

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 list below does *not* include all required courses, but includes those whose absence is likely to disrupt your graduation timeline. The full coursework requirements for the Chemical Engineering BS degree are listed at <http://chemicalengineering.byu.edu/majorrequirements.php>.
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. Also, accredited engineering degrees require a minimum number of engineering credits. This means you may need to take additional engineering electives at BYU if there is an engineering credit deficit.
4. Contact Professor Dean Wheeler at dean_wheeler@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>).

BYU Required Courses

First-year courses

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 and 191 (2.5 hrs)	Any combination of introductory engineering courses (2+ hrs)
Phys 121 (3 hrs)	Physics I – mechanics (must be calculus-based)

Second-year courses

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
Ch En 273 (3 hrs)	Material and energy balances course; this may be taken online by BYU Independent Study while you are still at another university
Stat 201 (3 hrs)	General statistics, plus multi-variable “design of experiments” (DOE) and “analysis of variance” (ANOVA) content
EC En 301 (3 hrs)	Physics or engineering course covering electricity, magnetism, and AC and DC circuits