

**Program:** Applied Mathematics and Computer Science  
**Major:** Applied Mathematics and Computer Science  
**Degree:** Master of Science (M.S.)

**Dept:** Mathematics & Statistics / Computer Science  
**College:** Mathematics and Science  
**Major Code:** 6660

**Applied Mathematics and Computer Science, M.S.**

This major is designed to prepare students to meet the demands of industry, business, and government for individuals with expertise in advanced applications of mathematics and computer science. While ensuring sound mathematical training, the degree program also concentrates on widely applicable computer science principles and provides further development of problem-solving skills.

**Graduate Advisor (Math):** **Dr. Brittany Bannish**  
 Email: [bbannish@uco.edu](mailto:bbannish@uco.edu)  
 Office: STEM 246  
 Phone: 405 - 974 - 5441

**Graduate Advisor (Comp. Sci.):** **Dr. Myung-Ah Park**  
 Email: [csggrad@uco.edu](mailto:csggrad@uco.edu)  
 Office: MCS 117  
 Phone: 405 - 974 - 5292

**Admission Requirements**

Submit the following items to:  
 Jackson College of Graduate Studies  
 100 N. University Drive, NUC 404  
 Edmond, OK 73034

Online application for admission ([www.uco.edu/graduate/](http://www.uco.edu/graduate/)).

- Official copies of undergraduate and graduate transcripts from each institution attended with all degrees posted. All transcripts must be from accredited institutions. Undergraduate transcripts must show:\*
  - A minimal 3.00 GPA overall and 3.00 GPA in the last 60 hours attempted.
  - Completion of the following prerequisite courses: Matrix Algebra or Linear Algebra, Differential Equations, Statistical Methods I, and Data Structures and Algorithms, and an upper-division OO design and programming course with design patterns.
- Students with a native language other than English must submit evidence of English language proficiency. See [Admission to Graduate Studies - English Language Proficiency \(pp. 17-18\)](#).

*\*Students falling below these standards may qualify for conditional admission. See [Admission to Graduate Studies \(p.17\)](#).*

**Other Requirements**

- Plan of Study. Each student must file a plan of study with their graduate program advisor and the Jackson College of Graduate Studies (JCGS) by the end of the first semester of graduate work. The plan must be signed and dated by the student and the graduate program advisor before it can be considered official.
- Academic Standards. Meet the following course work standards:
  - Overall GPA of 3.00 or higher.
  - No more than six hours of "C" or lower.
  - No more than six advisor-approved hours from traditional correspondence courses.
- Competency Examination. Achieve a minimum score of "pass" on competency exam.  
 NOTE: Request for re-examination will not be granted more than one time.
- Thesis (optional). If applicable, complete an acceptable thesis and successfully defend it in public. Submit two paper copies

- of the thesis and one electronic copy to the library through Proquest and submit the thesis' title page, original signature page, summary, and abstract page to the JCGS.
- Final Requirements. Apply for graduation through the JCGS by advertised deadline.

**Graduation Requirements**

**Required Courses.....24 Hours**

Course Prefix	Course No.	Course Title
CMSC	5043	Applications Database Systems
CMSC	5053	Operating Systems, <b>OR</b>
CMSC	5063	Computer Networks
CMSC	5283	Software Engineering I
CMSC	5023	Programming Languages, <b>OR</b>
CMSC	5273	Theory of Computing
MATH	5113	Operations Research 1
MATH	5143	Advanced Calculus for Applications 1
MATH	5853	Introduction to Graduate Research
STAT	5263	Computer Applications in Statistics

**Guided Electives.....9 Hours**

From MATH or STAT Courses ..... 3-6 Hours  
 From CMSC or SE Courses..... 3-6 Hours

**Thesis, Project, or Additional Course Work.....3 Hours**

Course Prefix	Course No.	Course Title
MATH	5980	Graduate Project, <b>OR</b>
MATH	5990	Graduate Thesis, <b>OR</b>
CMSC	5980	Graduate Project, <b>OR</b>
CMSC	5990	Graduate Thesis, <b>OR</b>
MATH	5xxx	Graduate MATH Course, <b>OR</b>
STAT	5xxx	Graduate STAT Course, <b>OR</b>
CMSC	5xxx	Graduate CMSC Course, <b>OR</b>
SE	5xxx	Graduate SE Course

**TOTAL HOURS REQUIRED ..... 36 HOURS**