



Advanced Program in Data Visualization



THE “
FUTURE
IS YOURS



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ABOUT EXEED ECX



Exeed ECX is a spin-off of Exeed College - a prestigious entity of higher learning and executive education from Westford Education Group. Exeed ECX provides a unique learning method through its satellite centres via blended learning.

Exeed ECX, with its world-class academics, has accreditation and partnerships with the world's premium universities and awarding bodies. Plymouth Marjon University is a top-ranked, accredited university in the UK that collaborated with Exeed ECX. Other major universities collaborating with Exeed ECX are Universidad Católica de Murcia (UCAM) in Spain, Acacia University in the USA, and GEX Business School in France.

Apart from this, our parent organisation Exeed College has tie-ups with universities across the globe – UCAM (Spain), Liverpool John Moores University (UK) and Carolina University (US) as well as with professional accreditation bodies like Scottish Qualifications Authority (SQA), Chartered Management Institute (CMI), Society for Human Resource Management (SHRM) and Cambridge International Qualification to provide globally recognised qualifications



About

Acacia University



Acacia University, located in Arizona, United States, has been a pioneer and leader in distance education since 2000. Stands as a symbol of regeneration, perseverance, and integrity, it aims to provide accessible, quality education to a multi-cultural, global learning community through online/distance learning.

As technology advances and students look for greater flexibility and accessibility with education, it is on a mission to make learning a long-lasting, invigorating experience. It offers academic programs at the bachelor's, master's, doctorate or certificate levels in a multitude of areas.

At Acacia, we are committed to provide unparalleled standards of learning by delivering the highest quality educational programs through smart, innovative forms of learning.

Acacia University Professional Development Programs—a division of Acacia University, USA, provide rigorous online programs to distance learners, working professionals, college students, and those with an insatiable thirst for knowledge.



Airtics Education's Advanced Programs are offered as part of Acacia University Professional Development Programs, and the learners are certified by the University.



ADVANCED PROGRAM IN **DATA VISUALIZATION**

Overview

Visualize data using pandas, matplotlib, and seaborn libraries for data analysis and data science.

Data Visualization helps businesses to get meaningful insights. It allows them to understand various strategies very clearly. It converts a large amount of data or information into smaller visuals which saves time and provides a brief report that is easy to understand. It allows them to have a crisp report of what is required and what is done. Many technical works need data representation. Data Science sometimes requires data representation, and this can be achieved using Python. A large quantity of information and data can be analyzed with Data Visualization using Python.

Course Duration: **6 Months** | Course Modules: **3 Modules**

PROGRAM STRUCTURE

Module 1

HANDS-ON CORE PYTHON AND PYTHON LIBRARIES FOR DATA

30 HOURS

PYTHON BASICS	PYTHON LIBRARIES
▲ Variable and data types	▲ Numpy
▲ Conditional statements	▲ Pandas
▲ Loops	▲ matplotlib
▲ Functions	

Learning Outcomes

- LO1:** Learning python structure and how to write programs in it
- LO2:** Basic concepts of Python, its syntax, functions and conditional statements
- LO3:** Acquire the prerequisite Python skills to move into specific branches - Machine Learning, Data Science
- LO4:** Understand packages to enable them to write scripts for data manipulation and analysis

Module 2

MATHEMATICS & STATISTICS FOR DATA TREATMENT

10 HOURS

LINEAR ALGEBRA	DATA PRE-PROCESSING
PROBABILITY	STATISTICAL TOOLS
STATISTICS	▲ CSV
DATA CLEANING	▲ Excel

Learning Outcomes

- LO1:** Introduce statistical tools for working with datasets
- LO2:** Learn the essentials of probability and statistics for data analysis & visualisation
- LO3:** Know how to import and clean data using libraries like NumPy and Pandas for data exploration and analysis
- LO4:** Learning to fix incorrect, corrupted, incorrectly formatted, duplicate, or incomplete data within a dataset

Module 3

DATA VISUALIZATION & DATABASE MANAGEMENT (SQL) **20** HOURS

DATA VISUALIZATION INTRODUCTION	SQL AND DATABASES
TYPES OF CHARTS	SQL COMMANDS

Learning Outcomes

- LO1:** Acquire a fundamental understanding of the analytical techniques and software tools necessary to effectively generate useful information from structured and unstructured datasets of any size
CHARTS
- LO2:** Gain experience in using the tools and techniques of data science to structure and complete projects focused on obtaining actionable insights from complex data
- LO3:** Dive deeply into a chosen area of practice to fully prepare to use the knowledge gained in the program to add significant value in a professional setting

LO4: Be able to utilize knowledge and skills to continue learning and adapting to new data science technologies

Specialization Module 1

DATA VISUALIZATION WITH POWER-BI

20 HOURS

POWERBI	DATA FILTERING
REPORT VIEWS IN POWERBI	EXCEL TOOL
DATA SORTING	POWER QUERY EDITOR
DATA TRANSFORMATION	

Learning Outcomes

- LO1:** Power BI's Data, Model, and Report views
- LO2:** learn how to change and format a wide range of visualizations, before moving on to sorting data and creating hierarchies—making it possible for you to drill into your reports
- LO3:** learn how to shape and transform your data before the data analysis using Power Query Editor
- LO4:** How to filter the information in your reports by location and control how these filters interconnect and interact with other visuals in your report

Project/Internship

CAPSTONE PROJECT

40 HOURS



TRAINING KEY FEATURES



80 hours of live instructor led training



3 industry-based projects, 12 Assignments
& 6 Case Studies



24/7 support and LMS Access



Hands on experience with latest tools & applied projects



Live engagement classes by seasoned academics and professionals



Internship and placement



3 guaranteed interviews by Airtics



Flexible timing for working professionals

ELIGIBILITY

There are no specific eligibility criteria for admission to the data visualization program. That being said, there are some specific skill sets that will help the student to learn the course better like basic maths skills, a desire to learn and basic spreadsheet knowledge.

PREREQUISITES

It is better to be familiar with databases, operations, and various features for learning Python Data Visualization. It is also crucial that you are good at Python programming and have an idea of what data visualization is.

TOOLS/Frameworks/LIBRARIES



APPLICATION & USE CASES



Logistics
& Delivery



Web Search
or Internet
Web results



Customer
segmentation



Personalised
Marketing



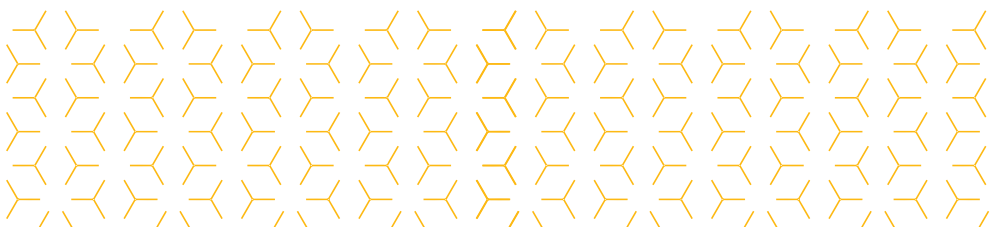
Financial
trading



Recomm-
endations



Search
Autocorrect &
Autocomplete



CAPSTONE PROJECTS

Suggested project topics:



HUMAN
RESOURCES
DATA SET



WOMEN'S
E-COMMERCE
CLOTHING
REVIEWS



TRENDING
YOUTUBE VIDEO
STATISTICS

INTERNSHIP/PROJECTS

Airtics provides internships in the respective field for a period of 2-3 months to all eligible and able students.

INTERNSHIP/PROJECTS INCLUDES:

- ✓ Mentoring by software developers
- ✓ Internship certificate
- ✓ Live workshops on projects
- ✓ Candidate's evaluation



After successfully completing the learning modules, eligible students would move on to internships.



PLACEMENT SUPPORT

Airtics's high level of instruction has attracted an increasing number of companies, and the placement scene is expanding. Candidates who excel in internship will be eligible for placement at top MNC's that work with Airtics.

- ✓ Deliver five proof-of- concept a month
- ✓ We will have our partner companies review the POCs
- ✓ 3 guaranteed interviews
- ✓ JD based Support training
- ✓ Placement in MNC

CERTIFICATION



International Certification by

Acacia University - Professional Development







Regional office:
City Center Complex, Pattambi Road, Perinthalmanna,
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