MASTER OF COMPUTER SCIENCE (MCS) DEGREE, ONLINE PROGRAM

Program Learning Outcomes for the MCS Degree

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

1. Solve advanced Computer Science problems. Students will acquire and apply a graduate-level understanding of material in sub-areas of Computer Science.
2. Design and implement complex software systems. Students will demonstrate skill in their design and implementation and function effectively in teams.
3. Communicate effectively to a client and user.

Requirements for the MCS Degree, Online Program

The Master of Computer Science, Online degree program is scheduled to start in Fall 2019 (starting in the Academic Year 2019-2020). Online courses are currently under development.

The MCS degree is a non-thesis master’s degree. For general university requirements, please see Non-Thesis Master's Degrees (ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-non-thesis-masters-degrees). For additional requirements, regulations, and procedures for all graduate programs, please see All Graduate Students (ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees). Students pursuing the MCS degree must complete:

- A minimum of 30 credit hours to satisfy degree requirements.
- A minimum of 30 credit hours of graduate-level study (coursework at the 500-level or above).
- A minimum of 24 credit hours must be taken at Rice University.
- A minimum overall GPA of 2.67.
- A minimum GPA of 2.67 in required coursework.

Students in the MCS degree program are expected to pay full tuition and all fees. No financial aid is available from the university or the department for MCS students. The MCS degree is a terminal degree for students intending to pursue a career in the computer industry.

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).) 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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<tbody>
<tr>
<td></td>
<td>Total Credit Hours Required for the MCS Degree, Online Program</td>
<td>30</td>
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<tr>
<td>Core Requirements</td>
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<tr>
<td>Computer Systems</td>
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<tr>
<td>COMP 6XX – COMPUTER ARCHITECTURE</td>
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<td>COMP 6XX – SYSTEMS SOFTWARE</td>
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<td>COMP 6XX – NETWORKS AND SECURITY</td>
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<td>COMP 6XX – DATABASES</td>
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<td>COMP 6XX – DATA VISUALIZATION</td>
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<td>COMP 6XX – MACHINE LEARNING</td>
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<td>COMP 6XX – BIG DATA</td>
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<td>Principles of Algorithms and Software</td>
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<td>COMP 6XX – ALGORITHMS</td>
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<td>COMP 6XX – PROGRAMMING LANGUAGES AND DESIGN</td>
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<td>COMP 6XX – SOFTWARE CONSTRUCTION PRACTICUM</td>
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<tr>
<td>Total Credit Hours</td>
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Footnotes and Additional Information

1 Computer Architecture, Databases, Algorithms, and Programming Languages and Design are pre-requisites to other required courses and must be taken first.

Policies for the MCS Degree, Online Program

Department of Computer Science Graduate Program Handbook

The General Announcements (GA) is the official Rice curriculum. As an additional resource for students, the department of Computer Science publishes a graduate program handbook, which can be found here: http://gradhandbooks.rice.edu/2018_19/Computer_Science_Graduate_Handbook.pdf.

Admission

The GRE test is highly recommended for all applicants, however it may be waived, upon discretion of the department’s Admission Committee, if an applicant has relevant industrial experience.

Financial Aid

No financial aid is available from Rice University or the Computer Science Department for students in the MCS degree program.

Transfer Credit

For Rice University’s policy regarding transfer credit, see Transfer Credit (ga.rice.edu/graduate-students/academic-policies-procedures/regulations-procedures-all-degrees/#transfer). Some departments and programs have additional restrictions on transfer credit. Students are encouraged to meet with their academic program’s advisor when considering transfer credit possibilities.
Departmental Transfer Credit Guidelines
Students pursuing the MCS degree should be aware of the following departmental transfer credit guidelines:

• No more than 6 credit hours of credit from another U.S. or international universities of similar standing at Rice may apply towards the degree. Transferred courses must be comparable in content and depth to the corresponding course at Rice, and must not have counted toward another degree.
• Request for transfer credit will be considered by the Computer Science Graduate Committee Chair, and the instructor of the equivalent Rice course.

Additional Information
For additional helpful information, please refer to the Graduate Study in Computer Science web page at https://www.cs.rice.edu/academics/graduate-studies/ or contact the department at gradapp@rice.edu.

Opportunities for the MCS Degree, Online Program
Fifth-Year Master’s Degree Option for Rice Undergraduate Students
Rice students have an option to pursue the Master of Computer Science (MCS) 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 MCS 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 MCS program director.

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).

For additional information, please see the Computer Science website: https://www.cs.rice.edu/