

MASTER OF CHEMICAL ENGINEERING (MChE) DEGREE / MASTER OF BUSINESS ADMINISTRATION (MBA) DEGREE

Program Learning Outcomes for the MChE Degree

Upon completing the MChE degree, students will be able to:

1. Identify, formulate, and solve complex engineering problems that require synthesis of advanced knowledge in chemical engineering fundamentals.
2. Demonstrate broad advanced knowledge in science and math, and depth in one chemical engineering sub-discipline (energy engineering, biomolecular engineering, materials science).
3. Demonstrate knowledge of business policies and practices in the current business environment in identifying, formulating, and solving engineering challenges in a problem/engineering challenge they undertake to solve as part of independent study.
4. Demonstrate effective oral and written communication skills.

Program Learning Outcomes for the MBA Degree

Upon completing the MBA degree, students will be able to:

1. Demonstrate an understanding and application of the foundational frameworks and tools of all business disciplines, including accounting, finance, marketing, organizational behavior, and strategic management.
2. Develop, evaluate, and implement complex business strategies and operational solutions holistically, integrating management principles across the functional areas.
3. Function effectively in a team setting both as a leader and a contributor.

Requirements for the MChE/MBA Coordinated Degrees Program

Students may earn a coordinated MBA degree and a non-thesis Master of Engineering degree from the George R. Brown School of Engineering in the following fields:

- Chemical Engineering (MChE)
- Computational and Applied Mathematics (MCAAM)
- Computer Science (MCS)
- Industrial Engineering (MIE)
- Materials Science and Nanoengineering (MMSNE)
- Mechanical Engineering (MME)
- Statistics (MStat)

For the coordinated MBA/Master of Engineering degrees, students must complete:

- A minimum of 69 credit hours in approved coursework*, including:
 - A minimum of 30 credit hours of graduate-level study (coursework at the 500-level or above) to satisfy the Master of Engineering degree requirements
 - A minimum of 24 credit hours in the corresponding engineering discipline
 - A minimum of 6 credit hours in elective requirements*
 - A minimum of 45 credit hours of graduate-level study (coursework at the 500-level or above) to satisfy the MBA degree requirements
 - A minimum of 45 credit hours of business coursework
 - All MBA core requirements, the global field experience, custom core requirements, and coordinated elective requirements
- ***Note:** A maximum of 6 credit hours of the Master of Engineering degree elective requirements may be selected from business course offerings (MGMP, MGMT, or MICO) and used to fulfill the requirements for both the MBA and the Master of Engineering degrees.

Students plan their course schedules in consultation with the George R. Brown School of Engineering department in which they are enrolled and with the Jones Graduate School of Business Registrar Department. Coordinated degrees candidates can fulfill requirements for both degrees within 2 academic years.

For general university requirements, see [Graduate Degrees \(https://ga.rice.edu/graduate-students/academic-opportunities/degrees/\)](https://ga.rice.edu/graduate-students/academic-opportunities/degrees/). For additional requirements, regulations, and procedures for all graduate programs, please see [All Graduate Students \(https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/\)](https://ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/). Candidates in the MBA/Master of Engineering coordinated degrees program must complete all requirements as listed for both degrees, and must apply and be accepted in both degree programs.

The courses listed below satisfy the requirements for this degree program. In certain instances, courses not on this official list may be substituted upon approval of the program's academic advisor, or where applicable, the department or program's Director of Graduate Studies. Course substitutions must be formally applied and entered into Degree Works by the department or program's [Official Certifier \(https://registrar.rice.edu/facstaff/degreeworks/officialcertifier/\)](https://registrar.rice.edu/facstaff/degreeworks/officialcertifier/). Additionally, these must be approved by the Office of Graduate and Postdoctoral Studies. Students and their academic advisors should identify and clearly document the courses to be taken.

Summary

Code	Title	Credit Hours
Total Credit Hours Required for the Coordinated Master of Engineering Degree		Minimum of 30
Total Credit Hours Required for the Coordinated MBA Degree		Minimum of 45

Coordinated MChE Degree Requirements

Students in the coordinated MBA/MChE degrees program must complete the Core Requirements of the [MChE degree program \(https://ga.rice.edu/programs-study/departments-programs/engineering/chemical-biomolecular-engineering/chemical-engineering-mche/#requirementstext\)](https://ga.rice.edu/programs-study/departments-programs/engineering/chemical-biomolecular-engineering/chemical-engineering-mche/#requirementstext) and Coordinated MChE Elective Requirements below.

Code	Title	Credit Hours
	MChE Core Requirements	15
	Coordinated MChE Elective Requirements	15
	<i>Select a minimum of 9 credit hours from approved departmental (CHBE) course offerings at the 500-level or above</i>	
	<i>Select a maximum of 6 credit hours from approved course offerings (MGMP, MGMT, or MICO) from the Jones Graduate School of Business at the 500-level or above</i>	
	Total Credit Hours	30

Coordinated MBA Degree Requirements

Students in the coordinated MBA/Master of Engineering degrees program or in the coordinated MBA/Master of Science degree from the Professional Science Master's (PSM) degrees program must complete the Core Requirements, Global Field Experience, and Custom Core Requirements of [the full-time MBA degree program \(https://ga.rice.edu/programs-study/departments-programs/business/business/business-administration-mba-full-time/#requirementstext\)](https://ga.rice.edu/programs-study/departments-programs/business/business/business-administration-mba-full-time/#requirementstext) and the Coordinated MBA Elective Requirements below.

Code	Title	Credit Hours
	Full-time MBA Core Requirements	25.5
	Full-time MBA Work Experience Requirement	0.75
	Full-time MBA Global Field Experience Requirement	1.5
	Full-time MBA Custom Core Courses	3-6
	Coordinated MBA Elective Requirements	
	<i>Select an additional 11.25-14.25 credit hours from departmental (MGMP, MGMT, or MICO) course offerings at the 500-level or above to reach 45 total credit hours.¹</i>	11.25-14.25
	Total Credit Hours	45

Footnotes and Additional Information

¹ To fulfill the remaining requirements for the coordinated MBA degree program, students must complete an additional 11.25-14.25 credit hours from departmental (MGMP, MGMT, or MICO) course offerings at the 500-level or above to reach 45 total credit hours. (MGMT 703, MGMT 704, and MGMT 705 are **not** accepted as electives.) The second year of the program is dedicated entirely to MBA elective coursework. Although the Jones Graduate School of Business offers a variety of courses for students to take as electives, students may wish to take courses from other departments at Rice University. MBA electives are offered on the daytime schedule, the evening schedule, and the weekend schedule.

Policies for the MChE/MBA Coordinated Degrees Program

Additional Information

For additional information on these two degrees:

1. Please see the Chemical and Biomolecular Engineering website: <https://chbe.rice.edu/>
2. Please see the Jones Graduate School of Business website: <https://business.rice.edu/>

Opportunities for the MChE/MBA Coordinated Degrees Program

Additional Information

For additional information on these two degrees:

1. Please see the Chemical and Biomolecular Engineering website: <https://chbe.rice.edu/>
2. Please see the Jones Graduate School of Business website: <https://business.rice.edu/>