM 210 or CAM 220, or equivalent.

**CAM 241 (NEW)****ADVANCED MASTERCAM LATHE**

3.0 Units

CAM 241 is an advanced Mastercam lathe course. This course will cover the setup aspects of MT\_Lathe. Students will learn how to configure the Mastercam workspace, properly orient part geometry, and complete Job Setup. Students will learn how to create more complex 3D geometry, advanced C-Axis toolpaths and toolpaths that support the Y-axis rotation and examples on how to use the Mill toolpaths on a Lathe with Live Tooling. Proper Tool Definition, Axis Combinations, Sub spindle machining, and Tool Plane setup will be covered. Note: This is an advanced CNC lathe course using Mastercam software, please make sure to review the recommended preparation for this class. Lecture 1 hour/Laboratory 6 hours. **Recommended Preparation:** CAM 220 or CAM 240, or equivalent.

**CAM 242 (NEW)****CNC LATHE COMPUTER AIDED MANUFACTURING LABORATORY**

1.0 Units

CAM 242 provides practice using computer-aided manufacturing (CAM) software, which will allow students to complete complex CNC lathe projects of their own choosing to further develop their CAM and CNC lathe setup and programming skills. Laboratory 3 hours. **Recommended Preparation:** CAM 241.

**CAM 260 (NEW)****INTRODUCTION TO 5-AXIS MACHINING**

4.0 Units

CAM 260 will introduce 5-Axis machining concepts that explores both surface (solid face) and wireframe based toolpaths. Different methods of tool axis control, and different titling strategies are covered. Special attention will be paid to collision control techniques. Multi-axis machining is becoming increasingly important to make difficult parts with high precision. Lecture 1 hours/Laboratory 9 hours. **Recommended Preparation:** CAM 210 or CAM 250. Transfer Credit: CSU.

### **CAM 261 (NEW)**

#### **ADVANCED 5-AXIS MACHINING**

4.0 Units

#### **NON DEGREE APPLICABLE**

CAM 261 prepares students for advanced machining using 5-Axis Computer Numerical Control (CNC) machines. The course includes a review of 3+2 positioning and use of Mastercam software. Students will learn surface (solid face) and wireframe-based toolpaths. Also covered are methods of tool axis control, tilting strategies, and collision control, including how multiple methods of collision control can be combined. Lecture 1 hour/ Laboratory 9 hours.

**Recommended Preparation:** CAM 260.

### **CHIN 101**

#### **BEGINNING CHINESE I**

**Recommended Preparation:** ENGL 100 or ESL 141.

### **CHLDV 133**

#### **OBSERVATION AND ASSESSMENT**

**Note:** Verification required of current tuberculosis (TB) clearance; measles, mumps, and rubella (MMR) immunization; and diphtheria, tetanus, and whooping cough (pertussis; DTaP) immunization.

### **CHLDV 141**

#### **STUDENT TEACHING SEMINAR**

Note: Verification required of current tuberculosis (TB) clearance; measles, mumps, and rubella (MMR) immunization; and diphtheria, tetanus, and whooping cough (pertussis; DTaP) immunization. Prerequisite: CHLDV 133 and CHLDV 150. **Recommended Preparation:** CHLDV 156 (CHLDV 156 may be taken concurrently).

**Corequisite:** Concurrent enrollment in CHLDV 180, 181 or 182.

### **CHLDV 150**

#### **INTRODUCTION TO CURRICULUM**

CHLDV 150 provides an overview of principles involved in planning, implementing and evaluating developmentally appropriate curriculum. It includes processes for planning and implementing developmentally appropriate environments and experiences; selection of appropriate materials, emerging curriculum, scheduling, room arrangement, and planning developmentally appropriate activities and curricula for young children from birth to age eight in child care and early childhood development settings. Included are focuses on children's play, the role of assessment, webbing, activity planning, daily scheduling and curriculum areas such as art, science, math, literature, music, language arts, and dramatic play are examined. **Note:** Verification required of current tuberculosis (TB) clearance; measles, mumps, and rubella (MMR) immunization; and diphtheria, tetanus, and whooping cough (pertussis; DTaP) immunization. **Prerequisite:** CHLDV 133 and CHLDV 140.

### **CHLDV 160**

#### **GUIDING CHILDREN AND ADOLESCENTS**

CHLDV 160 provides an overview of the developmental, environmental, and cultural factors that impact the behavior of children and adolescents; examines the role of the environment and the teacher in supporting appropriate behavior; and explores techniques to effectively address many types of behavior including those that are aggressive, antisocial, disruptive, destructive, emotional, and/or dependent. Emphasis is on developing culturally sensitive individualized plans for guiding the behavior of children and adolescents in early childhood and early elementary settings. **Note:** Verification of compliance with SB 792 regarding immunizations and TB clearance required. **Recommended Preparation:** ENGL 100 or ESL 141, or equivalent.

**ECON 101 (Summer 2022)**

**PRINCIPLES OF MICROECONOMICS**

*Recommended Preparation:* ENGL 100 or ESL 151 and MATH 30 or MATH 90.

**ECON 102 (Summer 2022)**

**PRINCIPLES OF MACROECONOMICS**

*Recommended Preparation:* ENGL 100 or ESL 151 and MATH 30 or MATH 90.

**ECON 102H (Summer 2022)**

**HONORS PRINCIPLES OF MACROECONOMICS**

*Recommended Preparation:* ENGL 100 or ESL 151 and MATH 30 or MATH 90.

**ECON 127 (Summer 2022)**

**INTRODUCTORY STATISTICS FOR ECONOMICS AND BUSINESS**

*Recommended Preparation:* MATH 30 or MATH 90 and ECON 101 or ECON 102.

**ECT 210**

**PROGRAMMABLE LOGIC CONTROLLERS (PLC)**

*Prerequisite:* ECT 110. *Recommended Preparation:* ENGL 100 or ESL 141.

**ENGL 111**

**WOMEN IN LITERATURE**

*Recommended Preparation:* ENGL 100 or ESL 151.

**ENGL 130**

**SCIENCE FICTION LITERATURE**

*Recommended Preparation:* ENGL 100 or ESL 151.

**ENGR 101**

**ENGINEERING DRAFTING AND BASIC DESIGN**

*Recommended Preparation:* ENGL 100 or ESL 141, or equivalent.

**ENGR 125**

**PROGRAMMING CONCEPTS AND METHODOLOGIES FOR ENGINEERS**

*Prerequisite:* MATH 103E or equivalent. *Recommended Preparation:* ENGL 100 or ESL 151, or equivalent.

**ENTRE 103 (NEW)**

**RUN YOUR OWN BUSINESS**

3.0 Units

ENTRE 103 covers the process of planning, organizing, and managing a small business. Topics include developing a business plan, forming and marketing a small business, legal aspects of business ownership, accounting, budgeting, financing, and risk management. The skills taught in this course will help individuals start new ventures as well as aid existing business owners to plan their growth. **Note:** This course may not be taken for credit by students who have completed BUSAD 158. Lecture 3 hours. *Recommended Preparation:* BUSAD 101. Transfer Credit: CSU.

**ETH S 102****LATINOS IN THE UNITED STATES**

ETH S 102 surveys the social, political, economic and cultural development and experience of the Latina/o/x communities in the United States. The survey includes the following groups: Mexicans, Puerto Ricans, Cubans and other Caribbeans, Central and South Americans. Students also analyze the contributions made by the Latina/o/x community to the economic development of the United States. **Recommended Preparation:** ENGL 100 or ESL 141, or equivalent.

**ETH S 110****CONTEMPORARY ETHNIC WOMEN**

ETH S 110 surveys the contemporary status of ethnic women in the United States. Students analyze the lived experiences of women in Native American, African American, Asian American, and Latina communities in the United States with a special emphasis on agency and group-affirmation. Students also pay special attention to topics such as anti-racism, feminism, and equity. **Recommended Preparation:** ENGL 100 or ESL 141, or equivalent.

**ETH S 120****CHICANA/O/X STUDIES**

ETH S 120 provides students with an understanding and appreciation of the social, political, economic and cultural experiences of Chicana/o/x in the United States. Students focus on the Chicana/o/x experience after the signing of the Treaty of Guadalupe Hidalgo in 1848. Students also analyze the development of the field and theories of racialization and intersectionality. Special attention is given to such topics as Chicana/o/x political and labor participation, Chicana/o/x aesthetics, intersectionality and education. **Recommended Preparation:** ENGL 100 or ESL 141.

**ETH S 121****ETHNIC AND RACIAL MINORITIES**

ETH S 121 surveys the major ethnic and racial minorities in the United States to provide students with a better understanding of the socio-economic, cultural and political practices and institutions that support or challenge racism, racial and ethnic inequalities. Students also study historical and contemporary patterns of interaction between intersectional identities of the four core Ethnic populations of Asian Americans, Chicanx/Latinx, African Americans, and Native/Indigenous Americans within the United States. **Recommended Preparation:** ENGL 100 or ESL 141, or equivalent.

**ETH S 123****ASIANS IN AMERICA**

**Recommended Preparation:** ENGL 100 or ESL 151.

**ETH S 124****JAPANESE EXPERIENCE IN AMERICA**

**Recommended Preparation:** ENGL 100 or ESL 151.

**ETH S 125****NATIVE AMERICAN STUDIES**

**Recommended Preparation:** ENGL 100 or ESL 151.



**ETH S 132****THE AFRICAN AMERICAN EXPERIENCE IN THE UNITED STATES**

ETH S 132 provides an interdisciplinary survey of African-American culture and heritage from the 1600s to the present. Students analyze the economic, political, social, artistic, and intellectual elements of the African-American community. Students explore concepts such as specialization, the intersection of class and gender, white supremacy and liberation while paying particular attention to the significant impact that African-Americans have had on American culture as a whole. **Recommended Preparation:** ENGL 100 or ESL 151.

**ETH S 164****THE ARMENIAN DIASPORA**

**Recommended Preparation:** ENGL 100 or ESL 151.

**FIRE 106****PRINCIPLES OF FIRE AND EMERGENCY SERVICES SAFETY AND SURVIVAL**

**Recommended Preparation:** ENGL 100 or ESL 141.

**FIRE 108****FIRE APPARATUS AND EQUIPMENT**

**Recommended Preparation:** ENGL 100 or ESL 141.

**FIRE 114****HAZARDOUS MATERIALS**

**Recommended Preparation:** ENGL 100 or ESL 141.

**FREN 101****BEGINNING FRENCH I**

**Recommended Preparation:** ENGL 100 or ESL 141.

**GEOG 101****PHYSICAL GEOGRAPHY**

**Recommended Preparation:** ENGL 100 or ESL 151.

**GEOG 102****CULTURAL GEOGRAPHY**

**Recommended Preparation:** ENGL 100 or ESL 151.

**GEOG 103****WORLD REGIONAL GEOGRAPHY**

**Recommended Preparation:** ENGL 100 or ESL 151.

**GEOG 106****HUMAN IMPACT ON THE ENVIRONMENT**

**Recommended Preparation:** ENGL 100 or ESL 151.

**GEOG 107****WEATHER, CLIMATE, AND CLIMATE CHANGE**

**RECOMMENDED PREPARATION:** ENGL 100 or ESL 151.

**GEOG 110****GEOGRAPHY OF CALIFORNIA**

*Recommended Preparation:* ENGL 100 or ESL 151.

**GEOG 160****GEOGRAPHY FIELD STUDIES**

*Recommended Preparation:* ENGL 100 or ESL 151.

**HLTH 104 (Summer 2022)****Personal Health and Wellness**

HLTH 104 focuses on the exploration of major health issues and behaviors in the various dimensions of health. The class emphasizes individual responsibility for personal health and the promotion of informed, positive health behaviors. Topics include nutrition, exercise, weight control, mental health, stress management, violence, substance abuse, reproductive health, disease prevention, aging, healthcare, and environmental hazards and safety. *Recommended Preparation:* ENGL 100 or ESL 151 and LIB 100.

**HIST 103****HISTORY OF EARLY LATIN AMERICA**

*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 104****HISTORY OF CONTEMPORARY LATIN AMERICA**

*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 105****TWENTIETH CENTURY CENTRAL AMERICA AND THE CARIBBEAN**

*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 106****HISTORY AND POLITICS OF THE RUSSIAN PEOPLE**

*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 111 (Summer 2022)****Women in American History**

*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 111H (Summer 2022)****Honors Women in American History**

*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 113****HISTORY OF MEXICO**

*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 115****REBELLIOUS WOMEN IN MODERN AMERICA**

*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 117 (Summer 2022)**  
**UNITED STATES HISTORY, 1550-1877**  
*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 118 (Summer 2022)**  
**UNITED STATES HISTORY, 1865-PRESENT**  
*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 118H (Summer 2022)**  
**HONORS UNITED STATES HISTORY, 1865-PRESENT**  
*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 119**  
**HISTORY OF EAST ASIA, ANTIQUITY-1800**  
*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 120**  
**HISTORY OF EAST ASIA, 1800-PRESENT**  
*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 121**  
**ARMENIAN HISTORY**  
*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 122**  
**CALIFORNIA HISTORY**  
*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 131**  
**A HISTORY OF AFRICA SINCE 1800**  
*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 132**  
**HISTORY OF THE PHILIPPINES**  
*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 133**  
**HISTORY OF SCIENCE**  
*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 133H**  
**HONORS HISTORY OF SCIENCE**  
*Recommended Preparation:* ENGL 100 or ESL 151.

**HIST 135**  
**THE VIETNAM WAR AND CULTURAL LEGACIES**  
*Recommended Preparation:* ENGL 100 or ESL 151.

### **HIST 136**

#### **WAR: HISTORY, CAUSES, SOLUTIONS**

*Recommended Preparation:* ENGL 100 or ESL 151.

### **HIST 140**

#### **WORLD HISTORY TO 1500**

*Recommended Preparation:* ENGL 100 or ESL 151.

### **HIST 141**

#### **WORLD HISTORY FROM 1500 TO PRESENT**

*Recommended Preparation:* ENGL 100 or ESL 151.

### **HIST 152**

#### **SOCIAL PROTEST IN THE 1960'S**

*Recommended Preparation:* ENGL 100 or ESL 151.

### **HUMAN 106**

#### **CULTURES AND MEANING**

*Recommended Preparation:* ENGL 100 or ESL 151.

### **ITAL 101**

#### **BEGINNING ITALIAN I**

*Recommended Preparation:* ENGL 100 or ESL 141.

### **JAPAN 101**

#### **BEGINNING JAPANESE I**

*Recommended Preparation:* ENGL 100 or ESL 141.

### **KIN 100 (Summer 2022)**

#### **INTRODUCTION TO KINESIOLOGY**

KIN 100 is designed for students who are interested in pursuing a career in the field of kinesiology, exercise science, or physical education. An overview of the importance of the following sub-disciplines in kinesiology are included: philosophy, history, scientific foundations of physical education, exercise science, health/wellness, fitness/sport, and the future of kinesiology. Topics explored include professional career opportunities in teaching, coaching, athletic training, sport management, fitness leadership and health/wellness. **Note:** Recommended for physical education majors. This course will not fulfill physical education activity requirements. **Recommended Preparation:** ENGL 100 or ESL 151 and LIB 100.

### **KIN 155**

#### **FOUNDATIONS FOR GROUP EXERCISE INSTRUCTION**

KIN 155 covers the theory and practice of designing and leading group exercise classes. This course covers critical competencies required for students interested in taking the certified Group Exercise Instructor (GEI) or Group Fitness Instructor (GFI) exams offered by several national certification agencies. The foundations for group exercise instruction include: safety and risk management, group exercise session design, effective demonstration, delivery and motivation, specialized group exercise certifications, and considerations for participant needs. Emerging group fitness formats, virtual group fitness and creating inclusive group exercise classes are also discussed. Lab includes practical experience leading group exercise sessions. **Note:** This course is designed as a part of the Fitness Specialist Program curriculum. **Recommended Preparation:** BIOL 115 or equivalent, ENGL 100 or ESL 151, KIN 167 or equivalent.

**KOREA 101**  
**BEGINNING KOREAN I**

*Recommended Preparation:* ENGL 100 or ESL 141.

**LIB 100**  
**CRITICAL APPROACHES TO INFORMATION RESEARCH**

*Recommended Preparation:* ENGL 100 or ESL 151.

**LING 101 (Summer 2022)**  
**INTRODUCTION TO LANGUAGE AND LINGUISTICS**

*Prerequisite:* ENGL 100 or ESL 151. *Recommended Preparation:* ESL 155.

**MACH 102**  
**MACHINE TECHNOLOGY II**

**3.0 Units**

Lecture 1 hour/Laboratory 6 hours.

**MACH 103**  
**MACHINE TECHNOLOGY III**

**3.0 Units**

Lecture 1 hour/Laboratory 6 hours.

**MACH 104**  
**MACHINE TECHNOLOGY IV**

**3.0 Units**

MACH 104 is a continuation of advanced and complicated operations of machine tools and equipment. Lectures and demonstrations include an investigation of heat-treatment of metals, special metals and their uses, abrasives, grinding wheels, and efficient use of surface, cylindrical, and tool cutter grinders. Basic tool and die work in which the student designs and builds jigs and fixtures is offered to students showing advanced abilities. Lecture 1 hour/Laboratory 6 hours.

**MATH 30 (Summer 2022)**  
**INTERMEDIATE ALGEBRA AND PRE-STATISTICS**

MATH 30 is a one-semester course to prepare students for success in transfer-level Statistics and Liberal Arts Math (SLAM) courses. Students will explore curve plotting, linear equations and inequalities, radicals, functions, exponential and logarithmic functions, descriptive statistics, graphical and numerical statistics for quantitative and categorical data, modeling bivariate data with linear, exponential, and logarithmic functions, introductory set theory, and introductory probability. **Note:** This course is optional for students who place into transfer-level SLAM courses. *Prerequisite:* Placement is based on an academic background.

**MATH 30+ (Summer 2022)**  
**INTERMEDIATE ALGEBRA AND PRE-STATISTICS WITH SUPPORT**

MATH 30+ is a one-semester course with a built-in support lab component to prepare students for success in transfer-level Statistics and Liberal Arts Math (SLAM) courses. Students will explore curve plotting, linear equations and inequalities, radicals, functions, exponential and logarithmic functions, descriptive statistics, graphical and numerical statistics for quantitative and categorical data, modeling bivariate data with linear, exponential, and logarithmic functions, introductory set theory, and introductory probability. **Note:** This course is optional for students who place into transfer-level SLAM courses. This course may not be taken for credit by students who have completed MATH 30. *Prerequisite:* Placement is based on an academic background.

**MATH 139****ELEMENTS OF ALGEBRA AND STATISTICS FOR ELEMENTARY AND MIDDLE SCHOOL TEACHERS**

MATH 139 is a continuation of MATH 138. It is a second-semester course designed for prospective elementary and middle school teachers. Topics in this course include functions, relations, sequences, discrete structures, probability, data analysis, descriptive statistics, and concepts of inferential statistics.

**MEDIA 110****AESTHETICS OF CINEMA**

*Recommended Preparation:* ENGL 100 or ESL 151.

**MOA 50****MOA INTERNSHIP**

*Recommended Preparation or Concurrent Enrollment:* ENGL 100 or ESL 141 and MOA 180, 182, 183, and 185.

**MOA 190 (NEW)****FUNDAMENTALS OF HEALTHCARE ADMINISTRATION**

3.0 Units

MOA 190 provides an overview of health care institutions, how they are organized and governed, essential roles and responsibilities of various healthcare administrators, physicians, nurses and clinical support staff as well as other common management functions. The relationship between external and internal forces that impact healthcare environments are inspected to help students understand the foundational framework for addressing healthcare administration problems and challenges along with solutions within the health care organization.

Lecture 3 hours. *Recommended Preparation:* ENGL 100 or ESL 151 and MOA 180.

**MOA 191 (NEW)****INTRODUCTION TO PUBLIC HEALTH & COMMUNITY**

3.0 Units

MOA 191 introduces key public health concepts, the history, present and future direction of public health, and how the core areas of public health can be integrated to promote health within a diverse population. The course investigates various public health models and will engage in active learning through the use of individual and team activities, discussions, and field experiences to fully explore diverse public health dynamics of cultural, racial and social issues. Lecture 3 hours. *Recommended Preparation:* ENGL 100 or ESL 151 and MOA 180.

**MOA 192 (NEW)****HEALTHCARE QUALITY MANAGEMENT AND PERFORMANCE**

3.0 Units

MOA 192 provides the student with an understanding of healthcare quality management and performance improvement principles within the hospital as well as clinical setting. Various theoretical, and practical methodologies used in quality assessments will be explored. This course examines regulatory, accreditation, patient safety, performance improvement and utilization along with compliance, credentialing, and licensing standards. Lecture 3 hours. *Recommended Preparation:* ENGL 100 or ESL 151 and MOA 180.

**NS 277 (Summer 2022)****CRITICAL CARE SPECIALTY NURSING**

NS 277 focuses on a comprehensive range of nursing knowledge of the adult patient in need of critical care. Topics included are evidence-based knowledge, skills and attitude to adequately and competently provide high-quality and safe patient care in the critical care setting. The course includes the use of technology, including simulation, while incorporating psychosocial and other holistic approaches as needed to the patient's situation and condition. In addition, the course discusses how to distinguish dependent and independent nursing actions and how to work collaboratively with the interdisciplinary healthcare team. Note: Applicant should be a Licensed Registered Nurse (RN) by the California Board of Registered Nursing (BRN) and carry a Basic Life Support (BLS) certificate. One year of RN experience in medical-surgical care, telemetry, or on a step down unit within the last two years, or recommendation from the current hospital employer is required. **Note:** This course is a Pass/No Pass only.

**PHILO 101 (Summer 2022)****INTRODUCTION TO PHILOSOPHY**

*Recommended Preparation:* ENGL 100 or ESL 151.

**PHILO 115****RELIGIONS OF THE WORLD**

*Recommended Preparation:* ENGL 100 or ESL 151.

**PHILO 116****ETHICS FOR MODERN LIFE**

*Recommended Preparation:* ENGL 100 or ESL 151.

**PHILO 117****INTRODUCTION TO LOGIC**

*Recommended Preparation:* ENGL 100 or ESL 151.

**PHILO 118****WOMEN, THE EARTH, AND THE DIVINE**

*Recommended Preparation:* ENGL 100 or ESL 151.

**PHILO 119****HISTORY OF PHILOSOPHY: ANCIENT PERIOD**

*Recommended Preparation:* ENGL 100 or ESL 151.

**PHILO 120****HISTORY OF PHILOSOPHY: MODERN PERIOD**

*Recommended Preparation:* ENGL 100 or ESL 151.

## **PHOTO 100**

### **INTRODUCTION TO PHOTOGRAPHY**

#### **3.0 Units**

PHOTO 100 is an introductory digital photography course in which students will be introduced to basic camera features, photo composition, and conceptual development to create meaningful images. The course camera features including aperture, shutter, and light meter, methods to obtain proper exposures and creative control, and composition to improve image quality. Students will learn the basics of image editing software such as Lightroom CC to organize and process their photographs. Note: Students must provide their own Adobe Lightroom CC site license. Digital Single Lens Reflex (DSLR) cameras are available for checkout from the Photography Department. Students may use their own camera if that camera is capable of manual operation. Students who have completed PHOTO 101 before Fall 2021 will not receive credit for this course. Lecture 2 hours/Laboratory 3 hours. **Recommended Preparation:** MATH 15 and ESL 125.

## **PHOTO 101**

### **TRADITIONAL PHOTOGRAPHY**

PHOTO 101 gives students a comprehensive overview of traditional photography. Students will learn traditional photography techniques, including processing black and white negative film and traditional black and white printing techniques. Through lectures and lab demonstrations, students will have the opportunity to personally experience the creative potential of black and white photography. Students will work in a traditional darkroom setting. Significant photographic works are presented and discussed to provide a context for the production and critique of photographic images. **Note:** 35mm film cameras are available for checkout from the Photography Department at no cost. **Prerequisite:** PHOTO 100 or equivalent. **Recommended Preparation:** MATH 15 and ESL 125.

## **PHOTO 140 (Summer 2022)**

### **FINE ART PHOTOGRAPHY**

PHOTO 140 includes learning fine art approaches in photography. The course provides guidance through artistic styles, project and theme development, and technical and design techniques used in fine art photography. In this course, self-motivated projects intended for exhibition are created within a fine art context. Significant photographic works are presented and discussed to provide a context for the production and critique of photographic images. **Prerequisite:** PHOTO 103, PHOTO 111, or PHOTO 130, or equivalent.

## **PHOTO 142 (Summer 2022)**

### **COMMERCIAL PHOTOGRAPHY**

PHOTO 142 includes commercial and editorial approaches in photography. The course provides guidance through editorial styles, project and theme development, and technical and design techniques used in commercial photography. In this course, projects are created to fulfill specified criteria as they would in a professional setting. The course includes professional practices for photographic work. Significant photographic works are presented and discussed to provide a context for the production and critique of photographic images. **Prerequisite:** PHOTO 112 or equivalent (PHOTO 112 may be taken concurrently).



**PHOTO 144 (Summer 2022)**

**DOCUMENTARY PHOTOGRAPHY**

PHOTO 144 includes documentary approaches in photography. The course introduces and provides guidance through documentary styles, project and theme development, and design techniques used to communicate theme. In this course, projects are created using course information. Significant photographic works are presented and discussed to provide a context for the production and critique of photographic images. **Note:** This course may not be taken by students who have completed PHOTO 118 prior to Fall 2019. **Prerequisite:** PHOTO 103, PHOTO 111, or PHOTO 130.

**PHOTO 146 (Summer 2022)**

**ADVANCED PROJECTS IN PHOTOGRAPHY**

PHOTO 146 is designed for advanced photo students to concentrate on a single project during the course. The course explores and combines an aesthetic and expressive use of the photographic medium to complete projects with developed artists' statements. Research and reading assignments will be made where applicable.

**Prerequisite:** PHOTO 103, PHOTO 111, or PHOTO 130.

**POL S 101 (Summer 2022)**

**INTRODUCTION TO UNITED STATES GOVERNMENT AND POLITICS**

Recommended Preparation: ENGL 100 or ESL 151.

**POL S 106**

**AMERICAN STATE AND LOCAL GOVERNMENT**

**Recommended Preparation:** ENGL 100 or ESL 141.

**POL S 108**

**POLITICS AND PRACTICE OF THE UNITED NATIONS**

**Recommended Preparation:** ENGL 100 or ESL 151.

**POL S 111**

**THE MODERN MIDDLE EAST: ITS POLITICAL AND ECONOMIC IMPACT**

**Recommended Preparation:** ENGL 100 or ESL 151.

**POL S 115**

**THE POLITICS OF RACE IN THE UNITED STATES**

**Recommended Preparation:** ENGL 100 or ESL 151.

**PSYCH 101 (Summer 2022)**

**GENERAL PSYCHOLOGY**

**Recommended Preparation:** ENGL 100 or ESL 151.

**PSYCH 101H (Summer 2022)**

**HONORS GENERAL PSYCHOLOGY**

**Recommended Preparation:** ENGL 100 or ESL 151.

**PSYCH 104**

**SOCIAL PSYCHOLOGY**

**Note:** This course may not be taken for credit by students who have completed SOC 114.

**PSYCH 104H (NEW)**

**HONORS SOCIAL PSYCHOLOGY**

3.0 Units

PSYCH 104H considers individual human behavior in relation to the social environment. The power of the situation, other individuals, and the social group are examined. Emphasized topics include: aggression, prejudice and stereotypes, interpersonal attraction, attitudes and attitude change, conformity, group phenomena, gender roles, cultural norms, person perception, and social cognition. The honors course is enhanced in one or more of the following ways: 1. Students have an increased responsibility for leading class discussions and facilitating group activities inside and outside the classroom. 2. Writing assignments are focused on critical and theoretical interpretation of research, and the application of social psychology concepts. **Note:** This course may not be taken for credit by students who have completed SOC 114. Lecture 3 hours. **Prerequisite:** PSYCH 101. Transfer credit: CSU.

**PSYCH 105**

**HUMAN SEXUALITY**

*Recommended Preparation:* ENGL 100 or ESL 151.

**PSYCH 106**

**DEVELOPMENTAL PSYCHOLOGY**

*Recommended Preparation:* ENGL 100 or ESL 151.

**PSYCH 110**

**THE PSYCHOLOGY OF PERSONAL AND SOCIAL ADJUSTMENT**

*Recommended Preparation:* ENGL 100 or ESL 151.

**PSYCH 113**

**PSYCHOLOGY OF WOMEN**

*Recommended Preparation:* ENGL 100 or ESL 151.

**PSYCH 131**

**MARRIAGE AND INTIMATE RELATIONSHIPS**

*Recommended Preparation:* ENGL 100 or ESL 151.

**PSYCH 150**

**EDUCATIONAL PSYCHOLOGY**

*Recommended Preparation:* PSYCH 101 or SOC S 101.

**PSYCH 170 (Summer 2022)**

**SPORTS PSYCHOLOGY**

*Prerequisite:* ENGL 100 or ESL 151.

**SOC 101 (Summer 2022)**

**INTRODUCTION TO SOCIOLOGY**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SOC 101H (Summer 2022)**

**HONORS INTRODUCTION TO SOCIOLOGY**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SOC 102**

**SOCIAL CRISES OF TODAY**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SOC 103**

**INTRODUCTION TO DEVIANCE AND CRIMINOLOGY**

*Recommended Preparation:* ENGL 100 or ESL 141.

**SOC 104**

**SOCIOLOGY OF SEX AND GENDER**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SOC 105**

**INTRODUCTION TO GERONTOLOGY**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SOC 108 (Summer 2022)**

**Men and Masculinities**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SOC 114 (NEW)**

**SOCIAL PSYCHOLOGY**

3.0 Units

SOC 114 considers individual human behavior in relation to the social environment. The power of the situation, other individuals, and the social group are examined. Emphasized topics include: aggression, prejudice and stereotypes, interpersonal attraction, attitudes and attitude change, conformity, group phenomena, gender roles, cultural norms, person perception, and social cognition. **Note:** This course may not be taken for credit by students who have completed PSYCH 104. Lecture 3 hours. **Prerequisite:** PSYCH 101. Transfer credit: CSU.

**SOC 131**

**MARRIAGE AND INTIMATE RELATIONSHIPS**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SOC 140**

**INTRODUCTION TO SOCIAL WORK**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SOC S 101**

**URBAN EDUCATION IN AMERICA**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SOC S 105**

**OUR DIGITAL WORLD: THE INTERNET, SOCIAL MEDIA, AND SOCIETY**

*Recommended Preparation:* ENGL 100 or ESL 141.

**SOC S 110**

**AMERICAN POP CULTURE**

*Recommended Preparation:* ENGL 100 or ESL 141.

**SOC S 120**

**RESPONSES TO POVERTY**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SOC S 127**

**LOS ANGELES COUNTY: HISTORY, POLITICS, AND CULTURE**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SPAN 101**

**BEGINNING SPANISH I**

*Recommended Preparation:* ENGL 100 or ESL 141.

**SPAN 124H**

**HONORS ENGLISH TRANSLATIONS OF MASTERPIECES OF HISPANIC LITERATURE**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SPCH 100**

**INTERPERSONAL COMMUNICATION**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SPCH 103**

**GROUP DISCUSSION**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SPCH 104**

**ARGUMENTATION AND DEBATE**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SPCH 107**

**CAREER COMMUNICATION**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SPCH 108**

**INTERCULTURAL COMMUNICATION**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SPCH 115**

**GENDER AND COMMUNICATION**

*Recommended Preparation:* ENGL 100 or ESL 151.

**SPCH 117**

**PROFESSIONAL VOICE-OVER**

*Recommended Preparation:* ENGL 100 or ESL 151.

**ST DV 125**

**CAREER PLANNING**

*Recommended Preparation:* ENGL 100 or ESL 141.

### **ST DV 127**

#### **MAJORS EXPLORATION**

ST DV 127 is a course designed to help students select majors that will lead to a potential career. Emphasis is placed on introducing students to the required education and training within a particular major. Guest lecturers from various industries will present on career options and discuss preferred desirable skills. Students will be able to connect majors to professions. **Note:** This course is offered only as Pass/No Pass. **Recommended Preparation:** ENGL 100 or ESL 141.

### **ST DV 141**

#### **IMPROVING COLLEGE PERFORMANCE AND STUDY SKILLS**

ST DV 141 is designed to help students develop effective academic study skills and critical thinking strategies to reach desired educational goals. The completion of this course prepares students to learn academic success strategies, such as principles of memory and learning, motivation and concentration, effective note-taking, textbook study methods, efficient time management, test-taking strategies, stress management, and develop knowledge of campus resources. **Note:** This course is Pass/No Pass only. **Recommended Preparation:** ESL 133.

### **T ART 100**

#### **INTRODUCTION TO ACTING**

**Recommended Preparation:** ENGL 100 or ESL 141.

## **NONCREDIT COURSES**

### **ESL 33 (NEW)**

#### **GRAMMAR AND WRITING III MIRRORED COURSE**

ESL 33 is a NCESL mirrored course for ESL 133, which focuses on grammar and composition for students at the intermediate level of academic English as a second language. The course covers increasingly complex grammatical structures that students incorporate into three-to-five paragraph compositions of 300-350 words in length. Lecture 90 hours. **Prerequisite:** Placement is based on a composite of test scores and academic background or satisfactory completion of ESL 123 and 126. **Recommended Preparation:** ESL 125 and ESL 127. **Recommended Corequisite:** ESL 135, 136, and 137.

### **ESL 41 (NEW)**

#### **GRAMMAR AND WRITING IV MIRRORED COURSE**

ESL 41 is a NCESL mirrored course for ESL 141, it focuses on grammar and composition for students at the high intermediate level of academic English as a second language. This course provides extensive practice in thesis-based essays, critical analysis of academic reading, and techniques to improve writing content, organization, and grammar. The course covers increasingly complex compositions of 400-450 words in length. Essays are written in response to readings and discussions. Lecture 90 hours. **Prerequisite:** Placement is based on a composite of test scores and academic background or satisfactory completion of ESL 133 and ESL 136. **Recommended Preparation:** ESL 135 and 137. **Recommended Corequisite:** ESL 145 and ESL 146.

### **ESL 70 (NEW)**

#### **ADMINISTRATIVE MEDICAL ASSISTING & ESL SUCCESS AND SUPPORT COURSE**

ESL 70 supports students concurrently enrolled in the Noncredit Business and Life Skills Division's Administrative Medical Assisting (AMA) certificate program. It is designed for students who are at the high-intermediate ESL (English as a Second Language) level or higher. In this course, we will follow the pacing of the AMA course, with emphasis on reviewing, understanding, and practicing medical terminology, communicating and handling problem situations involving patients, using medical software, learning basic billing and coding, and preparing for job interviews. Our goal is to have students feel more confident with their medical terminology, reading comprehension, and verbal and written communication skills. Lecture 77 hours. **Note:** This course is intended to be a recommended corequisite for students enrolled in STV 61. **Recommended Preparation:** ESL 30 or ESL 35. **Recommended Corequisite:** STV 61.

### **STV 61**

#### **ADMINISTRATIVE MEDICAL ASSISTING**

STV 61 provides the student with a comprehensive understanding of all medical front office duties. Emphasis is placed on mastering medical terminology, handling problem situations involving patients over the phone or in person, learning basic billing and transcription techniques and medical software. Lab 352 hours. **Note:** Student should be able to keyboard at a minimum rate of 20 wpm and perform alpha/numeric filing. **Note:** There is a recommended co-requisite of ESL 70 for all who need support with medical terminology. **Recommended Preparation:** ESL 30. **Recommended Corequisite:** ESL 70

### **STV 151**

#### **ENGINEERING DRAFTING AND BASIC DESIGN MIRRORED COURSE**

**Recommended Preparation:** ENGL 100 or ESL 141, or equivalent.

## **CREDIT PROGRAMS**

### **CIVIL ENGINEERING CERTIFICATE**

**Required Courses:** CHEM 101; MATH 103E, 104E, 105, 108; PHY 101, 102; ENGR 100, 122, 140, 141, 152, 156, 180 or 240, 230, 241; Choose one course with a lab: BIOL 122 or GEOL 101 and 111 or GEOL 102 and 112 or OCEAN 115 and 116

### **CIVIL ENGINEERING AS DEGREE**

Students completing an AS degree in civil engineering develop abilities in mathematics, basic sciences, engineering topics such as structural statics, as well as general education subjects that complement technical content. Students must complete all required courses for a total of 37 units. **Program Learning Outcomes:** Upon completion of this program, students will identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics; apply the engineering design process to create engineering solutions that meet specified needs that integrates consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors; communicate technical information effectively with a range of audiences; function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet technical objectives; and transfer to a bachelor's degree program in order to finish preparing for a career in a specific discipline of civil engineering.

**Required Courses:** MATH 103E, 104E; PHY 101, 102; CHEM 101

A minimum of twelve units from the following: ENGR 100, 122, 140, 141, 152, 156, 180, 230, 240, 241

### **COMPUTER ENGINEERING AS DEGREE**

Students completing an AS degree in Computer Engineering develop abilities in discrete mathematics, basic sciences, engineering topics such as circuit design, as well as general education subjects that complement technical content. Students must complete all required courses for a total of 37 units.

**Program Learning Outcomes:** Upon completion of this program, students will identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics; apply the engineering design process to create engineering solutions that meet specified needs that integrates consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors; communicate technical information effectively with a range of audiences; function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet technical objectives; and transfer to a bachelor's degree program in order to finish preparing for a career in a specific discipline of computer engineering.

**Required Courses:** MATH 103E, 104E, 108; PHY 101, 102

A minimum of twelve units from the following courses: ENGR 100, 125, 240; CS/IS 125, 211

### **DIGITAL CONTENT SPECIALIST CERTIFICATE**

This certificate prepares students with creative and technical skills to create, edit, optimize, and distribute digital content including web graphics, photographic images, and video. Completers will be able to develop, deploy, and manage web servers and optimize digital content for deployment on client side websites. The program will provide the employment skills required for Digital Content Creators, Digital Content Managers while providing skills to support Photographers, Graphic Designers and Video Editors. This program requires 23 units. **Program Learning Outcomes:** Upon successful completion of the required coursework, the student will be able to design, create, and manage webpages using current software and technology; produce, optimize, and distribute industry-ready image, video and photographic content for the Web and mobile devices; create and manage a client-side Web site and server; create, modify, organize, and upload Web-specific files to a server prepare students for a career as a digital content creator or digital content specialist.

**Required Courses:** PHOTO 100, 111, 130; ART 250, 251; CS/IS 260; MEDIA 103

### **ELECTRICAL ENGINEERING CERTIFICATE**

**Required Courses:** MATH 103E, 104E, 105, 108; PHY 101, 102; CHEM 101; ENGR 100, 125, 132, 140, 152, 240.

### **ELECTRICAL ENGINEERING AS Degree**

Students completing an AS degree in Electrical Engineering develop abilities in mathematics, basic sciences, engineering topics such as circuit design, as well as general education subjects that complement technical content. Students must complete all required courses for a total of 37 units.

**Program Learning Outcomes:** Upon completion of this program, students will identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics; apply the engineering design process to create engineering solutions that meet specified needs that integrates consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors; communicate technical information effectively with a range of audiences; function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet technical objectives; and transfer to a bachelor's degree program in order to finish preparing for a career in a specific discipline of electrical engineering.

**Required Courses:** MATH 103E, 104E, 108; PHY 101, 102;

A minimum of twelve units from the following: ENGR 100, 125, 132, 140, 152, 240

### **ENGINEERING TECHNOLOGY--CAD & DESIGN DRAFTING AS DEGREE/CERTIFICATE**

This degree or certificate prepares students with training to work in industry as a CAD designer, engineering drafter or drafting technician or technologist. The program includes instruction in both 2-D and 3-D computer aided drafting and design software such as AutoCAD and SOLIDWORKS. Motivated students can complete the required courses in one year by taking courses during the winter and summer sessions and online in addition to the traditional fall and winter sessions. Students must complete all required core courses for a total of 21 units. **Program Learning Outcomes:** Upon completion of this program students will produce engineering drawings and basic design of mechanical and civil engineering components and systems; create drawings using two-dimensional and three-dimensional computer aided design (CAD) software; incorporate and document industry codes, specifications and standards in the design process.

**Required Courses:** ENGR 100, 101, 102, 109, 110, 111, 112

### **FITNESS SPECIALIST AS DEGREE AND CERTIFICATE**

**Required Courses:** KIN 151, 155, 156, 167, 168; HLTH 102.

**Select one course from the following:** HLTH 128; KIN 157, 158; BUSAD 158; ENTRE 101, 102.

**Select two classes from the following (KIN 50 may be taken twice):** PE 108, 110, 111, 180, 181, 220, 221, 131; DANCE 101, 124, 127, 128, 129, 133, 190, 194; KIN 50; CO ED 101.

### **MECHANICAL, AEROSPACE, AND MANUFACTURING ENGINEERING CERTIFICATE**

**Required Courses:** MATH 103E, 104E, 105, 108; PHY 101, 102; CHEM 101; ENGR 100, 122, 133, 140, 141, 152, 156, 230, 240, 241.

### **MECHANICAL ENGINEERING – AS Degree**

Students completing an AS degree in Mechanical Engineering develop abilities in mathematics, basic sciences, engineering topics such as mechanics, as well as general education subjects that complement technical content. Students must complete all required courses for a total 37 units. The AS degree in Mechanical Engineering prepares students for transfer to a 4-year mechanical engineering university program. **Program Learning Outcomes:** Upon completion of this program, students will identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics; apply the engineering design process to create engineering solutions that meet specified needs that integrates consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors; communicate technical information effectively with a range of audiences; function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet technical objectives; and transfer to a bachelor's degree program in order to finish preparing for a career in a specific discipline of mechanical engineering.

**Required Courses:** MATH 103E, 104E; PHY 101, 102; CHEM 101

A minimum of twelve units from the following: ENGR 100, 133, 122, 140, 141, 152, 156, 230, 240, 241



## **REGISTERED NURSING AS DEGREE AND CERTIFICATE**

Registered nursing practice is a licensed occupation, which is regulated by the California Board of Registered Nursing (BRN). This curriculum qualifies the student for an Associate in Science degree with a major in Nursing. Graduates are eligible to apply for the California R.N. licensing examination (NCLEX-RN). This is a full-time program of study. The program has 41.5 units in total. In addition to courses required by the nursing major, graduation requirements established by the college must be met to earn the Associate in Science degree. Students must meet all prerequisite requirements and be formally accepted to the Nursing program prior to taking first semester classes.

**Prerequisite Courses for the Program:** BIOL 112, 120, 121; ENGL 101; PSYCH 101; Eligibility for MATH 90.

**Required Courses:** SPCH 101; NS 200, 201, 202, 203, 204, 205, 208, 210, 211, 212, 213, 214, 215, 216, 222, 223.