# MANAGERIAL ANALYTICS

Subject-area course lists indicate courses currently active for offering at the University of Louisville. Not all courses are scheduled in any given academic term. For class offerings in a specific semester, refer to the Schedule of Classes (https://csprd.louisville.edu/psp/ps\_class/EMPLOYEE/PSFT\_CS/c/COMMUNITY\_ACCESS.CLASS\_SEARCH./x/? state=62dab551a0d600a5e8237359c50704e59007&duo\_code=sjUx2OSTj2

500-level courses generally are included in both the undergraduate- and graduate-level course listings; however, specific course/section offerings may vary between semesters. Students are responsible for ensuring that they enroll in courses that are applicable to their particular academic programs.

### **Course Fees**

Some courses may carry fees beyond the standard tuition costs to cover additional support or materials. Program-, subject- and course-specific fee information can be found on the Office of the Bursar website (https://louisville.edu/bursar/tuitionfee/university-fees/).

ANLY 610. Database

1.5 Units

Term Typically Offered: Fall, Spring, Summer

Prerequisite(s): (MBA 631 or ANLY 631) or (MBA 602 and MBA 651).

Description: The course introduces issues, principles, and technologies used in managing organizational data. It covers concepts and skills for developing, accessing, and administering data related technologies with a strong focus in developing relational data models, relational databases, and formulating and executing complex quieries. It also discusses the role of data management technologies and practices in an organizational setting and how such tecnologies and practices affect business strategy, business processes, and organizational structure. This course has a strong hands-on component. The course will make extensive use of a leading relational database management software and structured query language (SQL).

For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)

ANLY 615. Artificial Intelligence

1.5 Units

Term Typically Offered: Fall, Spring, Summer

Prerequisite(s): ANLY 610.

Description: This course introduces the fundamental concepts, techniques, technologies, and practices of Al. Hands-on experiences in design and implementation are provided in meaningful business contexts. In addition you will be introduced to a leading data mining tool such as SAS Enterprise Miner. Homework is expected after each class session. Such work will build on the concepts and skills introduced in class. You will use a leading machine learning platform such as SAS Enterprise Miner to finish class work and assignments.

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**ANLY 620. Advanced Business Analytics** 

1.5 Units

Term Typically Offered: Fall, Spring, Summer

Prerequisite(s): (MBA 631 or ANLY 631) or (MBA 602 and MBA 651). Description: The volume of data generated every day continues to grow exponentially. Being able to mine the available data for information is now a fundamental skill sought by organizations. This course challenges and teaches students how to use powerful statistical tools (e.g., SAS and SPSS) to handle data that comes in a variety of forms and sizes in more โดยทั้งโลย 23 23 รู้ เห็นอนังเลย Situations. Students will participate in extensive hands-on work solving realistic business problems. This course may guide students with handling advanced regression analysis that deals with real-life models and interaction variables, time series analysis, and topics such as path modeling. After taking this course, students should: (1) Approach business problems data-analytically; (2) Think systematically whether and how data can help make betterinformed decisions; (3) Be able to interact competently with business analytical tools; and (4) Have a hands-on experience mining data. A review of necessary statistical concepts will be provided as needed. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/ setupSearchClassSchedule.cfm)

#### **ANLY 625. Spreadsheet Modeling for Analytics**

1.5 Units

Term Typically Offered: Fall, Spring, Summer

Description: This course introduces decision-support modeling using spreadsheets, including what-if analytics, goal-seeking, one and two-way data tables, and tools to solve optimization problems. The course explores a library of functions to manipulate data, visual presentation of data, and data organization skills. Students in this course should have an understanding of cell referencing, file manipulation, importing/exporting data, and the basic time-value of money financial concepts. Students will demonstrate mastery of the material through hands-on projects and skills assessments. The primary tool used in the course is Microsoft Excel. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)

#### ANLY 630. Blockchain

1.5 Units

Term Typically Offered: Fall, Spring, Summer

Prerequisite(s): (MBA 631 or ANLY 631) or (MBA 602 and MBA 651).

Description: The purpose of this course is to explore Blockchain concepts and how to apply them in a wide range of real business scenarios and explore unique, challenge-based business scenarios using designthinking methodology.

For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)

## ANLY 631. Introduction to Statistics and Data Analytics

Term Typically Offered: Fall, Spring, Summer

3 Units

**Description:** The course will cover the fundamental topics and subject matter related to statistics up through multiple regression modeling. A strong emphasis will be placed on how to use statistics. This will be accomplished through student analysis of real-world data sets in various assignments.

For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)



ANLY 635. Storytelling with Data

1.5 Units

Term Typically Offered: Fall, Spring, Summer

**Prerequisite(s):** (MBA 631 and ANLY 631) or (MBA 602 and MBA 651). **Description:** This course is a data visualization and business

Description: This course is a data visualization and business presentations course specifically designed for professionals in the field of business analytics. Throughout the course, you will develop an ability to organize, visualize, and present data driven messages that are professional, clear, concise, and persuasive. You will enhance your ability to communicate with and about data in multiple business and professional contexts: Formal individual presentations, team-based presentations, and informal one-on-one and small group interactions. For class offerings for a specific term, refer to the Schedule of Classes (http://htmlaccess.louisville.edu/classSchedule/setupSearchClassSchedule.cfm)