Arizona State University  
ASU Main Campus  
1999-2000 TRANSFER GUIDE  
FOR THE MARICOPA COMMUNITY COLLEGES  
Bachelor of Science in Engineering  
Mechanical 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.

Mechanical Engineering is a creative discipline that draws upon a number of basic sciences to design the devices, machines, processes, and systems that involve mechanical work and its conversion from, and into, various forms of energy. The undergraduate curriculum includes the study of principles governing the use of energy; principles of design, instruments, and control devices; and the application of these studies to the creative solution of practical, modern problems. Prospective students may call 480/965-7788 (toll free numbers for applicants: 1-800-252-ASU1 out of state and 1-800-325-9371 in state) or write to the Undergraduate Admissions Office for information including application materials. For further information, call (480) 965-3291.

Vice Chair for Mechanical Engineering  
Department of Mechanical and Aerospace Engineering  
College of Engineering and Applied Sciences  
Arizona State University  
Tempe, Arizona 85287-6106

SCHOOL OF ENGINEERING ADMISSION CRITERIA
In addition to the University admission requirements, transfer students must also consider the following:
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 lower-division coursework. 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)

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<tr>
<th>ASU</th>
<th>MCCCD</th>
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<tr>
<td>ENG 101 &amp; 102</td>
<td>ENG 101 &amp; 102 First-Year Comp</td>
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<tr>
<td>or</td>
<td>No MCCCD equivalent</td>
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<tr>
<td>ENG 105 Adv First-Year Comp</td>
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<tr>
<td>or</td>
<td>ENG 107 &amp; ENG 108 First-Yr Comp for ESL</td>
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<td>ENG 107 &amp; ENG 108 Eng Foreign Students</td>
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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), 6 credits that meet C, G and H. 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 114 Gen Chemistry for Engineers [S1/S2] or CHM 113 General Chemistry [S1/S2]
- CHM 116 General Chemistry [S1/S2]
- 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]

**MCCCD**
- CHM 151 General Chemistry I & CHM 151LL General Chemistry I Lab
- CHM 152 General Chemistry II & CHM 152LL General Chemistry II Lab
- ECN 111 Macroeconomic Principles
- CHM 151 General Chemistry I & CHM 151LL General Chemistry I Lab
- CHM 152 General Chemistry II & CHM 152LL General Chemistry II Lab
- ECN 111 Macroeconomic Principles
- MAT 225 Elementary Linear Algebra*
- MAT 220 Analytic Geom & Calc I or MAT 221 Calc Analytic Geom I
- MAT 230 Analytic Geom & Calc II or MAT 231 Calc Analytic Geom II
- MAT 241 Calc Analytic Geom III
- MAT 262 Differential Equations
- PHY 115 University Physics I & PHY 116 University Physics II
- PHY 121 Univ Physics I:Mechanics & PHY 131 Univ Phy II:Elec/Magnetism

**ENGINEERING CORE**

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<tr>
<th>ASU</th>
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<tr>
<td>ECE 100 Intro Engr Design [N3]</td>
<td>ECE 102 Eng Analysis Tools/Tech &amp; ECE 103 Engr Problm Solve/Design</td>
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<tr>
<td>ECE 210 Engr Mech I:Statics</td>
<td>ECE 211 Engineering Mech-Statics</td>
</tr>
<tr>
<td>ECE 312 Engr Mech II:Dynamics</td>
<td>ECE 212 Engineering Mech-Dynamic</td>
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*MAT 225 satisfies [N1] requirements.
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. In order to meet all three awareness areas (C, G, H), courses may be selected that simultaneously meet more than one area; however, a minimum of two different courses (6 credits) must be taken.

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.