Eat
Sleep
Code
Repeat
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About The Data Analytics Certificate Program

**DESIGNED TO FIT A WORK SCHEDULE**
Classes meet three times per week from 6:30PM - 9:30PM. All classes will be held 100% online.

**TAUGHT BY INDUSTRY INSTRUCTORS**
Learn from instructors who are data scientists, analysts and managers. They’ll not only teach you the fundamentals, but the updates, tips, & tricks they use daily.

**LEARN BY DOING**
Apply the new concepts and skills you learn in practical exercises, ongoing activities, and real-world projects.

**ADVANCE YOUR CAREER**
Take the next step on your unique professional journey by learning the essential professional skills to build the career you want.

**PROFESSIONAL ACCELERATION PROGRAMS 12 WEEKS CAREER COACHING AND MENTORING SUPPORT**
Our career mentors will guide you in your career growth and job search, and help you connect with the right people and companies along the way.

*12 weeks of career support available for Full 20 week Certificate Course only*
## What You Will Learn

- R
- RStudio
- SQL & MySQL
- Jupyter Notebooks
- APIs
- Data Cleaning
- Python
- Tableau
- Advanced Excel
- Google Sheets
- Data Visualization
- Data-Driven Presentations
- Forecasting
- Statistical Modeling
- Machine Learning
- Programming Basics
- Databases
- Business Intelligence

- Use statistical analysis to model & forecast trends
- Make the wrangling of intimidatingly large datasets surprisingly easy with R
- Interact with APIs to pull data from online sources
- Build and interact with databases, manipulating and returning information
- Communicate effectively under pressure
- Write R and Python scripts to crunch data and develop advanced models
- Tell data stories with beautiful graphs, charts, and tables with a variety of programming languages & visualizations
- Use real-world data to analyze and explain healthcare, economic, financial, or social happenings
- Create innovative solutions on diverse teams
- Understand the fundamental statistical principles powering the algorithms secretly all around us
To be able to learn these skills and do a meaningful project in such a short period of time was amazing. The Industry Project, as a team project, gave me a glimpse as to how project teams could look in the future in terms of how to collaborate on a data analytics project.

— LOIS DANKWA, WINTER 2020
If you’re interested in learning to do complex data analysis or data science, or simply want to work more effectively with technical counterparts, this program is for you. We guide those with little or no experience in the field and teach the skills companies look for in new Data Analysts, Business Analysts, Junior Data Scientists, Technical Project Managers, and more. Alternatively, this is a great immersion for those seeking to speak the language of engineers, analysts, and business leaders. **Select the course that’s right for you.**

<table>
<thead>
<tr>
<th>Introductory Data Analytics for Business</th>
<th>Python for Data Analytics</th>
<th>Data Analytics &amp; Data Science Certificate</th>
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<tbody>
<tr>
<td>3 weeks</td>
<td>3 weeks</td>
<td>20 weeks (full course)</td>
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<td>$2000</td>
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<td>$11,995</td>
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- Advanced Excel
- Introductory Data Analytics for Business
- Analytics & Data Science Career Paths
- Limited Professional Acceleration Courses
- Computer Programming Skills
- Python for Data Analytics
- Data Visualizations in Python
- Data-Driven Presentations
- R & RStudio for Data Analytics & Data Science
- Business Intelligence & Data Visualizations in Tableau
- Databases with SQL
- Machine Learning
- Technical Interviewing
- All Professional Acceleration Classes
- 12 Weeks of Career Support
- Capstone Project
- Co-Op-Style Project
<table>
<thead>
<tr>
<th>Description</th>
<th>Topics</th>
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<tbody>
<tr>
<td><strong>Getting Started with Data Analytics for Business</strong></td>
<td>• Analytics with advanced Excel &amp; Google Sheets for professionals</td>
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<td>• Working with large datasets</td>
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<td>• Filtering, Pivot Tables, Aggregation, Lookups, Conditional Formatting</td>
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<td>• Data-driven decision making</td>
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<td>• Telling stories with data</td>
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<td>• Introductory data visualizations</td>
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<td>• Career paths in analytics and data science</td>
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<tr>
<td><strong>Python Programming for Data Analytics</strong></td>
<td>• Python syntax &amp; data structures</td>
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<td>• Fundamentals of programming</td>
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<td>• Data modeling</td>
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<td>• Visualizing data with Matplotlib and plotly</td>
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<td>• Data-driven presentations &amp; storytelling</td>
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<td>• Data cleaning &amp; nulls</td>
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<td>• Jupyter Notebooks</td>
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<td>• Functions, variables, and strings</td>
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<td>• Loops &amp; logic statements</td>
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<td>• Packages and libraries</td>
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<td>• Test data vs train data</td>
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<td>• RESTful APIs</td>
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<td><strong>R &amp; RStudio for Data Analytics &amp; Data Science</strong></td>
<td>• Importing libraries &amp; reading data in R</td>
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<td>• Statistical tests &amp; analysis in R</td>
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<td>• Probability, statistics, &amp; Linear Regression</td>
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<td>• Data Structures, Functions, &amp; control flow</td>
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<td>• R Data Frame Essentials: subsetting, cbind, rbind</td>
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<td>• Advanced R: merge, apply, and more</td>
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<td>• Advanced Libraries: tibble, dplyr and more</td>
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<td></td>
<td>• Plotting libraries: ggplot</td>
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<td>Description</td>
<td>Topics</td>
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| **Business Intelligence & Data Visualizations** | • Choosing the right visualization  
• Advanced graphing & charts in Excel & R  
• Tableau: loading data, generating & manipulating visualizations  
• Color, design, & storytelling  
• Identifying the right KPIs  
• Snapshots, trends, & real-time data  
• Data insight communication  
• Business case study  
• Visualizations for Business Intelligence |
| **Databases & SQL** | • Database architecture & data management  
• Data acquisition using SQL  
• Joins, entity relationships, NULL handling  
• Writing efficient queries  
• Complex queries and testing  
• Analytical Databases |
| **Machine Learning & Data Science in R** | • Model inputs & outputs  
• Feature engineering  
• Applied machine learning models: Linear & logistic regression, K-means clustering, & more  
• Key model metrics  
• Predictive & Prescriptive Modeling  
• Forecasting |
| **Beating the Technical Interview** | • Navigating technical interviews  
• Roleplay practice solving common interview challenges |
| **Completing Your Capstone** | • Apply the key tools & techniques to a real world data set, especially focused on healthcare an insurance, and present your business case to complete your capstone project  
• Complete your company project |

**Professional Acceleration Program:** Throughout this program, you will be introduced to the social, emotional, and professional skills that companies look for in top performers, and will help you succeed throughout your career. These will be critical as you practice, hone, and showcase your abilities in your Company Project, where you’ll apply both your technical skills and your ability to collaborate on diverse teams in real-world situations.
Stack Education empowers colleges & universities to offer industry-driven, industry-taught courses, helping students of all ages learn the skills and earn the experience they need for the modern economy. Our programming is unique as we use local industry experts to teach our classes and provide an industry project in partnership with a local business. Our proprietary Professional Acceleration Program curriculum (PACC) envelops our program and gives students the necessary capabilities and skills required to thrive in business and in life. Stack Education is headquartered in Boston, MA.

Every year we help thousands of non-traditional students continue their education at the University of Vermont. Through collaborations with UVM’s various colleges and schools, we offer courses and programs to help you explore your options. Whether you’re planning a career change, looking for personal enrichment or professional development, or preparing for an undergraduate or advanced degree.

Financing Your Education*

**FULL TUITION**
Pay full tuition at the start of the program and receive $250 off

$11995

**INCOME SHARE**
Make flexible payments once you’re above a minimum income

$0
Upfront

**INSTALLMENT PLAN**
Pay tuition in 4 payments during the bootcamp with no interest

$1899-2375
Per month

**STUDENT LOAN**
Choose when you start paying and how much based on your credit history and finances

$150-250
Per month

*Financing and Payment Plans available for Full 20 week Certificate Course only