BACHELOR OF ARTS (BA) DEGREE WITH A MAJOR IN CHEMICAL ENGINEERING

Program Learning Outcomes for the BA Degree with a Major in Chemical Engineering

Upon completing the BA degree with a major in Chemical Engineering, students will be able to demonstrate:

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics
2. An ability to communicate effectively with a range of audiences
3. An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
4. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions
5. An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Requirements for the BA Degree with a Major in Chemical Engineering

For general university requirements, see Graduation Requirements (ga.rice.edu/undergraduate-students/academic-policies-procedures/graduation-requirements). Students pursuing the BA degree with a major in Chemical Engineering must complete:

• A minimum of 72 credit hours to satisfy major requirements.
• A minimum of 132 credit hours to satisfy degree requirements.
• A minimum of 60 credit hours outside of major requirements.
• A minimum of 13 courses (37 credit hours) taken at the 300-level or above.

The BA with a Major in Chemical Engineering is a flexible program and allows a student to pursue other areas of interest with or without a second major (or an academic minor).

The courses listed below satisfy the requirements for this major. In certain instances, courses not on this official list may be substituted upon approval of the major’s academic advisor, or where applicable, the department’s Director of Undergraduate Studies. (Course substitutions must be formally applied and entered into Degree Works by the major’s Official Certifier (https://registrar.rice.edu/facstaff/degeworks/officialcertifier.) Students and their academic advisors should identify and clearly document the courses to be taken.

Summary

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<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tr>
<td>Total</td>
<td>Credit Hours Required for the Major in Chemical Engineering</td>
<td>72</td>
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Opportunities for the BA Degree with a Major in Chemical Engineering

Academic Honors

The university recognizes academic excellence achieved over an undergraduate's academic history at Rice. For information on university honors, please see Latin Honors (ga.rice.edu/undergraduate-students/honors-distinctions/university) (summa cum laude, magna cum laude, and cum laude) and Distinction in Research and Creative Work (ga.rice.edu/undergraduate-students/honors-distinctions/university). Some departments have department-specific Honors awards or designations.

Fifth-Year Master's Degree Option for Rice Undergraduate Students

Rice students have an option to pursue the Master of Chemical Engineering (MChE) degree by adding an additional fifth year to their four undergraduate years of science and engineering studies.

Advanced Rice undergraduate students in good academic standing may apply to the MChE degree program during their junior or senior year. Upon acceptance, depending on course load, financial aid status, and other variables, they may then start taking some required courses of the master's degree program. A plan of study will need to be approved by the student's undergraduate advisor and the (MChE) chair of the department graduate studies committee.

As part of this option and opportunity, Rice undergraduate students:

• must complete the requirements for a bachelor's degree and the master's degree independently of each other (i.e. no course may be counted toward the fulfillment of both degrees).

• should be aware there could be financial aid implications if the conversion of undergraduate coursework to that of graduate level reduces their earned undergraduate credit for any semester below that of full-time status (12 credit hours).

• more information on this Undergraduate - Graduate Concurrent Enrollment opportunity, including specific information on the registration process can be found here (ga.rice.edu/undergraduate-students/academic-opportunities/undergraduate-graduate-concurrent-enrollment).

Additional Information

For additional information, please see the Chemical and Biomolecular Engineering website: https://chbe.rice.edu/.

Footnotes and Additional Information

* Includes coursework completed as distribution credit, FWIS, LPAR upper-level, residency (hours taken at Rice), 60 hours outside of the major (if applicable), and any additional academic program requirements. The "hours outside of the major" requirement may include all of the above university requirements.

1 CHM 121 or CHM 111 can be satisfied by completing CHM 151; CHM 123 or CHM 113 can be satisfied by completing CHM 153. CHEM 122 or CHEM 112 can be satisfied by completing CHEM 152; CHEM 124 or CHEM 114 can be satisfied by completing CHEM 154; CHEM 217 can be satisfied by completing CHEM 215.

2 MATH 221 and MATH 222 may substitute for MATH 212.

Policies for the BA Degree with a Major in Chemical Engineering

Transfer Credit

For Rice University's policy regarding transfer credit, see Transfer Credit (ga.rice.edu/undergraduate-students/academic-policies-procedures/transfer-credit). Some departments and programs have additional restrictions on transfer credit. The Office of Academic Advising maintains the university's official list of transfer credit advisors on their website: https://oaa.rice.edu. Students are encouraged to meet with their academic program's transfer credit advisor when considering transfer credit possibilities.

Departmental Transfer Credit Guidelines

Students pursuing the major in Chemical Engineering should be aware of the following departmental transfer credit guidelines:

• Requests for transfer credit will be considered by the program director (and/or the program's official transfer credit advisor) on an individual case-by-case basis.

Additional Information

For additional information, please see the Chemical and Biomolecular Engineering website: https://chbe.rice.edu/.