Math Minors for ENG Majors

List of Engineering Majors

- Aeronautical and Aerospace
- Biomedical
- Chemical and Biomolecular
- Civil
- Computer Information Science (ASC)
- Computer Science
- Electrical and Computer
- Engineering Physics

- Environmental
- Food, Agricultural and Biological
- Industrial Systems
- Materials Science
- Mechanical
- Welding

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

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

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

Total Hours 16-17

Chemical and Biomolecular Engineering		Civil Engineering	
Required math courses for major: Math 1151, Math 1172, I	Math 2177	Required math courses for major: Math 1151, Math 1172, I	Math 2177
D		D	
Does not have credit for Math 2177		Does not have credit for Math 2177	
Courses in major only		Courses in major only	
N/A		N/A	
Overlapped major courses with minor		Overlapped major courses with minor	
Math 2153 or 2162	4-5	Math 2153 or 2162	4-5
Courses in the minor only (12 disjoint hours)		Courses in the minor only (12 disjoint hours)	
Math 2568	3	Math 2568	3
Math 3345	3	Math 3345	3
Math 2415	3	Math 2415	3
Math elective (3000+)	3	Math elective (3000+)	3
Total Hours	16-17	Total Hours	16-17
Has credit for Math 2177		Has credit for Math 2177	
Courses in major only		Courses in major only	
N/A		N/A	
Overlapped major courses with minor		Overlapped major courses with minor	
Math 2153 or 2162	4-5	Math 2153 or 2162	4-5
Courses in the minor only (12 disjoint hours)		Courses in the minor only (12 disjoint hours)	
Math 2568	3	Math 2568	3
Math 3345	3	Math 3345	3
Math elective (2255/2415 or 3000+)	3	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	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

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3
4-5
3
3
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

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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
,	

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

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+) Math elective (3000+)

Total Hours 16-17

3

3

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Materials	Science	Engine	ering
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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

Math 3345 Math 2415

Math elective (3000+)

Total Hours 16-17

3

3

3

3

3

3

3

3

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

Math 3345 Math elective (2255/2415 or 3000+)

Math elective (2255/2415 or 3000+)

Total Hours 16-17

Mechanical Engineering

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

Math 3345

Does not have credit for Math 2174

Courses in major only
Math 2415

Overlapped major courses with minor
Math 2173, 2153 or 2162

Courses in the minor only (12 disjoint hours)
Math 2568

3

Math elective (3000+) 3 Math elective (3000+) 3

Total Hours 15-17

Has credit for Math 2174

Courses in major only

Math 2173

Overlapped major courses with minor

Math 2568

Courses in the minor only (12 disjoint hours)

Math 3345

Math elective (2255/2415 or 3000+)

3

Total Hours 15

Welding Engineering

Students that started at OSU before AU15		Students that started at OSU in AU15 or after	
Required math courses for major: Math 1151, Math 1172,		Required math courses for major: Math 1151, Math 1172,	
Math 2177		Math 2173, Math 2174	
Does not have credit for Math 2177		Does not have credit for Math 2174	
Courses in major only		Courses in major only	
N/A		Math 2415	0
Overlapped major courses with minor		Overlapped major courses with minor	
Math 2153 or 2162	4-5	Math 2173, 2153 or 2162	3-5
Courses in the minor only (12 disjoint hours)		Courses in the minor only (12 disjoint hours)	
Math 2568	3	Math 2568	3
Math 3345	3	Math 3345	3
Math 2415	3	Math elective (3000+)	3
Math elective (3000+)	3	Math elective (3000+)	3
Total Hours	16-17	Total Hours	15-17
Has credit for Math 2177		Has credit for Math 2174	
Courses in major only		Courses in major only	
N/A		Math 2173	0
Overlapped major courses with minor		Overlapped major courses with minor	
Math 2153 or 2162	4-5	Math 2568	3
Courses in the minor only (12 disjoint hours)	4-3	Courses in the minor only (12 disjoint hours)	
Math 2568	3	Math 3345	3
Math 3345	3	Math elective (2255/2415 or 3000+)	3 3 3
Math elective (2255/2415 or 3000+)	3	Math elective (2255/2415 or 3000+)	3
` '	3	Math elective (2255/2415 or 3000+)	3
Math elective (2255/2415 or 3000+)	3	Main elective (2235/2 VI3 61 3000 I)	3
Total Hours	16-17	Total Hours	15