

**Data is the best weapon
against climate change.**

Accredited | Affordable | Two-Week Terms

A.A.S. in Data Analytics


With a renewed emphasis on combating global climate change, the data analytics field is expected to grow at a rate of 20% over the next decade, according to the Bureau of Labor Statistics. Much of the climate change research and mitigation strategies rely on adequate and accurate data and data interpretation. Climate change is the biggest threat facing the planet for current and future generations. Climate change impacts everything from marine biology to food systems to human health. One of the most powerful tools in the fight against climate change is data. Data Analytics uses a variety of tools — from machine learning to data visualization — to present an accurate picture of the current health of the planet and predict the future.

Cost: \$250 per credit


How you will learn:

Job Outcomes, & Growth*


Data Analyst

 +15%

Business Intelligence Analyst

 +15%

Data Technician

 +15%

*Projected 10-year growth
Source: O*Net

We at TIEP have taken the best features of in-person learning and online learning to create an innovative and accelerated educational experience designed to meet the demands of a modern learner. Our new facility on the Unity College campus in New Gloucester, Maine is equipped with HyFlex classrooms designed with cutting edge technology to enhance teaching and learning. Our courses meet synchronously, in-person, but allow for flexibility to remote-in on those occasions when life happens, and you are unable to get to campus. Flexibility doesn't end there; the video recording and curating technology means you can revisit a particular subject discussed by simply re-watching that section of the class on your own time and refining your notes. After viewing the recording, questions are bound to come up; for this, our Instructors and Learner Success Coordinators are available for help through both in-person and virtual support hours.



Technical Institute for Environmental Professions

A.A.S. IN DATA ANALYTICS UNOFFICIAL CHECKSHEET

Student Name / Total Transfer Credits / Checksheet Date

Graduates of the A.A.S. in Data Analytics will be able to:

- + **Articulate** the connection between data and the environmental professions and the importance of data in the field.
- + **Demonstrate** the ability to think critically in making decisions based on data and deep analytics.
- + **Demonstrate** the ability to use data analysis tools such as Microsoft Excel, Python, APIs, JSON, Numpy, MathPlotLib, Beautiful Soup, and more.
- + **Use graphics to visualize and represent** data using packages such as Tableau and PowerBI.
- + **Demonstrate** the ability to communicate the result of the data analysis to relevant stakeholders.
- + **Organize and retrieve** data using tools such as MongoDB and SQL.
- + **Create and manipulate** web data using HTML, JavaScript, CSS, Leaflet, and more.
- + **Discuss** the use of AI and machine learning in data analytics.
- + **Identify and discuss** security and ethical issues in dealing with data.

General Education Core

- COM 100 Orientation
- COM 101 Digital Fluency and Information Literacy
- COM 102 21st Century Communication Skills
- COM 105 Research Applications
- COM 201 Write Right!
- COM 205 Focus on Sustainability
- MAT 101 Foundational Algebra
- ENS 101 Our Blue Planet
- ENS 201 World Cultures
- GIS 101 Introduction to Geographical Information Systems for Environmental Professionals

Program Core

- DAT 101 Introduction to Data Analytics
- DAT 201 Database Basics
- DAT 203 SQL Demystified
- DAT 205 Introduction to Data Science
- DAT 207 Business Intelligence Analytics
- DAT 209 Data Visualization
- DAT 211 Writing Reports
- DAT 213 Data and Information Security
- DAT 215 Ethics in Data Analytics
- DAT 290 Data Analytics Professional Capstone I
- DAT 295 Data Analytics Professional Capstone II
- MAT 201 Don't Step in the Bulls#!t! Workplace Statistics
- PGR 101 Fundamentals of Coding
- PGR 103 Introduction to Web Design and Web Programming
- PGR 105 Coding for Data Analytics
- PGR 107 Intermediate Web Programming

Electives

8 credits of unrestricted electives

Graduation Requirements

A minimum of 60 earned credit hours, a minimum of 15 credits earned at the Technical Institute, and an overall cumulative GPA of 2.0 or above.