

Chemical Engineering for Transfer Students

Recommended technical courses for students at other universities who intend to transfer to BYU to complete a Chemical Engineering BS degree

1. The full coursework requirements for the Chemical Engineering BS degree are listed at <https://catalog.byu.edu/engineering/chemical-engineering/chemical-engineering-bs> .
2. **The most important courses for you to take in this list are math and chemistry because they are prerequisites to many other courses and must be taken in order. Getting behind in the math or chemistry sequences can significantly delay your graduation.**
3. In order for a transfer course to satisfy a BYU requirement, the transfer course must cover equivalent content and generally have at least as many semester credit hours as the corresponding BYU course or courses.
4. It is generally better to transfer to BYU sooner, rather than later. It may be impossible or impractical to complete all needed first- and second-year courses at your university of origin.
5. Contact academic advisor David Oakeson at doakeson@byu.edu if you have questions that are not addressed here. Once you arrive in Provo, you will meet with him to formalize the transfer equivalency of specific major courses. Non-major, general education, or core courses are handled separately by the Registrar's Office (see <http://transfer.byu.edu>).

| <u>BYU Required Courses</u> | <u>Equivalent Courses</u> |
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| <i>First-year courses</i> | |
| Chem 111 and 112 (8 hrs.) | General chemistry sequence for chemistry and science majors, including full laboratory |
| Math 112 and 113 (8 hrs.) | Calculus I and II (full-year sequence) |
| Ch En 170 (2 hrs.) | Any combination of engineering credits; can be delayed and fulfilled at BYU as part of junior/senior electives |
| Phys 121 (3 hrs.) | Physics I – mechanics (must be calculus-based) |
| Bio 100 (3 hrs.) | General or higher-level biology |
| <i>Second-year courses</i> | |
| Chem 351, 352, and 353 (8 hrs.) | Organic chemistry sequence for chemistry and science majors, including full laboratory |
| Math 302 and 303 (8 hrs.) | Courses covering multivariable calculus (sometimes called Calculus III), linear algebra, and differential equations |
| Ch En 263 (2 hrs.) | Computer skills that include programming, spreadsheets, and mathematical software. This may be taken at BYU during Fall & Winter Semesters, or Spring Term (May-Jun) during sophomore year |
| Ch En 273 (3 hrs.) | Chemical engineering material and energy balances course; this may be taken at BYU during Fall or Winter Semester, or Spring Term (May-Jun) during sophomore year |
| Stat 201 (3 hrs.) | Statistics for engineers, multi-variable “design of experiments” (DOE) and “analysis of variance” (ANOVA) |
| EC En 301 (3 hrs.) | Physics or engineering course covering electricity, magnetism, and AC and DC circuits |
| Econ 110 (3 hrs.) | A macroeconomics course can substitute for this course |