

# Advising Guide for Freshman & Sophomore

# Mathematics with Actuarial Science

Mathematics with a concentration in Actuarial Science students will begin in the STEM Focus Area. Transfer credits, AP and other credit will be evaluated on an individual basis. Please speak with your academic advisor for your individual plan.

## General Education Courses

### (40 hours)

#### Freshman Requirement (1 hour)

COUN 1008 – Mastering College (1)

#### Communications (9 hours)

ENGL 1000 – Writing Studies I (3)

ENGL 1010 – Writing Studies II (3)

COMM 1000 – Public Discourse (3)

#### Humanities and Fine Arts (9 hours)

Fine Arts Course (3)

FYS 1001 – First Year Seminar (3)

Humanities or Fine Arts Course (3)

#### Mathematics (4)

MATH 2290 – Calculus I (4)

#### Physical and Life Sciences (8)

Life Science Course with Lab (4)

PHYS 2171/2172 – University Physics I and Lab(4)

#### Social and Behavioral Sciences (9 hours)

[courses must be from at least two different disciplines]

ECON 2301 – Microeconomics (3)

ECON 2302 – Macroeconomics (3)

Social and Behavioral Science Course (3)

## Major Courses

### (65-71 hours)

#### Mathematics Core Courses (47-50 hours)

MATH 2271 – Differential Equations (3)

MATH 2292 – Calculus II (4)

MATH 2294 – Calculus III (4)

MATH 2449 – Linear Algebra (3)

MATH 3099 – Jr. Seminar: Discrete Math (3)

MATH 4229 – Advanced Calculus (3)

MATH 4241 – Analysis I: Real Variables (3)

MATH 4250 – Applied Statistics – Time Series (3)

MATH 4350 – Found of Actuarial Science (3)

MATH 4450 – Theory of Interest (4)

MATH 4557 – Probability (3)

MATH 4637 – Mathematics Laboratory (3)

MATH 4800 – Mathematics Internship (1-4)

PHYS 2181/2182 – University Physics II (4)

STAT 4219 – Statistical Methods (3)

#### Actuarial Science Concentration Courses

##### (18 hours)

ACCT 2110 – Financial Accounting (3)

ECON 4101 – Econometrics (3)

FIN 3110 – Principles of Financial Mgmt (3)

FIN 3501 – Investments (3)

FIN 4501 – Financial Options and Futures (3)

FIN 4502 – Advanced Investments (3)

#### Computer Science Selective (3 hours)

*Select from the following courses:*

CPSC 2005, CPSC 2100, CPSC 3120, CPSC 3142, CPSC 3143 or PHYS 2500

## Electives (9-12 hours)

## Minimum Total 120

Students must earn a “C” or better in all general education courses.

Advising guide updated 10.4.2019