

CHEMICAL ENGINEERING OPTION

- * Baccalaureate Core Course
- ^ Writing Intensive Course (WIC)

Option Code: 303

This option is offered within the following major(s):

- Chemistry - College of Science (<http://catalog.oregonstate.edu/college-departments/science/chemistry/chemistry-ba-bs-hba-hbs>)

The Chemical Engineering option offers selected chemical engineering concepts that may enhance career opportunities in areas such as electronics, polymers, and biotechnology, or prepare students for graduate studies in chemistry or related fields. Students can earn a BS degree in Chemistry in four years while targeting a career direction. This option includes nine courses in basic engineering and chemical engineering including mass and fluid transport, reaction engineering, and separations processes.

The Chemical Engineering option is designed for the Track-Two BS degree in Chemistry.

The track-two core requirements are slightly modified for the Chemical Engineering option:

Code	Title	Hours
Required/Recommended for Core:		
PH 211 & PH 212 & PH 213	*GENERAL PHYSICS WITH CALCULUS and *GENERAL PHYSICS WITH CALCULUS and *GENERAL PHYSICS WITH CALCULUS (Required)	
CH 462	^EXPERIMENTAL CHEMISTRY II (Recommended)	
Chemical Engineering Option Requirements		
CHE 211	(Terminated 201101)	4
CHE 212	(Terminated 201101)	4
CHE 411	MASS TRANSFER OPERATIONS	4
CHE 412	(Terminated 200901)	3
CHE 443	CHEMICAL REACTION ENGINEERING	4
ME 331	INTRODUCTORY FLUID MECHANICS	4
ME 332	HEAT TRANSFER	4
MTH 256	APPLIED DIFFERENTIAL EQUATIONS	4
Select one of the following:		3-4
CH 401 or CHE 401	RESEARCH RESEARCH	
CHE 213	(Terminated 200901)	
CHE 311	THERMODYNAMICS	
CHE 312	CHEMICAL ENGINEERING THERMODYNAMICS	
CHE 331	TRANSPORT PHENOMENA I	
CHE 332	TRANSPORT PHENOMENA II	
CHE 361	CHEMICAL PROCESS DYNAMICS AND SIMULATION	
CHE 444	THIN FILM MATERIALS PROCESSING	
CHE 445 or ENGR 213	POLYMER ENGINEERING AND SCIENCE STRENGTH OF MATERIALS	
CHE 461	PROCESS CONTROL	
ENGR 321	INTRODUCTION TO MATERIALS SCIENCE	
Total Hours		34-35