



## Requirements for the Degree of Bachelor of Science in Applied Mathematics

	Required Hours and Grade Point Averages	
<b>Academic Year 2017 - 2018</b>	Minimum Total Hours ..... 120 Minimum Overall Grade Point Average ..... 2.00 Minimum Overall Grade Point Average in Major ..... 2.00 Minimum Overall Grade Point Average in Upper Division Courses ..... 3.00	<b>BS in Applied Mathematics Department of Mathematics</b>

**Please Note:**

While substantial effort will be made to insure accuracy of the material stated herein, Middle Georgia State University reserves the right to change any provision listed in this program of study, including but not limited to academic requirements for graduation, without actual notice to individual students. Every effort will be made to keep students apprised of such changes. If these degree requirements diverges from or conflicts with University System of Georgia Board of Regents (BoR) policy, BoR policy will always take precedence.

1. The Mathematics program of study is heavily dependent on meeting prerequisites. Many classes are arranged in a sequence so that certain course(s) must be successfully completed before starting the next courses.
  2. A minimum grade of C is required to satisfy any prerequisite requirements.
  3. Essential Skills courses must be completed in the first 30 hours of coursework.
  4. MGA students should plan to complete approximately 30 credit hours per academic year to complete this Bachelor's degree in 4 years.
  5. CORE curriculum classes marked with a double Asterisk (\*\*) are the recommended option to satisfy the degree requirements.
  6. Before taking **CLEP** or **DSST** consult with your advisor prior to the exam to make sure it will fit in the degree program.
- Additional directives: <http://www.mga.edu/testing-services/>

Subject	Requirements	
<b>Core Curriculum Requirements: 60 hours</b>		<b>Upper Division Requirements: 60 hours</b>
<b>AREA A: Essential Skills 9 Hours</b>	ENGL 1101 - English Composition I ENGL 1102 - English Composition II MATH 1112 – Trigonometry <b>OR</b> MATH 1113 – Precalculus Mathematics	<b>Grade Requirements:</b> A grade of at least a "C" must be earned in all upper division courses used to satisfy the major.  <b>Upper Level Core: 21 Credit Hours</b>  <ul style="list-style-type: none"> <li>• MATH 2120 - Discrete Mathematics (Credit: 3 hours)</li> <li>• MATH 3040 - Bridge to Higher Mathematics (Credit: 3 hours )</li> <li>• MATH 3207 – Communicating Mathematics (Credit: 4 hours )</li> <li>• MATH 3600 - Probability and Statistics (Credit: 3 hours )</li> <li>• MATH 4150 - Linear Algebra (Credit: 3 hours )</li> <li>• MATH 4621 - Mathematical Statistics I (Credit: 3 hours )</li> <li>• One hour of credit for MATH 1251 taken in Area D</li> <li>• One hour of credit for MATH 2270 taken in Area F</li> <li>• MATH 3251 - Applied Combinatorics (Credit: 3 hours)</li> <li>• MATH 3260 – Abstract Algebra (Credit: 3 hours)</li> <li>• MATH 4110 – Number Theory ( Credit: 3 hours)</li> <li>• MATH 4260 - Mathematical Analysis ( Credit: 3 hours)</li> <li>• MATH 4480 - Graph Theory (Credit: 3 hours)</li> <li>• MATH 4651 - Numerical Analysis I (Credit: 3 hours)</li> <li>• MATH 4901 - Operations Research I (Credit: 3 hours)</li> </ul>
<b>AREA B: Institutional Options 4 hours</b>	Perspectives Elective	
<b>AREA C: Humanities Electives 6 Hours</b>	Literature Elective Area C Elective	
<b>AREA D: Science, Math Technology 11 hours</b>	CHEM 1211K: Principles of Chemistry I CHEM 1212K: Principles of Chemistry II MATH 1251: Calculus I	

<p><b>AREA E: Social Sciences 12 hours</b></p>	<p>HIST 2111 or HIST 2112 - US History to/from 1865 POLS 1101 - American Government Area E Elective Area E Elective</p>	<p><b><u>Electives Credit: 18 hours</u></b> Electives are satisfied by completion of any mathematics course above the 3000 level <i>excluding</i> Early Childhood Education courses (MATH 3106, 3110, 3156).</p>
<p><b>AREA F: Major Field 18 Hours</b></p>	<p><b>CHOOSE ONE:</b> MATH 1371 - Computing for Math Sciences</p> <p><b>AND:</b> MATH 2252 - Calculus II MATH 2253 - Calculus III MATH 2260 - Introduction to Linear Algebra MATH 2270 - Differential Equations</p>	
<p><b>NOTES:</b></p>		