



XALTIUS

Towards Higher Excellence

Data Science and AI Professional Certificate Course

Industry-Readiness for a New Career Pathway

Empower your career with cutting-edge skills in Data Science and Artificial Intelligence, curated by experts to prepare you for the future of work.





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FROM THE DIRECTOR'S DESK

Greetings!

Every educational institute needs to implement valuable learning. Xaltius creates a positive attitude and inspire the students to achieve professional excellence in the most memorable way.

The need to modify and adapt is continuous and at Xaltius Academy we appreciate this opportunity as we believe it brings out the best in us, helping us strive further to provide valued learnings at all times.

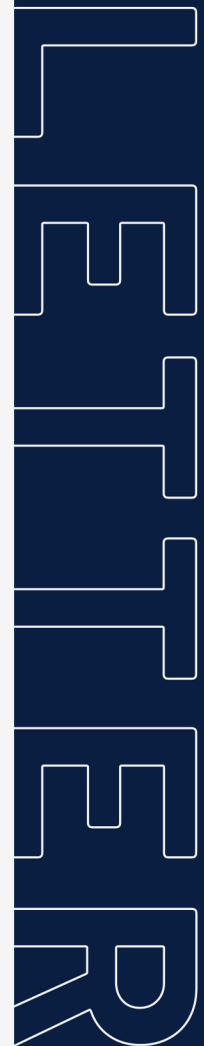
We are motivated to remain an innovative with our best education level, surpassing our students in providing them a better experience.

We help our students by providing them transformational information solutions so that they can have the bright future to build innovative and intelligent ideas.

As we embark upon our journey to the exciting times ahead, we will continue to co-innovative with our education to ensure profitable growth and ever increasing value by creating an inspiring environment for our students.

Desmond Sek

Co-founder & Director



ABOUT US



"Anything worth having takes time."

Xaltius is one of the leading training providers globally with more than 1,00,000 learners across 20+ countries. We are on a mission to democratize education as we believe that everyone has the right to quality education.

Our courses are delivered by subject matter experts from top MNCs, and our world-class pedagogy enables learners to quickly learn difficult topics in no time. Our 24/7 technical support and career services will help them jump-start their careers in their dream companies.

GLOBAL PRESENCE

Innovating in the field of technology, particularly in Data Science and Artificial Intelligence, Xaltius has democratized education across location, age, gender, experience and more. Xaltius has global footprints with learners all across the globe.



Countries

20+

Join a culture as committed to your success as you are with representation from over 50 nationalities.

Learners

100K+

Our alumni network continues to grow strong, and we encourage you to to be a part of it.

Hiring Partners

500+

Recruitment Drives to connect you with the best talent admirers in the Industry.

Data Science and AI Professional Certificate Course

The fields of Data Science and Artificial Intelligence are reshaping industries across the globe. As businesses increasingly rely on data-driven insights and AI-powered solutions, the demand for skilled professionals continues to soar.



Develop skills for exponential career growth

Cutting-edge curriculum designed in guidance with industry and academia to develop job-ready skills



Learn by working on real-world problems

Capstone projects involving real world datasets and problem statements for hands-on learning



6 MONTHS CERTIFICATION COURSE
4 MONTHS LIVE SESSIONS AND 2
MONTHS CAPSTONE PROJECTS



Learn from industry experts active
in their field!

COURSE OVERVIEW

Our Data Science and AI Professional Certificate Program is meticulously designed to cater to both recent graduates and working professionals. This program combines live virtual classes, self-paced learning, hands-on projects, and capstone experiences. With expert mentorship and real-world applications, you'll gain the essential skills needed to excel in this rapidly growing field.

Learning Outcomes

01

Develop expertise in data analysis, machine learning, generative AI, and data visualization tools like Python, PowerBI, SQL, and Tableau, equipping you with the knowledge required for high-demand roles.

02

Gain hands-on experience through capstone projects and industry-focused assignments, enabling you to solve real-world problems and create impactful solutions.

03

Learn to implement AI solutions responsibly by understanding ethical frameworks and governance, ensuring sustainable and unbiased applications of AI technologies.

GLOBAL RECOGNITION

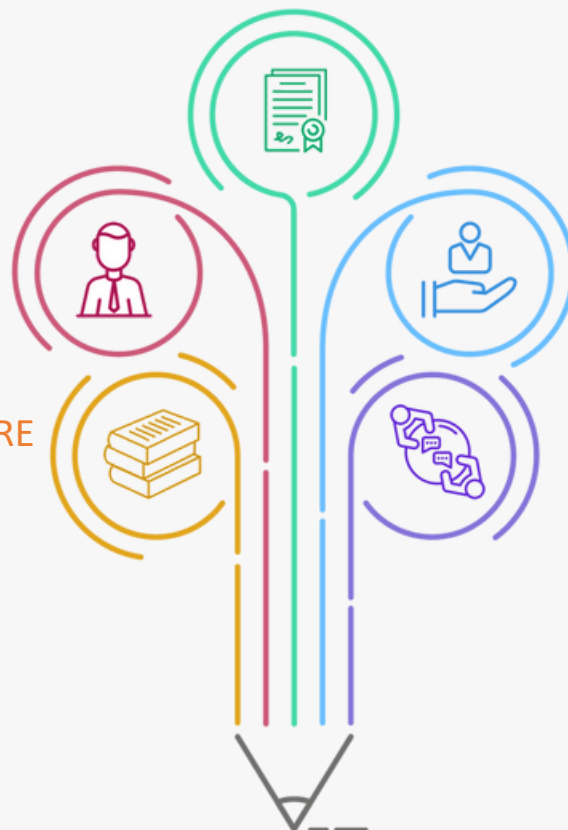
Gain credentials trusted by top organizations across the globe

EXPERT TRAINERS

Learn from industry professionals with hands-on experience in their fields

LEARN ANYTIME, ANYWHERE

Learn at your pace on any device for minimum disruption to your job and family life



JOB READY

Build in-demand skills to secure roles in Data Science and Artificial Intelligence

REALTIME EXPERIENCE

Work on real-world projects to tackle industry challenges effectively

Learning Pathway

1

Foundations of Data Science and AI

Start your journey with an introductory course that builds a strong foundation in Data Science and Artificial Intelligence. Learn essential concepts and familiarize yourself with programming and tools to get started effectively.



2

Data Wrangling, Analytics and Visualization

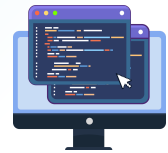
Gain expertise in data analysis and storytelling using tools like Excel, SQL, PowerBI, and Tableau. Master data wrangling and create insightful dashboards for impactful business decisions.



3

Python Programming and Machine Learning

Learn Python programming and delve into Advanced Data Analysis Machine Learning. Understand how to use statistics and various algorithms to solve problems.



4

Generative AI

Explore the cutting-edge field of Generative AI that is shaping the future of Artificial Intelligence. Learn how to use various AI tools for media generation, data analysis, market research, coding and many more!



5

Capstone Projects

Solve multiple real-world projects. Successfully completing this module earns you the ability to understanding problem statements, and reinforces your ability to build end to end solutions deliver impactful outcomes.



Ready to start your journey in Data Science and AI? Schedule a consultation with our education counselor today and let's map out your path to success!

COURSE CURRICULUM

MODULE 1: FOUNDATIONS OF DATA SCIENCE AND ARTIFICIAL INTELLIGENCE

This introductory course covers the fundamental principles of data science and AI, providing a broad overview of the field. Participants will learn about key concepts such as machine learning, neural networks, and algorithms. Practical examples and use cases from real-world applications help to reinforce these ideas. By the end, learners will gain an understanding of how data science and AI technologies are shaping various industries.



MODULE 2: DATA WRANGLING, ANALYTICS AND VISUALIZATION

Data Analysis using Excel

This course dives into the essential techniques for analyzing data using Microsoft Excel. It covers functions, formulas, pivot tables, and charts to manage and visualize large datasets effectively. Participants will gain practical skills in data manipulation and reporting, enhancing their ability to make data-driven decisions. The course also introduces statistical analysis tools available in Excel for more advanced data exploration.

Data Wrangling with SQL

Data wrangling is a critical skill for preparing raw data for analysis, and this course focuses on using SQL to clean, transform, and manipulate datasets. Students will learn essential SQL commands like joins, filtering, and aggregations to organize data efficiently. By mastering these techniques, learners will be able to handle complex data scenarios and prepare datasets for further analysis or reporting.

COURSE CURRICULUM

Creating Effective PowerPoint Presentations

This course emphasizes the art of crafting clear, engaging, and professional PowerPoint presentations. Participants will learn to design slides that effectively communicate ideas using visuals, text, and graphs. The course also covers presentation techniques, such as storytelling and audience engagement, to ensure the message is both informative and impactful. By the end, learners will be able to create presentations that leave a lasting impression.

Data Visualization using PowerBI

In this course, participants will learn how to use PowerBI to transform data into visually appealing and insightful dashboards. They will explore techniques for data importation, creating interactive visualizations, and sharing reports with stakeholders. By mastering PowerBI's tools, learners will be able to present data in a way that highlights key trends and insights, making data-driven decisions easier.

Data Visualization using Tableau

This course introduces Tableau, a powerful tool for creating stunning and interactive data visualizations. Participants will explore various chart types, filtering options, and dashboard creation techniques. The course will also focus on best practices for visual storytelling, ensuring that data is presented clearly and effectively. Learners will leave with the skills to build dashboards that allow users to interact with data dynamically.

TOOLS COVERED



Power BI



COURSE CURRICULUM

MODULE 3: PYTHON PROGRAMMING AND MACHINE LEARNING

Python 3 Programming

This course provides a deep dive into Python programming, covering the basics of syntax, data types, and functions. Students will learn to write scripts to automate tasks, perform calculations, and manage data structures. The course also covers Python libraries such as NumPy, pandas, and Matplotlib for data analysis and visualization. By the end, learners will be confident in using Python for general programming and problem-solving.

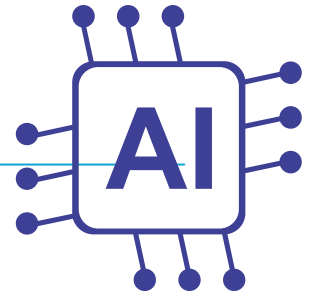
Data Analysis and Machine Learning using Python

Focusing on the intersection of data analysis and machine learning, this course teaches how to leverage Python for building predictive models. Students will learn about key machine learning algorithms, including regression, classification, and clustering. The course also includes data cleaning, feature engineering, and model evaluation techniques, providing a comprehensive foundation for working with real-world data in a machine learning context.

TOOLS COVERED



COURSE CURRICULUM



MODULE 4: GENERATIVE AI

Introduction to Generative AI and Prompt Engineering

This course offers an introduction to generative AI technologies and the art of prompt engineering. Participants will explore how AI models like GPT and DALL-E create text, images, and other media from simple inputs. The course emphasizes the importance of crafting effective prompts to get desired outputs and covers the ethical implications of using generative AI. Learners will also experiment with real-world examples to understand the potential and limitations of these technologies.

Generative AI for Text

In this course, participants will dive deep into the use of generative AI for creating text-based content. They will explore how AI models can write essays, generate summaries, and even compose poetry. The course will teach effective prompt engineering techniques for different types of text generation. Additionally, students will learn how to fine-tune models for specific tasks, ensuring the generated content meets desired standards.

Generative AI for Media Generation

This course covers the use of generative AI to create multimedia content such as images, music, and video. Participants will learn about AI models that generate realistic visuals and animations, as well as how to fine-tune models for specific creative needs. The course also explores the ethical considerations surrounding media generation, such as copyright and authenticity, giving learners a well-rounded view of AI's role in creative industries.

COURSE CURRICULUM

Generative AI for Data Analysis

This course focuses on using generative AI techniques for analyzing and interpreting complex datasets. Participants will explore how AI can assist in generating insights from structured and unstructured data. Topics include automating data analysis workflows, identifying patterns, and generating predictive models. By the end of the course, learners will be able to apply generative AI to solve data-related challenges in business and research contexts.

AI Ethics and Governance

This course delves into the ethical considerations and governance frameworks surrounding AI technologies. Participants will explore topics such as bias in AI models, data privacy, and accountability. The course also examines global efforts to create regulatory standards for AI development and deployment. By understanding the ethical implications of AI, learners will be equipped to make informed decisions and ensure responsible AI use.

TOOLS COVERED



ChatGPT

Gemini



Grok



Midjourney



runway



Suno



OpenAI



HeyGen



ElevenLabs

COURSE CURRICULUM

MODULE 5: CAPSTONE PROJECTS

The capstone project phase offers students the opportunity to apply the knowledge and skills they have acquired throughout their coursework. Participants will work on real-world problems and collaborate on solutions using data analysis, AI, and machine learning techniques. The capstone project encourages critical thinking, innovation, and hands-on experience in tackling complex challenges, making it an essential part of the learning journey.

FINANCE



E-COMMERCE



HEALTHCARE



REAL ESTATE



MEDIA



FORAGE VIRTUAL LEARNING EXPERIENCE

Experience work with virtual programs from innovative global companies.



1.5 M+

students registered
into Forage programs

70+

programs in diverse
industries and roles

2-5X

more likely to land a job at a
partner company by
completing that company's
virtual experience program

ACCESSIBLE EXPERIENCE FROM TOP COMPANIES



Learn highly relevant skills with
our instructor-led approach



Experience what real work looks like
and learn critical skills, all amongst
some of the best students across the
world.

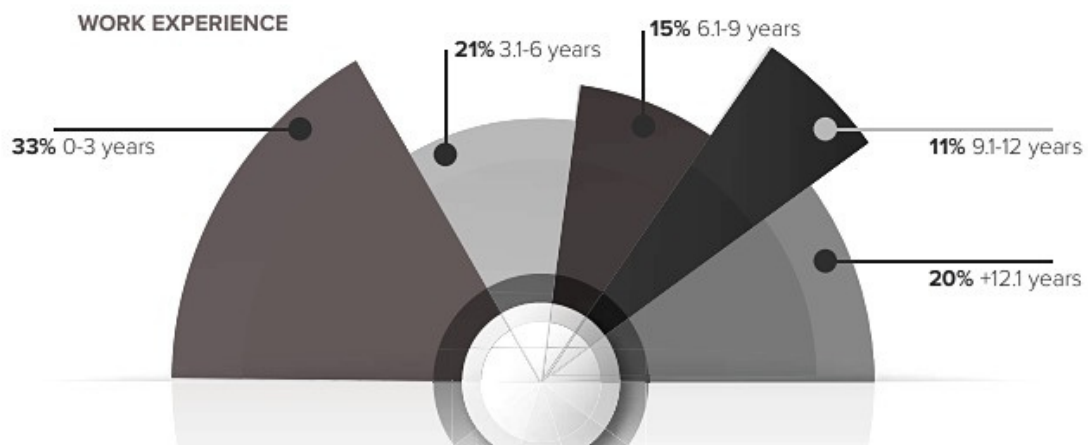
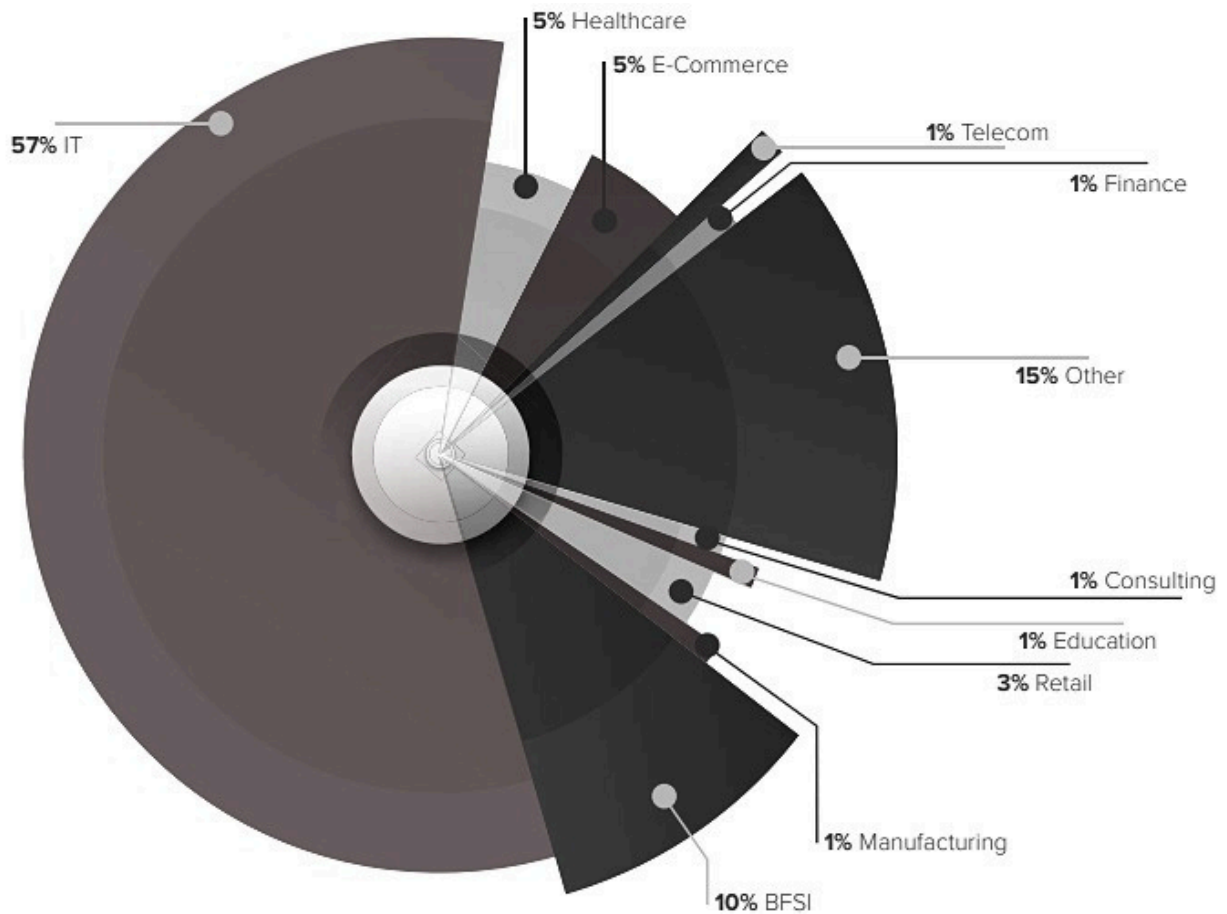


Replicate work at top
companies, and connect
students to the companies
themselves



Get a genuine career advantage with
Fortune 500 companies

STUDENT DEMOGRAPHICS



CLIENTS & PARTNERS



Our Students work at



”

“Education is the most powerful weapon that we can use to change the world.”

– Nelson Mandela





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<https://www.xaltiusacademy.com/>