



## STEP2UW Agreement Checklist

Select Transfer Engineering Pathway to the University of Wisconsin-Madison (STEP2UW) for Madison Area Technical College (Madison College) students interested in transferring to undergraduate degree programs in the University of Wisconsin-Madison College of Engineering (CoE)

Effective Spring 2025

Eligible STEP2UW candidates include students who qualify as [Wisconsin residents](#) for UW-Madison tuition purposes, attended Madison College after graduating from high school, and have not attended any other institution after graduating from high school. The STEP2UW agreement does not apply to students applying to UW-Madison as first-year students, including STEM Academy students.

Participating engineering programs include: Biomedical Engineering, Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, Engineering Mechanics, Environmental Engineering, Geological Engineering, Industrial Engineering, Materials Science and Engineering, Mechanical Engineering, and Nuclear Engineering.

Admission to UW-Madison's College of Engineering is competitive and not guaranteed, even for students who meet the transfer preparation guidelines below. STEP2UW students must follow standard UW-Madison procedures to submit an application for transfer admission consideration in accordance with published deadlines. As off-campus transfer applicants, STEP2UW students are considered for direct admission to the College of Engineering by applying to the Office of Admissions and Recruitment with an engineering program listed as their first choice major. STEP2UW students who are selected for admission to a participating engineering program and meet the requirements below will **automatically meet progression requirements** to guarantee advancement in their intended engineering program after transfer.

STEP2UW students may apply to a different program than listed on their STEP2UW form but are expected to continue in the engineering program to which they've been admitted through graduation. Although there is an interdepartmental transfer process for students to apply to be considered for a different engineering program after transfer, interdepartmental transfer is competitive and not guaranteed.

Students who do not meet the STEP2UW eligibility requirements or would like to be considered for admission to the Engineering Physics program may apply for general transfer admission consideration. If admitted, these students must meet progression requirements at the point of transfer or within their first two semesters at UW-Madison to be guaranteed permission to continue in an engineering program.

**1. Strongly Recommended: Enroll in the STEP2UW pathway prior to completing two semesters as a post-secondary student at Madison College.** *You must meet with a Madison College Engineering Faculty Advisor to enroll in STEP2UW (see #2 below).* Forms must be submitted no later than the [Application Opens date](#) for your transfer application term.

**2. Consult regularly with Madison College and UW-Madison CoE advisors.**

o Meet with a Madison College Engineering Faculty Advisor as early as possible and at least once per semester. Advising hours vary by semester. Up-to-date hours are posted on the Engineering Transfer Resources website:

<https://madisoncollege365.sharepoint.com/sites/EPM/SitePages/EPM-Home.aspx>

o Meet with a UW-Madison CoE transfer advisor as needed; to schedule an appointment, email a copy of your unofficial Madison College transcript, your availability, and your preference for an in-person/Zoom/phone meeting to [ugtransfer@engr.wisc.edu](mailto:ugtransfer@engr.wisc.edu).

**3. Fulfill UW-Madison minimum transfer admission requirements.**

o 24 transferable semester credits completed after high school graduation (excluding AP and other test credits)

o Algebra (one year high school or equivalent)

o Plane geometry (one year high school or equivalent; must be college track)

o College preparatory math (one year high school or equivalent)

o Single world language (two high school years or two college semesters)

**4. Fulfill CoE minimum transfer progression requirements.**

a. Establish equivalent credit through test credit (see UW-Madison AP Exam policy below ^) or coursework (see 4.c.) for:

o Math 221, 222, and 234

o Chemistry 103 (and 104, if required for the selected engineering program) or 109

o Physics 201 or EMA 201

b. Complete Communications Part A

o 20-801-201 English 1 (3 credits; or equivalent course) UW-Madison equivalent: Comm A

If Comm A is satisfied by test credit ^, complete a graded 3-credit liberal studies course with Humanities, Social Science, or Literature breadth.

c. Complete a minimum of **six Madison College core courses from the list below**. Any course taken from the list below must be passed with a grade of **B or better**. Only one course can be repeated and have the grade replaced to meet the B or better grade requirement.

- o 20-804-231 Calculus and Analytic Geometry 1 (5 credits) Math 221
- o 20-804-232 Calculus and Analytic Geometry 2 (5 credits) Math 222
- o 20-804-233 Calculus 3 (5 credits) Math 234
- o 20-804-255 Ordinary Differential Equations (3 credits) Math 319
- o 20-804-256 Elementary Matrix & Linear Algebra (3 credits) Math 340
- o 20-804-265 Intro to Discrete Mathematics (3 credits) Math 240
- o 20-806-209 College Chemistry 1 (5 credits) Chemistry 103
- o 20-806-212 College Chemistry 2 (5 credits) Chemistry 104
- o 20-806-259 Chemistry for Science & Engineering (5 credits) Chemistry 109
- o 20-806-223 University Physics 1-Calculus Based (5 credits) Physics 201
- o 20-806-224 University Physics 2-Calculus Based (5 credits) Physics 202
- o 20-806-232 Statics (3 credits) EMA 201
- o 20-806-233 Dynamics (3 credits) EMA 202
- o 20-804-216 Computer Science 2 (3 credits) Comp Sci 300

**\_\_\_ 5. Recommended: Complete additional Madison College courses to enhance preparation for engineering studies.**

Most competitive applicants will exceed the minimum of 6 core course requirements listed above. The additional courses listed in the appendix will count only toward certain UW-Madison CoE degree programs. Consult with your Madison College Engineering Faculty Advisor to ensure you are taking the courses that best match your intended engineering program.

**\_\_\_ 6. Achieve a minimum 3.0 grade point average (GPA) in all transferable college courses taken.**

Most competitive applicants will exceed this minimum GPA. The students we typically see selected for admission usually have a GPA between 3.2 – 4.0. CoE will compute the GPA in accordance with UW-Madison's transfer admission practices and will include grades for all transferable courses, including repeated courses and any transferable college courses taken at other institutions during high school. Note: Courses must be passed with at least a C final grade (2.0 on a 4.0 scale) for transfer credits to count towards CoE degree requirements.

**\_\_\_ 7. Complete at least two semesters of full-time study (minimum of 12 credits) in transferable courses that include at least two core courses per semester taken from 4.c. or the appendix.**

Note: College of Engineering students at UW-Madison are required to attend classes on a full-time basis (12-18 credits per semester).

**\_\_\_ 8. Fulfill the STEP2UW requirements within five years of submitting the STEP2UW Agreement at Madison College.**

**\_\_\_ 9. STEP2UW students must follow standard UW-Madison procedures to submit an application for transfer admission consideration in accordance with published deadlines. When applying for transfer admission consideration, submit one letter of recommendation from a Madison College math, science, or engineering instructor.**

**\_\_\_ 10. Admitted students who have courses in progress at the time of application must maintain current course enrollment and earn a minimum 3.0 term GPA for courses completed in the semester prior to transfer with no grades below a C (2.0 on a 4.0 scale).**

^ UW-Madison Advanced Placement (AP) Exam policy:

Calculus AB score of 4 or 5 = Math 221

Calculus BC score of 4 or 5 = Math 221-222

Chemistry score of 4 or 5 = Chem 103

Physics C Mechanics score of 4 or 5 = Physics 201

Physics C Electricity and Magnetism score of 4 or 5 = Physics 202

English Language/Literature score of 4 or 5 = Communications Part A

## Madison College and UW-Madison College of Engineering (CoE) Transfer Credit Equivalencies

### Madison College courses that fulfill degree requirements in all CoE programs.

Madison College Course				UW-Madison Course Equivalency
English 1	801	201	3 cr	Communication Part A
Chemistry for Science & Engineering	806	259	5 cr	Chemistry 109 Advanced General Chemistry
Calculus 1	804	231	5 cr	Math 221 Calculus & Analytic Geometry 1
Calculus 2	804	232	5 cr	Math 222 Calculus & Analytic Geometry 2
Calculus 3	804	233	5 cr	Math 234 Calc – Func of Several Variables
<u>Either</u> Univ Physics 1-Calc-Based*	806	223	5 cr	Physics 201 General Physics (calculus based)
<u>or</u> Statics*	806	232	3 cr	EMA 201 Statics
*Take the course preferred by the engineering program of interest.				
University Physics 2-Calc-Based	806	224	5 cr	Physics 202 General Physics (calculus based)

### Madison College courses that might fulfill CoE degree requirements, depending on the program of interest.

Madison College Course				UW-Madison Course Equivalency
Intro to Engineering	806	295	3 cr	InterEgr 170 Design Practicum
Ordinary Differential Equations	804	255	3 cr	Math 319* Techn in Ordinary Differential Equations
Elementary Matrix & Linear Algebra	804	256	3 cr	Math 340* Elementary Matrix & Linear Algebra
*Math 319 + 340 satisfies Math 320.				
Intro to Discrete Mathematics	804	265	3 cr	Math 240 Introduction to Discrete Mathematics
Computer Science 1	804	215	3 cr	Comp Sci 200 Programming I
Computer Science 2	804	216	3 cr	Comp Sci 300 Programming II
Intro to Programming in Python	804	217	3 cr	Comp Sci 220 Data Sci Programming
Data Structures and Algorithms	804	270	4 cr	Comp Sci Elective sub for Prof Elective for EE and CMPE
Intro to Engineering Statistics	804	241	3 cr	Statistics 324 Intro Stats for Engineers
Dynamics	806	233	3 cr	EMA 202 Dynamics
Mechanics of Materials	806	234	4 cr	EMA 303 (3cr) + 307 (1cr) Mechanics of Materials and Lab
College Chemistry 1	806	209	5 cr	Chem 103 General Chemistry I
College Chemistry 2	806	212	5 cr	Chem 104 General Chemistry II
Organic Chemistry 1 Lecture	806	256	4 cr	Chem 343 Intro Organic Chem
Organic Chemistry 2 Lecture	806	257	4 cr	Chem 345 Intmed Organic Chem
Organic Chemistry 1 Lab	806	266	2 cr	Chem Elective* *OChem 1 + 2 Labs = CHEM 344
Organic Chemistry 2 Lab	806	267	2 cr	Chem Elective* *OChem 1 + 2 Labs = CHEM 344
Introductory Engineering Graphics	606	231	3 cr	ME 231 Intro Engineering Graphics; sub for CEE 159
AC/DC Circuit Techn & Principles	605	270	3 cr	ECE Elective sub for ECE 210 after transfer to CoE
Intro to Computer Engineering	662	252	3 cr	ECE 252 Introduction to Computer Engineering
Circuit Modeling 1	662	121	3 cr	ECE Elective* *Circuit Modeling 1 + 2 = ECE 230 and 270
Circuit Modeling 2	662	221	4 cr	ECE Elective* *Circuit Modeling 1 + 2 = ECE 230 and 270
Speech	801	198	3 cr	Com Arts 105 Public Speaking
Introductory Zoology	806	203	5 cr	Zoology 101 (3 cr) + 102 Lab (2 cr) Animal Biology and Lab
Cellular & Molecular Biology	806	271	5 cr	Zoology 151 Introductory Biology
Organismal Biology	806	272	5 cr	Zoology 152 Introductory Biology
General Geology	806	244	4 cr	Geoscience 100 Introductory Geology
Microeconomics	809	212	3 cr	Economics 101 Principles of Microeconomics
Macroeconomics	809	211	3 cr	Economics 102 Principles of Macroeconomics
Environmental Economics	809	228	3 cr	Economics 343 Environmental Economics
Introduction to GIS	806	236	4 cr	GEOG/CEE 377 Intro to Geog Info Systems
Modern Physics	806	235	3 cr	PHYSICS 241 Modern Physics

Course offerings and equivalencies are subject to change. Always consult **Transferology** (<https://www.wisconsin.edu/transfer/>) for up-to-date transfer credit equivalencies. For more details about **CoE's transfer process**, visit <https://engineering.wisc.edu/admissions/undergraduate/transfer-from-off-campus/>. **Additional courses are available** that will fulfill CoE degree requirements, especially the liberal studies requirements. Consult engineering curriculum guides for the specific degree requirements: <https://guide.wisc.edu/undergraduate/engineering/#degreesmajorscertificatestext>.

**Communication Part B:** CoE students satisfy Comm B with INTEREGR 397: Engineering Communication taken at UW-Madison.