COMPUTER SCIENCE, MASTER OF SCIENCE (117)

Program Coordinator

Guangming Xing, guangming.xing@wku.edu, (270) 745-8848

This program is designed to provide post-graduate education for individuals seeking professional careers in computer science. Areas of emphasis are information systems, systems programming, computer networking, and algorithms.

Concentration(s)

- Net-centric (CSNC)

Joint Undergraduate Master's Program (JUMP)

This degree offers a Joint Undergraduate Master's Program (JUMP) which provides academically outstanding students the opportunity to complete both an undergraduate and graduate degree in an accelerated timeframe. Contact the graduate program coordinator for additional information.

Program Admission

Admission requirements include a minimum 3.0/4.0 undergraduate grade point average. Applicants must have a Bachelor's degree in computer science, mathematics, engineering, and other related fields. Minimum requirements include knowledge of programming in a high-level language and data structures. Prior course work or experiences in database applications, software engineering, and operating systems are preferred. Applicants who do not meet these criteria will be evaluated on a case-by-case basis.

Joint Undergraduate Master's Program (JUMP)

The Joint Undergraduate-Master's Program (JUMP) in Computer Science offers outstanding students the opportunity to earn both undergraduate and graduate degrees in an accelerated timeline.By allowing students to double count up to 9 graduate credit hours, the program provides a streamlined pathway to obtaining an **M.S. in Computer Science**.

In addition to meeting the criteria outlined in the **Graduate Catalog**, a applicants must fulfill the following program-specific requirements:

- Complete **CS 331** and **CS 339** with a grade of **B or better** in both courses, with at least one **A** between the two.

- Submit a **statement of purpose** outlining academic goals and motivation for pursuing the JUMP program.

- Provide one **letter of recommendation** from a WKU Computer Science faculty member.

Completion of a **thesis** is required for graduation from the program.

To apply, please email your statement of purpose and the name of the professor providing your recommendation letter to the program coordinator.

Graduate Studies Admission

Please refer to the admission section (http://catalog.wku.edu/graduate/admission/) of this catalog for Graduate Studies admission requirements.

Program Requirements (33 hours)

A minimum of 30 semester hours of course work is required, plus the research tool. Both thesis and non- thesis options are available. A minimum of six 500-level computer science courses is required. If any of the required courses have been completed for undergraduate credit, approved electives will be substituted. The research tool, under both options, must be met by successful completion of CS 500.

Code	Title	Hours
Required Courses		
CS 445G	Operating Systems II	3
CS 500	Research Methods and Projects	3
CS 530	Automata Theory and Compiler Construction	3
CS 543	Advanced Database Systems	3
CS 549	Analysis of Algorithms	3
CS 560	Software Engineering and Project Management	3
Electives		
Computer science courses approved by advisor or Net-Centric Concentration		15
Total Hours		**33**

Net-Centric Concentration

Code	Title	Hours
CS 450G	Computer Networks	3
CS 570	Security in Computing	3
CS 535	Cloud Computing	3
Select 6 hours of CS electives		6
Total Hours		**15**

[1]   Up to 6 credit hours.