

School of Biological and Health Systems Engineering

Accelerated 4+1 B.S.E./M.S. Program Information

Instructions:

1. Fill out paper application and submit it to BME Advising office, ECG 346 (**Attn: Keli Palmer.**)
2. Fill out online M.S. Application (<http://graduate.asu.edu/admissions>), including:
 - a. 2 letters of recommendation
 - b. Personal Statement
 - c. GRE NOT REQUIRED
3. Deadline for Application
 - a. Fall: June 1
 - b. Spring: December 1
4. Final admission decisions are made by the Office of Graduate Education
5. Questions on admissions should be directed to Keli.Palmer@asu.edu

All admission decisions will be made within 3 weeks of the application deadline.

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Overview

The Accelerated 4+1 B.S.E./M.S. degree program will allow students the opportunity to obtain both a Bachelor's (BSE) and Master's (MS) degree in Biomedical Engineering from the School of Biological and Health Systems Engineering in an accelerated timeframe. The Master's degree provides additional technical depth and specialization that can lead to expanded career opportunities and responsibilities.

The program is particularly suited for students with strong academic backgrounds who are motivated to pursue independent research. Participants will have an opportunity to work in a laboratory/research environment and engage in theoretical and/or experimental work with faculty and doctoral student mentors.

The credit hour requirements are 120 for the B.S.E. and 30 for MS students. **This integrated program allows up to twelve (12) credit hours of course work taken during the final semesters of undergraduate education (up to 2) to be shared between B.S.E. and the M.S. or reserved for the M.S. degree** in biomedical engineering.

Students will be eligible for travel grants to present their work at national conferences. Participants will also be expected to attend the weekly department graduate seminar series. Further, participants will be encouraged to prepare/submit proposals for graduate fellowship opportunities at the National Science Foundation (NSF) and elsewhere as they complete their senior year.

Admission Standards

- A minimum of 75 credits applicable to a B.S.E. Biomedical degree with a cumulative GPA of 3.5/4 or better must be completed prior to applying for the joint degree program.
- A minimum of 90 credits applicable to a B.S.E. Biomedical degree with a cumulative GPA of 3.5/4 or better must be completed prior to enrollment in the joint degree program.
- Applicants to the joint B.S.E./M.S. program are not required to take the Graduate Record Examination (GRE) or Test of English as a Foreign Language (TOEFL) exam.
- Other than the higher GPA requirements and omission of the GRE and TOEFL, the admission standards for the joint degree will be consistent with [normal admission criteria for the M.S. degree.](#)

How to Apply

- Students must apply for admission to the joint B.S.E./M.S. program through the SBHSE unit by submitting an application form for the Joint program to their SBHSE advisor.
- The students must also apply online for the M.S. program by submitting an application and supplemental materials to the Office of Graduate Education at <http://graduate.asu.edu/admissions>. The application must include two letters of recommendation and official transcripts.

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- Applications will be reviewed by the SBHSE Graduate Admissions Committee who will then make a recommendation to the department director. Applications received by December 1 (for Spring Admission) or June 1 (for Fall Admission) will receive priority. Acceptance notices are contingent on the Office of Graduate Education approval of M.S. admissions sent prior to registration in the semester of application. Late applications will not be guaranteed action prior to the start of registration. Final acceptance will be contingent on completion of 90+ credit hours with a GPA of 3.5/4 or better.

Degree Requirements

The degree requirements will be the same for the B.S.E. and MS degrees separately except that:

- **A maximum of up to twelve (12)* credit hours of course work can be shared** between the B.S.E. degree and MS programs of study, with at least six (6) of those hours at or above the 500 level or **“reserved”** to be used later for the MS degree that is not counted as part of the undergraduate BSE degree.
- An undergraduate honors thesis may not be substituted for the Master’s Thesis.
- Students must maintain a 3.0 GPA on the courses on their MS plan of study (POS).
- Students must complete requirements for the BSE by the end of their first year in the joint program and graduate from the BSE program.

Standards and Procedures for Monitoring Student Progress

- “Satisfactory progress in the joint program is achieved if the student maintains a 3.00/4.00 GPA both in overall undergraduate coursework and in the student’s overall approved M.S. program of study, AND
- Grade ‘C’ or above in each 400-level and above course.
- A student will be dismissed from the joint B.S.E. – M.S. program and returned to the B.S.E. program if the student does not complete the B.S.E. degree within one year of initiation of the joint program (without prior approval of his/her faculty advisor and supervisory committee).”
- Students will be considered an undergraduate until all B.S.E. degree requirements have been completed and their B.S.E. degree is posted. Undergraduate students enrolled in the joint program will be eligible for graduate-level courses and seminars. Upon receipt of the B.S.E. degree, the student must change his/her status from the joint B.S.E. – M.S. to the graduate M.S. degree program. They will then be eligible for graduate teaching and research assistantships and related health insurance and tuition waivers. Typically, these are reserved for students on the thesis option.
- To provide academic advising, applicants to this program must identify a faculty advisor and a supervisory committee and develop a joint BSE/MS program of study (POS). The supervisory committee will consist of the faculty advisor and two other ASU faculty members. At least two members of the committee must be from SBHSE. A change of advisors during the program will require approval of the department chair.
- Up to nine credit hours of course work may be counted toward both the bachelor’s and the master’s degrees. At least six (6) of these credit hours must be 500-level or above. Other restrictions on credit hours will be as detailed in the normal Master Program. All courses on the graduate POS must be taken at Arizona State University.

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- Monitoring and reporting the student's academic progress in the program will be the responsibility of the Faculty advisor and the department graduate academic associate. Prior to completion of the B.S.E. degree, the primary focus of this monitoring will be progression toward completion of the B.S.E. degree.

The consequences of not meeting the definition of satisfactory progress are that the student will be dismissed from the joint B.S.E. – M.S. program and returned to the B.S.E. program effectively withdrawn from the M.S. program. Dismissal from the joint program is effected by a departmental recommendation to the Graduate College to dismiss the student. At any time, the student may drop out of the joint program prior to completion of the B.S.E. and return to a regular B.S.E. track in biomedical engineering. A student must petition and get approval from his/her faculty advisor and supervisory committee if he/she is considering stopping the program for a brief time (up to two consecutive semesters).

Students will be considered as undergraduates until completing all B.S.E degree requirements, at which time the Master's Degree program will be activated. Students will not be counted as an undergraduate and graduate student simultaneously.

M.S. Curriculum

All students begin as a non-thesis, applied project student. The required coursework consists of 30 credit hours.

2 credits of Seminar

3 credits of Applied Project

6 credits of Elective Coursework

6 credits of Quantitative Electives

13 credits of BME Coursework

More information about the curriculum may be found online at:

<http://sbhse.engineering.asu.edu/academics/currentstudents/graduate/curriculum/msinfo/>