The professional master's degree in Applied Chemical Sciences aims to provide students with a wider range of science-related career opportunities. Students will take three semesters of advanced science and engineering courses together with business, ethics, and communication classes. In addition, a required internship will provide practical work experience. The MS in Applied Chemical Sciences (MSACS) degree prepares students with background in chemistry for employment in chemical industries or government organizations. The MSACS degree program offers three areas of specialization:

- Bioorganic Chemistry, or
- Computational Chemistry and Data Science, or
- Petroleum Chemistry.

Students will be able to pursue advanced coursework in the area that matches their interests.

The MS in Applied Chemical Sciences (MSACS) degree is part of the professional science master’s (PSM) program at Rice housed in the Wiess School of Natural Sciences. These master's degrees are designed for students seeking to gain further scientific core expertise coupled with enhanced management and communications skills. They instill a level of scholastic proficiency that exceeds that of the bachelor’s level, and create the cross-functional aptitudes needed in modern industry. Skills acquired in this program will allow students to move more easily into management careers in consulting or research and development, design, and marketing of new science-based products.

Applied Chemical Sciences does not currently offer an academic program at the undergraduate level.

**Master's Program**


**Director**

Anatoly B. Kolomeisky

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**Advisors**

Michelle Gilbertson
Anatoly B. Kolomeisky
James M. Tour
Eugene Zubarev

**Steering Committee**

David Alexander
Janet Braam
Mary Susan Cates
Daniel Cohan
Scott Egan
Thomas C. Killian
Kirstin Matthews
Andrew J. Meade
Loren Hopkins Raun
Evan Siemann
Daniel S. Wagner
Colin A. Zelt

*For Rice University degree-granting programs:

To view the list of official course offerings, please see Rice’s Course Catalog ([https://courses.rice.edu/admweb/ISWKSCAT.cat?p_action=cata](https://courses.rice.edu/admweb/ISWKSCAT.cat?p_action=cata))

To view the most recent semester's course schedule, please see Rice’s Course Schedule ([https://courses.rice.edu/admweb/ISWKSCAT.cat](https://courses.rice.edu/admweb/ISWKSCAT.cat))

**Description and Code Legend**

*Note:* Internally, the university uses the following descriptions, codes, and abbreviations for this academic program. The following is a quick reference:

**Course Catalog/Schedule**

- Course offerings/subject codes: Courses from various subjects may apply toward the graduate degree.

**Department Description and Code**

- Chemistry: CHEM

**Graduate Degree Description and Code**

- Master of Science in Applied Chemical Sciences degree: MSACS

**Graduate Degree Program Description and Code**

- Degree Program in Applied Chemical Sciences: ACSC

**CIP Code and Description**

1. ACSC Major/Program: CIP Code/Title: 41.0301 - Chemical Technology/Technician

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1. Classification of Instructional Programs (CIP) 2020 Codes and Descriptions from the National Center for Education Statistics: [https://nces.ed.gov/ipeds/cipcode/](https://nces.ed.gov/ipeds/cipcode/)