

Professional Certificate Program in Data Analytics

Course Outline





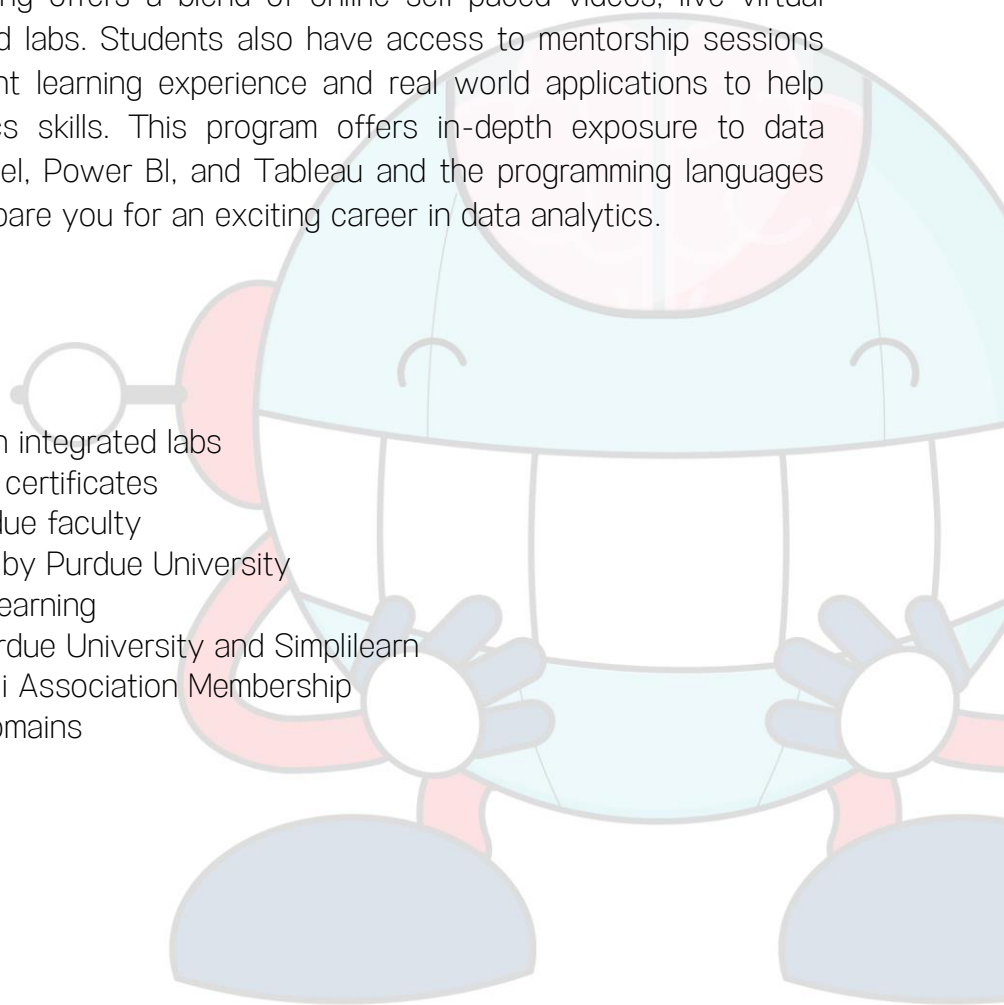
Course Overview:

Accelerate your career with this acclaimed Professional Certificate Program in Data Analytics, in collaboration with Purdue University and in collaboration with IBM. This program features the perfect mix of theory, case studies, and extensive hands-on practice. This program, in partnership with Purdue University, provides a comprehensive data analytics education, leveraging Purdue's academic excellence in data analytics partnership with IBM.

This Certificate Program is designed to give graduates in any discipline and experienced professionals from programming as well as non-programming background an extensive data analytics education. This training offers a blend of online self-paced videos, live virtual classes, hands-on projects, and labs. Students also have access to mentorship sessions that provide a high-engagement learning experience and real world applications to help master essential data analytics skills. This program offers in-depth exposure to data visualization tools such as Excel, Power BI, and Tableau and the programming languages Python, R, and SQL to help prepare you for an exciting career in data analytics.

Key Features:

- 12+ hands-on projects on integrated labs
- Industry-recognized IBM certificates
- Masterclasses from Purdue faculty
- International recognition by Purdue University
- 180+ hours of Blended Learning
- Joint certificate from Purdue University and Simplilearn
- Eligible for Purdue Alumni Association Membership
- Capstone project in 3 domains





About the Purdue University

Purdue University, a top public research institution, offers higher education at its highest proven value. Committed to student success, Purdue is changing the student experience with a greater focus on faculty-student interaction and creative use of technology.

This Professional Certificate Program in Data Analytics in collaboration with Purdue University will open pathways for you in the data analytics domain as it pertains to virtually every realm of business— from healthcare to manufacturing to ecommerce.

Upon completing this program, you will receive a joint Simplilearn and Purdue certificate of completion.

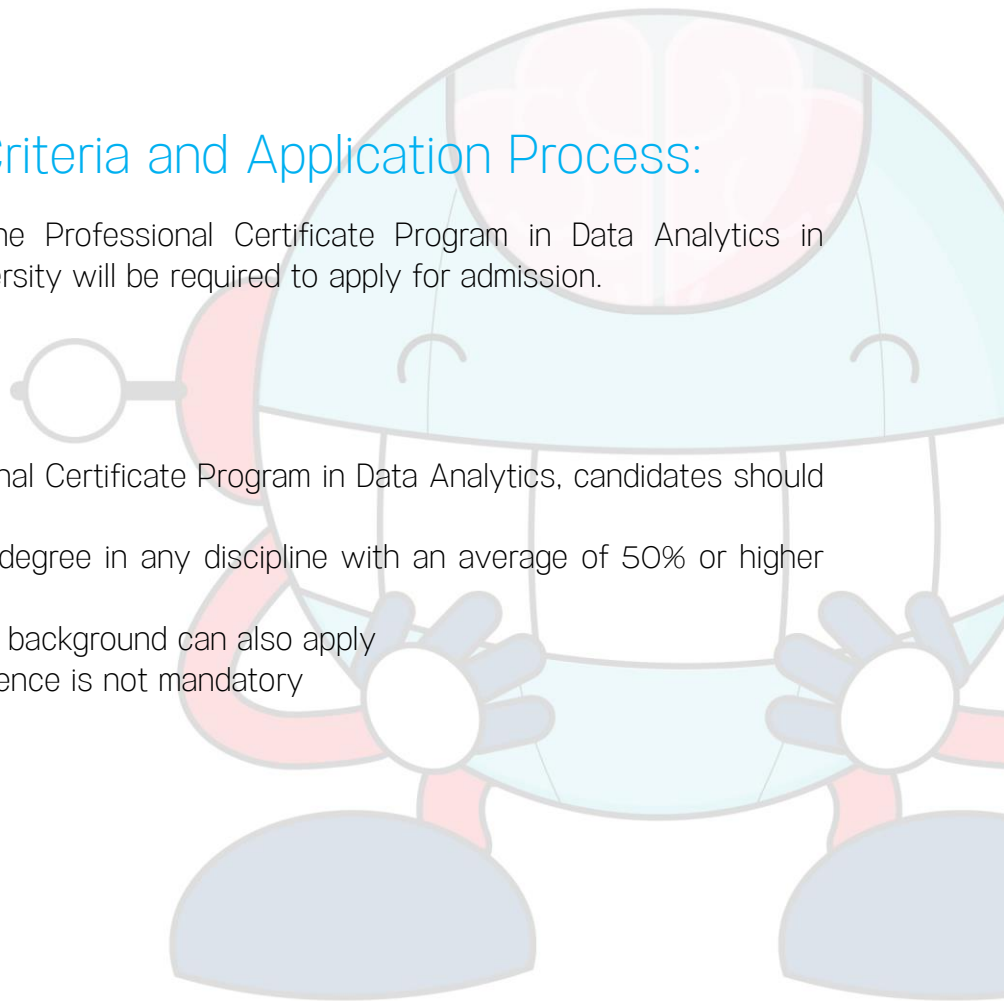
Program Eligibility Criteria and Application Process:

Those wishing to enroll in the Professional Certificate Program in Data Analytics in collaboration with Purdue University will be required to apply for admission.

Eligibility Criteria

For admission to this Professional Certificate Program in Data Analytics, candidates should have:

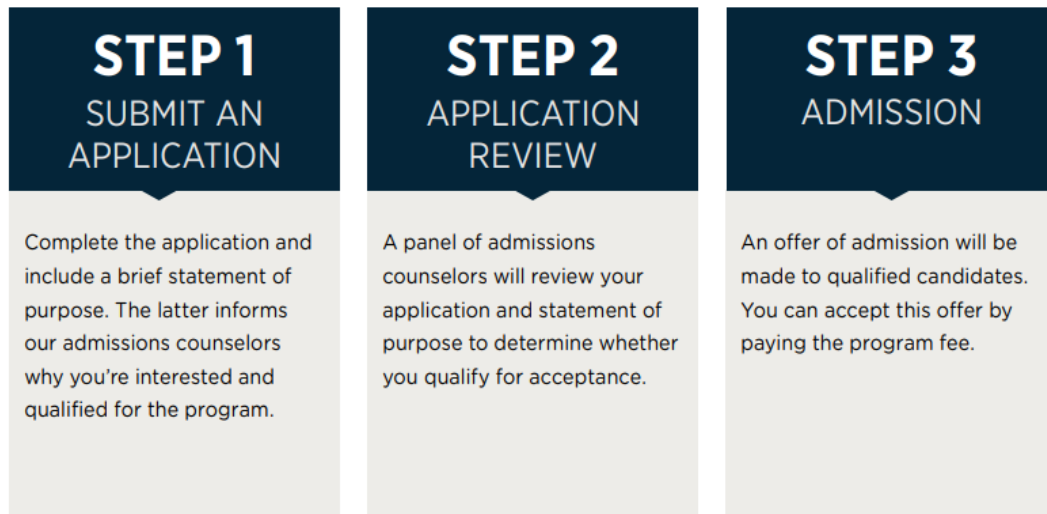
- Should have bachelor's degree in any discipline with an average of 50% or higher marks
- With a non-programming background can also apply
- Having prior work experience is not mandatory





Application Process

The application process consists of three simple steps. An offer of admission will be made to the selected candidates and accepted by the candidates by paying the admission fee.



Talk to an Admissions Counselor

We have a team of dedicated admissions counselors who are here to help guide you in applying to the program. They are available to:

- Address questions related to the application
- Assist with financial aid (if required)
- Help you resolve your questions and understand the program



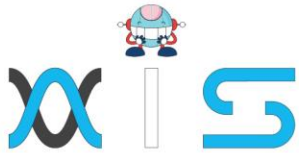
Who should enroll in this Program?

This program caters to graduates in any discipline and working professionals from programming as well as non-programming backgrounds. Candidates with no prior experience can also apply for this program. The diversity of our students adds richness to class discussions and interactions. A career as a data analyst requires a foundation in statistics and mathematics. Aspiring professionals of any educational background with an analytical frame of mind are best suited to pursue this Professional Certificate Program in Data Analytics, including:

- IT professionals
- Banking and finance professionals
- Marketing managers
- Supply chain network managers
- Students in UG/ PG program

Program Outcomes:

- Understand essential statistical concepts and SQL concepts
- Write your first Python program by implementing concepts of variables, strings, functions, loops, and conditional statements
- Understand the nuances of lists, sets, dictionaries, conditions and branching, objects and classes in Python
- Work with data in Python, including the reading and writing of files and loading, working, and saving data with Pandas
- Perform data analytics using popular Python libraries
- Learn how to interpret data in Python using multi-dimensional arrays in NumPy, manipulate DataFrames in pandas, use SciPy library of mathematical routines, and execute machine learning using Scikit-Learn
- Gain insights on several data visualization libraries in Python; including Matplotlib, Seaborn, and Folium
- Gain an in-depth understanding of the basics of R, learning how to write your own R scripts
- Master R programming and understand how various statements are executed in R



- Understand and use linear and non-linear regression models and classification techniques for data analysis
- Grasp the concepts of Tableau Desktop 10, become proficient with Tableau statistics and build interactive dashboards
- Become an expert on visualization techniques such as heat map, tree-map, waterfall, Pareto, Gantt chart, and market basket analysis
- Get introduced to the latest Microsoft analytics and visualization tools (Power BI)
- Understand the basics of AI concepts, machine learning workflows, and AI business applications

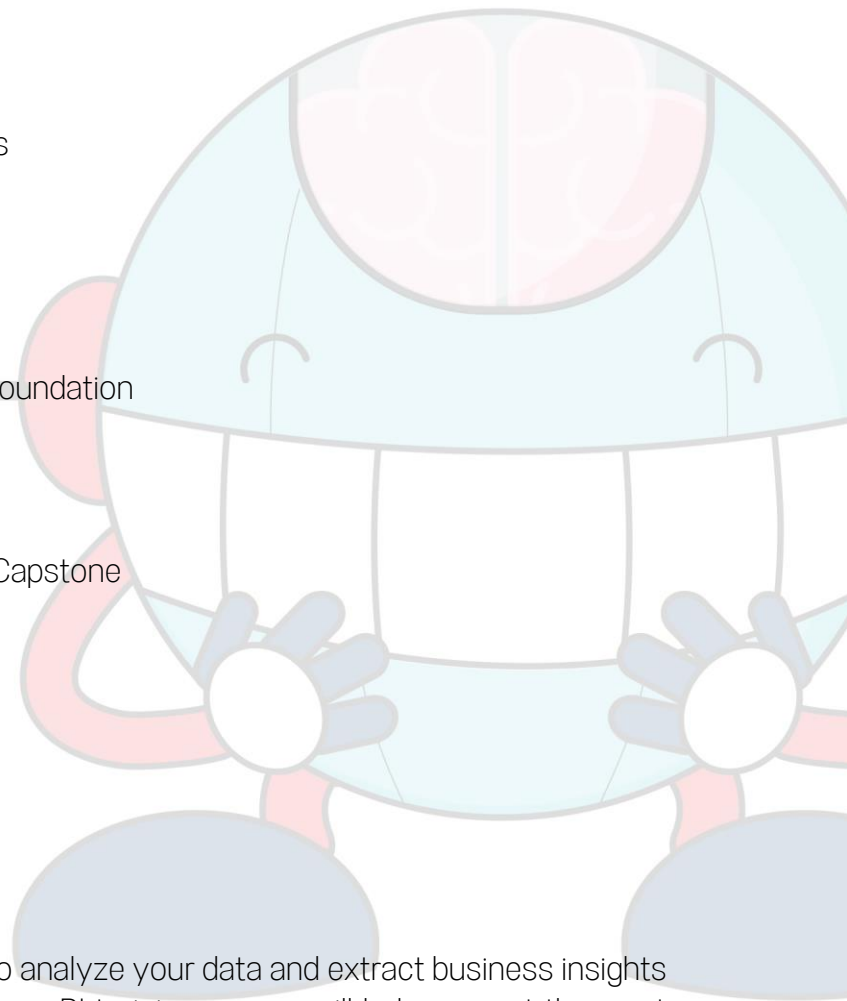
Learning Path:

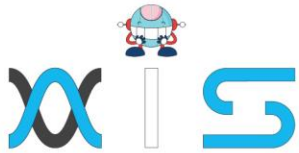
1. Introduction to Data Analytics
2. Statistics Essentials
3. SQL Training
4. Data Analytics with Python
5. Analytics and Programming Foundation
6. Data Science with R
7. Tableau Training
8. Business Analytics program Capstone

Electives:

Power BI

Microsoft Power BI is a suite of tools used to analyze your data and extract business insights by building interactive dashboards. This Power BI training course will help you get the most out of Power BI, enabling you to solve business problems and improve operations. This Power BI training course will help you master the development of dashboards from published





reports, discover greater insight from your data with Quick Insights, and learn practical recipes for the various tasks that you can do with Microsoft Power BI—from gathering your data to analyzing it. This course also contains some handy recipes for troubleshooting various issues in Power BI.

Introduction to AI

The Introduction to Artificial Intelligence course is designed to help learners decode the mystery of artificial intelligence and understand its business applications. This course provides an overview of artificial intelligence concepts and workflows, machine learning, deep learning, and performance metrics. You'll learn the difference between supervised and unsupervised learning, be exposed to use cases, and see how clustering and classification algorithms help identify artificial intelligence business applications.

IBM Watson for Chatbots

This course provides a practical introduction on how to build a chatbot with Watson Assistant without writing any code and then deploy your chatbot to a real website in less than five minutes. It will teach you to plan, build, test, analyze, and deploy your first chatbot.

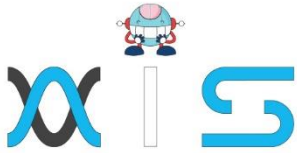
Master Class – Purdue University

Attend an online interactive masterclass and get insights about advancements in the Data Analytics domain. Industry

Master Class – Data Science

Attend this online interactive industry master class to gain insights about Data Analytics Domain.





AIS

With the rising demand in scalable technology, AIS provides tailored goal-setting based on your organization's needs and expectations. With products geared towards the growing needs of your organization's customers and employees, AIS has innovative and value-driven solutions.

Learning Partners



SAS Management, Inc.

SAS Management, Inc. has been a leader in the training, certification and consulting services industry in the Philippines. With offices in Makati, Ortigas and Cebu, Philippines, the company has been the top training and consulting company for over 9 years. In its years of existence, it has provided certificates to over 100,000 professionals including 10,000 participants in the 160+ courses that have been conducted just during the 2020-2021 pandemic alone. The most sought-after courses being offered are ITIL, Project Management Professional (PMP)®, COBIT 5, Six Sigma Yellow Belt, Six Sigma Green Belt, PRINCE2, and organizational skills, among others.



Simplilearn

Simplilearn, based in California and India, is the world's #1 online bootcamp and one of the world's the leading certification and training providers. Simplilearn trained over 2,000,000 professionals with 2,000+ trainers and provides over 400 different courses.

Technology Partner

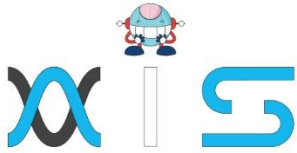


Freshworks

With over 40,000 customers, Freshworks is a business solutions software provider with products ranging from IT helpdesk and service desk, customer relationship management, live chat, marketing automation, phone system, and HR.

Partners & Affiliates





The program presented, as well as a wide range of programs are products of the partnership of AIS, SAS Management, Inc., and Simplilearn. With a common goal of providing the best practice of facilitating learning with an array of choices available in the online platform in this time of digitization.

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