

Chemical Engineering Emphasis Outline

Fall Semester

Freshman

| | | |
|------------|-------------------------------|----|
| ENGR120 | Intro to Engineering & Design | 2 |
| ENGR125 | Engineering Graphics | 3 |
| Math191 | Calculus I | 4 |
| CHEM131 | General Chemistry I | 4 |
| HLED120/FT | Fit for Life/Fitness Activity | 1 |
| ENGL115 | College Writing I | 3 |
| | | 17 |

Spring Semester

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|---------|----------------------|----|
| ENGR180 | Material Science | 4 |
| MATH192 | Calculus II | 4 |
| CHEM132 | General Chemistry II | 4 |
| RELT100 | God & Human Life | 3 |
| ENGR185 | Engineering Statics | 3 |
| | | 18 |

Sophomore

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|---------|---------------------------|----|
| ENGR225 | Circuit Analysis | 3 |
| PHYS241 | Physics for Scientists I | 5 |
| MATH240 | Calculus III | 4 |
| CHEM231 | Organic Chemistry I | 4 |
| FTES | Physical Fitness Activity | 1 |
| | | 17 |

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|---------|---------------------------|----|
| ENGR285 | Engineering Dynamics | 3 |
| MATH286 | Differential equations | 3 |
| GEN ED | Religion (RELB,RELG,RELT) | 3 |
| COMM104 | Communication Skills | 3 |
| ENGR485 | Community Service | 2 |
| ENGR275 | Electronics I | 3 |
| | | 17 |

Junior

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|-----------------|--------------------------------------|----|
| CPTR151 | Computer Science I | 3 |
| CHEM200 | Quantitative Analysis | 4 |
| CHEM431 | Physical Chem I | 3 |
| ENGR464* | Kinetics & Reactor Design | 3 |
| Gen ED | History | 3 |
| | | 16 |

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|-----------------|--------------------------------------|----|
| ENGR310 | Linear Systems Analysis | 3 |
| ENGR355 | ChemE Lab | 4 |
| ENGR345* | ChemE Fundamentals | 3 |
| ENGR360 | Fluid Dynamics | 3 |
| ENGL220/EN | Technical Writing/College Writing II | 3 |
| | | 16 |

Senior

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|-----------------|------------------------------|----|
| ENGR491 | Review of Engineering Design | 1 |
| ENGR450 | Engineering Economy | 2 |
| ENGR410 | Feedback Control Systems | 4 |
| ENGR480* | Process Design | 3 |
| GEN ED | Religion (RELB,RELG,RELT) | 3 |
| GEN ED | Social Sciences | 3 |
| | | 16 |

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|----------|--------------------------|----|
| Elective | ENGR Elective | 3 |
| ENGR492 | Senior Design Project | 3 |
| ENGR440 | Heat & Mass Transfer | 3 |
| GEN ED | Arts/Humanities | 3 |
| ENGR | ENGR Elective | 6 |
| RELT340 | Religion & Ethics in ... | 3 |
| | | 18 |

Offered every other year*

Suggested 4-year course outline per Bulletin 2019-2020

Total Credits for Graduation

135