SGUNITED SKILLS PROGRAMME

Modern Services

Up-Skill in Data Science

Course code: GCN

Course Overview
The aim of this course is to enhance your knowledge and skillsets to perform more advanced analytics tasks by equipping you with advanced skills such as augmented analytics apabilities to streamline data preparation, data exploration and insight discovery; use automated Machine Learning (ML) to automate ML modelling and model operationalization; select and use appropriate tools to automatically find and visualise insights; and collaborate insights through effective data storytelling.

Career Opportunities
Upon completion of the course, graduates can look forward to career opportunities in roles such as:
- Business Analyst
- Citizen Data Scientist
- Data Analyst

Minimum Entry Requirement

- Singapore Citizens and Singapore Permanent Residents, aged 21 & above
- At least a Polytechnic Diploma or ITE Technical Diploma/ Technical Engineer Diploma/ Work-Learn Technical Diploma
- Holders of other equivalent academic qualifications will be considered on a case-by-case basis

Applicants who do not meet the entry requirements may be considered for admission to the course based on evidence of at least 5 years of relevant working experience or supporting evidence of competency readiness. Suitable applicants who are shortlisted may have to go through an interview and/or entrance test. The Polytechnic reserves the right to shortlist and admit applicants.

Important information for you
With the new support scheme, you can now earn up to $1,200 per month by attending courses and equipping yourself with industry-relevant skills and knowledge.

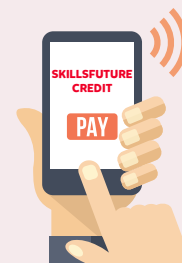**View courses**
Find all courses at:
www.tp.edu.sg/sgus

Application Period
09 November 2020 - 04 January 2021
APPLY HERE

Training Allowance
$1200 per month
- Min. 75% attendance requirement

Nett Course fee
6-month course - $500
12-month course - $1000
Use your SkillsFuture Credits!

Click here for FAQ.

Reach out to us!
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UP-SKILL IN DATA SCIENCE | 08 MARCH 2021 INTAKE

Course fee: **$500.00**
Course Duration: **6 months | Full Day training**
Course commencement date: **08 March 2021**
Application period: **09 November 2020 – 04 January 2021**

APPLY NOW

COURSE CODE: GCN

Full Course fee before subsidy: $15,646.00
Please take note of the following requirements in order to be eligible for the subsidy:
1. Trainees must fulfil minimum attendance requirements and pass assessments to qualify for course fee subsidies. Trainees who are unable to meet these requirements may be asked to return the course fee subsidies that they have received.
2. The programme allows trainees to exit without penalty if they are successfully placed into a job or have secured a job on their own accord while undergoing training. However, trainees who exit the programme without a valid reason may be asked to return the course fee subsidy that they have received.

Specialist Diploma in Data Science for Business	Course Outline
Robotic Process Automation for Beginners	Course Outline
Basic Business Analytics @ Work	Course Outline
Fundamentals of the Personal Data Protection Act	Course Outline
Design Thinking in Action - The SEE Cycle	Course Outline
Predictive Analytics for Business Users	Course Outline
Data Science Essentials	Course Outline
Text Analytics for Business Users	Course Outline
Big Data & Analytics	Course Outline
Industry Project / Industry Attachment	Course Outline

COURSE OUTLINE

Specialist Diploma in Data Science for Business
The aim of this Specialist Diploma is to enhance the knowledge and skillsets of participants to perform more advanced analytics tasks by equipping them with advanced skills such as augmented analytics, automated machine learning and data storytelling.

What you will learn
Post-Diploma Certificate in Augmented Analytics
- Augmented Data Preparation
- Automated Machine Learning

Post-Diploma Certificate in Date Visualization and Storytelling
- Data Visualization Fundamentals
- Data-driven Storytelling

Robotic Process Automation for Beginners
This course aims to give participants a glimpse into the limitless possibilities of robotic process automation and learn how to use RPA to automate repetitive, computerized administrative tasks.

What you will learn
- Introduction to RPA: What is it?
- Learn to develop a basic RPA script
- Best practices for automation

Basic Business Analytics @ Work
This workshop is a quick jumpstart to do basic business analytics. Participants will get to understand of the importance of Analytics, to get hands-on experience to handle data, as well as to create interactive dashboards. This workshop will also show case the potential and possibilities of doing more with advance business analytics.

What you will learn
- Introduction to Analytics
- Business Analytics Life Cycle
- Text Mining

Fundamentals of the Personal Data Protection Act
The course will train participants to identify key legislative and regulatory requirements under the PDPA and will look at the role of the Data Protection Officer and how to manage data breaches.

What you will learn
- Identify key legislative and regulatory requirements under the PDPA including the 9 key obligations under the PDPA, the provisions relating to "Do Not Call
- Manage data breaches through case study.

Participant Pre- requisites
Participants are assumed to be able to:
- Understand relevant organisational strategies, objectives, culture, policies, processes and products / services;
- Have information gathering skills to gather and collate necessary data;
- Have analytical skills to assess policies and procedures;
- Have business writing skills to prepare management report;
- Have interpersonal and communication skills to interact with relevant stakeholders;
- Have facilitation skills to ask the right questions to elicit necessary information; and
- Be aware of compliance requirements of organisation.

Design Thinking in Action - The SEE Cycle
This course will help non-designers sift through the jargon and gain insight into the cyclical and highly iterative creative thinking process. Participants will be encouraged to adopt an open and expansive mindset that will embrace productive failure, risk-taking and deep inquiry.

What you will learn
- Overview of Design Thinking
- Introduction to The SEE Cycle
- Beginning with The Right Mind-set
- Presenting The Design Challenge
- The Power Of Empathy
- Identifying the Issue
- Deconstruction and Reconstruction
- Presentation and Critique
- Generating New Ideas
- Discovering the Impossible
- Distilling the Best
- Validating Viable Options
- Presentation and Critique
- Summary and Conclusion

Predictive Analytics For Business Users

This course covers the concepts, methodology, and techniques needed to provide an end-to-end analytics solution. Preparation of raw data into "analytics-ready" data and popular techniques such as supervised and unsupervised learning will be introduced.

What you will learn
- Introduction to Predictive Analytics
- Data Preparation
- Predictive Models

Data Science Essentials

This course covers the fundamental skills needed to kick-start a data science project by using an open-source programming language. It focuses on how to read, explore, manipulate data and present data using the right visualisations. There will be guided programming and participants will learn how to perform data exploration and analysis techniques to discover new knowledge from data to aid data-driven decisions in an intelligent and informed way.

What you will learn
- Be able to use an open-source programming platform and its related packages to:
  - Understand your data
  - Manipulate your data into desired formats
  - Apply appropriate techniques to carry out Exploratory Data Analysis (EDA)
  - Use suitable visualizations to communicate your findings

Text Analytics for Business Users

This course covers the knowledge and best practices of text analytics. Several popular techniques such as text topics, text clustering and sentiment analysis will be introduced. Participants will learn to use a user-friendly, GUI-based process flow designing tool to automate the entire process of extracting, preparing and analyzing textual data.

What you will learn
- Introduction to Text Analytics
- Text Pre-processing
- Text Analytics

Big Data & Analytics

This course covers the knowledge and skills needed to use and manage big data and to perform big data analytics using big data programming. Several concepts and techniques, like handling different data structures and analyzing them, will be introduced.

What you will learn
- Introduction to Big Data & Analytics
- Introduction to Big Data Architecture
- Big Data Acquisition
- Big Data processing and analysis
- Big Data Case studies

Industry Project/Industry Attachment

This programme involves project-based learning, where you are required to be either attached to companies or work on real-life projects for companies or centres, related to your course of study. You are expected to undertake various activities discussed with and assigned by the supervisors or participating host organisations. The programme enables you to apply knowledge and skills acquired in the course of your study to address practical problems in the real workplace.

BACK

The information in this brochure is accurate at the time of updating (28 Sep 2020).

Temasek POLYTECHNIC