Education

Program Description
The Turner Teacher Education Program is designed to provide an introduction to the teaching profession. ED 101 will provide an opportunity to explore teaching as a career while working toward an Associate in Arts Degree in Liberal Studies. Included is a combination of in-class theory and information about teaching, along with an opportunity to intern with a local school.

Teaching English as a Foreign Language (TEFL) is a six-unit certificate program for students interested in teaching English abroad. Graduates of this program have gone to South America, Asia and other regions to teach. In order to be certified, students must complete all six courses.

For information regarding the TEFL program, call faculty member Lou Spaventa at ext. 3560, or the SBCC Professional Development Center at (805) 683-8283.

Program Student Learning Outcomes
1. Students will be able to apply the fundamentals of critical and reflective thinking to the analysis of the issues and challenges facing American education.
2. Students will develop a personal philosophy of education in order to be able to articulate their personal goals, values and beliefs about teaching.
3. Students will develop a pre-professional portfolio for use in the advancement in the field.

Faculty and Offices
Julie K. Smith, Chair (ECOC-1/2, ext. 2859)

College Requirements
For complete information, see “Graduation Requirements” in the Catalog Index.

Skills Competency Award, Introduction to Teaching English as a Foreign Language

Department Requirements (6 units)
ED 105 — Introduction to Teaching English as a Foreign Language or

ED 105 ABCDEF — Introduction to Teaching
English as a Foreign Language

Students must complete the above course with a grade of "C" or higher or credit in all courses.

Education Courses
ED 101 — Introduction to Teaching and Learning in K-12 Contemporary Classrooms
(3) — CSU, UC
Skills Advisories: Eligibility for ENG 100 and 103
Hours: 54 lecture
Provides students with an introduction to teaching as a profession. Addresses critical issues in diverse contemporary K-12 classrooms. Students initiate development of their professional portfolio. 10 hours of observation.

ED 102 — Introduction to the History and Philosophy of Education in America
(3) — CSU
Skills Advisories: Eligibility for ENG 100 and 103
Hours: 54 lecture
Provides an overview of the K-12 teaching profession for students interested in teaching as a career. Students are exposed to the philosophies of education, the history of education in America, the sociology of education, contemporary issues in education and the role of education in American society.

ED 103 — Introduction to Language and Linguistics
(3) — CSU
Course Advisories: ED 101
Hours: 54 lecture
Designed for students interested in pursuing teaching as a career. Provides an introductory survey of the study of language and applied linguistics.

ED 104 — Introduction to K-12 Classroom Teaching
(4) — CSU
Course Advisories: ED 101
Skills Advisories: Eligibility for ENG 100 and 103
Hours: 108 (54 lecture 54 lab)
Introduces students to the concepts and issues related to teaching diverse learners in today's K-12 contemporary schools. Topics include teaching as a profession and career, historical and philosophical foundations of the American education system, contemporary educational issues, content standards and frameworks, teacher performance standards and 45 hours of fieldwork.
ED 105 — Introduction to Teaching English as a Foreign Language (TEFL)  
(6)  
Skills Advisories: Eligibility for ENG 110 or 110H or 110GB  
Hours: 81 lecture  
Introduction to methods and principles of teaching English as a foreign language. Intended for students interested in teaching English abroad.

ED 105A — Introduction to Teaching English as a Foreign Language (Language Acquisition)  
(1)  
Skills Advisories: Eligibility for ENG 100  
Hours: 18 lecture  
Introduction to methods and principles of teaching English as a foreign language. Intended for students interested in teaching English abroad.

ED 105B — Introduction to Teaching English as a Foreign Language (Methods and Materials)  
(1)  
Skills Advisories: Eligibility for ENG 100  
Hours: 18 lecture  
Introduction to methods and principles of teaching English as a foreign language. Intended for students interested in teaching English abroad.

ED 105C — Introduction to Teaching English as a Foreign Language (Cross-cultural Communication)  
(1)  
Skills Advisories: Eligibility for ENG 100  
Hours: 18 lecture  
Introduction to methods and principles of teaching English as a foreign language. Intended for students interested in teaching English abroad.

ED 105D — Introduction to Teaching English as a Foreign Language (English Grammar)  
(1)  
Skills Advisories: Eligibility for ENG 100  
Hours: 18 lecture  
Introduction to methods and principles of teaching English as a foreign language. Intended for students interested in teaching English abroad.

ED 105E — Introduction to Teaching English as a Foreign Language (Testing and Assessment)  
(1)  
Skills Advisories: Eligibility for ENG 100  
Hours: 18 lecture  
Introduction to methods and principles of teaching English as a foreign language. Intended for students interested in teaching English abroad.

ED 105F — Introduction to Teaching English as a Foreign Language (Educational Technology)  
(1)  
Skills Advisories: Eligibility for ENG 100  
Hours: 18 lecture  
Introduction to methods and principles of teaching English as a foreign language. Intended for students interested in teaching English abroad.

ED 291 — Practicum in Teaching  
(2) — CSU  
Corequisite: ED 101  
Skills Advisories: Eligibility for ENG 100 and 103  
Hours: 72 (18 lecture, 54 lab)  
Designed to provide pre-service teachers the opportunity to gain field experience. Students begin to apply skills essential to effective teaching under the guidance of a mentor teacher. Course consists of 45 hours of supervised field experience and 16 hours of lecture. Lecture focuses on topics related to school needs and current trends in education.

ED 295 — Internship in Education  
(2-3) — CSU  
Prerequisites: ED 101 with a minimum grade of “C”.  
Skills Advisories: Eligibility for ENG 110 or 110H or 110GB  
Limitation on Enrollment: Completion of two courses in Education at SBCC prior to enrolling in an internship course.  
Hours: 60-150 lab  
Structured internship program in which students gain experience with community organizations related to the discipline.
Engineering

Degree
Associate in Arts and Associate in Science: Engineering

Program Description
Engineering involves the application of science, mathematics and technology to solve and analyze a wide range of problems. In today’s society, engineering specialties include civil, electrical, mechanical, chemical, materials, industrial, aeronautical, environmental and computer engineering, among others. In general, engineers participate in the activities which make the resources of nature available in a form beneficial to society and provide systems which will perform optimally and economically.

The Engineering transfer program at Santa Barbara City College provides lower-division engineering coursework equivalent to the first two years of education at a 4-year university leading to a Bachelor of Science Degree. At Santa Barbara City College, all Engineering transfer students major in Engineering and do not declare a specific branch of engineering study until after they have transferred to a 4-year university. An Associate in Science and an Associate in Arts may also be obtained.

Program Student Learning Outcomes
1. Knowledge of the engineering profession, and the engineering analysis and design process.
2. Utilize mathematical analysis and graphical methods to solve engineering problems.
3. Demonstrate proficiency in the application and use of engineering software and laboratory equipment.
4. Develop teamwork and technical writing skills to be successful on an engineering design team.

Department Offices
Mike Young, Chair (PS-119, ext. 2697)
Donald Ion, Supervising Lab Technician (PS-120, ext. 2312)
Marilynn Spaventa, Dean (A-113, ext. 2539)

Faculty and Offices
Nick Arnold (PS-118, ext. 4253)
Doug Folsom (PS-115, ext. 4305)

AS/AA Degree Requirements: Engineering

Department Requirements (49-54 units)
CHEM 155 — General Chemistry I ..................................... 5
ENGR 101 — Introduction to Engineering ............................ 2
MATH 150 — Calculus with Analytic Geometry I ................. 5
MATH 160 — Calculus with Analytic Geometry II ............... 5
MATH 200+ — Multivariable Calculus ................................ 4
MATH 210+ — Linear Algebra ............................................ 4
PHYS 121 — Mechanics of Solids and Fluids .......................... 5
PHYS 122 — Electricity and Magnetism ............................... 5
+MATH 250 satisfies this requirement.

Plus one of the following courses is required:
ENGR 115 — Statics and Strength of Materials or ............... 4
ENGR 117 — Electronic Circuits and .................................. 3
ENGR 117L — Electronic Circuits Laboratory ....................... 1

Plus at least 3 additional courses from the following:
CHEM 156 — General Chemistry II .................................. 5
CS 131 — Assembly Language Programming ........................ 4
CS 135 — Programming Fundamentals ................................ 3
CS 137 — C Programming .................................................. 3
ENGR 105/DRFT 105 — Engineering Graphics ................... 4
ENGR 115 — Statics and Strength of Materials ..................... 4
ENGR 116 — Dynamics .......................................................... 4
ENGR 117 — Electronic Circuits and .................................. 3
ENGR 117L — Electronic Circuits Laboratory ....................... 1
DRFT 130/ENGR 130 — CAD Design I ............................. 5
MATH 220 ♦ — Differential Equations .................................. 4
PHYS 123 — Heat, Light and Modern Physics ...................... 5
♦MATH 260 may also count toward the elective requirement.

Note: A course may not be used to satisfy more than one requirement (double counting not allowed).

College Requirements
For complete information, see “Graduation Requirements” in the Catalog Index.

Planning a Program of Study
Students should work with Santa Barbara City College’s counseling staff in planning semester-by-semester programs of study. Important conditions to be met by students majoring in the Physical Sciences include:
1. The number of units taken each semester is a matter of personal choice. Students who work full-time should take a reduced course load.
2. Many required courses are in sequences—which must be taken in the prescribed order (e.g. MATH 150, 160, 200/210 and 220).