

Master of Science Analytics

Cesar Acosta Ph.D.

Department of Industrial and Systems Engineering University of Southern California



Contact info

Cesar Acosta

MS Analytics, Program Director

- GER 216
- <u>acostame@usc.edu</u>
- https://ise.usc.edu/people/core-faculty/



ANALYTICS

MS in Analytics is designed for those interested in a data science career

It provides the students the three key skills needed to succeed as a Data Analytics professional

- to organize the data
- to discover information from the data
- to make decision based on facts



ANALYTICS

You will learn how to apply

- Statistical learning
- Machine learning methods

for the three key domains of Data Analytics

- Descriptive
- Predictive
- Prescriptive Analytics



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Required
     INF 559 Introduction to Data Management (3, Sp)
     ISE 529
              Predictive Analytics (3, FaSp)
     ISE 530
              Optimization Methods for Analytics (3, FaSp)
     ISE 562
              Decision Analysis (3, FaSp)
     ISE 533
               Integrative Analytics (3, Sp)
                                                                 ISE 529, ISE 530
Select one course from
     ISE 538 Markov Models for Performance Analysis (3, SP)
     ISE 580 Performance Modeling with Simulation (3, FaSp)
Electives – 12 units
      INF or CSCI (3 or 4 units)
      ISE Elective (3 units)
      Additional Elective subject to adviser's approval (3units)
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INF or CSCI (3 or 4 units)

ISE Elective (3 units)

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ISE 599 Data Mining (with R)



Electives – 12 units

INF or CSCI (3 or 4 units)

ISE Elective (3 units)

Additional Elective subject to adviser's approval (3units)

- ISE 599 Text Analytics
- ISE 599 Financial Analytics
- ISE 599 Consulting Data Analytics (Sp)



Electives – 12 units
INF or CSCI (3 or 4 units)
ISE Elective (3 units)
Additional Elective subject to adviser's approval (3units)
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- Computer Science Department (CSCI or INF)
- Marshall School of Business (DSO)



Electives – 12 units

INF or CSCI (3 or 4 units)

ISE Elective (3 units)

Additional Elective subject to adviser's approval (3units)

- CSCI 571 Web Technologies (Fall)
- CSCI 585 Database Systems
- CSCI 570 Analysis of Algorithms
- CSCI 572 Information Retrieval and Web Search Engines (Sp)
- INF 551 Foundations of Data Management
- INF 552 Machine Learning
- INF 553 Foundations Applications of Data Mining



Electives – 12 units

INF or CSCI (3 or 4 units)

ISE Elective (3 units)

Additional Elective subject to adviser's approval (3units)

- DSO 562 Fraud Analytics
- DSO 566 Marketing Analytics
- DSO 528 Data Warehousing, Business Intelligence and Data Mining
- DSO 545 Stat Computing and Data Visualization
- DSO 522 Time Series Analysis for Forecasting



OTHER TOPICS

- Program duration
- Data Science
- On-line training
- Languages
- CV
- Networking
- Job Search and Skills
- Linkedin, Github, YouTube



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