

CHEMICAL ENGINEERING OPTION

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.

Option Code: 303

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

| Code | Title | Credits |
|---------------------------------------|---|---------|
| 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) | |
| Required | | |
| 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 course from the following: | | 3-4 |
| CH 401 or CHE 401 | RESEARCH RESEARCH | |
| 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 ENGR 321 | PROCESS CONTROL | |
| Total Credits | | 34-35 |

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Baccalaureate Core Course

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Writing Intensive Course (WIC)

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