Program Coverage – Learning Sprints

Participants learn & apply increasingly difficult concepts to challenges. We believe skilling happens through this process of making mistakes, dealing with consequences, receiving feedback, and refactoring to improve. The course focuses on competency development.

The program consists of the following sprints that are described below.

Sprint No.	Sprint Name	Sprint Objectives
1	Creating Visuals Using Tableau	• Explore different components of the Tableau interface and also create visuals in Tableau
2	Robust Visualizations Using Tableau	• Connect Tableau to various data sources and work with various types of charts by demonstrating data aggregation
3	Time-Series Data Analysis	• Explore time series data using various types of charts
4	Visualizations of Spatial and Relational Data	• Create spatial charts using various maps and hierarchies
5	Visualize Data Distribution and Create Dashboard	• Create reports that visualize data distribution and present them in dashboards
6	Designing Interactive Dashboards	• Create dashboards with interactive actions
7	Build Interactive Dashboards Using Templates	• Create, index, and manipulate a series of data structures and data frames using series.

8	Case Study	• Apply the knowledge and skills you have gained so far to solve a case study.

About NIIT StackRoute™

NIIT Limited is an Indian multinational skills and talent development corporation headquartered in Gurgaon, India. The company was set up in 1981 to help the nascent IT industry overcome its human resource challenges. Established in August 2015, StackRoute® is an NIIT-incubated venture. StackRoute runs immersive bootcamp programs that deliver job-ready professionals with deep skills. Our distinctive implementation of mastery learning combined with personalized tutoring allows us to guarantee learning outcomes. Our graduates confidently take on challenging assignments in the context of digital transformation. Several large global IT organizations, Global Incubation Centers, Product Engineering teams, and Universities trust StackRoute programs to transform their own employees' or students' digital skills. As a digital talent transformation partner, StackRoute programs transform over 20,000 professionals in India each year. In the USA, StackRoute Learning Inc., an NIIT company, partners with educational institutions across North America to offer University-branded online bootcamp programs to students who wish to upskill or reskill for better employment. In its 21 years in China, NIIT China has worked with over 100 Chinese universities.

For any assistance feel free to contact:
support.da@psu.edu.sa

Digital Academy, Community Service and Continuing Education Center.

NIIT

⏱ **9 weeks Part Time**

Data Visualization, Dashboarding and EDA using **Tableau**

Contact:
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جامعة الامير سلطان
PRINCE SULTAN UNIVERSITY

Data Visualization – Better and Faster

With the rapid proliferation of digital data, it is important for individuals & organizations to make data-based decisions to succeed in a hyper-competitive environment. Students aspiring to do well in a modern workplace need to visualize the data & insights impactfully and be able to create dashboards that help accelerate decision making.

Business teams are using cutting-edge tools like Tableau to analyze and visualize data. For the construction of powerful dashboards, exploratory data analysis, and stories with more effective data visualization, these tools offer great productivity and complex capabilities. In general, this project supports KSA's Vision 2030, which is focused on preparing the next generation of workers.

Program Outline & Highlights

This program teaches learners how to visually represent data and develop stories with it, which can assist business intelligence gain new perspectives. To construct drill-down dashboards that more effectively communicate business data visually, you'll leverage important Tableau features. The many data connecting methods available to Tableau for combining data from sources will also be covered.

The program also includes time series analysis, which allows you to drill down from years to days of data. This aids in the extraction of actionable insights over time. It also discusses map visualization. These visuals display data about its physical location in order to generate insights. You will use Tableau to create views that provide a snapshot of business performance data.

This program will help learners as they progress through their academic journey and will lay the foundation of an important data analysis and visualization skill that will be of immense value in their professional lives.

Program duration – 90 hours

This program is scheduled over **9 weeks** to make it convenient for students to take it up along with other academic work. In each week, learners need to spend **10 hours** of learning effort:

- To attend two sessions of two hours each

- Spend six hours to complete the hands-on assignments.

- Additionally, learners can use the Office Hours or two hours duration scheduled each week to clarify any doubts with the mentor.

Exit Profile

Learners will acquire knowledge and skills to create simple data visualizations and dashboards using Tableau. This can be used to analyze and present data so that it is easy to comprehend.

On successful completion of all the assignments and project, each learner will be able to:

- Create charts and graphs for data analysis

- Perform Time Series Data Analysis

- Visualize Spatial and relational data

- Visualize data distribution

- Create interactive dashboards

Who Should Attend?

This program from NIIT StackRoute, brought to you by Prince Sultan University (PSU), is open to learners from all undergraduate disciplines who can:

- Communicate effectively in English

- Perform Basic Data Analysis using Excel

- Work comfortably on their PC with common productivity tools and use the Internet.

StackRoute Learning Cycle

StackRoute courses emphasize self-learning facilitated by personalized coaching, mentoring, review, feedback & deliberate practice. The course is practice based i.e., learners learn by doing things rather than by watching videos or by attending traditional lectures.

The Program focuses on competency development. Each course has a collection of "learning sprints." Each sprint typically requires a 10 hours of learning effort. Each learning sprint is mapped to a distinct task and is built around a challenge that validates a learner's ability to perform that task effectively.