

CHEMICAL ENGINEERING

Co-op Option

| FIRST YEAR | | |
|-------------------|--|----------------|
| FALL | | |
| C&PE 111 | Introduction to the Profession | 2 |
| MATH 121 | Calculus I | 5 |
| CHEM 184 | Foundations of Chemistry I | 5 |
| ENGL 101 | Composition | 3 |
| | | Total 15 hours |
| SPRING | | |
| C&PE 121 | Introduction to Computers in Engineering | 3 |
| MATH 122 | Calculus II | 5 |
| CHEM 188 | Foundations of Chemistry II | 5 |
| ENGL 102 | Composition & Literature | 3 |
| | | Total 16 hours |

| THIRD YEAR – (continued) | | |
|---------------------------------|--|----------------|
| SPRING | | |
| C&PE 521 | Heat Transfer | 3 |
| C&PE 523 | Mass Transfer | 4 |
| C&PE 524 | Chemical Engineering Kinetics & Reactor Design | 3 |
| | Humanities or Social Sciences Elective | 3 |
| CHEM 648 | Physical Chemistry II | 4 |
| | | Total 17 hours |
| SUMMER | | |
| ENGR 300 | Co-op Program CO-OP EMPLOYMENT | |
| | | Total 1 hour |

| SECOND YEAR | | |
|--------------------|-----------------------------------|----------------|
| FALL | | |
| C&PE 211 | Materials & Energy Balances | 3 |
| MATH 220 | Applied Differential Equations | 3 |
| MATH 290 | Elementary Linear Algebra | 2 |
| ME 312 | Basic Thermodynamics | 3 |
| CHEM 624 | Organic Chemistry I | 3 |
| PHSX 211 | General Physics I | 4 |
| | | Total 18 hours |
| SPRING | | |
| ENGR 300 | Co-op Program CO-OP EMPLOYMENT | |
| | | Total 1 hour |
| SUMMER | | |
| PHSX 212 | Physics II | 4 |
| | | Total 4 hours |

| FOURTH YEAR | | |
|--------------------|--|----------------|
| FALL | | |
| C&PE 615 | Introduction to Process Dynamics and Control | 3 |
| C&PE ____ | Elective | 3 |
| | MSEHS Elective | 3 |
| ENGL ____ | Advanced English Elective | 3 |
| CHEM ____ | Advanced Chemistry Elective | 4 |
| | | Total 16 hours |
| SPRING | | |
| ENGR 300 | Co-op Program CO-OP EMPLOYMENT | |
| | | Total 1 hour |

| THIRD YEAR | | |
|-------------------|--|----------------|
| FALL | | |
| C&PE 511 | Momentum Transfer | 3 |
| C&PE 512 | Process Engineering Thermodynamics | 3 |
| CHEM 625 | Organic Chemistry I Lab | 2 |
| CHEM 646 | Physical Chemistry I | 3 |
| C&PE 522 | Econ Appraisal | 2 |
| _____ | Humanities or Social Sciences Elective | 3 |
| | | Total 16 hours |

| FIFTH YEAR | | |
|-------------------|---|----------------|
| FALL | | |
| C&PE 613 | Chemical Engineering Design I | 4 |
| C&PE 616 | Chemical Engineering Laboratory I | 3 |
| _____ | Engineering Elective | 3 |
| _____ | Humanities and Social Sciences Elective | 3 |
| _____ | Humanities and Social Sciences Elective | 3 |
| | | Total 16 hours |
| SPRING | | |
| C&PE 623 | Chemical Engineering Design II | 2 |
| C&PE 624 | Plant & Environmental Safety | 3 |
| C&PE 626 | Chemical Engineering Laboratory II | 3 |
| _____ | Engineering Electives | 3 |
| _____ | Engineering Electives | 3 |
| | | Total 14 hours |

The Co-op Option is very flexible. This is an example.
 131 credit hours required for graduation
 Revised October 2008 (KVC)