

B.S.Ch.E. in Chemical Engineering

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Degree Requirements

The academic regulations for this degree program, as entered in the University of Mississippi Catalog, are in effect for the current or selected academic year and semester. The University of Mississippi reserves the right to 1) change or withdraw courses; 2) change rules for registration, instruction, and graduation; and 3) change other regulations affecting the student body at any time.

B.S.Ch.E. in Chemical Engineering

General Education

| REQUIREMENT | HOURS | DESCRIPTION |
|--------------------------|-------|---|
| First Year Writing I | 3 | Complete Hon 101 , Writ 100 or Writ 101 with a passing grade. |
| First Year Writing II | 3 | Complete Hon 102 , Liba 102 , or Writ 102 with a passing grade. |
| Chem 105 | 3 | Complete Chem 105 with a passing grade. |
| Chem 106 | 3 | Complete Chem 106 with a passing grade. |
| Chem 115 | 1 | Complete Chem 115 with a passing grade. |
| Chem 116 | 1 | Complete Chem 116 with a passing grade. |
| Math 261 | 3 | Complete Math 261 with a passing grade. |
| Math 262 | 3 | Complete Math 262 with a passing grade. |
| Math 263 | 3 | Complete Math 263 with a passing grade. |
| Math 264 | 3 | Complete Math 264 with a passing grade. |
| Math 353 | 3 | Complete Math 353 with a passing grade. |
| Phys 211 | 3 | Complete Phys 211 with a passing grade. |
| Phys 212 | 3 | Complete Phys 212 with a passing grade. |
| Phys 221 | 1 | Complete Phys 221 with a passing grade. |
| Phys 222 | 1 | Complete Phys 222 with a passing grade. |
| 3 hrs fine arts | 3 | Student must successfully complete 3 hours in the fine arts. The course may be chosen from art history, art appreciation, and criticism of art, dance, music, and theatre arts. Courses emphasizing the enhancement of skills and performance are not acceptable. |
| Serial humanities | 6 | Complete 6 hrs (from the same department) of humanities choosing from course work in classics, literature, history, philosophy, religion, Southern Studies, African American Studies, and Gender Studies. |
| Serial social science | 6 | Complete 6 hours (from the same department) of social sciences choosing from the following; economics, anthropology, political science, psychology, and sociology. Psy 202 and Econ 230 are excluded from these options. |

Major Requirements

| REQUIREMENT | HOURS | DESCRIPTION |
|--|-------|--|
| Ch E 103 /104 or approved course | 2 | Complete Ch E 103 and Ch E 104 . As an alternative, students may complete one one of the following courses: Engr 100 , Manf 150 or Manf 252 . Coursework must be completed with a passing grade. |
| Ch E 307 | 2 | Complete Ch E 307 with a passing grade. |
| Ch E 308 | 2 | Complete Ch E 308 with a passing grade. |
| Ch E 317 | 3 | Complete Ch E 317 with a passing grade. |
| Ch E 345 | 3 | Complete Ch E 345 with a passing grade. |
| Ch E 411 | 1 | Complete Ch E 411 with a passing grade. |
| Ch E 417 | 3 | Complete Ch E 417 with a passing grade. |
| Ch E 421 | 3 | Complete Ch E 421 with a passing grade. |
| Ch E 423 | 3 | Complete Ch E 423 with a passing grade. |



| REQUIREMENT | HOURS | DESCRIPTION |
|--|-------|--|
| Ch E 445 | 2 | Complete Ch E 445 with a passing grade. |
| Ch E 446 | 2 | Complete Ch E 446 with a passing grade. |
| Ch E 451 | 4 | Complete Ch E 451 with a passing grade. |
| Ch E 452 or Ch E 460/461 | 3 | Complete either Ch E 452 or Ch E 460/461 with a passing grade. |
| Ch E 412 or 511 | 3 | Complete Ch E 412 or 511 with a passing grade. |
| Enroll in a BSChE emphasis | | Enroll in an emphasis in BSChE program. |
| School of Engineering GPA | | Must be at least a 2.0 |

Major Requirements II

| REQUIREMENT | HOURS | DESCRIPTION |
|--|-------|--|
| Chem 225 | 1 | Complete Chem 225 with a passing grade. |
| Chem 222 | 3 | Complete Chem 222 with a passing grade. |
| Chem 221 | 3 | Complete Chem 221 with a passing grade. |
| Engr 310 | 3 | Complete Engr 310 with a passing grade. |
| Engr 313 | 3 | Complete Engr 313 with a passing grade. |
| Engr 321 | 3 | Complete Engr 321 with a passing grade. |
| Engr 322 | 3 | Complete Engr 322 with a passing grade. |
| Engr 309 or Csci 251 | 3 | Complete either Engr 309 or Csci 251 with a passing grade. |
| Engr 360 | 3 | Complete Engr 360 with a passing grade. |

Standard Option

| REQUIREMENT | HOURS | DESCRIPTION |
|---------------------------|-------|---|
| Advanced chemistry course | 3 | Complete at least one advanced chemistry course. Course can be chosen from the following: Chem 334 , Chem 471 , Ch E 543 , Ch E 545 , GE 503 , and Engr 540 . |
| 9 hrs technical electives | 9 | Complete at least 9 credit hours of technical electives to include three 3-hour electives of 300 or higher course number from among engineering, science, or mathematics. |
| Add'l hum/soc sci | 3 | Complete an additional 3 hours in humanities or social sciences. |

Emphasis - Materials

| REQUIREMENT | HOURS | DESCRIPTION |
|---|-------|---|
| Ch E 545 | 3 | Complete Ch E 545 with a passing grade. |
| Engr 312 | 3 | Complete Engr 312 with a passing grade. |
| Materials elective | 3 | Complete at least one materials elective chosen from the following courses: Ch E 543 , ME 527 , ME 528 , ME 530 , ME 531 , ME 532 , ME/EL E 533 . |
| Tech elective or Ch E 330 | 3 | Complete a technical elective or ChE R&D Experience (ChE 330). |
| Add'l hum/soc sci | 3 | Complete an additional 3 hours in humanities or social sciences. |

Emphasis - Biotechnology

| REQUIREMENT | HOURS | DESCRIPTION |
|---|-------|--|
| Ch E 520 | 3 | Complete Ch E 520 with a passing grade. |
| Chem 334 | 3 | Complete Chem 334 with a passing grade. |
| Phar 331 | 3 | Complete Phar 331 with a passing grade. |
| Tech elective or Ch E 330 | 3 | Complete a technical elective or ChE R&D Experience (ChE 330). |
| Add'l hum/soc sci | 3 | Complete an additional 3 hours in humanities or social sciences. |

Pre-Med Option



| REQUIREMENT | HOURS | DESCRIPTION |
|----------------------------|-------|--|
| Chem 471 | 3 | Complete Chem 471 with a passing grade. |
| Chem 473 | 3 | Complete Chem 473 with a passing grade. |
| Biological science courses | 8 | Complete the following biological science courses: Bisc 160/161 and Bisc 162/163 . |
| 3 hrs Tech elective | 3 | Complete a technical elective. |
| Add'l hum/soc sci | 3 | Complete an additional 3 hours in humanities or social sciences. |

Emphasis - Environmental

| REQUIREMENT | HOURS | DESCRIPTION |
|---|-------|--|
| C E 471 | 3 | Complete C E 471 with a passing grade. |
| Advanced chemistry course | 3 | Complete at least one advanced chemistry course chosen from the following: G E 503 or Engr 540 . |
| Environ. technical elective | 3 | Complete at least one of the following environmental technical elective courses: Engr 537 , Engr 573 , or Engr 571 . |
| Tech elective or Ch E 330 | 3 | Complete a technical elective or ChE 330 . |
| Add'l hum/soc sci | 3 | Complete an additional 3 hours in humanities or social sciences. |

Emphasis - Manufacturing

| REQUIREMENT | HOURS | DESCRIPTION |
|--------------------------|-------|---|
| Bus 250 | 3 | Complete Bus 250 with a passing grade. |
| Manf 150 | 1 | Complete Manf 150 with a passing grade. |
| Manf 251 | 3 | Complete Manf 251 with a passing grade. |
| Manf 252 | 1 | Complete Manf 252 with a passing grade. |
| Manf 253 | 3 | Complete Manf 253 with a passing grade. |
| Manf 254 | 3 | Complete Manf 254 with a passing grade. |
| Manf 350 | 3 | Complete Manf 350 with a passing grade. |
| Manf 351 | 1 | Complete Manf 351 with a passing grade. |
| Manf 450 | 3 | Complete Manf 450 with a passing grade. |
| Manf 451 | 1 | Complete Manf 451 with a passing grade. |
| Manf 452 | 2 | Complete Manf 452 with a passing grade. |

