

# Curriculum: Graduate Certificate in Business Analytics

## Graduate Certificate in Business Analytics

Effective September 2013

(12 credits)

### Required Courses

(2 courses)

| <u>Course</u> | <u>Title</u>                                   | <u>Prerequisite</u> |
|---------------|--|---------------------|
| ST 625        | Quantitative Analysis for Business             | GR521               |
| ST 635        | Intermediate Statistical Modeling for Business | ST625               |

### Elective Courses

(2 courses)

#### Methodology Courses

Select one of the following methodology courses, although students may not take both EC621 and MA611.

| <u>Course</u> | <u>Title</u>                                       | <u>Prerequisite</u>                     |
|---------------|--|---|
| EC 621        | Business & Economic Forecasting                    | Pre-Req: GR521 and Pre or Co-Req: GR522 |
| MA 610        | Optimization and Simulation for Business Decisions | GR521                                   |
| MA 611        | Time Series Analysis                               | ST625                                   |
| MA 710        | Data Mining  | ST635                                   |
| MK 726        | Customer Data Analysis and Relationship Marketing  | Pre or Co-Req: GR523                    |

#### Application Courses

Select one course from the above list OR from the following application courses.

| <u>Course</u> | <u>Title</u>                                 | <u>Prerequisite</u>                 |
|---------------|--|-------------------------------------|
| CS 602        | Data-Driven Development with Python          | None                                |
| CS 605 **     | Data Management and SQL for Analytics        | None                                |
| CS 753        | Business Intelligence Methods & Technologies | CS605 or IPM652                     |
| EC 611        | The Macroeconomics of Financial Markets      | GR521 and GR522 and GR524 and GR525 |
| EC 631        | Market Structure and Firm Strategy           | GR522                               |
| MA 705        | Data Science                                 | Pre or Co-Req: GR521                |
| MA 706        | Design of Experiments for Business           | ST625                               |
| MA 707        | Introduction to Machine Learning             | ST635 and MA705                     |
| MK 711        | Marketing Research & Analysis                | Pre or Co-Req: GR521 and GR523      |
| ST 701        | Internship in Business Data Analysis         | ST635                               |

### ADVISING GUIDANCE

- All course work must be completed within five years
- All course prerequisites must be satisfied. Please note that the stated prerequisites of a course may also have a prerequisite that must be satisfied.
- \*\*Course title changed in September 2018.