

Twenty four 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 28- unit master's degree, subject to departmental approval, is four units.

Required Prerequisite Courses (or equivalent)

A computer programming language (e.g. ISE 150)

Calc-based Probability and Statistics (e.g., ISE 220, ISE 225)

Calculus I, II, III and Linear Algebra

MAJOR - REQUIRED COURSES – 12 Units

Semester	Course	Prerequisite
	ISE 521 Foundations of Analytics (4, FaSp)	
	ISE 529 Predictive Analytics (4, FaSp)	
	ISE 530 Optimization Methods for Analytics (4, FaSp)	

Project Course: 4 units

Choose One

Semester	Course	Prerequisite
	ISE 503 Health Analytics (4, Sp) *	ISE 529, ISE 530
	ISE 534 Data Analytics Consulting (4, FaSp)	ISE 529
	ISE 543 Enterprise Business Intelligence and Systems Analytics (4, Sp) *	
	ISE 558 Data Management for Analytics (4, FaSp) *	

Methodology-Based Courses: 8 units

Choose One

Semester	Course	Prerequisite
	ISE 503 Health Analytics (4, Sp) *	
	ISE 525 Design of Experiments (4, Sp)	
	ISE 535 Data Mining (4, Sp)	
	ISE 537 Financial Analytics (4, FaSp)	
	ISE 538 Performance Analysis using Markov Models (4, Fa)	
	ISE 540 Text Analytics (4, FaSp)	
	ISE 541 Time Series and Spatial Data Analysis (4, Fa)	
	ISE 543 Enterprise Business Intelligence and Systems Analytics (4, Sp)	
	ISE 547 Applied Generative Artificial Intelligence for Enterprises (4, Sp)	
	ISE 558 Data Management for Analytics (4, FaSp) *	
	ISE 562 Decision Analysis (4, FaSp)	
	ISE 580 Performance Analysis with Simulation (4, FaSp) *	

* May count towards Project or Methodology course, but not both

Electives – 4 units, subject to approval by advisor

Semester	Course	Prerequisite

Master of Science in Analytics
Total Minimum Units: 28