| | | Bio | System/Environment | Material |
|---|---|---|---|---|
| 1st year | | Mandatory General, Humanities & Social Science, Mandatory Basic(26), Elective Basic | | |
| 2nd | Spring | CBE202 Introduction to Chemical and Biomolecular Engineering<br>CBE203 Industrial Organic Chemistry<br>CBE205 Chemical Engineering Analysis | | |
| | Fall | CBE201 Molecular Engineering Laboratory<br>CBE221 Molecular Thermodynamics and Energy System | | |
| | | Mandatory General, Humanities & Social Science, Elective Basic | | |
| 3rd | Spring | CBE301 Chemical and Biomolecular Engineering Laboratory<br>CBE260 Biomolecular Engineering<br>CBE311 Molecular Reaction Engineering | CBE301 Chemical and Biomolecular Engineering Laboratory<br>CBE311 Molecular Reaction Engineering<br>CBE332 Heat and Molecular Transfer | CBE301 Chemical and Biomolecular Engineering Laboratory<br>CBE311 Molecular Reaction Engineering<br>CBE351 Introduction to Macromolecular Engineering |
| | Fall | CBE261 Biochemical Engineering<br>Track Elective 1 | CBE321 Separation Processes<br>CBE341 Process Simulation and Control | (MS211 Introduction to Materials Science and Engineering)*<br>Track Elective 1<br>Track Elective 2 |
| | | Mandatory General, Humanities & Social Science | | |
| 4th | Spring | CBE569 Nucleic Acid Engineering<br>Track Elective 2 | CBE331 Fluid Mechanics for Chemical Engineering<br>CBE342 Chemical and Biological Product Design | CBE455 Nanochemical Technology<br>Track Elective 3 |
| | Fall | CBE563 Protein Engineering<br>CBE564 Bioprocess Engineering | CBE442 Optimal Design and Economics<br>Track Elective 1 | CBE404 Understanding of Molecules and Nanosystems<br>Track Elective 4 |
| | | Graduation Research(3), Seminar(1) | | |
| Track Elective | | CBE321 Separation Processes (F)<br>CBE471 Introduction to Environmental Engineering (S/F)<br>CBE483 Engineering Principles of Human Physiology (S)<br>CBE566 Principles of Human Tissue Engineering (S)<br>CBE567 Metabolic Engineering (F)<br>CBE568 Nanobiotechnology for Biochemical Engineers (S/F) | CBE260 Biomolecular Engineering (S)<br>CBE261 Biochemical Engineering (F)<br>CBE443 Chemical and Biological Product Design Laboratory (S/F)<br>CBE471 Introduction to Environmental Engineering (S/F)<br>CBE503 Numerical Method for Chemical Process (S)<br>CBE542 Process Optimization (S) | CBE473 Microelectronics Processes (S/F)<br>CBE512 Introduction to Catalysis Engineering (S/F)<br>CBE522 Introduction to Interfacial Engineering (S)<br>CBE525 Molecular Electronics (S/F)<br>CBE552 Materials Engineering of Polymers(S/F)<br>CBE554 Polymer Physics (S)<br>CBE556 Structure and Properties of Macromolecules (S)<br>CBE568 Nanobiotechnology for Biochemical Engineers (S/F)<br>CBE572 Inorganic Materials Processing (S/F)<br>CBE573 Fuel Cell Processes and Materials (F) |
| Graduation Credit (41) | | Mandatory Major 18 + Elective Major 24<br>(Recommended 18, Track Elective 6) | Mandatory Major 18 + Elective Major 24<br>(Recommended 21, Track Elective 3) | Mandatory Major 18 + + Elective Major 24<br>(Recommended 12, Track Elective 12) |

*Not included in Graduation Credit

Red marked: Mandatory Major Course

Blue marked: Recommended Course