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| UHM General Education Core Requirements |
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| Foundations |
| * FW ENG 100, 100A, 190, ESL 100, or AMST 111 |
| * FQ\* MATH 241 |
| * FG (A / B / C) |
| * FG (A / B / C) |
| *\*Note: This requirement changed in Fall 2018. If you entered the UH System prior to that, please see your college/school advisor.* |
| Diversification |
| * DA / DH / DL |
| * DA / DH / DL |
| * DB BIOL 171 |
| * DP CHEM 161 |
| * DY CHEM 161L |
| * DS ECON 120, 130, or 131 |
| * DS |
| *\* See degree, college and major requirements for courses that can also fulfill these.* |
| **UHM Graduation Requirements** |
|  |
| Focus |
| * H |
| * E (300+) |
| * O (300+) |
|  |
| * W |
| * W |
| * W |
| * W (300+) |
| * W (300+) |
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| Hawaiian / Second Language |
| * The Hawaiian or Second Language requirement is **not** required for students admitted to the Biological Engineering program. |
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| **Credit Minimums** |
| * 120 total applicable |
| * 30 in residence at UHM |
| * 45 upper division (300+ level) credits |
| **Grade Point Average** |
| * 2.0 cumulative or higher *(Note: Other GPAs may be required)* |
| * Good academic standing |

*This program sheet was prepared to provide information and does not constitute a contract. See back for major requirements. Meet regularly with your major advisor.*

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| College Requirements |
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| **CTAHR Required Set of Interrelated Courses** |
| * NREM 310 |
| * Internship or capstone course (BE 481-482) |
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| **Credit Minimums** |
| * 120 total applicable |
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| **Major Requirements for BS in Biological Engineering** |
| Admission: Open |
| Application: NA |
| Min. major credits: 102-105 |
| Min. exit GPA: 2.0 in the major. Enrollment in BE courses require a grade of C- or better in all prerequisites unless otherwise noted. |
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| **Requirements** |
| **Biological Engineering Required Basic Courses (51-52 credits)** |
| ❑ ECON 120\*DS, 130\*DS, or 131\*DS |
| ❑ MATH 241\*FS |
| ❑ MATH 242 |
| ❑ MATH 243 |
| ❑ MATH 244 |
| ❑ PHYS 170\*DP / ❑ 170L\*DY |
| ❑ PHYS 272\*DP / ❑ 272L\*DY |
| ❑ CHEM 161\*DP / ❑ 161L\*DY |
| ❑ CHEM 162\*DP / ❑ 162L\*DY |
| ❑ CHEM 272\*DP / ❑ 272L\*DY |
| ❑ BIOL 171\*DB / ❑ 171L\*DY |
|  |
| Two biological science courses from the following list.  ❑ BIOL 172\*DB / ❑ 172L\*DY ❑ MICR 351\*DB / ❑ 351L\*DY ❑ BE 120\*DB  ❑ BIOL 275\*DB / ❑ 275L\*DY ❑ MICR 485\*DB ❑ 300+ BIOC, BIOL, MBBE, MICR course\*\* |
| *MATH 251A-253A may be taken in place of MATH 241-244.* |
| *CHEM 171/171L or CHEM 181A/181L may be taken in place of CHEM 161/161L and CHEM 162/162L.* |
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| **Programming Courses (3-4 credits)** |
| ❑ EE 160 or EE 110 or ICS 111 |
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| **Biological Engineering Core Courses (36-37 credits)** |
| **All** of the following:  ❑ CEE 270 ❑ CEE 271 ❑ CEE 320 or ME 322 ❑ EE 211  ❑ ME 311 ❑ BE 260 ❑ BE 350 ❑ BE 350L  ❑ BE 373 ❑ BE 437 ❑ BE 481 ❑ BE 482 |
|  |
| **Biological Engineering Elective Courses (12 credits)** |
| **9 credits** of the following:  ❑ BE 405 ❑ BE 410 ❑ BE 411 (Pre: C) ❑ BE 420 ❑ BE 431 ❑ BE 460 ❑ BE 470  **3 credits** from a 300+ BE, CEE, EE, ME, or ORE course.\*\* |
| \*\*Courses not specifically listed under the science and engineering requirements must be approved by the Biological Engineering program’s curriculum committee. |
| *A minimum of 48 engineering credits must be completed. EE 160/110 does not count toward the total.* |
| Students must take but not necessarily pass the NCEES Fundamentals of Engineering exam in the semester that they intend to graduate. |
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| **Notes** |
| CTAHR Academic Advising Office:  Gilmore 1st floor; [ctahradv@hawaii.edu](mailto:ctahradv@hawaii.edu)  Appointments are required to see an advisor; please visit [ctahradv.youcanbook.me/](https://ctahradv.youcanbook.me/) to schedule an appointment.  CTAHR Office of Academic and Student Affairs:  Gilmore 210, (808) 956-8183/(808) 956-6733;  [www.ctahr.hawaii.edu/ugadvising](http://www.ctahr.hawaii.edu/ugadvising)  BE Faculty Advisor: Ryan Kurasaki; AEI 121; (808) 956-7259; [rkurasak@hawaii.edu](mailto:rkurasak@hawaii.edu) |

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