Course & Capstone Requirements: (30 credits):
The student will choose a specialization in computer programming techniques and numerical methods or computer systems and software engineering. The student and faculty advisor will work out an appropriate plan of study within the framework of the following requirements.

Requirements:
Basic Mathematics Courses (12 credits) — Three (3) of MATH 515, 516, 519 and 520; and one (1) of MATH 523, 526 and STAT 551. Electives appropriate to the area of specialization as approved by the faculty advisor (18 credits); no more than nine of these credits may be earned in 400-level courses. Comprehensive Examination

Program Rationale:
The Master of Arts in Mathematics with Specialization in Computer Science provides an abstract introduction to mathematics at an advanced level, combined with an introduction to some advanced topics in computer science. This program is suitable for students wishing to improve their mathematics backgrounds before applying to doctoral programs and for professionals in the informational sciences.

Program Learning Outcomes:
Students in this program will be expected to:
• deeply understand analytic arguments, using such common notions as epsilon/delta, infinite sums, and limits, and expand this to include such considerations for more general spaces than the real numbers, such as spaces of functions;
• develop a basic understanding of measure theory and use it to study the Lebesgue integral;
• deeply understand basic algebraic and discrete notions, such as facts about vector spaces and counting arguments, and expand this to include ideas about rings and fields; and
• develop an understanding of the fundamentals of computer science and the application of mathematics to computer programming and/or software engineering.

Admission Requirements:
Applicants must hold a bachelor’s degree from a regionally accredited institution of higher education. Applicants must also have a minimum undergraduate GPA of 2.70 on a 4.00 point scale (where A is 4.00), or its equivalent, and good standing (3.00 GPA) in all post-baccalaureate course work.

The Department of Mathematical Sciences may, at its discretion, admit an applicant with a GPA between 2.40 and 2.70 on an unconditional basis provided that the prospective student has both sufficient undergraduate course work and standardized test scores that meet any of the following standards:
• GRE (math subject area): 600 (45th percentile)
• GRE (general test quantitative reasoning): 720 (80th percentile)
• GMAT (quantitative): 50 (95th percentile)

Contact: 860-832-2835 www.ccsu.edu/grad