

GRADUATE COURSE SERIES
IN
DATA ANALYTICS

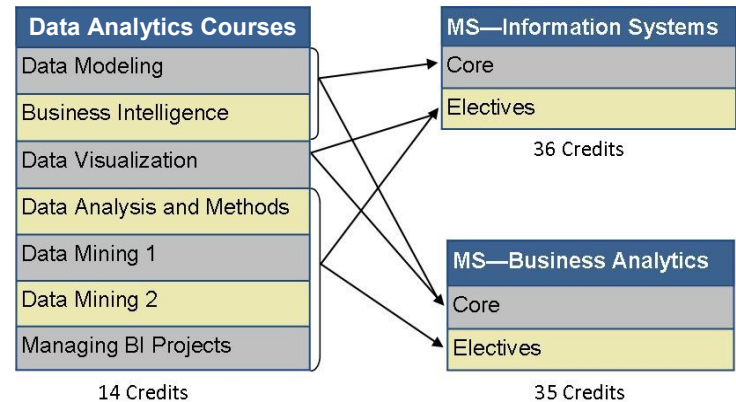
Graduate Course Series in Data Analytics

The University of Cincinnati Carl H. Lindner College of Business is pleased to offer a series of graduate-level courses in Data Analytics. Data Analytics is now driving decision-making throughout the world of business and will be one of the highest IT priorities in leading companies for many years to come.

The series of courses prepares students to lead Data Analytics initiatives in their businesses by providing a broad and deep understanding of the fundamentals of Data Analytics. In designing the course series, UC has partnered with LÛCRUM, Inc., a leading Data Analytics consulting firm and industry thought leader based in Cincinnati.

UC plans to offer a total of 14 credit hours in the course series, all of which count towards the Master of Science (MS) - Business Analytics and the MS – Information Systems degrees. Additionally, all of the classes are offered in the evening hours for the convenience of business professionals. UC will begin offering these courses in the Winter Quarter of the 2011/2012 school year.

Data Analytics Courses to Masters Mapping



Data Analytics Course Descriptions

Data Modeling (2 credit hours)

This course provides in-depth coverage of the principles of data modeling. Starting at the highest level of abstraction, the data requirements culled out from user requirements specifications are rendered as a conceptual data model using the entity-relationship modeling grammar.

Business Intelligence (2 credit hours)

This course covers data warehousing, dimensional modeling, and on-line analytic processing (OLAP). Students will learn the various architectural models for Data Warehouses and the tradeoffs among them. The course will also cover principles of dimensional modeling, star schemas, the role of time in data warehouses, and ETL processes.

Data Visualization

(2 credit hours)

This course provides an introduction as well as hands-on experience in data visualization. It introduces students to design principles for creating meaningful displays of quantitative and qualitative data to facilitate managerial decision making.

Data Analysis Methods

(2 credit hours)

This course covers: Fitting and drawing inferences from simple and multiple linear regression models; Variable selection procedures; Residual diagnostics; Cross validation; Logistic regression for binary response; Introduction to SAS and R for Linear and Logistic regression and change management, and maintenance/retirement.

Data Mining 1

(2 credit hours)

Topics include: Data Processing, Variable Selection for linear regression and generalized linear regression, Out-of-sample Cross Validation, Generalized Additive models, nonparametric smoothing methods, Classification and Regression Tree, Neural Networks, and Monte Carlo Simulations.

Data Mining 2

(2 credit hours)

Topics include: Missing Data Imputation, Bootstrapping, Boosting and Multiple Additive Regression Trees, Bayesian Trees, Support Vector Machine, Discriminate Analysis, Cluster Analysis, Factor analysis, and Principle Component Analysis.

Managing Business Intelligence Projects

(2 credit hours)

This course will introduce students to the major challenges (and solutions) at each stage in the life cycle of Business Intelligence Projects, including cost-benefit analysis, electing user requirements, design and development, implementation.

Registration FAQs

Q: When can I register for the Winter Quarter courses?
A: Registration for the Winter Quarter begins November 14, 2011.

Q: What courses will be offered in the Winter and Spring Quarters?
A: A Special Topics course in Data Visualization and a Special Topics course in Managing Business Intelligence Projects will be offered in both the Winter and Spring Quarters.

Q: Who teaches the courses?
A: Professors from UC's College of Business in conjunction with LUCRUM adjunct professors, combining graduate level teaching with real-world experience.

Q: How do I apply?
A: Go to <http://business.uc.edu/programs/graduate/mba/admission/non-matriculated-applicants.html>, complete the application for non-matriculated students and return it to the Graduate Programs Office.

Q: How much do the courses cost?
A: For the Winter and Spring Quarters of the 2011/2012 school year, the cost is \$562.00 per credit hour.

Q: Where will the courses be offered?
A: UC's Uptown Campus (Clifton).

Registration and Information

Graduate Programs Office

(513) 556-7021

Business Intelligence

University of Cincinnati Carl H. Lindner College of Business & LÛCRUM, Inc. *Symposium*

The University of Cincinnati Carl H. Lindner College of Business and LÛCRUM, Inc., have partnered to host quarterly Business Intelligence Symposia to educate and discuss best practices and lessons learned and provide a platform for networking with business executives and IT professionals. For more information, go to www.lucruminc.com.

Courses developed in partnership with LÛCRUM, Inc.

LÛCRUM is a leader in developing Business Intelligence solutions.