



Catalog year: 2020

Fulbright College Advising Center
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479.575.3307
fulbrightadvising.uark.edu

J. WILLIAM FULBRIGHT COLLEGE OF ARTS AND SCIENCES

MAJOR REQUIREMENTS for a BACHELOR OF SCIENCE IN MATHEMATICS

MINIMUM DEGREE CREDIT HOURS REQUIRED TO GRADUATE = 120 (CORE + MAJOR + GENERAL ELECTIVES)

Department of Mathematics
301 SCEN
479-575-3351
math.uark.edu

NATURAL SCIENCES (2 courses – 8 hours)

Choose from one of the following natural science sequences:

- BIOL 1543/1541L Principles of Biology
- Chose one additional BIOL course:
- BIOL 1603/1601L Principles of Zoology
- BIOL 1613/1611L Plant Biology
- BIOL 2013/2011L General Microbiology
- CHEM 1103/1101L University Chemistry I
- CHEM 1123/1121L University Chemistry II
- GEOS 1113/1111L Physical Geology
- GEOS 1133/1131L Earth Science
- PHYS 2054 University Physics I
- PHYS 2074 University Physics II

MATHEMATICS CORE (8 courses – 24 hours)

- MATH 2574 Calculus III
- MATH 2584 Elementary Differential Equations
- MATH 2803 Transition to Advance Math
- MATH 3093 Abstract Linear Algebra
- MATH 3113 Intro to Abstract Algebra
- MATH 4513 Advanced Calculus I
- MATH 4933 Mathematics Major Seminar

Note: It is recommended that MATH 2803 be taken as early as possible in the program.

Note: A 2.00 cumulative GPA on all work completed in the Department of Mathematical Sciences is required for graduation with a B.A. or B.S. degree.

COMPUTER PROGRAMMING (1 course – 4 hours)

- CSCE 2004 Programming Foundations I

ADDITIONAL REQUIREMENTS (choose one below)

- Completion of eight hours numbered 3000+ not in MATH/STAT with department approval.
- Completion of UA Teach curriculum.
- Completion of Fulbright Four Year Honors Core for a Bachelor of Science.

MATHEMATICS WRITING REQUIREMENT

- Satisfied by a senior or writing project under the direction of a faculty member (typically in MATH 4933) or by completing an honors thesis.

- Students must complete one concentration from the three listed below (Applied, Pure, or Statistics) -

CONCENTRATION 1: APPLIED (6 courses – 18-19 hours)

A program for the student who wishes to prepare for either applied work in mathematics or graduate work in some field other than mathematics or statistics.

- STAT 3013 Intro to Probability and Statistics
- or
- STAT 5103 Intro to Probability Theory
- MATH 4423 Intro to Partial Differential Equations
- MATH 4353 Numerical Linear Algebra
- MATH 4363 Numerical Analysis

Two additional MATH or STAT electives numbered 3000 or higher. (Students may also take CSCE 4133)

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CONCENTRATION 2: PURE (6 courses – 18 hours)

A program for the student who is seeking a broad background in mathematics or wishes to study mathematics at the graduate level.

- MATH 4113 Intro to Abstract Algebra II
- or
- MATH 4523 Advanced Calculus II
- MATH 4443 Complex Variables

MATH or STAT electives numbered 3000 or higher. (Students may also take CSCE 4133 Algorithms)

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CONCENTRATION 3: STATISTICS (7 courses – 19 hours)

A program for the student who wishes to emphasize statistics or who intends to study statistics at the graduate level.

- STAT 3013 Intro to Probability & Statistics
- OR
- STAT 5103 Intro to Probability Theory
- STAT 3003 Statistical Methods
- STAT 3001L Statistical Methods Lab or STAT 4101L Intro to R
- STAT 3113 Introduction to Mathematical Statistics
- STAT 4033 Nonparametric Statistical Methods

MATH or STAT electives numbered 3000 or higher. (Students may also take CSCE 4133 Algorithms.)

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