



Washkewicz College of Engineering

Bachelor of Mechanical Engineering with Mathematics Minor

Benefits of earning a Mathematics Minor:

- No additional cost or time to pursue and earn
- Informs recruiters for co-ops, internships, and career opportunities of your strong critical thinking and problem-solving skills

Courses Needed for Mechanical Engineering Students to Earn a Math Minor

	ESC 250 Differential Equations for Engineers 3 credits	ESC 350 Linear Algebra for Engineers 3 credits	MTH 281 Multivariable Calculus 4 credits	STA 323 Statistical Methods 3 credits
Mechanical Engineering Without Math Minor	✓	✓	✓	✗
Mechanical Engineering With Math Minor	✓	✓	✓	✓

To earn a Mathematics Minor, Mechanical Engineering students must earn a C or better in the following:

- 4 credits — MTH 181 (Calculus I)
- 4 credits — MTH 182 (Calculus II)
- 3 credits — ESC 250 (Intro to Differential Equations)
- 4 credits — MTH 281 (Multivariable Calculus)
- 3 credits — ESC 350 (Linear Algebra for Engineers)
- 3 credits — STA 323 (Statistical Methods)
- 21 credits

Transfer students must complete a minimum of 9 of these credits at Cleveland State University to earn the Mathematics Minor

Overall Math Minor Requirements and How-To Sign-Up

REQUIRED COURSES

A grade of C or higher is required in both [MTH 181](#) and [MTH 182](#)

- [MTH 181 - Calculus I](#)
- [MTH 182 - Calculus II](#)

MATHEMATICS ELECTIVES

10 additional credits chosen from MTH courses numbered 200 or above, or from the STA courses [STA 323](#) or [STA 424](#). Courses must be completed with a grade of C or better. The following statistics and education-focused courses along with any statistics or education-focused special topics or reading courses are excluded from the math minor.

- Statistics courses: [STA 347](#), [STA 421](#), [STA 431](#), [STA 435](#), [STA 436](#), [STA 467](#)
- Education courses: [MTH 201](#), [MTH 325](#), [MTH 326](#), [MTH 328](#), [MTH 329](#), [MTH 330](#)

NOTES:

Engineering students can apply one of the following ESC courses toward the minor: [ESC 250](#), [ESC 310](#) or [ESC 350](#). Moreover,

- Only one of [MTH 284](#), [MTH 288](#) or [ESC 350](#) may be used,
- Only one of [MTH 286](#) or [ESC 250](#) may be used,
- Only one of [STA 323](#) or [ESC 310](#) may be used,
- Only one of [MTH 281](#) or [MTH 283](#) may be used.



Use your smart phone's camera app to scan the QR code above. It will direct you to CSU's Undergraduate Course Catalog.

How do I sign-up for a Mathematics Minor?

Log into your CampusNet → Select "Student" Tab → Select "Degree Audit" → Click "Ask a Question" **Please be sure to confirm your eligibility with your Academic Advisor.**

The screenshot shows the CampusNet interface with the 'Student' tab selected. The 'Degree Audit' section is active, and the 'Ask a Question' link is highlighted. The form is titled 'campusnet.csuohio.edu' and contains the following fields:

- Department:** Registrar's Office
- Subject:** Other
- Question:** I would like to add a minor in mathematics.

Below the question field, there is a note: "Please choose whether you prefer to have your question answered by email or by phone. If you check Phone, you must provide a phone number in the space provided. If you check Email, please see the section below to provide additional information."

There are two radio buttons for "Email" (checked) and "Phone". Below the "Phone" button is a field for "Phone () - ". At the bottom, there is a section for "Select a preferred contact email." with "CSU Email" (checked) and "Alternate Email" (unchecked). The "CSU Email" field is populated with "CSUID@vikes.csuohio.edu". A note says "Click the box on left to provide an alternate email address." At the bottom of the form are "Submit" and "Cancel" buttons.



Use your smart phone's camera app to scan the QR code above for a step-by-step tutorial on signing up for a mathematics minor!