

Notes for McCormick/ISP Students in Catalog Year 2026

Students entering the McCormick School of Engineering and Applied Science as first-years may major in Integrated Science, provided that they have been accepted during the university application process by the Integrated Science Program (ISP) as well as McCormick. In addition to the McCormick B.S. degree that they have chosen to pursue, these students will simultaneously be pursuing the ISP major in the Weinberg College of Arts and Sciences (WCAS). They will follow McCormick B.S. degree requirements rather than Weinberg College B.A. degree requirements. In the rare case where a McCormick/ISP student wishes to obtain both McCormick and WCAS bachelor's degrees, all the requirements of both schools must be completed. See the [Undergraduate Catalog](#) for additional information on the dual degree.

Undergraduate degrees in McCormick, with the exceptions of industrial engineering, artificial intelligence (BSE), computer science, applied math, and integrated engineering, are accredited by the Engineering Accreditation Commission of ABET. ABET dictates that at least 18 units of credit be in Engineering Topics and at least 12 units of credit be in Math and Basic Science Topics. A McCormick/ISP student will have more than enough Math and Basic Science Topics credit but needs to ensure that their curriculum carries enough Engineering Topics credit. No WCAS course carries Engineering Topics credit. Many, but not all, McCormick courses carry Engineering Topics credit. The [distribution of these two categories of credit](#) for engineering courses (course partitioning) is relevant to the discussion that follows. Students should refer to the [ABET course partitioning](#) page for details on partitioning of a specific McCormick class.

Design Thinking and Communication:

McCormick/ISPs will take *Design Thinking and Communication* during their first year, consistent with when all McCormick students complete this requirement. ISP does not alter the need for DTC in the McCormick degree program. Specific timing of DTC 1 and 2 is confirmed in study planning with the McCormick First-Year Adviser.

Programming:

McCormick/ISPs will take Gen Eng 150: Programming for Engineers or Gen Eng 151: Honors Programming for Engineers in the fall quarter of the first year. Students interested in Gen Eng 151 should refer to Purple Prep for more details on selection into this honors version of the course. Gen Eng 150/151 will satisfy the ISP programming requirement.

Math:

McCormick degrees require Math 220-1, 220-2, 228-1, and 228-2*. Instead of this sequence McCormick/ISP students complete a separate, ISP-specific, math sequence that includes Math 281-1, 281-2, and 281-3.

McCormick will apply the Math 281 sequence to Engineering requirements as follows:

- Math 281-1 will substitute for Math 228-2. Per the McCormick Math Exemption Policy, students must successfully complete Math 281-1 in their fall quarter with a grade of C or higher to earn exemption from lower-level math requirements in the sequence. Students who earn a C or higher will be exempt from any of the Math 220-1, Math 220-2, or Math 228-1 requirements for which they do not already have credit. Students who receive a grade of C- or lower in Math 281-1 and those who drop or withdraw from the course in fall quarter will be required to complete all standard McCormick math requirements for which they do not already have earned credit.

*Note: Artificial Intelligence and Computer Science do not require Math 228-2. However, Math 281-1

Revised: August 2026

must still be completed to satisfy ISP requirements.

- Math 281-2 will substitute for Gen Eng 251. This course is required within some McCormick degrees but not in others. However, McCormick/ISP students must take Math 281-2 regardless of whether their McCormick program specifically requires differential equations.
 - Majors requiring Gen Eng 251: Applied Math, Biomedical, Chemical, Civil, Computer Engineering, Electrical, Environmental, Manufacturing and Design, Materials Science, Mechanical
McCormick automatically allows students in these majors to use Math 281-2 in place of Gen Eng 251.
 - Majors that do not specifically require Gen Eng 251: Artificial Intelligence (BSE), Computer Science, Industrial Engineering
Students in these majors may use Math 281-2 toward any degree requirement where Gen Eng 251 would otherwise apply.
- Math 281-3 will substitute for Gen Eng 241. This course is required within all McCormick majors as part of the Engineering Foundations curriculum.

Mechanics:

Calculus-based mechanics is a component of all McCormick degree programs. However, programs vary in their specific required coursework for this component of the degree. Some McCormick programs require calculus-based general physics satisfied via Physics 135-1. Other programs require engineering mechanics satisfied via the two-course Gen Eng 211 (Statics) and Gen Eng 212 (Dynamics) sequence.

- Majors requiring Physics 135-1: Applied Math, Artificial Intelligence (BSE), Chemical, Computer Engineering, Computer Science, Electrical, Industrial, Materials Science
McCormick automatically allows McCormick/ISP students within these majors to use Physics 125-1 in place of Physics 135-1. This substitution does not require a McCormick curriculum petition.
- Majors requiring Gen Eng 211 & Gen Eng 212: Biomedical, Civil, Environmental, Manufacturing and Design, Mechanical
Students in these majors are required to complete Gen Eng 211 and Gen Eng 212. Physics 125-1 will apply toward the unrestricted electives or, if the program allows, toward general technical requirements for students in these programs.

Statistics:

McCormick/ISP students will complete Gen Eng 231, which is part of the Engineering Foundations curriculum and is required in all Engineering majors.

Basic Science:

All McCormick degrees include a basic science requirement. Specific courses required will vary by degree program and students should consult the course catalog and departmental requirements pages for specific details. Science courses that are taken to satisfy ISP requirements that also fall within the required courses for McCormick basic science in the given department may be used toward both programs. In cases where Physics 135-2 and/or Physics 135-2 are part of the basic science requirement, Physics 125-2 and/or Physics 125-3 will

be applied to the relevant requirement. This substitution does not require a petition.

Biology:

In some cases, McCormick/ISP students who have a requirement for biology in their McCormick major may replace ChemEng 275 or Biol Sci 201 with the ISP course Biol Sci 240. This petition should be discussed with the McCormick department.

Other Areas of Curriculum Overlap:

In cases outside of those specifically outlined here where students wish to explore substitutions for standard requirements across McCormick and ISP, students should discuss with their home McCormick department and ISP whether the relevant course(s) can be used in place of the standard department requirement or vice versa. In some cases, students may successfully petition the ISP versions to count toward the standard McCormick major courses. However, this is not always the case. Some McCormick departments will require completion of their standard degree requirements. Petitions should be submitted *before* registering for the relevant course. If the student is in an [ABET accredited major](#), then the petition will need to show that the student's curriculum overall contains at least 18 units of Engineering Topics. On these petitions, it is important that students state that they are aware of the 18 units of engineering requirement and that they will make course selections to ensure they meet the requirement. In some McCormick majors, this may mean that the student needs to take an additional Engineering Topics course beyond those in the standard departmental curriculum (e.g. as an unrestricted elective). Students should create their proposed plan for meeting the ABET requirement before approaching their advisers for a signature on the petition. The curriculum petition form is linked on [McCormick's forms page](#).

Students wishing to request that a McCormick course be used in place of a standard ISP requirement should be in touch with the ISP Director before registering to discuss whether such a substitution would be approved.

Note on Biotechnology & Biochemical Engineering Minor:

ISP students wishing to pursue the Biotechnology & Biochemical Engineering Minor will complete all the requirements for the minor with one substitution. In addition to the three required labs (Biol Sci 232, Biol Sci 233, and Biol Sci 234), ISP students will take the full sequence of Biol Sci 239, Biol Sci 240, and Biol Sci 241 in place of the non-ISP minor requirements of Biol Sci 201, Biol Sci 202, and Biol Sci 203.