# Business Analytics - BUAL

## Courses

**BUAL 2600/2603 BUSINESS ANALYTICS I (3)** LEC. 3. Pr. (MATH 1610 or MATH 1617 or MATH 1680 or MATH 1683) and (P/C COMP 1000 or P/C COMP 1003 or COMP 1AA0). Introduction to analytics in business including use of data to make business decisions, basic predictive business modeling, and communication of analytical results.

**BUAL 2650/2653 BUSINESS ANALYTICS II (3)** LEC. 3. Pr. BUAL 2600 or STAT 2610 or STAT 2010 or STAT 2017 or STAT 2510 or STAT 3010 or STAT 2513. A second course in quantitative analysis in business including statistical inference, classification analysis, predictive modeling, forecasting, introduction to data mining.

**BUAL 4910 PRACTICUM (1-3)** PRA. SU. Supervised practical application of business analytics theory and methods. Course may be repeated for a maximum of 3 credit hours.

**BUAL 4920 BUSINESS ANALYTICS INTERNSHIP (1-6)** INT. SU. The internship program represents an opportunity for students to be exposed to analytics environments first-hand and to integrate this experience with their formal education. The practical nature of the internship facilitates the educational process and provides valuable work experience. Course may be repeated for a maximum of 6 credit hours.

**BUAL 5600 PREDICTIVE MODELING I (3)** LEC. 3. Pr. BUAL 2600. Introduction to linear models including multiple linear regression and model building in business decision making and applications. Credit will not be given for both BUAL 5600 and BUAL 6600/6606.

**BUAL 5610 PREDICTIVE MODELING II (3)** LEC. 3. Pr. (BUAL 5600 or BUAL 6600 or BUAL 6606). or equivalent. Basic data mining techniques including neural networks, decision trees, clustering algorithms, linear programs, text and web mining in business setting. Credit will not be given for both BUAL 5610 and BUAL 6610/6616.

**BUAL 5650 BIG DATA I (3)** LEC. 3. Pr. BUAL 2650. or equivalent. Managing, governing, extracting, merging, and preparing large data sets for analysis.

**BUAL 5660 BIG DATA II (3)** LEC. 3. Pr. BUAL 5650. Advanced topics in big data management, with emphasis on loading and cleansing the data for analysis. Credit will not be given for both BUAL 5660 and BUAL 6660/6666.

**BUAL 5700 BIG DATA INFRASTRUCTURE AND APPLICATIONS (3)** LEC. 3. Pr. ISMN 5650. Advanced topics related to big data infrastructure and using these technologies to create data science applications. The course provides deep understanding of various state-of-art data science approaches using different distributed and (or) cloud computing environments. Credit will not be given for both BUAL 5700 and BUAL 6700/6706.

**BUAL 5860 COMMUNICATING QUANTITATIVE RESULTS IN BUSINESS (3)** LEC. 3. Pr. BUAL 5610 and BUAL 5660. A case-based, project-oriented approach to business decision making based on company’s mission and strategic objectives. Credit will not be given for both BUAL 5860 and BUAL 6860/6866.

**BUAL 5900 DIRECTED STUDIES (1-3)** IND. SU. Faculty led individualized or group-oriented in-depth study of a topic in business analytics. May include literary research, algorithm development, programming, data analysis, or a combination of these. Course may be repeated for a maximum of 6 credit hours.

**BUAL 6600/6606 PREDICTIVE MODELING I (3)** LEC. 3. Pr. BUAL 2650. Introduction to linear models including multiple linear regression and model building in business decision making and applications. Credit will not be given for both BUAL 5600 and BUAL 6600/6606.

**BUAL 6610/6616 PREDICTIVE MODELING II (3)** LEC. 3. Pr. (BUAL 5600 or BUAL 6600 or BUAL 6606). Basic data mining techniques including neural networks, decision trees, clustering algorithms, linear programs, text and web mining in business setting. Credit will not be given for both BUAL 5610 and BUAL 6610/6616.

**BUAL 6650/6656 BIG DATA I (3)** LEC. 3. Pr. BUAL 2650. or equivalent. Managing, governing, extracting, merging, and preparing large data sets for analysis.

**BUAL 6660/6666 BIG DATA II (3)** LEC. 3. Pr. (BUAL 5650 or BUAL 6650 or BUAL 6656). Advanced topics in big data management, with emphasis on loading and cleansing the data for analysis. Credit will not be given for both BUAL 5600 and BUAL 6600/6606.
BUAL 6860/6866 COMMUNICATING QUANTITATIVE RESULTS IN BUSINESS (3) LEC. 3. Pr. BUAL 6610 or BUAL 6616. A case-based, project-oriented approach to business decision making based on company’s mission and strategic objectives. Credit will not be given for both BUAL 5860 and BUAL 6860/6866.