

Math Minors for ENG Majors

List of Engineering Majors

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Math Minor Requirements

Students must complete 3 required courses, a multivariable calculus course, a proof writing course, and a linear algebra course. Students will then complete additional elective courses to complete their minor, the number of courses depending on the type of minor the student is pursuing.

Traditional Math Minor Requirements:

Complete the following requirements with at least 15 semester hours of mathematics courses with a 2.0 GPA.

Honors Math Minor Requirements

Option 1:

- Complete at least 15 hours of math, chosen from the required and elective courses
- At least 2 courses must be honors math courses (Note: 2162.02 does not count as honors)
- Courses that constitute minor must have a GPA of at least a 3.0

Option 2:

- Complete at least 18 credit hours of math, chosen from the required and elective courses
- Courses that constitute the minor must have a GPA of at least 3.3

Aeronautical and Aerospace Engineering

Required math courses for major: Math 1151, Math 1172, Math 2173, Math 2174

Does not have credit for Math 2174

Courses in major only	
Math 2415	0
Overlapped major courses with minor	
Math 2173, 2153 or 2162	3-5
Courses in the minor only (12 disjoint hours)	
Math 2568	3
Math 3345	3
Math elective (3000+)	3
Math elective (3000+)	3
Total Hours	15-17

Has credit for Math 2174

Courses in major only	
Math 2173	0
Overlapped major courses with minor	
Math 2568	3
Courses in the minor only (12 disjoint hours)	
Math 3345	3
Math elective (2255/2415 or 3000+)	3
Math elective (2255/2415 or 3000+)	3
Math elective (2255/2415 or 3000+)	3
Total Hours	15

Biomedical Engineering

Required math courses for major: Math 1151, Math 1172, Math 2177

Does not have credit for Math 2177

Courses in major only	
N/A	
Overlapped major courses with minor	
Math 2153 or 2162	4-5
Courses in the minor only (12 disjoint hours)	
Math 2568	3
Math 3345	3
Math 2415	3
Math elective (3000+)	3
Total Hours	16-17

Has credit for Math 2177

Courses in major only	
N/A	
Overlapped major courses with minor	
Math 2153 or 2162	4-5
Courses in the minor only (12 disjoint hours)	
Math 2568	3
Math 3345	3
Math elective (2255/2415 or 3000+)	3
Math elective (2255/2415 or 3000+)	3
Total Hours	16-17

Chemical and Biomolecular Engineering

Required math courses for major: Math 1151, Math 1172, Math 2177

Does not have credit for Math 2177

Courses in major only

N/A

Overlapped major courses with minor

Math 2153 or 2162 4-5

Courses in the minor only (12 disjoint hours)

Math 2568 3

Math 3345 3

Math 2415 3

Math elective (3000+) 3

Total Hours 16-17

Has credit for Math 2177

Courses in major only

N/A

Overlapped major courses with minor

Math 2153 or 2162 4-5

Courses in the minor only (12 disjoint hours)

Math 2568 3

Math 3345 3

Math elective (2255/2415 or 3000+) 3

Math elective (2255/2415 or 3000+) 3

Total Hours 16-17

Civil Engineering

Required math courses for major: Math 1151, Math 1172, Math 2177

Does not have credit for Math 2177

Courses in major only

N/A

Overlapped major courses with minor

Math 2153 or 2162 4-5

Courses in the minor only (12 disjoint hours)

Math 2568 3

Math 3345 3

Math 2415 3

Math elective (3000+) 3

Total Hours 16-17

Has credit for Math 2177

Courses in major only

N/A

Overlapped major courses with minor

Math 2153 or 2162 4-5

Courses in the minor only (12 disjoint hours)

Math 2568 3

Math 3345 3

Math elective (2255/2415 or 3000+) 3

Math elective (2255/2415 or 3000+) 3

Total Hours 16-17

Computer Information Science (ASC)

Required math courses for major: Math 1151, Math 1152, Math 3345

Courses in major only	
N/A	0
Overlapped major courses with minor	
Math 3345	3
Courses in the minor only (12 disjoint hours)	
Math 2153 or 2162	4-5
Math 2568	3
Math elective (2255/2415 or 3000+)	3
Math elective (2255/2415 or 3000+)	3
Total Hours	16-17

Electrical and Computer Engineering

Required math courses for major: Math 1151, Math 1172, Math 2568, Math 2415

Courses in major only	
Math 2415	0
Overlapped major courses with minor	
Math 2568	3
Courses in the minor only (12 disjoint hours)	
Math 2153 or 2162	4-5
Math 3345	3
Math elective (3000+)	3
Math elective (3000+)	3
Total Hours	16-17

Computer Science Engineering

Required math courses for major: Math 1151, Math 1172, Math 2568, Math 3345

Courses in major only	
Math 2568	0
Overlapped major courses with minor	
Math 3345	3
Courses in the minor only (12 disjoint hours)	
Math 2153 or 2162	4-5
Math elective (2255/2415 or 3000+)	3
Math elective (2255/2415 or 3000+)	3
Math elective (2255/2415 or 3000+)	3
Total Hours	16-17

Engineering Physics

Required math courses for major: Math 1151, Math 1172, Math 2173, Math 2174

Does not have credit for Math 2174

Courses in major only	
Math 2415	0
Overlapped major courses with minor	
Math 2173, 2153 or 2162	3-5
Courses in the minor only (12 disjoint hours)	
Math 2568	3
Math 3345	3
Math elective (3000+)	3
Math elective (3000+)	3
Total Hours	15-17

Has credit for Math 2174

Courses in major only	
Math 2173	0
Overlapped major courses with minor	
Math 2568	3
Courses in the minor only (12 disjoint hours)	
Math 3345	3
Math elective (2255/2415 or 3000+)	3
Math elective (2255/2415 or 3000+)	3
Math elective (2255/2415 or 3000+)	3
Total Hours	15

Environmental Engineering

Required math courses for major: Math 1151, Math 1172, Math 2177

Does not have credit for Math 2177

Courses in major only	
N/A	
Overlapped major courses with minor	
Math 2153 or 2162	4-5
Courses in the minor only (12 disjoint hours)	
Math 2568	3
Math 3345	3
Math 2415	3
Math elective (3000+)	3
Total Hours	16-17

Has credit for Math 2177

Courses in major only	
N/A	
Overlapped major courses with minor	
Math 2153 or 2162	4-5
Courses in the minor only (12 disjoint hours)	
Math 2568	3
Math 3345	3
Math elective (2255/2415 or 3000+)	3
Math elective (2255/2415 or 3000+)	3
Total Hours	16-17

Food, Agricultural and Biological Engineering

Required math courses for major: Math 1151, Math 1172, Math 2177

Does not have credit for Math 2177

Courses in major only

N/A

Overlapped major courses with minor

Math 2153 or 2162 4-5

Courses in the minor only (12 disjoint hours)

Math 2568 3

Math 3345 3

Math 2415 3

Math elective (3000+) 3

Total Hours 16-17

Has credit for Math 2177

Courses in major only

N/A

Overlapped major courses with minor

Math 2153 or 2162 4-5

Courses in the minor only (12 disjoint hours)

Math 2568 3

Math 3345 3

Math elective (2255/2415 or 3000+) 3

Math elective (2255/2415 or 3000+) 3

Total Hours 16-17

Industrial Systems Engineering

Required math courses for major: Math 1151, Math 1172, Math 2568,
Math 2415

Courses in major only

Math 2415 0

Overlapped major courses with minor

Math 2568 3

Courses in the minor only (12 disjoint hours)

Math 2153 or 2162 4-5

Math 3345 3

Math elective (3000+) 3

Math elective (3000+) 3

Total Hours 16-17

Materials Science Engineering

Required math courses for major: Math 1151, Math 1172, Math 2177

Does not have credit for Math 2177

Courses in major only	
N/A	
Overlapped major courses with minor	
Math 2153 or 2162	4-5
Courses in the minor only (12 disjoint hours)	
Math 2568	3
Math 3345	3
Math 2415	3
Math elective (3000+)	3
Total Hours	16-17

Has credit for Math 2177

Courses in major only	
N/A	
Overlapped major courses with minor	
Math 2153 or 2162	4-5
Courses in the minor only (12 disjoint hours)	
Math 2568	3
Math 3345	3
Math elective (2255/2415 or 3000+)	3
Math elective (2255/2415 or 3000+)	3
Total Hours	16-17

Mechanical Engineering

Required math courses for major: Math 1151, Math 1172, Math 2173, Math 2174

Does not have credit for Math 2174

Courses in major only	
Math 2415	0
Overlapped major courses with minor	
Math 2173, 2153 or 2162	3-5
Courses in the minor only (12 disjoint hours)	
Math 2568	3
Math 3345	3
Math elective (3000+)	3
Math elective (3000+)	3
Total Hours	15-17

Has credit for Math 2174

Courses in major only	
Math 2173	0
Overlapped major courses with minor	
Math 2568	3
Courses in the minor only (12 disjoint hours)	
Math 3345	3
Math elective (2255/2415 or 3000+)	3
Math elective (2255/2415 or 3000+)	3
Math elective (2255/2415 or 3000+)	3
Total Hours	15

Welding Engineering

Students that started at OSU before AU15

Required math courses for major: Math 1151, Math 1172,
Math 2177

Does not have credit for Math 2177

Courses in major only	
N/A	
Overlapped major courses with minor	
Math 2153 or 2162	4-5
Courses in the minor only (12 disjoint hours)	
Math 2568	3
Math 3345	3
Math 2415	3
Math elective (3000+)	3
Total Hours	16-17

Has credit for Math 2177

Courses in major only	
N/A	
Overlapped major courses with minor	
Math 2153 or 2162	4-5
Courses in the minor only (12 disjoint hours)	
Math 2568	3
Math 3345	3
Math elective (2255/2415 or 3000+)	3
Math elective (2255/2415 or 3000+)	3
Total Hours	16-17

Students that started at OSU in AU15 or after

Required math courses for major: Math 1151, Math 1172,
Math 2173, Math 2174

Does not have credit for Math 2174

Courses in major only	
Math 2415	0
Overlapped major courses with minor	
Math 2173, 2153 or 2162	3-5
Courses in the minor only (12 disjoint hours)	
Math 2568	3
Math 3345	3
Math elective (3000+)	3
Math elective (3000+)	3
Total Hours	15-17

Has credit for Math 2174

Courses in major only	
Math 2173	0
Overlapped major courses with minor	
Math 2568	3
Courses in the minor only (12 disjoint hours)	
Math 3345	3
Math elective (2255/2415 or 3000+)	3
Math elective (2255/2415 or 3000+)	3
Math elective (2255/2415 or 3000+)	3
Total Hours	15