

# 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 <a href="#">Hon 101</a> , <a href="#">Writ 100</a> or <a href="#">Writ 101</a> with a passing grade.   |
| First Year Writing II        | 3     | Complete <a href="#">Hon 102</a> , <a href="#">Liba 102</a> , or <a href="#">Writ 102</a> with a passing grade.   |
| <a href="#">Chem 105</a>     | 3     | Complete <a href="#">Chem 105</a> with a passing grade.   |
| <a href="#">Chem 106</a>     | 3     | Complete <a href="#">Chem 106</a> with a passing grade.   |
| <a href="#">Chem 115</a>     | 1     | Complete <a href="#">Chem 115</a> with a passing grade.   |
| <a href="#">Chem 116</a>     | 1     | Complete <a href="#">Chem 116</a> with a passing grade.   |
| <a href="#">Math 261</a>     | 3     | Complete <a href="#">Math 261</a> with a passing grade.   |
| <a href="#">Math 262</a>     | 3     | Complete <a href="#">Math 262</a> with a passing grade.   |
| <a href="#">Math 263</a>     | 3     | Complete <a href="#">Math 263</a> with a passing grade.   |
| <a href="#">Math 264</a>     | 3     | Complete <a href="#">Math 264</a> with a passing grade.   |
| <a href="#">Math 353</a>     | 3     | Complete <a href="#">Math 353</a> with a passing grade.   |
| <a href="#">Phys 211</a>     | 3     | Complete <a href="#">Phys 211</a> with a passing grade.   |
| <a href="#">Phys 212</a>     | 3     | Complete <a href="#">Phys 212</a> with a passing grade.   |
| <a href="#">Phys 221</a>     | 1     | Complete <a href="#">Phys 221</a> with a passing grade.   |
| <a href="#">Phys 222</a>     | 1     | Complete <a href="#">Phys 222</a> 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. <a href="#">Psy 202</a> and <a href="#">Econ 230</a> are excluded from these options.          |
| Add'l 300+ level hum/soc sci | 12    | Complete an additional 3 hours of advanced course work (300 level or above) in the area selected for the humanities or social sciences.   |

### Major Requirements

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



| REQUIREMENT  | HOURS | DESCRIPTION  |
|--|-------|--|
| <a href="#">Ch E 423</a>                                 | 3     | Complete <a href="#">Ch E 423</a> with a passing grade.  |
| <a href="#">Ch E 445</a>                                 | 2     | Complete <a href="#">Ch E 445</a> with a passing grade.  |
| <a href="#">Ch E 446</a>                                 | 2     | Complete <a href="#">Ch E 446</a> with a passing grade.  |
| <a href="#">Ch E 451</a>                                 | 4     | Complete <a href="#">Ch E 451</a> with a passing grade.  |
| <a href="#">Ch E 452</a> or <a href="#">Ch E 460/461</a> | 3     | Complete either <a href="#">Ch E 452</a> or <a href="#">Ch E 460/461</a> with a passing grade. |
| <a href="#">Ch E 511</a>                                 | 3     | Complete <a href="#">Ch E 511</a> 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  |
|--|-------|--|
| <a href="#">Chem 225</a>                             | 1     | Complete <a href="#">Chem 225</a> with a passing grade.                                    |
| <a href="#">Chem 222</a>                             | 3     | Complete <a href="#">Chem 222</a> with a passing grade.                                    |
| <a href="#">Chem 221</a>                             | 3     | Complete <a href="#">Chem 221</a> with a passing grade.                                    |
| <a href="#">Engr 310</a>                             | 3     | Complete <a href="#">Engr 310</a> with a passing grade.                                    |
| <a href="#">Engr 313</a>                             | 3     | Complete <a href="#">Engr 313</a> with a passing grade.                                    |
| <a href="#">Engr 321</a>                             | 3     | Complete <a href="#">Engr 321</a> with a passing grade.                                    |
| <a href="#">Engr 322</a>                             | 3     | Complete <a href="#">Engr 322</a> with a passing grade.                                    |
| <a href="#">Engr 309</a> or <a href="#">Csci 251</a> | 3     | Complete either <a href="#">Engr 309</a> or <a href="#">Csci 251</a> with a passing grade. |
| <a href="#">Engr 360</a>                             | 3     | Complete <a href="#">Engr 360</a> 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: <a href="#">Chem 334</a> , <a href="#">Chem 471</a> , <a href="#">Ch E 543</a> , <a href="#">Ch E 545</a> , <a href="#">GE 503</a> , and <a href="#">Engr 540</a> . |
| 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.   |

### Emphasis - Materials

| REQUIREMENT                               | HOURS | DESCRIPTION   |
|---|-------|---|
| <a href="#">Ch E 545</a>                  | 3     | Complete <a href="#">Ch E 545</a> with a passing grade.   |
| <a href="#">Engr 312</a>                  | 3     | Complete <a href="#">Engr 312</a> with a passing grade.   |
| Materials elective                        | 3     | Complete at least one materials elective chosen from the following courses: <a href="#">Ch E 543</a> , <a href="#">ME 527</a> , <a href="#">ME 528</a> , <a href="#">ME 530</a> , <a href="#">ME 531</a> , <a href="#">ME 532</a> , <a href="#">ME/EL E 533</a> . |
| Tech elective or <a href="#">Ch E 330</a> | 3     | Complete a technical elective or ChE R&D Experience ( <a href="#">ChE 330</a> ).  |

### Emphasis - Biotechnology

| REQUIREMENT                               | HOURS | DESCRIPTION  |
|---|-------|--|
| <a href="#">Ch E 520</a>                  | 3     | Complete <a href="#">Ch E 520</a> with a passing grade.                          |
| <a href="#">Chem 334</a>                  | 3     | Complete <a href="#">Chem 334</a> with a passing grade.                          |
| <a href="#">Phar 331</a>                  | 3     | Complete <a href="#">Phar 331</a> with a passing grade.                          |
| Tech elective or <a href="#">Ch E 330</a> | 3     | Complete a technical elective or ChE R&D Experience ( <a href="#">ChE 330</a> ). |

### Pre-Med Option

| REQUIREMENT              | HOURS | DESCRIPTION   |
|--------------------------|-------|---|
| <a href="#">Chem 471</a> | 3     | Complete <a href="#">Chem 471</a> with a passing grade. |



| REQUIREMENT                | HOURS | DESCRIPTION  |
|----------------------------|-------|--|
| <a href="#">Chem 473</a>   | 3     | Complete <a href="#">Chem 473</a> with a passing grade.  |
| Biological science courses | 8     | Complete the following biological science courses: <a href="#">Bisc 160/161</a> and <a href="#">Bisc 162/163</a> . |
| 3 hrs Tech elective        | 3     | Complete a technical elective.   |

### Emphasis - Environmental

| REQUIREMENT                               | HOURS | DESCRIPTION  |
|---|-------|--|
| <a href="#">C E 471</a>                   | 3     | Complete <a href="#">C E 471</a> with a passing grade.   |
| Advanced chemistry course                 | 3     | Complete at least one advanced chemistry course chosen from the following: <a href="#">G E 503</a> or <a href="#">Engr 540</a> .                                     |
| Environ. technical elective               | 3     | Complete at least one of the following environmental technical elective courses: <a href="#">Engr 537</a> , <a href="#">Engr 573</a> , or <a href="#">Engr 571</a> . |
| Tech elective or <a href="#">Ch E 330</a> | 3     | Complete a technical elective or <a href="#">ChE 330</a> .   |

### Emphasis - Manufacturing

| REQUIREMENT              | HOURS | DESCRIPTION   |
|--------------------------|-------|---|
| <a href="#">Manf 150</a> | 1     | Complete <a href="#">Manf 150</a> with a passing grade. |
| <a href="#">Manf 251</a> | 3     | Complete <a href="#">Manf 251</a> with a passing grade. |
| <a href="#">Manf 252</a> | 1     | Complete <a href="#">Manf 252</a> with a passing grade. |
| <a href="#">Manf 253</a> | 3     | Complete <a href="#">Manf 253</a> with a passing grade. |
| <a href="#">Manf 254</a> | 3     | Complete <a href="#">Manf 254</a> with a passing grade. |
| <a href="#">Ch E 460</a> | 1     | Complete <a href="#">Ch E 460</a> with a passing grade  |
| <a href="#">Ch E 461</a> | 2     | Complete <a href="#">Ch E 461</a> with a passing grade. |
| <a href="#">Bus 250</a>  | 3     | Complete <a href="#">Bus 250</a> with a passing grade.  |

