

# Chemical Engineering

[Overview](#)[Academics & Admissions](#)[Programs](#)[Courses](#)[Faculty](#)

## Courses

- [Engr 321: Thermodynamics](#)
- [Engr 322: Transport Phenomena](#)
- [Engr 450: Product Design and Development](#)
- [Ch E 101: Introduction to Chemical Engineering](#)
- [Ch E 103: Introduction to Chemical Engineering I](#)
- [Ch E 104: Introduction to Chemical Engineering II](#)
- [Ch E 251: Programming for Chemical Engineering](#)
- [Ch E 252: Fundamentals of Chem Eng Problem Solving](#)
- [Ch E 307: Chemical Process Principles I](#)
- [Ch E 308: Chemical Process Principles II](#)
- [Ch E 309: Intro to Chemical Engineering Design](#)
- [Ch E 313: Modeling and Simulation I](#)
- [Ch E 314: Modeling and Simulation II](#)
- [Ch E 316: Chemical Engineering Fluid Mechanics](#)
- [Ch E 317: Process Fluid Dynamics and Heat Transfer](#)
- [Ch E 318: Chem Engineering Heat and Mass Transfer](#)
- [Ch E 330: Chemical Eng. R & D Experience](#)
- [Ch E 345: Engineering Economy](#)
- [Ch E 407: Chemical Engineering Projects I](#)
- [Ch E 408: Chemical Engineering Projects II](#)
- [Ch E 411: Chemical Engineering Seminar](#)
- [Ch E 412: Process Control and Safety](#)
- [Ch E 413: Chemical Process Safety](#)
- [Ch E 417: Separation Processes](#)
- [Ch E 421: Chemical Engineering Thermodynamics](#)
- [Ch E 423: Chemical Reactor Analysis and Design](#)
- [Ch E 431: ChE Mass and Energy Balance Lab](#)
- [Ch E 432: ChE Unit Operations Lab](#)
- [Ch E 433: ChE Design Lab](#)
- [Ch E 445: Chemical Engineering Lab I](#)
- [Ch E 446: Chemical Engineering Lab II](#)
- [Ch E 449: Process Design](#)
- [Ch E 450: Process Optimization](#)
- [Ch E 451: Plant Design I](#)
- [Ch E 452: Plant Design II](#)
- [Ch E 460: Product Design I: Development, Evaluation](#)
- [Ch E 461: Product Design II: Product Realization](#)
- [Ch E 470: Principles of Lean Six Sigma](#)
- [Ch E 511: Process Dynamics and Control](#)
- [Ch E 513: Special Topics in Chemical Engineering](#)
- [Ch E 515: Research Seminar](#)
- [Ch E 520: Biochemical Engineering](#)
- [Ch E 521: Drug and Gene Delivery](#)
- [Ch E 522: Immunoengineering](#)
- [Ch E 523: Molecular and Cellular Biophysics](#)
- [Ch E 524: Microscopy for Engineers](#)
- [Ch E 528: Polymer Processing](#)
- [Ch E 530: Coal Utilization and Pollutants Control](#)
- [Ch E 535: Experimental Methods in Engineering](#)



- [Ch E 540: Coating Materials Process & Applications](#)
- [Ch E 541: Appl of Chemical Instrumentation I](#)
- [Ch E 542: Appl of Chemical Instrumentation II](#)
- [Ch E 543: Introduction to Polymer Science](#)
- [Ch E 545: Colloid and Surface Science](#)
- [Ch E 547: Sufactant Science and Applications](#)
- [Ch E 550: Membrane Science and Engineering](#)
- [Ch E 560: Advanced Transport Phenomena I](#)
- [Ch E 561: Advanced Transport Phenomena II](#)
- [Ch E 593: Graduate Projects in Chemical Engr](#)
- [Ch E 660: Advanced Transport Phenomena I](#)
- [Ch E 661: Advanced Transport Phenomena II](#)
- [Engr 540: Environmental Organic Transport Phenomen](#)
- [Engr 542: Molecular Modeling of Nano Materials](#)
- [Engr 544: Synth and Fab of Nano Materials](#)
- [Engr 545: Polymer Nanocomposites](#)

