

**The Ohio State University  
College of Engineering  
Approved for the College of Arts and Sciences**

**Biomedical Engineering Minor (BIOMEDE-MN)**

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Biomedical Engineering Department, Lindsay Tolchin  
2124 Fontana Labs, 140 W 19<sup>th</sup> Ave  
Columbus, OH 43210; 614-292-4557 <https://bme.osu.edu>

The minor is designed to provide undergraduate students education and problem solving skills in biomedical engineering and its applications to better prepare them for jobs in industry, or advanced studies and research in this field. It is anticipated that students taking the minor will be more employable in health services, pharmaceutical industries, rehabilitation engineering, biomedical product companies, and many relatively new high-tech industries such as those developing and manufacturing bio-microelectromechanical systems.

The biomedical engineering minor consists of 12 credit hours of course work as listed below. You are responsible for taking the prerequisites for each course. If you are interested in this minor, you should contact the biomedical engineering minor advisor (Lindsay Tolchin; Tolchin.6@osu.edu) and propose a plan for your minor program. Next, you must obtain your major advisor's signature on the Minor Program Form and return to BME for the signed approval of the minor faculty advisor. You must file the signed form with your college or school advisor. For further information about the minor program, contact the Biomedical Engineering Department.

**Set A courses (6 credit hours)**

*Physiology or biological science course (2000 level or higher); e.g. Anatomy 2300, BME 2200, BME 2800, EEOB 2520 etc (3+); prereq: varies with course*

AND

*BME 2000 (3); prereq: Physics 1250, Math 1172, Chem 1220, Engr 1182 or equiv; concur: ME 2040, Bio 1113, Math 2173 or equivalent courses*

**Set B courses (6 credit hours)**

Choose at least one "Domain" course. The second course may be a second domain course or may come from the "Advanced BME Courses."

*BME Domain Courses:*

*BME 4110 (3); prereq: Physics 1251, Math 2174, BME 2800 or EEOB 2520, or permission of instructor  
BME 4210 (3); prereq: BME 2000, Math 2174, ME 3500 or FABE 3120, or permission of instructor  
BME 4310 (3); prereq: BME 2000, MSE 2010, Math 2174, or permission of instructor  
BME 4410 (3); prereq: BME 2000, Math 2174, ME 2040 , or permission of instructor  
BME 4510 (3); prereq: BME 2000, Math 2174; Concur: Biochem 4511 or BME 2200, or permission of instructor  
BME 4610 (3); prereq: BME 2000, MSE 2010, Biochem 4511 or BME 2200, or permission of instructor*

*Advanced BME Courses:* Any 3-credit hour, 5000 level BME course, (excluding 5193 independent study hours, or research credit)  
e.g. BME 5001, BME 5310, BME 5560, BME 5639 prereq: varies with course

**Biomedical Engineering minor program guidelines**

Credit hours required A minimum of 12 credit hrs. At least 6 credit hrs must be at the 2000 level or above and 6 credits must be at the 4000 level or above.

Transfer credit hours allowed At least half of the credits counting toward the minor must be earned in regular OSU coursework.

Overlap with the GE Permitted, no more than 6 credit hours.

Overlap with the major and additional minor(s)

- The minor must be in a different subject than the major.
- The minor must contain a minimum of 12 hours distinct from the major and/or additional minor(s).

Grades required

- Minimum C- for a course to be listed on the minor.
- Minimum 2.00 cumulative GPA for all minor course work.
- Course work graded Pass/Non-Pass cannot count on the minor.
- No more than 3 credit hours of course graded Satisfactory/Unsatisfactory may count toward the minor

Approval required

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Filing the minor program form The minor program form must be filed at least by the time the graduation application is submitted to a college/school advisor.

Changing the minor Once the minor program is filed in the college office, any changes must be approved by all parties and a new form re-filed.

College of Arts and Sciences  
Curriculum and Assessment Services  
306 Dulles Hall, 230 Annie and John Glenn Ave  
<http://artsandsciences.osu.edu>  
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