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## Department of Mathematics and Statistics

## APPLIED MATH CONCENTRATION

## Lower Division Requirements

| Course | Title | Semester |
| :--- | :--- | :--- |
| Math 131 | Calculus I |  |
| Math 132 | Calculus II |  |
| Math 233 | Calculus III |  |
| Math 235 | Linear Algebra |  |
| CICS 110 <br> (or Info 190S <br> or CS 121) | Programming |  |
| Math 300 <br> (or CS 250) | Intro to <br> Abstract Math |  |
| Math 370 | Junior Year <br> Writing |  |

## Integrative Experience (IE) for Primary Math/Stat Majors

One of the following:

- Math 455
- Math 456
- Math 475
- Stat 525

The IE can also satisfy another requirement on this page.

## Upper Division Requirements

## Advanced Calculus

Replaces the requirement of Math 425, which is no longer offered.
One of: Math 405/397C, Math 421, Math 425, Math 523H, Math 524, Math 532H, Math 534H, Math 552, Math 597F, Math 597U, Stat 516, or Stat 525

| Course | Semester |
| :--- | :--- |
|  |  |
|  |  |

## Comments:

Up to two courses on this page (outside of yellow boxes) can count towards the plus-one master's. Two more classes can count towards the plus-one master's, but they must be taken in addition to the courses listed in yellow boxes.

## Upper Division Requirements (Continued)

Diff Eqs, Lin Alg for Applied Math, and Scientific Computing

| Course | Title | Semester |
| :--- | :--- | :--- |
| Math 331 | Differential <br> Equations |  |
| Math 545 | Adv. Linear <br> Algebra |  |
| Math 551 | Scientific <br> Computing |  |

One of: Math 456 (satisfies Math/Stat IE requirement), Math 532H, Math 534H, Math 552.

| Course | Semester |
| :--- | :--- |
|  |  |

## Upper Division Electives

Choose three (3) additional 3 credit Math or Stat courses numbered 390 or higher (except Stat 501).

Primary majors may use one approved course from outside the department toward this requirement. Secondary majors may use two. The list of approved courses is at: https://www.math.umass.edu/undergraduate/minor\#course\ list

| Course | Semester |
| :--- | :--- |
|  |  |
|  |  |
|  |  |

Additional elective \# 1, to be counted towards master's
Additional elective \# 2, to be counted towards master's

## MS Degree requires

- Math 532, 534, 651, Stat 607

Rest include:

- At most two approved courses under 600
- MATH 545, 523, 524, STAT 535 allowed
- MATH 551, 552, 537 **not** allowed
- Any Math/Stat courses 600 or higher
- Approved outside courses

