### Major Sequence and Degree Requirements

**Major:** BS MATHEMATICS  
**Option:** (Stats, Actuarial, or Without Option)  
**Major Field Requirements:** 45.0 credits  
**Other Requirements:** 18.0 - 27.0 credits  

When applicable, up to six of the REQUIRED RELATED courses may be credited toward the Liberal Arts Core subject to normal distribution rules.

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<th>Course No.</th>
<th>Short Title</th>
<th>C.H.</th>
<th>Grade</th>
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<th>Course No.</th>
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<tbody>
<tr>
<td>MATH 161</td>
<td>Calculus I*</td>
<td>4.0</td>
<td>------</td>
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<td>MATH 435</td>
<td>Math Statistics II</td>
<td>3.0</td>
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<td>MATH 211</td>
<td>Calculus II</td>
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<td>MATH 535</td>
<td>Statistical Methods I</td>
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<td>MATH 310</td>
<td>Intro Math Proof</td>
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<td>MATH 536</td>
<td>Statistical Methods II</td>
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<td>MATH 311</td>
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<td>MATH 537</td>
<td>Stat Prob Solv. Sem</td>
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<td>MATH 322</td>
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<td>MATH 335</td>
<td>Mathemathic Stats I</td>
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<td>MATH 345</td>
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<td>MATH 365</td>
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<td>MATH 375</td>
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<tr>
<td>MATH 464</td>
<td>Real Analysis I</td>
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*With permission, MATH 163 Honors Calculus I may be taken in place of MATH 161.

### Required Option Courses (9.0 - 10.0 credits)

Choose one of the following options: No Declared, Statistics, or Actuarial Science.

#### MATH Electives- No Declared Option (9.0 credits)

Students must choose one of MATH 422, MATH 435, MATH 445, MATH 465 or MATH 467. Another may be substituted with the approval of the department.

- MATH 353 Survey of Geometry 3.0
- MATH 355 Transfmrnl Geometry 3.0
- MATH 370 Operations Research 3.0
- MATH 393 Number Theory 3.0
- MATH 395 Intro Combinatorics 3.0
- MATH 422 Linear Algebra II 3.0
- MATH 435 Math Statistics II 3.0
- MATH 445 Abstract Algebra II 3.0
- MATH 457 Elem Diff Geometry 3.0
- MATH 465 Real Analysis II 3.0
- MATH 467 Partial Diff. Equations 3.0
- MATH 471 Math Modeling
- MATH 472 Financial Math 3.0
- MATH 483 Point - Set Topology 3.0
- MATH 4 ___ Topics in ___________ 
- MATH 4 ___ Topics in ___________ 
- MATH 535 Statistical Methods I 3.0
- MATH 536 Statistical Methods II 3.0
- MATH 566 Complex Variables 3.0
- MATH 592 Graph Theory 3.0
- MATH ___ ___________ 

Selected 500-level MATH courses may be substituted with departmental permission.

#### MATH Electives - Statistics Option (10.0 credits)

- MATH 435 Math Statistics II 3.0
- MATH 535 Statistical Methods I 3.0
- MATH 536 Statistical Methods II 3.0
- MATH 537 Stat Prob Solv. Sem 1.0

Recommended Courses: MATH 370, 375, 422

#### MATH Electives - Actuarial Science Option (10.0 credits)

- MATH 319 Calc & Act Sci Sem 1.0
- MATH 435 Math Statistics II 3.0
- MATH 535 Statistical Methods I 3.0

Choose one additional MATH course from the No Declared Option electives list.

MATH ___ ____________________

And for the Actuarial Science option:

Required Related: 6 credits
- ECON 101 Princ.of Macroecon. 3.0
- ECON 102 Princ. of Microecon. 3.0

Recommended Courses: MATH 422, 536, BUAD 161, 162

### Required Related Courses (18.0-27.0 credits)

- CSCI 161 Intro Computing I 4.0
- PHYS 231 General Physics I 5.0

#### ONE of the following options:

a) Three courses (at least 3.0 c.h. each) chosen from the departments of Biology, Chemistry, Computer Science, Earth Science, and Physics, which count toward the major in that department, and to include at least one of:
- BIOL 375
- CSCI 162
- ESCI 340
- ESCI 341
- ESCI 342
- PHYS 232

or

b) Four courses (at least 3.0 credit hours each) chosen from a single department, which count toward the major in that department.

- ___________________________
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