

ENGINEERING 3+2

Program Website: Engineering Dual Degree – Hiram College (<https://www.hiram.edu/academics/undergraduate-studies/dual-degree-programs/engineering-dual-degree/>)

Engineering 3+2

The dual degree engineering program (also called a binary engineering program or 3+2 program) gives students the advantages of a liberal arts education: focus on written and oral communication skills, exposure to a broad range of topics, ways of thinking that employers value, and close, personal attention from faculty. Along with these benefits, the student also has the advantage of training in a technical field.

Dual degree students are eligible for admission to the engineering school if the required academic and disciplinary standards are met. Hiram College has agreements with Case Western Reserve University in Cleveland (They require students to have a 3.0 GPA overall and a 3.0 GPA in their required science and math courses while at Hiram.) and Washington University in St. Louis (They require students to have a 3.25 GPA overall and a 3.25 GPA in their required science and math courses while at Hiram. Courses with less than a C- will not be accepted for transfer).

Students who participate in the dual degree program graduate after five years (three at Hiram, two at the engineering school) with a Bachelor of Arts degree from Hiram College **and** a Bachelor of Science degree from the engineering school. Washington University also has a 3+3 option in which students can spend a third year at the engineering school to obtain both a bachelor's and master's degree in engineering.

Students are still eligible for financial aid their fourth and fifth years though they have to apply for that at the engineering school. Hiram College financial aid packages do not carry over for the last two years. As a student is then enrolled at a different institution, all financial aid packages are in conjunction with and at the discretion of the engineering university.

The choice of academic major depends on what type of engineering the student wishes to pursue. Possible majors include physics, chemistry, computer science, and biology. Consult our web page for further information about types of engineering and the related majors as well as typical schedules for the various types of engineering.

Policy Notes:

- Students will retain their email during their absence.
- Students may keep their iPad during their absence. If a student does not complete their Hiram College degree, they will be billed.
- Students are not permitted to live on campus or use facilities, including health and counseling services, while away since they are not maintaining full-time student status.

Program Course Requirements

Students interested in the 3+2 engineering program should meet with the program coordinator in their first semester at Hiram to map out an individual three-year course plan.

At Hiram, all dual degree (3+2) engineering students must complete a set of eleven math and science courses specified by our partner engineering schools. Students must also complete all Hiram general education

course requirements plus all required courses for their chosen major, excepting two upper-level courses (which will be formally covered by credit transferred back from the engineering school).

Math and Science Courses

| Code | Title | Hours |
|-----------------------------|--|-------|
| MATH 19800 | CALCULUS I:MM (Although not mandatory, the program works best if students are prepared to take Calculus I in their first semester at Hiram.) | 4 |
| MATH 19900 | CALCULUS II:MM | 4 |
| MATH 20000 | CALCULUS III:MM | 4 |
| MATH 21800 | LINEAR ALGEBRA:MM | 3 |
| MATH 24300 | DIFFERENTIAL EQUATIONS:MM | 3 |
| CHEM 12000 | GEN I:STRUCTURE/BOND-W/LAB:SM | 4 |
| CHEM 12100 | GEN II:INTR CHEM ANLS-W/LAB:SM | 4 |
| CPSC 17000 or CPSC 17100 | JAVA SUPPLEMENT INTRO TO COMPUTER SCI-W/LAB:MM | 1-4 |
| CPSC 17200 | INTRO TO PROGRAMMING-W/LAB:MM | 4 |
| PHYS 21300 | FUNMNTLS OF PHYSICS-W/LAB I:SM | 4 |
| PHYS 21400 | FUNMNTL OF PHYSICS-W/LAB II:SM | 4 |

Different engineering disciplines have other specific course requirements but, in most cases, these are met by the associated major.

General Education Courses

| Code | Title | Hours |
|---------------------------------------|-------------------------------|-------|
| UCS 10101 | FIRST-YEAR ENDURING QUESTIONS | 4 |
| UCS 20201 | ADDRESSING URGENT QUESTIONS | 4 |
| UCS 30301 | URGENT CHALLENGE SEMINAR:TT | 4 |
| 8 Core Courses | | 24-32 |
| Exempt from Hiram Connect Requirement | | |
| Exempt from Senior Capstone | | |