

# QUANTITATIVE ANALYSIS AND OPERATIONS RESEARCH CONCENTRATION, MATHEMATICAL SCIENCES (BA)

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This concentration provides students with the mathematical background to work in finance, computer applications, and production scheduling and forecasting

## Course Requirements

| Course                         | Title                                    | Quarter Hours |
|--------------------------------|--|---------------|
| MAT 351                        | PROBABILITY AND STATISTICS I             | 4             |
| MAT 352                        | PROBABILITY AND STATISTICS II            | 4             |
| MAT 353                        | PROBABILITY AND STATISTICS III           | 4             |
| Select three of the following: |  | 12            |
| MAT 356                        | APPLIED REGRESSION ANALYSIS              |               |
| MAT 358                        | APPLIED TIME SERIES AND FORECASTING      |               |
| MAT 387                        | OPERATIONS RESEARCH: LINEAR PROGRAMMING  |               |
| MAT 388                        | OPERATIONS RESEARCH: OPTIMIZATION THEORY |               |

## Open Electives

Open elective credit also is required to meet the minimum graduation requirement of 192 hours.

## Additional Recommended Courses

| Course  | Title                         | Quarter Hours |
|---------|-------------------------------|---------------|
| MAT 370 | ADVANCED LINEAR ALGEBRA       |               |
| MAT 384 | MATHEMATICAL MODELING         |               |
| MAT 385 | NUMERICAL ANALYSIS I          |               |
| MAT 386 | NUMERICAL ANALYSIS II         |               |
| MAT 389 | TOPICS IN OPERATIONS RESEARCH |               |
| CSC 389 | THEORY OF COMPUTATION         |               |