# Bachelor of Science in Mathematics

**CORE COURSES**
- MATH 122A & B or 125
- MATH 129
- MATH 223
- MATH 313
- MATH 323
- MATH 355

**SUPPORTING PROGRAMMING COURSE:**
- CSC 110 or ISTA 130

**EMPHASES**

**Comprehensive**
- MATH 413
- MATH 424
- MATH 425A & 425B

**Applied**
- MATH 422
- MATH 485

**Computer Science**
- One of the following sequences:
  - MATH 415A & 415B
  - MATH 464 & 466
  - MATH 475A & 475B

**Economics or Business**
- MATH 425A
- MATH 464

**Life Sciences**
- MATH 422
- MATH 464
- MATH 485
- MATH 454 or 456
- MATH 466 or 468

**Probability & Statistics**
- MATH 425A
- MATH 464 & 466
- MATH 413 or 468

**Education**
- MATH 425A
- MATH 464

**APPLICATION COURSES**

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1. The Bachelor of Science degree requires second-semester proficiency in a second language and a two-semester lab science sequence.
2. Upper division (300-400 level) units: 42 required. See Advisement Report (ADVIP) for details.
3. These courses are recommended for most math majors. Other courses that can be used are: CSC 127A or 227, ECE 175, MIS 301, MSE 350, and PHYS 305. These latter courses may have additional eligibility criteria.
4. MATH 313 replaced MATH 215 as of fall semester 2015. Students who completed 215 prior to fall 2015 or who have transfer credit equivalent to 215 will still fulfill this requirement, though they will not earn upper-division credit for the course.
5. All emphases except Education require a minor; the Applied, Comprehensive, and Probability & Statistics emphases allow a minor in any subject. The minor should be selected in consultation with faculty advisor. Double-dipping between the math major and a minor is NOT permitted, with the one exception of the introductory programming course, which may also be used in a minor. Double majors are not required to have a minor. If pursuing a double degree, consult with your major advisor regarding UA requirements.
6. The Computer Science emphasis requires a Computer Science minor.
7. The Economics/Business emphasis requires an Economics, Finance, or Business Administration minor, or a Thematic minor with an Econ, Finance, or Business Admin emphasis (approved by your advisor).
8. The Life Sciences emphasis requires a minor in a Life Sciences area.
9. This 400-level course is to be selected with approval from your math faculty advisor. See handbook for pre-approved list. At least 15 units of 400-level MATH course work are required for the major.
10. The pedagogy courses within this emphasis replace the minor requirement. No additional minor is required.
11. For the BS degree, except for the Education emphasis, students must complete six units of course work outside the Mathematics Department, approved by the major advisor requiring Calculus or higher as pre-requisite or co-requisite. See ADVIP for a list of courses that fulfill this requirement. Courses taken to fulfill other requirements of the degree may also be applied to this requirement.