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## B.S. IN MATHEMATICAL SCIENCES

General Education Requirements

| Writing | Credits | Grade |
| :--- | :--- | :--- |
| ENGL 101 Writing \& Rhetoric I <br> (C grade or better required) |  |  |
| ENGL 200 Writing \& Rhetoric II <br> (C grade or better required; must complete 24 credits before <br> enrolling) |  |  |



| Civilization: Take 1 course from each area listed (9 credits total) |  |  |
| :--- | :---: | :---: |
| but no more than 6 credits in any one discipline OR take two 4- |  |  |
| credit interdisciplinary courses (8 credits total) that combine |  |  |
| elements of each area. |  |  | | Historical and Cultural Origins: 1 course from |
| :--- |
| Approved List G. |

Foreign Language: Must demonstrate competency through 102 level by course or placement test.

| 101 level |  |  |
| :--- | :--- | :--- |
| 102 level |  |  |

Human Behavior: Take 2 courses in different disciplines from Approved List J. Approved List D. This course must be in the biological sciences if the above sequence was in PHYS or CHEM OR must be in the physical sciences if the BIOL sequence was selected.

Complete one other course in the natural sciences OR complete a minor or second major offered outside the Department of Mathematical Sciences. Students in the Extended Teacher Preparation program are considered to have a second major outside the Department of Mathematical Sciences.


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The Bachelor of Science degree awarded by the Department of Mathematics and Applied Mathematics requires a minimum of 41 credits above the 100 level in courses labeled MATH, OPER, or STAT. Students choose the concentration in mathematics, applied mathematics or secondary mathematics teacher preparation. At least 24 of these credits must be at the 300-500 levels.
Applied Mathematics
MATH 301 Differential Equations; MATH 512 Complex Analysis for Applications; MATH 517-518 Methods of Applied Mathematics; and six additional upper-level credits in mathematical sciences. (MATH 302 Numerical Calculus, MATH 437 Applied Partial Differential Equations, and MATH 511
Applied Linear Algebra are recommended.)

## Mathematics

MATH 501 Intro to Abstract Algebra; MATH 507-508 Analysis I-II; MATH 509 General Topology; and six additional upper-level credits in mathematical sciences.
Secondary Teacher Preparation
MATH 327 Mathematical Modeling; MATH 504 Algebraic Structures and Functions; MATH 505 Modern Geometry; MATH 507 Analysis I; MATH 530 History of Mathematics; MATH 554 Using Technology in the Teaching of Mathematics

## CONCENTRATION

| Mathematics Core: Required for all <br> Mathematical Science majors. | Credits |  |
| :--- | :--- | :--- | Grade | MATH 200 Calculus with Analytic Geometry I |  |
| :--- | :--- |
| STAT 212 Concepts of Statistics |  |
| MATH 201Calculus with Analytics Geometry II |  |
| MATH 255 Introduction to Computational <br> Mathematics |  |
| MATH 300 Introduction to Mathematical <br> Reasoning |  |
| MATH 307 Multivariate Calculus |  |
| MATH 310 Linear Algebra |  |
| MATH 490 Mathematical Expositions |  |

Concentration: Other required courses in mathematics

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| Electives: Select additional courses to <br> satisfy the 120 credits needed to graduate. | Credits | Grade |
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## Additional degree requirements

- Cumulative 2.00 GPA
- 2.00 GPA in the major
- 45 credits in upper level courses or the equivalent
- 120 Total Earned Hours
- 30 At least 30 of the last 45 credits taken at VCU
- Computer literacy requirement (must either pass Computer Proficiency Assessment or pass INFO 160,161, \& 162 courses or equivalent transfer course)


[^0]:    - Has VCCS Associate Degree

