The University of Arizona Pima Community College Transfer Guide for 2015-2016

This transfer guide is recommended for students attending classes at Pima Community College and preparing to transfer to The University of Arizona, College of Engineering. Refer to <u>The UA Catalog</u> or contact the <u>College of Engineering</u> (621-6032) for additional information.

A maximum of 64 credits of transferable community college course work may be applied to a bachelor's degree program at The University of Arizona. Consult your advisor regarding course selection.

ARIZONA GENERAL EDUCATION CURRICULUM (AGEC) – 35 credits (<u>AGEC information</u> – note that second language and major requirement courses may fulfill AGEC requirements – see your Pima advisor)

Any AGEC (i.e. AGEC A, AGEC B or AGEC S) will fulfill the UA general education requirements (Tier I and II). The recommended AGEC for this degree is the AGEC-S.

Freshman Composition: 6 credits

Mathematics: 3 credits

(MAT 220 will fulfill this requirement) (MATH 122B)

Biological and Physical Sciences: 8 credits

(PHY 210IN and 216IN will fulfill this requirement) (PHYS 141, 241)

Humanities and Fine Arts: 6 credits

Social and Behavioral Sciences: 6 credits

Other Requirement Options: 6 credits

(MAT 231 and 241 will fulfill this requirement) (MATH 129, 223)

NOTE: If you will not be completing the AGEC see the "Completion of the UA General Education Requirements with Transfer Courses."

SECOND LANGUAGE – **Is not required** by engineering students, but can be beneficial a student decides to complete a major in another college requiring proficiency in a second language. This requirement may be met by demonstrating proficiency in a single second language at the second semester level. Refer to <u>Second Language Requirement for Undergraduate Degrees</u> for additional information on ways in which proficiency may be demonstrated. The list of courses found in the Pima Catalog:

ARB (Arabic) CHI (Chinese) FRE (French) GER (German) GRK (Greek) ITA (Italian)
JPN (Japanese) KOR (Korean) LAT (Latin) POR (Portuguese) RUS (Russian)

SLG (Sign Language) SPA (Spanish) THO (Tohono O'Odham

TUR (Turkish) YAQ (Yaqui)

MAJOR REQUIREMENTS -- The following courses are available at Pima Community College for application to the major. UA equivalents are *italicized*, semester restricted UA courses are in **bold print**:

- CHM 151IN or 151/151LB (CHEM 151)
- ENG 102IN (*ENGR 102*)
- MAT 220 (MATH 124/122A and B)
- MAT 231 (MATH 129)
- MAT 241 (*MATH 223*)
- PHY 210IN or PHY 210/210LB (PHYS 141)
- PHY 216IN or PHY 216/216LB (PHYS 241)

SPECIFIC DEGREE PROGRAMS -- Students may complete the courses listed below that relate to their specific degree programs.

Aerospace Engineering – For students beginning their enrollment at Pima prior to Fall 2014: CHM 152IN *or* 152/152LB (*CHEM 152*) *or* ENG 110IN (*MSE 110*); ENG 210 (*CE 214*), 220 (*AME 250*), 232 (*AME 230*), 260 (*ECE 207*); MAT 262 (*MATH 254*). For students beginning their Pima enrollment in Fall 2014: ENG 175IN (*ECE 175*) ENG 210 (*CE 214*), 220 (*AME 250*), 232 (*AME 230*), 260 (*ECE 207*); MAT 262 (*MATH 254*)

UA COURSES ONLY: Second semester Freshman year: AME 105, Sophomore year fall semester AME 205

Biomedical - BIO 181IN (MCB 181R & L), 201IN (PSIO 201); 182IN (MCB 182R & L) or 202IN (PSIO 202); CHM 152IN or 152/152LB (CHEM 152); ENG 210 (CE 214), 218 (CE 218); 260 (ECE 207); MAT 262 (MATH 254); UA COURSES ONLY: Freshman year spring semester BME 295C. Sophomore year fall semester: ABE 284, BME 214 (Fall ONLY), Sophomore year, spring semester: BME 210 (Spring ONLY)

Biosystems – For students beginning their enrollment at Pima prior to Fall 2014: BIO 181IN (*MCB 181R & L*); CHM 152IN or 152/152LB (*CHEM 152*); 182IN (*MCB 182R & L*) or 201IN (*PSIO 201*) or BIO 205IN (*MIC 205R & L*); ENG 122IN (*ABE 221*), 210 (*CE 214*), 218 (*CE 218*), 220 (*AME 250*); MAT 262 (*MATH 254*); WRT 254 (*Can be substituted for ENGL 307, does not apply to degrees outside of ENGR*) For students beginning their Pima enrollment in Fall 2014: BIO 181IN (*MCB 181R & L*); CHM 152IN or 152/152LB (*CHEM 152*); 182IN (*MCB 182R & L*) or 201IN (*PSIO 201*) or BIO 205IN (*MIC 205R & L*); ENG 122IN (*ABE 221*), 210 (*CE 214*), 218 (*CE 218*); MAT 262 (*MATH 254*); WRT 254 (*Can be substituted for ENGL 307, does not apply to degrees outside of ENGR*)

UA COURSES ONLY: Sophomore year fall semester: ABE 201, 284 (Fall ONLY); Sophomore year, spring semester: ABE 205 (Spring ONLY) SIE 265

Chemical Engineering - For students beginning their enrollment at Pima prior to Fall 2014: CHM 152IN or 152/152LB (CHEM 152), 235IN or 235/235LB (CHEM 241A/243A), 236IN or 236/236LB (CHEM 241B/243B); ENG 175IN (ECE 175), MAT 262 (MATH 254) For students beginning their Pima enrollment in Fall 2014: CHM 152IN or 152/152LB (CHEM 152), 235IN or 235/235LB (CHEM 241A/243A), 236IN or 236/236LB (CHEM 241B/243B); MAT 262 (MATH 254)

UA COURSES ONLY: Second semester Freshman year: AME 105. Sophomore year fall semester: CHEE 201R & L (Fall, Winter/Summer ONLY), AME 205; Sophomore year, spring semester: CHEE 202, 203 (Spring ONLY)

Civil Engineering – BIO 181IN (*MCB 181 R & L*) OR GLG 101IN (*GEOS 251*), CHM 152IN or 152/152LB (*CHEM 152*) OR PHYS 216IN (*PHYS 241*); ENG 120IN* (*CE 210*), 130IN (*CE 251*), 210 (*CE 214*), 218 (*CE 218*), 230 (*CE 215*), MAT 262 (*MATH 254*) UA COURSES ONLY: Sophomore year, spring semester AME 105

Computer Engineering Option – ENG 175IN (*ECE 175*), 274IN (*ECE 274A*), 276IN (*ECE 275*), 282IN (*ECE 220*); MAT 227 (*MATH 243*); MAT 262 (*MATH 254*); PHY 221/221LB (*PHYS 143*)

Electrical Engineering Option- ENG 175IN (*ECE 175*), 274IN (*ECE 274A*), ENG 276IN (*ECE 275*), 282IN (*ECE 220*); MAT 227 (*MATH 243*); MAT 262 (*MATH 254*); PHY 221/221LB (*PHYS 143*)

Engineering Management - For students beginning their enrollment at Pima prior to Fall 2014: CHM 152IN or 152/152LB (CHEM 151) or ENG 110IN (MSE 110); ENG 175IN (ECE 175), ENG 210 (CE 214), 232 (AME 230), 250 (SIE 270); 260 (ECE 207); MAT 262 (MATH 254); WRT 254 (Can be substituted for ENGL 307, does not apply to degrees outside of ENGR) For students beginning their Pima enrollment in Fall 2014: CHM 152IN or 152/152LB (CHEM 151) or ENG 110IN (MSE 110); ENG 175IN (ECE 175), ENG 210 (CE 214), 232 (AME 230), 260 (ECE 207); WRT 254 (Can be substituted for ENGL 307, does not apply to degrees outside of ENGR)

UA COURSE ONLY: Sophomore year fall semester: SIE 265 (offered in fall and spring), spring semester SIE 270, 295S (Spring ONLY)

Environmental Engineering - CHM 152IN *or* 152/152LB (*CHEM 152*), 235IN *or* 235/235LB (*CHEM 241A/243A*), 236IN *or* 236/236LB (*CHEM 241B/243B*); MAT 262 (*MATH 254*)

UA COURSES ONLY: Second semester Freshman year: AME 105. Sophomore year fall semester: CHEE 201R & L (Fall, Winter/Summer ONLY), AME 205; Sophomore year, spring semester: CHEE 202, CHEE 370R, CHEE 295E (SPRING ONLY COURSES), ENGR 211C

Industrial Engineering - CHM 152IN or 152/152LB (CHEM 152) or ENG 110IN (MSE 110) or BIO 181IN (MCB 181R & L); ENG 175IN (ECE 175); Possible technical electives ENG 210 (CE 214), 232 (AME 230); 260 (ECE 207); WRT 254 (Can be substituted for ENGL 307, does not apply to degrees outside of ENGR)

UA COURSES ONLY: Sophomore year fall semester: SIE 250, 277 (Fall ONLY); SIE 265 (offered in fall and spring), 270, 295S (Spring ONLY)

UA COURSES ONLY: Sophomore year fall semester: MSE 222, 345 (Fall ONLY); MSE 223 R & L, 365 (Spring ONLY)

Mechanical Engineering - For students beginning their enrollment at Pima prior to Fall 2014: CHM 152IN *or* 152/152LB (*CHEM 152*) *or* ENG 110IN (*MSE 110*); ENG 122IN (*ABE 221*)*, 210 (*CE 214*), 220 (*AME 250*), 230 (*CE 215*), 232 (*AME 230*), 260 (*ECE 207*); MAT 262 (*MATH 254*) For students beginning their Pima enrollment in Fall 2014: ENG 175IN (*ECE 175*) ENG 210 (*CE 214*), 220 (*AME 250*), 232 (*AME 230*), 260 (*ECE 207*); MAT 262 (*MATH 254*)

UA COURSES ONLY: Second semester Freshman year: AME 105, Sophomore year spring semester AME 205

Mining Engineering - CHM 152IN or 152/152LB (CHEM 152); ENG 210 (CE 214), 218 (CE 218), 230 (CE 215); GLG 101IN (GEOS 251); MAT 262 (MATH 254)

UA COURSES ONLY: Sophomore year fall semester: MNE 205, 296A, 297A (Fall ONLY, course continues through spring semester); MNE 210 (Spring ONLY)

Optical Sciences & Engineering – ENG 110IN (MSE 110); MAT 262 (MATH 254); ENG 260 (ECE 207) or 282IN (ECE 220), UA COURSES ONLY: Sophomore year fall semester OPTI 201R & 201L, spring semester: OPTI 202R & 202L, 240, 280 (Spring ONLY)

Systems Engineering - For students beginning their enrollment at Pima prior to Fall 2014: CHM 152IN or 152/152LB (CHEM 152) or ENG 110IN (MSE 110) or BIO 181IN (MCB 181R & L); ENG 175IN (ECE 175); 260 (ECE 207); MAT 262 (MATH 254), WRT 254 (Can be substituted for ENGL 307, does not apply to degrees outside of ENGR) For students beginning their Pima enrollment in Fall 2014: CHM 152IN or 152/152LB (CHEM 152) or ENG 110IN (MSE 110); ENG 175IN (ECE 175); MAT 262 (MATH 254), WRT 254 (Can be substituted for ENGL 307, does not apply to degrees outside of ENGR)

UA COURSES ONLY: Sophomore year fall semester: SIE 250, 277 (Fall ONLY); SIE 265 (offered in fall and spring), 270, 295S (Spring ONLY)

Notes: A total of 128 credits are required for the majority of these degree programs. This includes a minimum of 30 credits in the major of which at least 42 units must be upper-division, and 18 units taken in residence at the UA. Neither a second language nor a minor are required for this program.

ADDITIONAL INFORMATION REGARDING THE COLLEGE OF ENGINEERING

All transfer students admitted into the College of Engineering must first complete the Next Steps online tour, including clicking on the Transfer Student Academic Preview (TSAP) link. Instructions within the TSAP will direct students to contact the college to begin their transition into their major. Once this is completed, you will be referred to your major advisor for course selection. Transfer students cannot choose a No Major Selected option, they must choose one of the 14 academic degree programs offered in the college.

Be sure to review the College of Engineering academic programs and course descriptions at <u>engineering.arizona.edu/majors</u> to assist you in choosing the degree program that is right for you.

PLEASE NOTE: STUDENTS ARE STRONGLY ENCOURAGED TO COMPLETE STU 210, "TRANSFER STRATEGIES" This course offers UA campus visits, meetings with UA staff members who represent the Offices of Admissions, Financial Aid, Transfer Student Center and other University resources, and consultation for evaluating transfer timing. This course transfers to the UA as elective credit. See a P.C.C. counselor/advisor about enrolling in STU 210.

Are you certain about your choice of major, or are you still considering your options? If you are not sure, you are encouraged to enroll in STU 107, "University Transfer Preparation" to help with your major decision and to plan your path to successful completion of a bachelor's degree.

You can find contact information for all advisors at The University of Arizona, as well as other resource information, at the UA Advising Resource Center.