DATA ANALYTICS

PROGRAM OVERVIEW

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Technology 221
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This curriculum provides training that enables students to seek employment in areas related to data analytics such as a market research analyst, financial analyst, statistical assistant and many more.

Data analytics and visualization skills are in high demand in today's global market. This degree will help a student build the necessary skills to become a data analyst.

Students will learn and practice a broad set of skills in data analytics, graphics, and visualization. In addition, students in this program will be able to create data models and data warehouses, develop and use various digital graphics techniques and data visualization methods and use various statistical and predictive/applied applications and methods.

Student must achieve a “C” or better in any data analytics course before being advanced to any subsequent data analytics course in the curriculum progression. In order to graduate from this curriculum, the students must meet all college academic requirements plus achieve a grade of “C” or better in each data analytics course.

This is a career program, designed to enable students to seek employment at the program’s completion.

Successful completion of this program qualifies a student to apply for an Associate of Applied Science degree in Data Analytics.

COURSE REQUIREMENTS

REQUIRED DATA ANALYTICS COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATA-101</td>
<td>Introduction to Data Analytics</td>
</tr>
<tr>
<td>DATA-103</td>
<td>Introduction to Machine Learning</td>
</tr>
<tr>
<td>DATA-105</td>
<td>Introduction to Data Visualization</td>
</tr>
<tr>
<td>DATA-201</td>
<td>Advanced Data Analytics</td>
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<td>DATA-206</td>
<td>Python for Data Analytics</td>
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<td>DATA-210</td>
<td>Data Warehouse Implementation</td>
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<td>DATA-214</td>
<td>Advanced Data Visualization</td>
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<tr>
<td>DATA-216</td>
<td>Data Analysis in the Cloud</td>
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</table>

REQUIRED GENERAL COURSES

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>BUAD-101</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>BUAD-216</td>
<td>Principles of Marketing</td>
</tr>
<tr>
<td>COMP-101</td>
<td>Computer Literacy</td>
</tr>
<tr>
<td>COMP-241</td>
<td>Python Programming I</td>
</tr>
<tr>
<td>ECON-202</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>ENG-101</td>
<td>English Composition I</td>
</tr>
<tr>
<td>MATH-102</td>
<td>College Algebra</td>
</tr>
<tr>
<td>MATH-109</td>
<td>Probability and Statistics</td>
</tr>
<tr>
<td>PHIL-202</td>
<td>Ethics</td>
</tr>
<tr>
<td>SPCH-101</td>
<td>Speech Communication</td>
</tr>
</tbody>
</table>

REQUIRED ELECTIVE COURSES

Please consult with your advisor or the Advising Center staff for selecting appropriate elective courses for graduation.

<table>
<thead>
<tr>
<th>Elective</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>Social and Behavioral Science</td>
<td>3</td>
</tr>
</tbody>
</table>

PROGRAM PATH

DATA ANALYTICS
TWO-YEAR CAREER PROGRAM
### PREPARATION FOR EMPLOYMENT

#### FIRST SEMESTER
- Computer Technology 101 (Computer Literacy)  
  Credit Hours: 3
- Business Administration 101 (Introduction to Business)  
  Credit Hours: 3
- English 101 (English Composition I)  
  Credit Hours: 3
- Mathematics 109 (Probability and Statistics)  
  Credit Hours: 3
- Data Analytics 101 (Introduction to Data Analytics)  
  Credit Hours: 3

Total: 15

#### SECOND SEMESTER
- Mathematics 102 (College Algebra)  
  Credit Hours: 3
- Data Analytics 201 (Advanced Data Analytics)  
  Credit Hours: 3
- Data Analytics 103 (Introduction to Machine Learning)  
  Credit Hours: 3
- Data Analytics 206 (Python for Data Analytics)  
  Credit Hours: 3
- Computer Technology 241 (Python Programming I)\(^1\)  
  Credit Hours: 3

Total: 15

#### THIRD SEMESTER
- Business Administration 216 (Principles of Marketing)  
  Credit Hours: 3
- Social and Behavioral Science Elective  
  Credit Hours: 3
- Data Analytics 105 (Introduction to Data Visualization)  
  Credit Hours: 3
- Data Analytics 206 (Python for Data Analytics)  
  Credit Hours: 3
- Data Analytics 210 (Data Warehouse Implementation)  
  Credit Hours: 3

Total: 15

#### FOURTH SEMESTER
- Speech 101 (Speech Communication)  
  Credit Hours: 3
- Philosophy 202 (Ethics)  
  Credit Hours: 3
- Economics 202 (Principles of Microeconomics)  
  Credit Hours: 3
- Data Analytics 214 (Advanced Data Visualization)  
  Credit Hours: 3
- Data Analytics 216 (Data Analysis in the Cloud)  
  Credit Hours: 3

Total: 15

**Total Credit Hours: 60**

\(^1\) COMP-103 is not a required pre-requisite for students taking COMP-241 (Python Programming) if registered for the Data Analytics Program. Please consult with your advisor or the Advising Center staff for selecting appropriate pre-requisites or elective courses for graduation.

DATA240 (Field Placement) can be used as a substitute for any required 200-level data analytics course in the Data Analytics program.

**NOTE:** All courses specifically identified by course number are graduation requirements for this program.