Eighteen units must be in the major earned in the ISE Department.

Graduate courses used toward a degree completed elsewhere may not be applied toward a master's degree at USC. If courses were not used toward a completed degree, the maximum number of transfer credits that may be applied towards a 30 unit master's degree, subject to departmental approval, is four units.

Required Prerequisite Courses

A computer programming language Calc-based Probability and Statistics (e.g., ISE 220, ISE 225)

MAJOR - REQUIRED COURSES - 12 Units

| Semester | Course | Prerequisite |
|----------|--|--------------|
| | DSCI 559 Introduction to Data Management (3, Sp) | |
| | ISE 529 Predictive Analytics (3, FaSp) | |
| | ISE 530 Optimization Methods for Analytics (3, FaSp) | |
| | ISE 535 Data Mining (3, FaSp) | |

Select one course from Group A – 3 Units

Group A:

| Semester | Course | Prerequisite |
|----------|--|------------------|
| | ISE 533 Integrative Analytics (3, Sp) * | ISE 529, ISE 530 |
| | ISE 534 Data Analytics Consulting (3, FaSp) | ISE 529, ISE 530 |
| | ISE 580 Performance Analysis with Simulation (3, FaSp) * | |

Select two courses from Group B - 6 Units Group B:

| Semester | Course | Prerequisite |
|----------|--|------------------|
| | ISE 533 Integrative Analytics (3, Sp) * | ISE 529, ISE 530 |
| | ISE 537 Financial Analytics (3, Fa) | |
| | ISE 538 Performance Analysis using Markov Models (3, FaSp) | |
| | ISE 540 Text Analytics (3, Fa) | |
| | ISE 543 Enterprise Business Intelligence & Systems Analytics (3, Sp) | |
| | ISE 562 Decision Analysis (3, FaSp) | |
| | ISE 580 Performance Analysis with Simulation (3, FaSp) * | |

* may count towards Group A or Group B but not both

Electives – 9 units, subject to approval by advisor –

| Semester | Course | Prerequisite |
|----------|---|--------------|
| | 1- ISE Elective (3 units) | |
| | 1- Free Elective subject to advisor's approval (3units) | |
| | 1- Free Elective subject to advisor's approval (3units) | |

Master of Science in Analytics Total 30 units