Biomedical Engineering, Minor

Marquette students in other disciplines may obtain a minor in Biomedical Engineering if they meet the requirements of specific courses in the biomedical engineering field of study. Interested students should work with their advisor to plan their schedules to meet the specific biomedical engineering courses within their given program and electives.

Biomedical Engineering Minor

The Department of Biomedical Engineering offers a minor in biomedical engineering to all undergraduate students in the university except those students in biomedical engineering. Completion of the minor will be noted on the student’s transcript if the following requirements are met: Twenty-two hours consisting of:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIEN 2300</td>
<td>Biomedical Circuits and Electronics</td>
<td>4</td>
</tr>
<tr>
<td>BIEN 3200</td>
<td>Computer Applications in Biomedical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>BIEN 3300</td>
<td>Signals and Systems for Biomedical Engineering</td>
<td>3</td>
</tr>
<tr>
<td>BIEN 4320</td>
<td>Biomedical Instrumentation Design</td>
<td>3</td>
</tr>
<tr>
<td>BIEN 4400</td>
<td>Transport Phenomena</td>
<td>3</td>
</tr>
<tr>
<td>BIEN 4700</td>
<td>Systems Physiology</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1001</td>
<td>General Biology 1</td>
<td>3</td>
</tr>
<tr>
<td>or equivalent</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total Credit Hours:</strong></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>

At least half of these credit hours must be taken at Marquette University.

University Policies

- Academic Advising (https://bulletin.marquette.edu/policies/academic-advising/)
- Academic Censure - Undergraduate (https://bulletin.marquette.edu/policies/academic-censure/undergraduate/)
- Academic Integrity (https://bulletin.marquette.edu/policies/academic-integrity/)
- Academic Misconduct (https://bulletin.marquette.edu/policies/academic-misconduct-policy/)
- Academic Program Definitions (https://bulletin.marquette.edu/policies/academic-programs-defined/)
- Academic Standing (https://bulletin.marquette.edu/policies/academic-standing/)
- Accelerated Degree Programs (https://bulletin.marquette.edu/policies/accelerated-degree-programs/)
- Advanced Standing Credit - Undergraduate (https://bulletin.marquette.edu/policies/advanced-standing-undergraduate/)
- Attendance - Undergraduate (https://bulletin.marquette.edu/policies/attendance/undergraduate/)
- Audit - Undergraduate (https://bulletin.marquette.edu/policies/audit/)
- Awarding Diplomas and Certificates (https://bulletin.marquette.edu/policies/awarding-diplomas-certificates/)
- Background Checks, Drug Testing (https://bulletin.marquette.edu/policies/background-checks-drug-testing/)
- Class Rank (https://bulletin.marquette.edu/policies/class-rank/)
- Classification - Undergraduate (https://bulletin.marquette.edu/policies/classification-undergraduate/)
- Commencement (https://bulletin.marquette.edu/policies/commencement/)
- Conferral of Degrees and Certificates (https://bulletin.marquette.edu/policies/conferral-degrees-certificates/)
- Course Levels (https://bulletin.marquette.edu/policies/course-levels/)
- Credit Hour (https://bulletin.marquette.edu/policies/credit/)
- Credit Load - Undergraduate (https://bulletin.marquette.edu/policies/credit-load/undergraduate/)
- Examinations (Midterm and Final) - Undergraduate (https://bulletin.marquette.edu/policies/examinations-midterm-final-undergraduate/)
- Faculty Grading (https://bulletin.marquette.edu/policies/faculty-grading/)
- Family Education Rights and Privacy Act-FERPA (https://bulletin.marquette.edu/policies/ferpa/)
- Grade Appeals (https://bulletin.marquette.edu/policies/grade-appeals/)
- Grading System - Undergraduate and Health Science Professional (https://bulletin.marquette.edu/policies/grading-system/undergraduate-healthscienceprofessional/)
- Graduation - Undergraduate (https://bulletin.marquette.edu/policies/graduation/undergraduate/)
- Immunization and Tuberculosis Screening Requirements (https://bulletin.marquette.edu/policies/immunization-and-tuberculosis-screening/)
- Last Date of Attendance/Activity (https://bulletin.marquette.edu/policies/last-dateof-attendance-activity/)
• Major and Minor Declaration - Undergraduate (https://bulletin.marquette.edu/policies/major-declaration/)
• Medical Withdrawal (https://bulletin.marquette.edu/policies/medical-withdrawal/)
• Military Call to Active Duty or Training (https://bulletin.marquette.edu/policies/militarycall-active-duty-training/)
• Non-Degree Undergraduate Students (https://bulletin.marquette.edu/policies/non-degree-undergraduate-students/)
• Readmission - Undergraduate (https://bulletin.marquette.edu/policies/readmission/)
• Registration - Undergraduate (https://bulletin.marquette.edu/policies/registration/undergraduate/)
• Repeated Courses - Undergraduate (https://bulletin.marquette.edu/policies/repeated-courses/undergraduate/)
• Second Language Course Placement - Undergraduate (https://bulletin.marquette.edu/policies/second-language-course-placement-undergraduate/)
• Second/Additional Bachelor Degree (https://bulletin.marquette.edu/policies/second-additional-bachelor-degree/)
• Student Data Use and Privacy (https://bulletin.marquette.edu/policies/student-data-use-privacy/)
• Study at Other Institutions - Undergraduate (https://bulletin.marquette.edu/policies/study-institutions/)
• Transcripts-Official (https://bulletin.marquette.edu/policies/transcripts-official/)
• Transfer (Internal) to Another Undergraduate College within the University (https://bulletin.marquette.edu/policies/transfer-internal-another-undergraduate-college-within-university/
• Transfer Course Credit - Undergraduate (https://bulletin.marquette.edu/policies/transfer-course-credit-policy/undergraduate/)
• Withdrawal - Undergraduate (https://bulletin.marquette.edu/policies/withdrawals/undergraduate/)

College of Engineering Policies
• Absence from Final Exams, Incomplete (I) Grade (https://bulletin.marquette.edu/engineering/policies/absence-finals-incomplete-grade/)
• Academic Dismissal/Probation/College Academic Alert (CAA) (https://bulletin.marquette.edu/engineering/policies/dismissal-probation-college-alert/)
• Academic Integrity (https://bulletin.marquette.edu/engineering/policies/academic-integrity/)
• Academic Load (https://bulletin.marquette.edu/engineering/policies/academic-load/)
• Accreditation (https://bulletin.marquette.edu/engineering/policies/accreditation/)
• Admission Requirements (https://bulletin.marquette.edu/engineering/policies/admission-requirements/)
• Articulation Agreements (https://bulletin.marquette.edu/engineering/policies/articulation-agreements/)
• Course and Grade Limitations (https://bulletin.marquette.edu/engineering/policies/course-grade-limitations/)
• Credit/No Credit (CR/NC) Grading Option (https://bulletin.marquette.edu/engineering/policies/credit-no-credit-grading-option/)
• Dean's List (https://bulletin.marquette.edu/engineering/policies/deans-list/)
• Degrees Offered (https://bulletin.marquette.edu/engineering/policies/degrees-offered/)
• Electives (https://bulletin.marquette.edu/engineering/policies/electives/)
• Grade Appeals for Engineering Courses (https://bulletin.marquette.edu/engineering/policies/grade-appeals-engineering-courses/)
• Repeating Courses (https://bulletin.marquette.edu/engineering/policies/repeating-courses/)
• Simultaneous Enrollment in Two Academic Programs (https://bulletin.marquette.edu/engineering/policies/simultaneous-enrollment-two-academic-programs/)
• Transfer Credit from Other Programs (https://bulletin.marquette.edu/engineering/policies/transfer-credit-programs/)
• Undergraduate Independent Study (https://bulletin.marquette.edu/engineering/policies/undergraduate-independent-study/)