

# CHEMICAL ENGINEERING (BSE)

## Bachelor of Science in Engineering

The Chemical Engineering major requires a total of 128 credits. Chemical Engineering majors are required to complete the following:

Course	Title	Credits
<b>Required Courses</b>		
CHEG 2103	Introduction to Chemical Engineering	3
CHEG 2111	Chemical Engineering Thermodynamics I	3
CHEG 3112	Chemical Engineering Thermodynamics II	3
CHEG 3123	Fluid Mechanics	3
CHEG 3124	Heat and Mass Transfer	3
CHEG 3145	Chemical Engineering Analysis	3
CHEG 3151	Process Kinetics	3
CHEG 4139	Chemical Engineering Senior Laboratory	2
CHEG 4140	Chemical Engineering Capstone Design I	3
CHEG 4143W	Chemical Engineering Capstone Design II	3
CHEG 4147	Process Dynamics and Control	3
CHEM Electives (six credits minimum)		6
CHEM 1128Q or CHEM 1148Q	General Chemistry II Honors General Chemistry II	4
CHEM 2443	Organic Chemistry	3
CHEM 2444	Organic Chemistry	3
CHEM 2446	Organic Chemistry Laboratory	1
ENGR 1166	Foundations of Engineering	3
MATH 2110Q	Multivariable Calculus	4
MATH 2410Q	Elementary Differential Equations	3
<b>Professional/Engineering Requirements</b>		
Any 2000 level engineering, science or math courses <sup>1</sup>		9
<b>Elective Courses</b>		
Elective courses		5
<b>Total Credits</b>		<b>73</b>

<sup>1</sup> Except ME 2233 Thermodynamic Principles, due to the significant overlap in content.

Selection of Professional Requirements courses must include engineering design work as detailed in the *Chemical Engineering Guide to Course Selection*. At least three credits of Professional Requirements must be outside of Chemical Engineering. A maximum of six credits of independent chemical engineering research credits may be applied toward degree requirements.

The Chemical Engineering undergraduate program educational objectives are that our alumni/ae: our graduates will be gainfully employed in chemical engineering or related career paths including industrial, academic, governmental and non-governmental organizations. Our graduates will continue their professional development by engaging in professional activities and/or training to enhance their careers and/or pursue post-graduate studies.

Students admitted as first-year students to the College of Engineering may transfer, at most, one core (non-elective) 3000 (CHEG 3112 Chemical Engineering Thermodynamics II, CHEG 3123 Fluid Mechanics, CHEG 3124 Heat and Mass Transfer, CHEG 3128 Chemical Engineering Junior Laboratory, CHEG 3145 Chemical Engineering Analysis, CHEG 3151 Process Kinetics) or 4000 (CHEG 4139 Chemical Engineering Senior Laboratory, CHEG 4140 Chemical Engineering Capstone Design I, CHEG 4142 Unit Operations and Process Simulation, CHEG 4143W Chemical Engineering Capstone Design II, CHEG 4147 Process Dynamics and Control) level chemical engineering course from an ABET accredited program at another university. Students transferring to UConn after their first year from another university will have previous credits earned transferred via the University transfer credit rules, but any credits earned once at UConn are subject to the same restriction above.

The Chemical Engineering program is accredited by the Engineering Accreditation Commission of ABET, [www.abet.org](http://www.abet.org) (<https://www.abet.org/>).

## University General Education Requirements

Every student must meet a set of core requirements to earn a baccalaureate degree, in addition to those required by the student's major course of study and other requirements set by the student's school or college. For more information about these requirements, please see General Education Requirements (<https://catalog.uconn.edu/undergraduate/gen-ed-requirements/>).

## College of Engineering Degree Requirements

Students must meet a set of requirements established by the college in addition to the University's General Education requirements. For more information, see the College of Engineering (<https://catalog.uconn.edu/undergraduate/engineering/#requirementstext>) section of this catalog.