## Bachelor of Science in Mathematics

## Learning Outcomes Crosswalk

The overall mission of the mathematics majors is to prepare students for the lifelong study and use of mathematics. As for the specific educational goals of the program, we expect our graduates to be able to:
A. Organize and analyze data and information and synthesize problem solutions using appropriate mathematical tools;
B. Formulate conjectures, find counterexamples and state and prove theorems carefully;
C. Learn mathematics outside of the classroom through self-study or group-study, including the ability to refresh knowledge;
D. Communicate mathematics effectively both orally and in writing;
E. Use technology to aid in the above.

| Course Prefix/Number | Course Title | Learning Outcomes | Credit Hours |
| :---: | :---: | :---: | :---: |
| MATH 125 or <br> CSIT 121 | Software for Mathematics <br> Computer Science I | A, E | 3 |
| MATH 122 | University Calculus 1 | A, E | 4 |
| MATH 123 | University Calculus II | A | 4 |
| MATH 210 | Mathematical Structures <br> and Proof | B, D (writing) | 4 |
| MATH 223 | University Calculus III | A | 4 |
| MATH 224 | Differential Equations | A, E | 3 |
| MATH 231 | Linear Algebra | A, B, E | 4 |
| MATH 323 | Intermediate Real Analysis | B, C, D (writing) | 3 |
| MATH 331 | Abstract Algebra I | B, C, D (writing) | 3 |
| MATH 405 | Senior Seminar | A, B, C, D, E | 1 |
| MATH 332 or | Abstract Algebra II | A, C, D (writing), E | 3 |
| MATH 420 | Advanced Calculus | A, C, D (writing), E | 3 |
| STAT 350 | Probability and Statistics | A, B, C, D | 3 |
| MATH/STAT Elective ${ }^{1}$ |  | A, B, C, D | 4 |
| MATH/STAT Elective ${ }^{1}$ |  |  | 3 |

${ }^{1}$ Two additional MATH or STAT courses numbered 311 or higher, as advised.

