

## Post Graduate Program in Business Analysis

In collaboration with IBM



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## About the Program

Kickstart your career in Business Analysis with the comprehensive Post Graduate Program in Business Analysis, in partnership with Purdue University. This program provides a complete overview of the Business Analysis domain and prepares you for the role of a Business Analyst with help of practical skills, with real-world case studies, extensive hands-on practicum and masterclasses by IBM experts.

This Post Graduate Program is designed for graduates in any discipline and experienced professionals from diverse backgrounds to provide an extensive business analysis education. This training offers a blend of online self-paced videos, live virtual classes and hands-on projects. Students also have access to mentorship sessions that provide a high-engagement learning experience and real-world applications to help master essential business analysis skills. This program gives a broad exposure to statistical concepts, business analysis elements, lifecycle management, agile scrum methodologies, data analysis and visualization with Python and tools like Excel, Power BI, and Tableau to help prepare you for an exciting career in Business Analysis.

## Key Features of the Post Graduate Program in Business Analysis in Partnership with Purdue University



Purdue Post
Graduate Program
Certification



Purdue Alumni Association membership



Masterclasses from top faculty from Purdue and industry experts from IBM



170+ hours of Applied Learning



Harvard Business
Case studies,
Capstone from
3 domains and
14+ projects with
Industry data sets
from Unilever,
Amazon, etc.



Exclusive IBM
Hackathons, AMA
and data analytics
certification

# About the Post Graduate Program in Business Analysis in Partnership with 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.

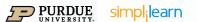
This Post Graduate Program in Business Analysis in partnership with Purdue University will open pathways for you in the Business Analysis domain. It relates to virtually every realm of business—from banking to eCommerce to healthcare.

Upon completing this program, you will receive a joint Purdue-Simplilearn certification of completion.



## About Simplilearn

Simplilearn is the world's #1 online bootcamp provider that enables learners through rigorous and highly specialized training. We focus on emerging technologies and processes that are transforming the digital world, at a fraction of the cost and time as traditional approaches. Over one million professionals and 2000 corporate training organizations have harnessed our award-winning programs to achieve their career and business goals.



## About IBM and Simplilearn collaboration

A joint partnership with Simplilearn and IBM introduces students to an integrated blended learning, making them an expert in Business Analysis. The program in collaboration with IBM will make students industry ready for Business Analyst job roles. IBM is a leading cognitive solution and cloud platform company, headquartered in Armonk, New York, offering a plethora of technology and consulting services. Each year, IBM invests \$6 billion in research and development and has achieved five Nobel Laureates, nine US National Medals of Technology, five US National Medals of Science, six Turing Awards, and 10 Inductees in US Inventors Hall of Fame.



## Program Eligibility Criteria and Application Process

To enroll in the program, you must apply for admission.

### **Eligibility Criteria**

For admission to this Post Graduate Program in Business Analysis, candidates :

- 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.

### STEP 1

## SUBMIT AN APPLICATION

Complete the application and include a brief statement of purpose. The latter informs our admissions counselors why you're interested and qualified for the program.

### STEP 2

## APPLICATION REVIEW

A panel of admissions counselors will review your application and statement of purpose to determine whether you qualify for acceptance.

## STEP 3

**ADMISSION** 

An offer of admission will be made to qualified candidates. You can accept this offer by paying the program fee.

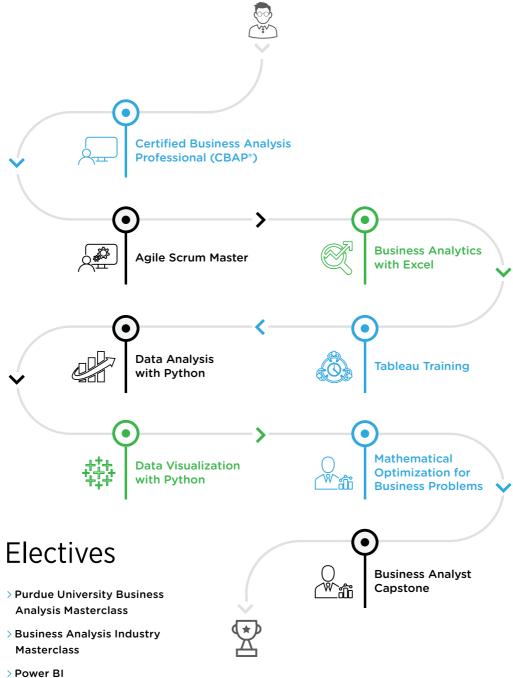


### Talk to an Admissions Counselor

We have a team of dedicated admissions counselors to guide you through the process. They'll address questions, assist with financial aid, and give you a better overall understanding of the program.



## Learning Path



- > Data Science with R
- > Digital Transformation Course for Leaders

## **Program Outcomes**



Grasp fundamentals of excel analytics functions and conditional formatting



Apply statistical tools and concepts like moving average, hypothesis testing, ANOVA and regression to data sets using Excel



Understand the tools and techniques used in Business Analysis Planning and Monitoring



Master the concepts of requirements life cycle management



Gain fundamental knowledge on agile perspective



Learn to analyze data using Tableau and become proficient in building interactive dashboards



Master the Agile Scrum project management approach



Learn to analyze and visualize data to obtain insightful information using Python



Apply the fundamentals of data science using R



Utilize the concepts of statistics and mathematical optimization to solve business problems systematically

## **Program Outcomes**



Gain expertise in Agile Scrum methodologies, Agile Scrum applications, Daily Scrum synchronization, Sprint planning, and review



Understand Business Analysis Key Concepts and Business Analysis Core Concept Model (BACCM)



Plan, execute, monitor and track Scrum projects



Absorb Agile philosophy and gain deep knowledge of Scrum



Effectively apply Scrum in your organizations



## Who Should Enroll in this Program?

This program caters to graduates in any discipline and working professionals from diverse backgrounds. Candidates need not have any prior experience to enroll for this program.

The program is best suited for individuals seeking the following careers:

Aspiring Business Analysts

 including recent college
 graduates and those looking
 for a career change.

- Other positions that are performing business analysis duties such as administrators,
- Managers and project leads
- IT professionals
- Project managers
- Banking and finance professionals
- Marketing managers
- Sales professionals
- Supply chain network managers





## Certified Business Analysis Professional (CBAP®)

This CBAP certification training lets you master the highest skills of business analysis, including advanced documentation, effective planning, and the design of business solutions. This course also covers the core concept model of business analysis and the six knowledge areas of the BABOK® Guide Version 3. It all prepares you to pass the IIBA-CBAP exam.

#### **Key Learning Objectives**

- Business analysis planning and monitoring
- Elicitation and collaboration
- Requirements life cycle management
- Strategy analysis
- Requirements analysis and design definition
- Business intelligence perspective
- Business architecture perspective
- Business process management perspective

- ✔ Lesson 01 Introduction to CBAP certification
- Lesson 02 Introduction to BABOK V3
- Lesson 03 Business Analysis Planning and Monitoring

- Lesson 04 Elicitation and Collaboration
- ✓ Lesson 05 Requirements Life Cycle Management
- Lesson 06 Strategy Analysis
- ✓ Lesson 07 Requirements Analysis and Design Definition
- Lesson 08 Solution Evaluation
- ✓ Lesson 09 Agile Perspective
- ✓ Lesson 10 Business Intelligence Perspective
- ✓ Lesson 11 Information Technology Perspective
- Lesson 12 Business Architecture Perspective
- ✓ Lesson 13 Business Process Management Perspective





## Agile Scrum Master

This Agile Scrum Master online training introduces you to the best practices of Agile and the nuances of the Scrum methodology. Master the Agile Scrum project management approach and enhance your ability to develop and deliver quality products to customers. Use this popular methodology to maximize business value while mitigating potential risks.

#### **Key Learning Objectives**

After completing this phase, you will be able to:

- Agile Scrum methodologies
- Agile Scrum applications
- Daily Scrum synchronization
- Sprint planning and review
- Producing Scrum artifacts

- Implementing distributed
- Scrum
- JIRA project management
- Agile Scrum best practices

- Course Introduction
- Agile Way of thinking
- Other Agile frameworks
- Scrum events and artifacts

- Scrum roles
- Agile estimating, planning and monitoring
- Agile on Complex projects
- Adopting Agile

## Business Analytics with Excel

Business Analytics with Excel training will boost your analytics career with powerful new Microsoft Excel skills. This business analytics training will equip you with the most sophisticated and effective concepts and hard skills. You'll learn the basic concepts of data analysis and statistics, and promote data-driven decision-making. Your knowledge of this tool, combined with official business analytics certification, may lead to more success in your career.

#### **Key Learning Objectives**

- Understand the meaning of business analytics and its importance in the industry
- Grasp the fundamentals of excel analytics functions and conditional formatting
- Learn how to analyze with complex datasets using pivot tables and slicers
- Solve stochastic and deterministic analytical problems using tools like scenario manager, solver and goal seek
- Apply statistical tools and concepts like moving average, hypothesis testing, ANOVA and regression to data sets using Excel
- Represent your findings using charts and dashboards
- Get introduced to the latest Microsoft analytic and visualization tools i.e. Power BI



- ✓ Lesson 1 Introduction to CBAP certification
- ✓ Lesson 01 Introduction to Business Analytics
- Lesson 02 Formatting Conditional
   Formatting and Important Functions
- Lesson 03 Analysing Data with Pivot Tables
- Lesson 04 Dashboarding
- ✓ Lesson 05 Business Analytics with Excel
- Lesson 06 Data Analysis Using Statistics
- ✓ Lesson 07 Power BI

## Tableau Training

This Tableau course helps you understand how to build visualizations, organize data, and design charts and dashboards to empower more meaningful business decisions. You'll be exposed to the concepts of Data Visualization, different combo charts, and stories, working with filters, parameters, and sets, and building interactive dashboards.

#### **Key Learning Objectives**

- Become an expert on visualization techniques such as heat map, treemap, waterfall, Pareto
- Understand metadata and its usage
- ✓ Work with Filter, Parameters, and Sets
- Master special field types and Tableau-generated fields and the process of creating and using parameters
- ✔ Learn how to build charts, interactive dashboards, story interfaces, and how to share your work
- Master the concepts of data blending, create data extracts and organize and format data
- ✓ Master arithmetic, logical, table, and LOD calculations



- Lesson 01 Getting Started with Tableau
- Lesson 02 Core Tableau in Topics
- Lesson 03 Creating Charts in Tableau
- Lesson 04 Working with Metadata
- ✓ Lesson 05 Filters in Tableau
- Lesson 06 Applying Analytics to the worksheet
- Lesson 07 Dashboard in Tableau
- ✓ Lesson 08 Modifications to Data Connections
- Lesson 09 Introduction to Level of
- Details in Tableau (LODS)





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## Data Analysis with Python

Grow beyond spreadsheet software for data analytics. Perform statistical analyses and create meaningful data visualizations using Python. This course will take you from the basics of Python to exploring many different types of data. You will learn how to prepare data for analysis, perform simple statistical analyses, create meaningful data visualizations and predict future trends from data.

#### **Key Learning Objectives**

- Learn data analysis with Python
- Learn how to import data sets, clean and prepare data for analysis
- Summarize data and build machine learning models using scikitlearn
- Build data pipelines

- Lesson 01 Importing Datasets
- Lesson 02 Cleaning and Preparing the Data
- Lesson 03 Summarizing the Data Frame
- Lesson 04 Model Development
- Lesson 05 Model Evaluation

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## Data Visualization with Python

Learn how to tell compelling stories with data visualization. With this course you will learn how to extract information, and leverage that data for effective decision making by presenting it in an approachable and stimulating way.

#### **Key Learning Objectives**

- Basics of data visualization
- Learn how to use specialized visualization tools
- Learn to create maps and visualizing geospatial data
- Learn data visualization libraries in Python namely Matplotlib, Seaborn and Folium.

- ✔ Lesson 01 Introduction to Visualization Tools
- Lesson 02 Basic Visualization Tools
- Lesson 03 Specialized Visualization Tools
- Lesson 04 Advanced Visualization Tools
- Lesson 05 Creating Maps and Visualizing Geospatial Data

## Mathematical Optimization for Business Problems

Construct optimization models to solve business problems in this course. Learn different aspects of mathematical programming to construct optimization models using IBM Decision Optimization technology in this course.

#### **Key Learning Objectives**

- Learn how to model and solve optimization model
- Learn basics of optimization model like data, decision variables, objective functions, and constraints
- Understand the different type of solutions possible and mathematical programming technique used for optimization

- ✓ Lesson 01 The Big Picture
- Lesson 02 Linear Programming
- ✓ Lesson 03 Network Models
- Lesson 04 Beyond simple LP
- Lesson 05 Modelling Practice



## **Business Analyst Capstone**

This Business Analyst capstone project will let you apply the skills you learned in this program. Through dedicated mentoring sessions, you'll learn how to solve a real-world, industry-aligned problem in business analysis. This project is the final step in the learning path, and it will demonstrate to employers your expertise in Business Analysis.



## **Elective Course**

#### Power BI

Microsoft Power BI is a suite of tools that let you build interactive dashboards. These dashboards help you analyze data and extract business insights. This Power BI training course will help you get the most out of Power BI, enabling you to solve business problems and improve operations.



#### Data Science with R

This course enables you to take your data science skills into a variety of companies, helping them analyze data and make more informed business decisions. The course covers data exploration, data visualization, predictive analytics, and descriptive analytics techniques with the R language. Learn about R packages, how to import and export data in R, data structures in R, various statistical concepts, cluster analysis, and forecasting.



#### **Digital Transformation Course for Leaders**

Learn to leverage digital technologies to transform your business strategies and objectives with this course. Our course is designed to help you build a solid action plan, foster customer-focused innovation, and drive a digital culture in your organization.





## **Elective Course**

### **Business Analysis Industry Master Class**

Attend online interactive masterclasses from IBM and get insights about advancements in technology/techniques in Business Analysis.

#### Purdue University Business Analysis Master Class

Attend an online interactive Masterclass and get insights into the world of Business Analysis.





## Certification





Upon completion of this Post Graduate Program in Business Analysis in partnership with Purdue University, you will receive the Post Graduate Program Certification from Purdue University. You will also receive certificates from Simplilearn for the courses in the learning path. These certificates will testify to your skills as a Business Analyst Expert.



## **Advisory Board Member**



Dr. Zhiwei Zhu

Clinical Assistant Professor at Krannert School of Management, Purdue University

With over 15 years of experience leading business analytics functions at global reinsurance companies, Dr. Zhu now uses his wealth of knowledge and business-relevant experience to provide analytics training to future business leaders at Purdue University's Krannert School of Management.



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