The Engineering Transfer Blueprint Requirements

for Madison Area Technical College (MATC) students interested in guaranteed admission to participating degree programs in University of Wisconsin-Madison College of Engineering (COE)

___1. Enroll as a first-year college student at MATC.

___2. Sign The Engineering Transfer Blueprint Contract prior to completing 24 college transfer credits at MATC.
   - Be enrolled at MATC when you sign the Contract
   - At the time of signing the Contract, specify your intended COE degree program (choose one):
     - Chemical Engineering
     - Electrical Engineering
     - Industrial Engineering
     - Mechanical Engineering
     - Civil Engineering
     - Engineering Mechanics
     - Materials Science
     - Nuclear Engineering
     - Computer Engineering
     - Geological Engineering

___3. Consult regularly with MATC and COE academic advisors.
   - Meet with the MATC Liberal Arts Transfer advisor each semester
   - Meet with the COE transfer coordinator at least annually

___4. Fulfill UW-Madison minimum transfer requirements.
   Meet UW-Madison minimum requirements for transfer application
   - 24 transferable semester credits (excluding AP and other test credits)
   - Algebra (one year high school or equivalent)
   - Plane geometry (one year high school or equivalent; must be college track)
   - College preparatory math (one year high school or equivalent)
   - Single foreign language (two high school years or two college semesters)

___5. Fulfill COE minimum transfer requirements.
   Complete COE transfer course requirements
   - 20-801-201 English I (3 credits) UW-Madison equivalency: Communication Part A
   - 20-804-231 Calculus and Analytic Geometry 1 (5 credits)
   - 20-804-232 Calculus and Analytic Geometry 2 (5 credits)
   - 20-806-209 College Chemistry 1 (5 credits) Chemistry 103
   - 20-806-212 College Chemistry 2 (5 credits) Chemistry 104
   - 20-806-223 College Physics 1-Calculus Based (5 credits) Physics 201
   - Achieve a minimum grade point average (GPA) of 2.5 in the calculus, chemistry, and physics courses above.*
   - If any additional calculus, physics, computer science, statistics, and chemistry courses are taken from the list in #6, the credits and grades will be included in the GPA calculation.

___6. Recommended: Take additional MATC courses as required by your specific engineering degree program.
   Requirements vary among the engineering degree programs; check the curriculum for your program in #2 above.
   - 20-623-260 Introduction to Engineering Design (3 credits) UW-Madison equivalency: Interdisciplinary Engr 160
   - 20-804-208 Computer Science (3 credits) Computer Science 302
   - 20-804-233 Calculus 3 (5 credits) Math 234
   - 20-804-241 Introduction to Engineering Statistics (3 credits) Statistics 224
   - 20-806-213 Organic Chemistry 1 (5 credits) Chemistry 343, 344
   - 20-806-214 Organic Chemistry 2 (5 credits) Chemistry 345
   - 20-806-224 College Physics 2-Calculus Based (5 credits) Physics 202
   - Liberal Electives (see page 2)

___7. Achieve an overall MATC GPA of at least a 3.0 in all college-transfer courses.*

___8. Fulfill the Blueprint requirements within no more than five academic years after matriculating at MATC.

*COE will compute the GPA for MATC course work in accordance with UW-Madison’s grading practices and will include grades for all transferable courses, including repeated courses.

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All COE degree programs require **15-16 credits** (15 in curricula requiring 120 credits) of liberal electives, which are courses that are designated as H (humanities), L (literature), S (social studies), or Z (humanities/social studies). These designations accompany the course equivalencies listed on the **Transfer Information System (TIS)** website: [www.uwsa.edu/tis](http://www.uwsa.edu/tis)

Students must obtain both **breadth** (i.e., both social studies and humanities) and **depth** (i.e., more than one course in one subject). In addition, all UW-Madison students must meet the UW-System **ethnic studies** requirement.

__Breadth__

Social Studies: at least 3 credits designated as social studies (S or Z).

Humanities: at least 6 credits designated as humanities (H, L, or Z).
- College foreign language courses count as H credits.
- Foreign language retroactive credits do not count toward the 15-16 liberal elective credits.
- See the MATC Liberal Arts Transfer advisor about the awarding of retroactive credits and how the depth requirement may be met.

__Depth__

At least two courses must be from the same subject (e.g., history, philosophy, or psychology) and at least one of those courses must be at the intermediate level (I) as designated on TIS. Examples:

- 20-803-214 Native American History-elementary level (E), also S and ETHNIC and
  20-803-213 History of the American West-intermediate level (I), also Z
- 20-809-260 Introduction to Philosophy-elementary level (E), also Z and
  20-809-261 Logic and Critical Thinking-intermediate level (I), also Z and QR-B
- 20-809-231 Introduction to Psychology-elementary level (E), also S and
  20-809-237 Abnormal Psychology-intermediate level (I), also S

__Ethnic Studies__

At least 3 credits designated as ETHNIC on TIS. The ethnic studies course may also be used to meet the breadth and/or depth requirements above.

Exceptions to the Liberal Electives Requirements

Several engineering programs have added to the basic requirements for liberal electives:

- **Chemical Engineering**: 9-12 credits in the same subject with one course above the elementary level (fulfills the depth requirement)
- **Civil Engineering**: 20-809-211 Macroeconomics or 20-809-212 Microeconomics (also fulfills the social studies requirement) and 20-809-228 Environmental Economics (also fulfills the depth requirement if Micro- or Macroeconomics is taken and fulfills the environmental issues course requirement)
- **Industrial Engineering**: 20-809-212 Microeconomics (also fulfills the social studies requirement)

Questions about The Engineering Transfer Blueprint?

Consult the MATC Liberal Arts Transfer advisor, Room 246 Truax, 608/246-6271, or the COE Transfer Admissions coordinator, 1150 Engineering Hall, 608/262-4822.