Arizona State University

ASU Main Campus

1999-2000 TRANSFER GUIDE

FOR CENTRAL ARIZONA COLLEGE

Bachelor of Science in Engineering

Materials Science and Engineering

The Arizona resident applicant for transfer admission must meet competency requirements and have a cumulative grade point average (GPA) of 2.00 on a four-point (A) scale in all college level work and be in good standing and eligible to return to the last institution attended. Students who have less than 24 semester transfer credits must also meet competency requirements. Arizona residents who have completed an Arizona General Education Curriculum (AGEC) or an associate degree with a minimum 2.00 GPA in the AGEC or associate degree are exempt from admission requirements. A maximum of 64 semester credit hours will be accepted when transferred from community colleges; all transferable community college credits are accepted as lower-division credits and do not satisfy upper-division General Studies or graduation requirements.

Materials Science and Engineering is the discipline in which students develop special scientific knowledge about metals, semiconductors, ceramics, polymers, and composites, which engineers use to build aircraft, bridges, computers, and many other useful products. This knowledge is used to improve existing materials and to develop new and better materials. For further information, call or write:

(480) 965-3313
Department of Chemical, Bio and Materials Engineering
College of Engineering and Applied Sciences
Arizona State University
Tempe, Arizona 85287-6006

SCHOOL OF ENGINEERING ADMISSION CRITERIA

1. A minimum of 2.50 cumulative GPA is required from community college transfer students.
2. Students whose native language is not English must also submit a TOEFL score of 550 points in addition to meeting the minimum GPA requirements.
3. Transfer students are encouraged to have completed science and math courses applicable to the engineering degree.
4. A preprofessional category of admission is available for applicants deficient in School of Engineering admission requirements.
5. Students admitted to the preprofessional program are restricted to taking lower-division courses. After completing a minimum of 30 semester hours of required or approved elective courses with a cumulative minimum GPA of 2.50, one may apply for admission to the professional program. The cumulative GPA is calculated using all credits from ASU and from all other colleges and universities attended.

Transfer value of a course, including General Studies value, is governed by the Course Equivalency Guide (CEG) in force at the time the course is taken. Summer session is included with the previous academic year. Community college courses which are equivalent in content to upper division courses at ASU will be transferable as equivalent but with lower division credit. The course need not be repeated but will not count toward the required number of upper division credit hours.

FIRST YEAR COMPOSITION (3-6)

ASU
ENG 101 & 102 First-Year Comp
or
ENG 105 Adv First-Year Comp
or
ENG 107 & ENG 108 Eng Foreign Students

CAC
ENG 101 & ENG 102 English Comp III & IV
No CAC equivalent
ENG 107 & ENG 108 English Comp III & IV (ESL)

GENERAL STUDIES REQUIREMENTS

Students completing the Arizona General Education Curriculum (AGEC) will still be required to fulfill lower division program requirements and prerequisites within their college and major/minor area of study. In all cases, students have the responsibility for selecting general education coursework that is relevant to the requirements of their intended major and degree.

Students in an engineering program must complete 16 hours of Humanities [HU] and Social/Behavioral Sciences [SB] courses. One course must be taken at ASU, as it must be upper division. In your selection of HU and SB credits, two courses must be from the same department (or have the same prefix). Select credits from CEG General Studies Insert as follows: 6 or 7 HU credits, 6 or 7 SB credits (which must include those that transfer as ECN 111 or ECN 112), 3 C credits, 3 G credits, and 3 H credits. It is beneficial for students to select HU or SB courses that concurrently satisfy C, G or H requirements. Additional and/or mandated General Studies requirements, if any, are listed in the Major Requirements section below with designation in brackets, e.g. [N3].
MAJOR REQUIREMENTS

**ASU**

- CHM 113 General Chemistry [S1/S2]
- CHM 116 General Chemistry [S1/S2]
- CHM 331 General Organic Chem
- CHM 335 Gen Organic Chem Lab
- ECN 111 Macroeconomic Principles [SB] or
- ECN 112 Microeconomic Principles [SB]
- MAT 242 Elementary Linear Algebra
- MAT 270 Cal/Analytic Geo I [N1]
- MAT 271 Cal/Analytic Geo II [N1]
- MAT 272 Cal/Analytic Geo III [N1]
- MAT 274 Elem Diff Equations [N1]
- PHY 121 Univ Physics I: Mech [S1/S2] &
- PHY 122 Univ Physics Lab I [S1/S2] &
- PHY 131 Univ Physics II:Elec & Magntsm [S1/S2] &
- PHY 132 Univ Physics Lab II [S1/S2]

**CAC**

- CHM 101 General Chemistry I
- CHM 102 General Chemistry II
- CHM 201 General Organic Chem I
- ECN 201 Macroeconomic Principles
- ECN 202 Microeconomic Principles or
- GBS 105 Applied Business Econ
- No CAC equivalent
- MAT 220 Calc/Analyt Geo I or
- MAT 221 Analyt Geom /Calc I &
- MAT 230 Calc/Analyt Geo II or
- MAT 231 Analyt Geom/Calc II &
- MAT 240 Calc/Analyt Geo III or
- MAT 241 Analyt Geom/Calc III
- MAT 262 Ordin Diff Equations
- PHY 261 University Phys I &
- PHY 262 University Phys II

**ENGINEERING CORE**

- ECE 100 Intro Engrg Design [N3]
- ECE 210 Engr Mech I:Statics
- No CAC equivalent
- EGR 202 Eng Mechan/Statics

Approved by Marilyn L. Hart on Coordinator, Academic Administration

1. Although a course may satisfy a core area requirement and an awareness area requirement concurrently, a course may **not** be used to satisfy requirements in two core areas simultaneously. A course may satisfy two awareness areas concurrently.
2. When selecting HU or SB core courses, students must keep in mind that A. two courses from the same department must be taken in either core area; B. courses from at least two departments must be taken. These two conditions may, but need not be satisfied in the same core area. At least one course within the 16 semester hours **must** be an upper-division course taken only at ASU.