WHY MINOR IN MATHEMATICS?
Mathematics is more than the numbers and arithmetic algorithms needed for monetary transactions, more than geometric proofs and trigonometric identities, and more than calculus and probability theory; the study of mathematics is the science of patterns and logical reasoning. A minor in Mathematics helps you develop a much deeper level of analytic ability and enhances your marketability whether you are entering into private industry or applying for graduate school. The Mathematics minor program is flexible enough to accommodate a wide variety of interests, depending on your major discipline and career interests.

WHAT WILL I LEARN WITH A MINOR IN MATHEMATICS?
- Learn how to solve mathematical problems choosing from a variety of courses depending on your field and interests
- Increase your own set of mathematical skills and learn how to use them in your field
- Present yourself as someone with strong analytic ability to prospective employers

WHAT ARE THE REQUIREMENTS?
Pre-requisites are listed in [ square brackets ].
1. Take MATH 2203 Calculus III [ MATH 2202 ]
2-5. And choose 11 additional hours, with at least 9 hours at the 3000 or 4000 level, from:
   - MATH 2306 Ordinary Differential Equations [ MATH 2202 ]
   - MATH 2332 Probability & Data Analysis [ MATH 1190 ]
   - MATH 2390 Introduction to Logic, Set Theory, & Proofs [ MATH 2202 ]
   - MATH 2345 Discrete Mathematics [ MATH 1112, 1113, or 1190 ]
   - MATH 3000 Software of Mathematics [ MATH 2202 & CS 1301* ]
   - MATH 3204 Calculus IV [ MATH 2203 ]
   - MATH 3260 Linear Algebra I [ MATH 1190 ]
   - MATH 3261 Numerical Methods I [ MATH 3260 & CS 1301* ]
   - MATH 3272 Linear Programming [ MATH 3260 ]
   - MATH 3322 Graph Theory [ MATH 2202 & CS 1304 ]
   - MATH 3324 Enumerative Combinatorics [ MATH 2390 or 2345 ]
   - MATH 3332 Probability & Inference [ MATH 2202 ]
   - MATH 3405 Probabilistic Foun. of Actuarial Science [ MATH 2203 & 3332 ]
   - MATH 3496 Elementary Number Theory [ MATH 2390 ]
   - MATH 3696 College Geometry [ MATH 2202 ]
   - MATH 4260 Linear Algebra II [ MATH 3260 ]
   - MATH 4310 Partial Differential Equations [ MATH 2203 & 2306 ]
   - MATH 4345 Numerical Methods II [ MATH 2306 & CS 1301* ]
   - MATH 4361 Modern Algebra I [ MATH 2390 & 3260 ]
   - MATH 4362 Modern Algebra II [ MATH 4361 ]
   - MATH 4381 Real Analysis I [ MATH 2390 ]
   - MATH 4382 Real Analysis II [ MATH 4381 ]
   - MATH 4391 Complex Analysis [ MATH 2203 ]
   - MATH 4400 Directed Study [ Professor & Department approval ]
   - MATH 4490 Special Topics [ varies, see schedule ]
   - MATH 4596 Elementary Number Theory [ MATH 2390 ]
   - MATH 4699 Undergraduate Research [ Professor & Department approval ]

WHAT ARE THE PREREQUISITES?
- MATH 1112 College Trigonometry or MATH 1113 Precalculus [ recommended placement from MAPT; see http://placement.kennesaw.edu ]
- MATH 1190 Calculus I [ MATH 1112/1113 or recommended placement from MAPT ]
- MATH 2202 Calculus II [ MATH 1190 ]
- CS 1301 Programming Principles I
- MATH 2203 Calculus III [ MATH 2202 ]
- MATH 3260 Linear Algebra I [ MATH 1190 ]
- MATH 3261 Numerical Methods I [ MATH 3260 & CS 1301* ]
- MATH 3272 Linear Programming [ MATH 3260 ]
- MATH 3322 Graph Theory [ MATH 2202 & CS 1304 ]
- MATH 3324 Enumerative Combinatorics [ MATH 2390 or 2345 ]
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- MATH 4382 Real Analysis II [ MATH 4381 ]
- MATH 4391 Complex Analysis [ MATH 2203 ]
- MATH 4400 Directed Study [ Professor & Department approval ]
- MATH 4490 Special Topics [ varies, see schedule ]
- MATH 4596 Elementary Number Theory [ MATH 2390 ]
- MATH 4699 Undergraduate Research [ Professor & Department approval ]

WHAT ELSE SHOULD I KNOW?
- If you decide to pursue the Mathematics minor, you will need to fill out the ‘Minor Declaration’ form, available within the College of Science & Mathematics Advising Center, in the Mathematics department, or online at http://math.kennesaw.edu/resources/forms.
- For a tentative two-year plan for when these MATH courses are available, please use http://math.kennesaw.edu/resources/advising/forecast.
- Per KSU policies regarding minors, please be aware of the following:
  1. The Mathematics minor is officially 15 hours of MATH courses; however, 9 of these hours in the Mathematics minor requirements cannot be duplicated within classes that are already included as part of your major degree requirements.
  2. Students must earn a grade of at least a ‘C’ or higher for prerequisites and for coursework within the minor.
  3. At least 9 hours of upper division coursework is required, of which at least 6 hours of these must be earned in residence at KSU.
  4. Returning to college after you have earned a baccalaureate degree to add or complete a minor is not permitted.
- Use http://catalog.kennesaw.edu for official details, course descriptions, and prerequisites.
- As part of your Petition to Graduate, you may need to fill out the ‘Minor Approval’ form, available with the Office of the Registrar, with the College of Science & Mathematics Advising Center, or with the Mathematics Minor Program Coordinator (see below).

WHO CAN I TALK TO?
For additional questions, please contact the Mathematics Minor Program Coordinator: Dr. Shangrong Deng. He is located at the Marietta campus in D-206 (Mathematics Building); his office phone is 470-578-7237, and his email is sdeng@kennesaw.edu.

College of Science and Mathematics
Department of Mathematics