

Note that this is a “Typical Program.” Actual programs will vary. See the Academic Catalog for official details.

MATHEMATICS B.S. DEGREE
Actuarial Track

Advisor: Dr. Dobbs

| Fall 2014 | | Spring 2015 | | | |
|-------------------|---|-------------|-------------------|--|-----------|
| <u>MA 165</u> : | <u>Intro to Discrete Mathematics</u> ² | 3 | <u>MA 172</u> : | <u>Analytic Geometry & Calculus II</u> | 4 |
| <u>MA 171</u> : | <u>Analytic Geometry & Calculus I</u> | 4 | HS 116: | Hist Persp on Cult & Civ II | 3 |
| HS 115: | Hist Persp on Cult & Civ I | 3 | EN 151: | Perspectives on Literature | 3 |
| EN 121: | Academic Writing and Research | 3 | BR 111: | Biblical History and Literature | 3 |
| EX 101: | Wellness for Life | 2 | | Core Curriculum Social Science | 3 |
| | total | 15 | | total | 16 |
| Fall 2015 | | Spring 2016 | | | |
| CS 116: | <u>Computer Concepts & Program I</u> ³ | 4 | * <u>MA 351</u> : | <u>Geometry</u> | 4 |
| <u>MA 205</u> : | <u>Intro to Mathematical Proofs</u> | 1 | * <u>MA 371</u> : | <u>Differential Equations</u> | 4 |
| <u>MA 273</u> : | <u>Analytic Geometry & Calculus III</u> | 4 | <u>MA 490</u> : | <u>Ind Study: Stats II</u> ² | 3 |
| 115: | Introduction to AR/DM/MU/TH | 2 | MI 285: | Core Curriculum Christian Faith | 3 |
| | Laboratory Science | 4 | | Creative Studio Arts | 1 |
| | total | 15 | | total | 15 |
| Fall 2016 | | Spring 2017 | | | |
| <u>EB 211</u> : | <u>Principles of Macroeconomics</u> | 3 | <u>EB 212</u> : | <u>Principles of Macroeconomics</u> | 3 |
| * <u>MA 431</u> : | <u>Introduction to Real Analysis</u> | 4 | * <u>MA 311</u> : | <u>Elements of Linear Algebra</u> | 4 |
| * <u>MA 471</u> : | <u>Mathematical Statistics</u> ² | 4 | PL____: | Introduction to Philosophy/Ethics | 3 |
| <u>MA 490</u> : | <u>Ind Study: Actuary Exam Prep</u> | 2 | | Laboratory Science | 4 |
| | Elective ⁴ | 3 | | | |
| | total | 16 | | total | 14 |
| Fall 2017 | | Spring 2018 | | | |
| * <u>MA 411</u> : | <u>Abstract Algebra</u> | 4 | <u>MA 490</u> : | <u>Independent Study</u> ⁵ | 4 |
| <u>MA 481</u> : | <u>Seminar in Math Sciences</u> | 1 | BR____: | Bible Elective [300+ level] | 3 |
| CO 215: | Public Speaking | 3 | | Electives ⁴ | 8 |
| | Electives ⁴ | 8 | | | |
| | total | 16 | | total | 15 |

NOTES:

- Students who take mathematics or computer science courses must demonstrate satisfactory mathematics placement scores prior to enrolling in their intended mathematics or computer science courses (*see mathematics placement policy in Catalog under Academic Information*).
- It is **strongly recommended** that the student attempt to pass the Society of Actuaries Exam P by the fall semester of junior year and complete an internship during the summer between junior and senior years. Preparation for Exam P requires completion of MA 471 and independent study. It is also recommended that the student attempt to pass Society of Actuaries Exam FM before graduation, as this will make the student a stronger candidate for jobs.
- CS 111 and CS 117 may be taken in place of CS 116.
- It is recommended that the student take courses from the business department, such as AC 241 Principles of Accounting I, BA 252 Business Organization and Management, BA 351 Business Law, BA 421 Financial Management, EB 381 Money and Banking, and OA 215DB Database. In addition, CS 216 Programming II and CS 415 Database Management Systems may also be helpful for actuarial work.
- An accounting, business or economics course numbered above 300 may be taken in place of 4 hours of MA 490.

*Indicates alternating year course.

Underlining indicates required for major.