



COLLEGE OF
ENGINEERING, ARCHITECTURE
AND TECHNOLOGY

CHE CHEMICAL ENGINEERING



WHAT IS CHEMICAL ENGINEERING?

Chemical engineering is a discipline focused on conceiving and designing processes to produce, transform and transport materials — beginning with experimentation in the laboratory followed by implementation of the technology.

WHY CHEMICAL ENGINEERING AT OSU?

The mission of the School of Chemical Engineering at Oklahoma State University is to develop human resources, professional knowledge, and the infrastructure through which chemical engineering can contribute to human welfare. We expect to maintain national recognition for our contributions. Traditional careers are in the chemical, energy and oil industries, with increasing opportunities in biotechnology and pharmaceuticals.

HIGHLIGHTS

- All undergraduate Chemical Engineering courses are taught by award winning faculty with extensive industrial experience.
- No university has received more safety awards from the AIChE Safety and Health Division than OSU for the AIChE National Student Design Competition.
- Students benefit from a nationally accredited curriculum that balances theory and hands-on application experiences in the state-of-art Endeavor Lab.
- State-of-the-art Unit Operations Laboratory with more hands-on experience than most universities.
- Students choose 10 apparatuses to work on out of 20 available options, and gain experience in completing written reports and oral presentations modeled after industry practices.
- Medical schools readily accept our Chemical Engineering pre-medical graduates.
- Students can test the skills they learn by getting involved in various CHE organizations and competitions including AIChE, ChemKidz, ChemE Car, SPE and AADE.

CAREER INDUSTRIES & FOCUS AREAS

OPTIONS

- Biomedical/Biochemical
- Pre-Medical
- Minor in Petroleum Engineering

CAREER OPPORTUNITIES

- Process Engineer
- Production Engineer
- Field Engineer
- Project Manager
- Research & Development Engineer
- Biomedical Engineer
- Other: Law, Medicine, Venture Capitalism



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BACHELOR OF SCIENCE
CHEMICAL ENGINEERING

Typical Four-Year Curriculum

FIRST YEAR

Fall Semester

ENGR	1111	Intro to Engr
ENGR	1412	Engr Comp Programming
MATH	2144	Calculus I
HIST	1103	American Hist
ENGL	1113	Engl Comp I
CHEM	1314	Gen Chemistry I
XXXX	XXXX	"S/D H/I" Elective

Spring Semester

CHEM	1515	Gen Chemistry II
MATH	2153	Calculus II
PHYS	2014	Gen Physics I
XXXX	XXXX	"S/D H/I" Elective
XXXX	XXXX	"S/D H/I" Elective

SECOND YEAR

Fall Semester

CHEM	3053	Organic Chemistry I
MATH	2163	Calculus III
ENSC	2213	Thermodynamics I
MATH	2233	Diff Equations
ENSC	2113	Statics
CHE	2581	CHE Sophomore Seminar

Spring Semester

CHEM	3153	Organic Chemistry II
CHEM	3112	Organic Chem Lab
CHE	2033	Intro to Che Engr Processes
PHYS	2114	Gen Physics II
ENSC	3233	Fluids
STAT	4033	Engr Statistics

THIRD YEAR

Fall Semester

CHE	3013	Rate Operations I
CHE	3473	Chem Thermodynamics
CHE	3333	Intro Transport Phenomena
CHE	3581	CHE Junior Seminar
CHEM	3433	Physical Chem I

Spring Semester

CHE	4002	Chem Engr Lab I
CHE	3113	Rate Operations II
CHE	3123	Chem Reaction Engr
POLS	1113	American Gov't
ENSC	3313	Materials Science
ENGL	1213	Engl Comp II

FOURTH YEAR

Fall Semester

CHE	4112	Chem Engr Lab II
CHE	4124	Chem Engr Design I
CHE	4581	Senior Seminar
XXXX	XXXX	"S/D H/I" Elective
CHEM	XXXX	CHEM Elective
ENSC	2143	Strength of Materials

Spring Semester

CHE	4843	Chem Process Instr/Cntrl
CHE	4224	Chem Engr Design II
ENSC	2613	Electrical Science
CHEM	XXXX	CHEM Elective
CHEM	XXXX	Adv CHEM Science Elective

TOTAL HOURS: 130

Accredited by the Engineering
Accreditation Commission of ABET,
<http://www.abet.org>.



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This course plan is for general guidance only. An official course plan will be provided upon enrollment.

Contact | ceat.recruitment@okstate.edu | (405)-744-5279