

Computer Science, Graduate Admission Requirements

Computer Science Programs

Admission Requirements

Applicants must meet the general graduate admission requirements of the Graduate School, described in the UMSL Bulletin. Students are considered for admission to the graduate program in Computer Science only after they have formally applied for admission through the Graduate School. Applications are completed on-line. Additional requirements are listed below.

Applicants must ~~have at least a bachelor's degree, preferably in computer science or in a related area. Applicants with bachelor's degrees outside of computer science must~~ demonstrate significant proficiency in computer science by showing competence (~~proving demonstrating~~ related academic or professional experience, ~~or taking a test~~) in the following areas. Courses in parentheses are UMSL ~~recommended undergraduate~~ courses that ~~can be used to fulfill~~ would satisfy the requirements.

1. Programming skills in C or C++ and Java (CMP SCI 1250 or CMP SCI 2250, and CMP SCI 2261)
2. Proficiency with Object-Oriented concepts and terminology (CMP SCI 2261)
3. Proficiency with dynamic data structures (CMP SCI 2250)
4. Proficiency with computer organization, architecture, or assembly level programming (CMP SCI 2700)
5. Proficiency with design and time/space analysis of algorithms (CMP SCI 3130)
6. Familiarity with Unix/Linux/OSX and with command-line ~~scripting with tools~~ processing, file system and permissions, shell and script programming (CMP SCI 2750)

Students must also have satisfactorily completed mathematics courses equivalent to the following UMSL courses:

1. ~~Two~~ ~~One~~ semester~~s~~ of calculus (MATH 1800 ~~and~~ ~~MATH 1900~~)
2. A course in ~~elementary linear algebra (MATH 2450)~~ discrete mathematics (MATH 3000)
3. An elementary course in probability or statistics (MATH 1320)

~~A student~~ ~~An applicant~~ missing some of the above requirements may be admitted on restricted status if there is strong supportive evidence in other areas. ~~The student will have to take the missing courses,~~ ~~Such restricted students would have to take the suggested courses for the missing requirements~~ or otherwise demonstrate proficiency. Special regulations of the Graduate School that apply to students on restricted status are described in the UMSL Bulletin.

Sign-offs from other departments affected by this proposal

None

Rationale

We are modifying the entry requirements to better align with the proposed changes to the MS program.