

# MANAGEMENT INFORMATION SYSTEMS, BACHELOR OF SCIENCE WITH A CONCENTRATION IN BUSINESS ANALYTICS (B.S.)

## Overview

A Bachelor of Science degree in Management Information Systems (MIS) focuses on the applications and implications of computing in the world of business. This program prepares graduates for employment in many job opportunities in the local and regional job market. The BS in MIS will provide a positive impact on economic growth in the state of Kentucky by preparing knowledge workers with IT skills and business analytics skills. These high-tech and high-demand skills will lead to greater success as graduates enter the Kentucky workforce. There are two choices of major elective areas: Business Analytics or Security Systems.

## Business Analytics Concentration

The Business Analytics Concentration prepares students for careers as Data Analyst, Business Intelligence Analyst, Data Architect, Business Systems Analyst, Data Warehousing, and Data Consultant. Students learn skills such as data visualization, data cleaning, statistical analysis, and data-driven decision making.

## Security Systems Concentration

The Security Systems Concentration prepares students for careers as IT Manager, Project Manager, Business Analyst, Systems Analyst, Data Base Engineer, and Programmer/Analyst. Students learn skills such as business programming, e-business technology, database management systems, and IT project management.

## Program Requirements

### Summary Checklist for General Education

| Code             | Title  | Hours |
|------------------|--|-------|
| <b>Element 1</b> |  |       |
| A:               | Written Communication ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/</a> )  | 3     |
| B:               | Written Communication ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/</a> )  | 3     |
| C:               | Oral Communication ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/</a> )     | 3     |
| <b>Element 2</b> |  |       |
|                  | Quantitative Reasoning ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-2/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-2/</a> ) | 3     |
| <b>Element 3</b> |  |       |
| A:               | Arts ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/</a> )                   | 3     |
| B:               | Humanities ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/</a> )             | 3     |

|                    |   |           |
|--------------------|---|-----------|
| <b>Element 4</b>   |   |           |
|                    | Natural Sciences ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-4/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-4/</a> )                      | 6         |
| <b>Element 5</b>   |   |           |
| A:                 | Historical Science ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/</a> )                    | 3         |
| B:                 | Social Behavioral Science ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/</a> )             | 3         |
| <b>Element 6</b>   |   |           |
|                    | Diversity of Perspectives Experiences ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-6/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-6/</a> ) | 6         |
| <b>Total Hours</b> |   | <b>36</b> |

Students are expected to complete Elements 1 and 2 within their first 60 hours of college credit.

## Major

| Code  | Title                           | Hours |
|---|---------------------------------|-------|
| University Graduation Requirements  |                                 |       |
| General Education   |                                 | 36    |
| Student Success Seminar   |                                 |       |
| SCO 100   | Student Success Seminar         | 1     |
| Upper division courses (42 hrs. distributed throughout Major/Supporting/Gen Ed/Free Electives categories) |                                 |       |
| Major Requirements  |                                 |       |
| Core Courses  |                                 |       |
| CSC 160   | Introduction to Web Programming | 3     |
| MIS 215   |                                 |       |
| MIS 335   |                                 |       |
| MIS 340   |                                 |       |
| MIS 375   |                                 |       |
| MIS 380   |                                 |       |
| MIS 410   |                                 |       |
| CSC 496   | Senior Seminar                  | 1     |
| CSC 499   | CS Career Preparation           | 1     |

## Concentrations

|   |  |              |
|---|--|--------------|
| Students must select one of the following Concentrations:                     |  |              |
| Business Analytics  |  | 9            |
| Security Systems  |  |              |
| <i>Supporting Course Requirements</i>   |  | <i>19-20</i> |
| ACC 200   | Survey of Accounting   |              |
| ECO 230   | Fundamentals of Microeconomics ((Element 5B)) <sup>G</sup>           |              |
| INF 104   | Computer Literacy with Software Applications                         |              |
| or TEC 161  | Computer Applications in Technology                                  |              |
| MAT 112A & MAT 112B   | Algebra: Polynomials and Algebra: Functions & Matrices ((Element 2)) |              |
| MGT 301   | Principles of Management (NB)  |              |
| STA 270   | Applied Statistics   |              |
| The addition of a certificate of minor to this program is highly recommended. |  |              |

|                    |            |
|--------------------|------------|
| Free Electives     | 31-32      |
| <b>Total Hours</b> | <b>120</b> |

**G**

Course also satisfies a General Education element. Supporting hours are included within the 36 hr. General Education requirement above.

**Concentration**

| Code                                  | Title                               | Hours    |
|---------------------------------------|-------------------------------------|----------|
| <b>Concentration Courses</b>          |                                     |          |
| Choose nine hours from the following: |                                     | 9        |
| MIS 430                               |                                     |          |
| MIS 431                               | Advanced Business Analytics         |          |
| MIS 435                               | Advanced Database Topics            |          |
| STA 580                               | R and Introductory Data Mining      |          |
| NET 343                               | Network Switches & Routers          |          |
| NET 354                               | Microcomputer & Network Security    |          |
| NET 403                               | Advanced LANSs and PC Communication |          |
| <b>Total Hours</b>                    |                                     | <b>9</b> |