# DATA SCIENCE

## THE DIPLOMA

The Data Science program prepares students for an entry-level career in data science.

<table>
<thead>
<tr>
<th>SQL</th>
<th>Programming in Python</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistical Programming in R</td>
<td>Tableau</td>
</tr>
<tr>
<td>Big Data</td>
<td>Machine Learning</td>
</tr>
<tr>
<td>Data modeling</td>
<td>Agile and Waterfall project management</td>
</tr>
</tbody>
</table>

## WHAT YOU’LL LEARN

## WHAT YOU’LL GET

- Practical skills and work habits to be successful in entry-level data science roles.
- Receive job placement assistance including resume building, interview training and help identify relevant positions in related fields.
- Access to create a virtual profile on our exclusive employment networking platform.
- Hands-on experience.

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## THE WOZ U EDGE

### QUALITY CONTENT

- Created by Industry Experts & Employers
- Curriculum created by industry experts for employers and vetted by Department of Education accreditors for rigor and outcomes with instructors meeting college level standards.

### CAREER SERVICES

- Resume Building
- Interview Training
- Job Placement Assistant
- Electronic Career Profile
- Digital Badges
- Employer/Alumni
- Connections

### IN-PERSON COACH

- Admissions coach
- Financial Aid Coach
- Instructors
- Career Services Coach
- Assigned Mentor
- Student Ambassadors

### WOZ U EDGE BENEFITS

<table>
<thead>
<tr>
<th>Weeks of Program Training</th>
<th>Unnecessary Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>33</td>
<td>0</td>
</tr>
</tbody>
</table>

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## FINANCIAL AID & MILITARY ASSISTANCE AVAILABLE*

### EDUCATION IS AFFORDABLE!

<table>
<thead>
<tr>
<th>Women In Tech</th>
<th>Interest Free Payments Pay in Full Options</th>
<th>Post-Vietnam Veteran Education Assistance Program</th>
<th>Dependents’ Educational Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military Grant</td>
<td>Montgomery GI Bill College &amp; Education Assistance*</td>
<td>Post 9/11 GI Bill Education Assistance</td>
<td>Selective Reserve Option of MGIB</td>
</tr>
<tr>
<td>Agency Sponsor Grant</td>
<td>Vocational Rehabilitation</td>
<td></td>
<td>Reserve Educational Assistance Program</td>
</tr>
</tbody>
</table>

* FOR THOSE WHO QUALIFY
<table>
<thead>
<tr>
<th>COURSE OUTLINE</th>
<th>CAREER SKILL BADGES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DSO101</strong></td>
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</tr>
<tr>
<td><strong>DSO102</strong></td>
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<td><strong>DSO103</strong></td>
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<td><strong>DSO104</strong></td>
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<tr>
<td><strong>DSO105</strong></td>
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<td><strong>DSO106</strong></td>
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<td><strong>DSO107</strong></td>
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<td><strong>DSO108</strong></td>
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<td><strong>DSO109</strong></td>
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<td><strong>DSO110</strong></td>
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<tr>
<td><strong>DSO111</strong></td>
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**DSO101** **BASIC STATISTICS**
- Complete t-tests & Chi-Squares in MS Excel
- Learn about the normal distribution, hypothesis testing, & Type I & II error
- Compute basic probability

**DSO102** **STATISTICAL PROGRAMMING IN R**
- Complete t-tests, simple linear regression, & correlations in R
- Learn about data types, data structures, & for loops in R
- Utilize data wrangling library dplyr & data visualization package ggplot2

**DSO103** **METRICS & DATA PROCESSING**
- Learn how to create & utilize KPIs
- Create your own evidence-based survey
- Perform survey validation in R
- Utilize Agile project management
- Understand Waterfall project management

**DSO104** **DATA WRANGLING & VISUALIZATION**
- Perform data wrangling in Python & R
- Complete data recoding in Python & R
- Visualize data in Tableau, Python, & R
- Create infographics
- Learn how to choose the appropriate statistical test

**DSO105** **INTERMEDIATE STATISTICS**
- Perform t-tests, Chi-Squares, & correlations in Python
- Learn how to normalize data
- Complete Independent, Goodness-of-Fit, & McNemar Chi-Squares in R
- Perform ANOVAs, ANCOVAs, & MANOVAs in R
- Determine sample size based on power calculations

**DSO106** **MACHINE LEARNING & MODELING**
- Perform linear, non-linear, & logistic regression modeling in Python & R
- Utilize machine learning models including k-means, decision trees, random forests & Bayesian networks in Python
- Learn Natural Language Processing in Python

**DSO107** **INTRODUCTION TO BIG DATA**
- Learn about the Hadoop ecosystem
- Use Hive, Pig, & Spark for big data analytics
- Utilize Amazon Web Services for additional cloud computing

**DSO108** **DATABASE FOUNDATIONS**
- Query databases & join tables in MySQL
- Query documents in NoSQL using MongoDB

**DSO109** **PROGRAMMING FOUNDATIONS IN PYTHON**
- Learn object-oriented programming in Python
- Utilize Jupyter Notebooks, Pandas and NumPy to complete data science tasks in Python
- Understand data types, data structures, & for loops in Python

**DSO110** **GROUP FINAL PROJECT**
- Use machine learning, modeling, or advanced statistics to extract meaningful information from a dataset of your choosing
- Utilize Agile project management skills to stay on task
- Present your final project in front of peers &/or potential employers to showcase your work

**DSO111** **CAREER SKILLS**
- *not graded; just a bonus course*
- Create a data-science focused resume
- Polish your social media profile & networking skills
- Learn how to ace technical interviews
- Begin building your data science portfolio

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**Projected JOB GROWTH in the Data Science Field**
2018-2028, 16% INCREASE

<table>
<thead>
<tr>
<th>Job Role</th>
<th>Projected Growth</th>
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<tbody>
<tr>
<td>Data or Business Analyst</td>
<td>16% (MUCH FASTER THAN AVERAGE)</td>
</tr>
<tr>
<td>Data Scientist</td>
<td>12%</td>
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<tr>
<td>Marketing or Finance Analyst</td>
<td>5%</td>
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**STAT SOURCE: BLS.GOV**

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**SPEAK WITH AN ADMISSION ADVISOR TODAY!**

Woz U is a diverse ecosystem that empowers Individuals (Learners), Higher Education and Corporations to overcome the talent and skill gaps plaguing the technology industry today and in the future.

“I now have a renewed love of coding. Woz U has reawakened my desire and enjoyment of learning new things.”
- Richard Charay, Woz U Graduate