COLLEGE OF SCIENCE
MATHEMATICS
VIRGINIA TECH.

SAMPLE PROGRAM OF STUDY
Total of 120 credit hours required for graduation
There is considerable flexibility in designing a program of study. The example given below is not likely to fit every situation and is provided for information as you develop your own plan with your academic advisor.
Fall Semester Freshman

| MATH $\mathbf{1 2 2 5}$ | Calculus of a Single Variable Pathway 5f | Credits |
| :--- | :--- | :---: |
| MATH 1004 | Discovering Mathematics I (fall only) | 1 |
| MATH 1454 | Introduction to Math Programming (fall only) | 3 |
| ENGL 1105 | First-Year Writing, Pathway 1f | 3 |
|  | Pathway 2 | 3 |
|  | Pathway 3 | 3 |

Fall Semester Sophomore

| MATH 2114 | Introduction to Linear Algebra | 3 |
| :--- | :--- | :---: |
| MATH 2204 | Intro Multivariable Calculus | 3 |
|  | Pathway 3 | 3 |
|  | Pathway 4 | 3 |
|  | Pathway 6a | 3 |

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Spring Semester Freshman

| MATH 1226 | Calculus of a Single Variable Pathway 5f | 4 |
| :--- | :--- | :---: |
| MATH 1044 | Discovering Mathematics II (spring only) | 2 |
| ENGL 1106 | First-Year Writing, Pathway 1f | 3 |
|  | Pathway 2 | 3 |
|  | Pathway 7² | 3 |

Spring Semester Sophomore Credits

| MATH 2214 | Intro to Differential Equations Pathway 5a | 3 |
| :--- | :--- | :---: |
| MATH 3034 | Intro to Proofs (Prereq: C in MATH 2114) | 3 |
|  | Pathway 4 | 3 |
|  | Pathway 6d | 3 |
|  | Free Elective | 3 |

Spring Semester Junior

| MATH $\mathbf{3 1 4 4}$ | Linear Algebra I | Credits |
| :--- | :---: | :---: |
| MATH 3224 | Advanced Calculus | 3 |
|  | Math-Related Course | 3 |
|  | Free Elective | 3 |
| Free Elective | 3 |  |

Spring Semester Senior

| MATH 4XXX | 4000-level sequence ${ }^{\mathbf{3}}$ |
| :---: | :---: |
| MATH 4XXX | 4000-level MATH course ${ }^{4}$ |
| Math-Related Course | 3 |
| Free Elective | 3 |
| Free Elective | 3 |

Fall Semester Junior

| MATH 3124 | Modern Algebra | Credits |
| :--- | :--- | :---: |
| MATH 3214 | Calculus of Several Variables | 3 |
|  | Math-Related Course | 3 |
|  | Pathway 1a | 3 |
|  | Free Elective | 3 |

Fall Semester Senior

| MATH 4XXX | 4000-level sequence ${ }^{\mathbf{3}}$ | 3 |
| :--- | :--- | :---: |
| MATH 4XXX | 4000-level MATH course ${ }^{4}$ | 3 |
|  | Math-Related Course | 3 |
|  | Free Elective | 3 |
|  | Free Elective | 3 |

${ }^{1}$ MATH 1225 is a corequisite for MATH 1454. Discuss choice of programming course with academic advisor.
${ }^{2}$ In Pathways, some courses can be used for Pathway Concept 7 plus one other Concept, but no other double-counting is permitted.
${ }^{3}$ Select from the following combinations:

- Any two of the following: $4124,4134,4144,4175,4176,5114$
- 4225 together with one of the following: 4226 or 4234
- 4245 together with one of the following: $4246,4254,4454,4425,4564$
- 4425 and 4426
- Any two of the following: 4445, 4446, 4414
- 5454 and 5464

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[^0]:    ${ }^{4}$ At most one of 4044 and 4334 is allowed. At most one of 4425 and 4564 is allowed. $4574,4625,4626,4644,4654$, and 4664 may not be used. Students must petition the Associate Chair to use 4974, 4984, or 4994.

