Bachelor of Science in Engineering, BSE

Combined and Dual Degrees

BSE and Undergraduate Degrees BSE/BBA

The College of Engineering and the Tippie College of Business offer a combined degree program in which students earn two University of Iowa bachelor's degrees: a Bachelor of Business Administration (BBA) from the Tippie College of Business and a Bachelor of Science in Engineering (BSE) from the College of Engineering.

Students in the combined program must complete all requirements for both degrees, including all general education requirements. They must enroll in appropriate mathematics and engineering courses early in their course of study in order to complete the program in a timely way. Because courses in natural sciences, mathematics, humanities, and social sciences count toward the BBA and the BSE, students may count a single course toward both degrees.

Students usually meet the degree requirements of both colleges in about five years; the time required depends on a student's choice of major study areas. Students should consult their advisors about whether the second-grade-only option is available to them. They are assigned two advisors, one in the Tippie College of Business Undergraduate Program Office and the other in their College of Engineering major department.

To enter the combined degree program, students must have approval from both colleges and must be admitted to both colleges. Interested students should contact the Student Development Center. For information about the BBA, including requirements for the degree, see the Undergraduate Programs (Tippie College of Business) in the catalog.

BSE/Liberal Arts and Sciences Degree

Students may earn two University of Iowa bachelor's degrees in a combined program in the College of Engineering and the College of Liberal Arts and Sciences. Successful candidates are awarded a BSE (Bachelor of Science in Engineering) by the College of Engineering and a BA (Bachelor of Arts), BS (Bachelor of Science), BFA (Bachelor of Fine Arts), or BM (Bachelor of Music) by the College of Liberal Arts and Sciences.

Students in combined degree programs must complete all requirements for both degrees, including the College of Liberal Arts and Sciences GE CLAS Core and the College of Engineering General Education Component. Students are encouraged to complete a course for the Engineering Be Creative requirement that will also satisfy a GE CLAS Core requirement. See General Education Component [p.] in this section of the catalog.

Students in the combined program usually are able to meet the degree requirements of both colleges in about five academic years. The exact length of time necessary to complete the program is determined by the major areas of study selected in each college. Students who enter the combined degree program are assigned two faculty advisors, one in their major department in the College of Engineering and the other in their major department in the College of Liberal Arts and Sciences.

To enter the combined degree program, students must be admitted to both the College of Engineering and the College of Liberal Arts and Sciences and must have College of Engineering approval to enter the combined degree program. Combined degree program applicants must meet the high school course or unit requirements for admission to each of the two colleges.

It is crucial that students enroll in the proper mathematics and engineering courses early in their course of study to expedite the completion of the program. The specific engineering courses taken by each student vary according to one's engineering major. Since courses in natural sciences, mathematics, humanities, and social sciences are accepted for credit by both colleges, students may be able to count a particular course toward both degrees.

Contact the Student Development Center for information about specific requirements. To learn about liberal arts and sciences majors, visit College of Liberal Arts and Sciences in the catalog and select majors of interest in the departments.

BS/BSE Dual Degree with Northern Iowa

The 3+2 dual degree program leads to a BS in applied physics from the University of Northern Iowa (UNI) and a BSE from the University of Iowa. It requires approximately three years of study at UNI followed by approximately two years of study at Iowa. There is no guarantee that students can complete the 3+2 degree in five years.

Students interested in the program are guaranteed admission to the University of Iowa portion of the program if they have a grade-point average of at least 3.00 (B average) in all coursework and in the chemistry, mathematics, and physics courses required by the University of Northern Iowa physics department.

During the first three years of the program, students complete at least 90 s.h. of coursework at the University of Northern lowa. They must successfully complete courses in each of the following areas: chemistry, mathematics through differential equations, physics to satisfy the applied physics major requirements, and courses to satisfy the general education requirements. Credit for courses passed with a grade of C or higher is transferred to the University of Iowa as credit for equivalent coursework.

At the University of Iowa, students complete the BSE requirements that are current at the time of their admission to the College of Engineering. Coursework completed at the University of Iowa is transferred to the University of Northern Iowa and applied toward the requirements for that institution's BS in applied physics.

When transferring to the University of Iowa from UNI, students must submit applications for admission, housing, and financial aid to the University of Iowa by the university's established deadlines.

BSE and Graduate Degrees BSE/MS Programs in Engineering

Engineering students may be eligible to enroll in one of the College of Engineering's combined BSE/MS programs, which allow students to begin working toward a master's degree in engineering while they are completing their bachelor's degree. The combined programs, which are offered by each of the college's departments, permit students to count certain courses toward both degrees, completing both programs in less time than they would need to complete them separately. See "Combined Programs" in each department's BSE sections of the catalog.

BSE in Biomedical Engineering (Biomechanics and Biomaterials Track)/MS in Occupational and Environmental Health (Industrial Hygiene Subprogram)

BSE students majoring in biomedical engineering in the biomechanics and biomaterials track who are interested in earning a Master of Science in occupational and environmental health with an industrial hygiene subprogram may apply to the combined BSE/MS program offered by the College of Engineering and the College of Public Health. The combined program permits students to count a limited amount of credit toward the requirements of both degrees, enabling them to begin the study of public health before they complete the bachelor's degree. See the MS in occupational and environmental health Undergraduate to Graduate (U2G) information on the Department of Occupational and Environmental Health (College of Public Health) website.

BSE in Civil Engineering/MS in Urban and Regional Planning

The College of Engineering and the School of Planning and Public Affairs offer the combined Bachelor of Science in Engineering in civil engineering/Master of Science in urban and regional planning. The program, which is completed in five years, is designed for students who wish to pursue a public or private sector career in planning, a field that encompasses the development of alternatives to improve the quality of life in cities and regions.

For additional information on the BSE in civil engineering, see that section of the catalog. For more information about the graduate degree, see the MS in urban and regional planning (Graduate College) in the catalog. Contact Engineering Student Services for information about applying to the combined program.

BSE in Computer Science and Engineering/MCS

The College of Engineering and the Department of Computer Science (College of Liberal Arts and Sciences) offer a combined BSE in computer science and engineering/Master of Computer Science for computer science and engineering undergraduate students.

The combined degree program allows students to count a limited amount of credit toward both degrees. For more information, see the Master of Computer Science, MCS in the catalog.