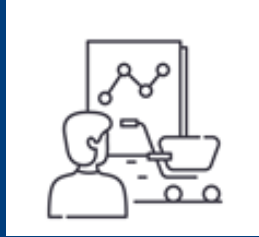


# Machine Learning Methods for Customer Analytics



## Course Description

Noting that, all customers are not the same, this course uses data analytics to analyze customer lifetime value, identify high value customers, which customers to up-sell to, which customers to cross-sell to, which customers to send a retention campaign to and which customers to do nothing. Key techniques used to derive actionable insights and taught in this course are Descriptive Statistics, Cluster Analysis, Principal Component Analysis (PCA), Logistic Regression, and Decision Trees. The software programming language used in this course is Python programming.

## Course Curriculum

Day	Lecture Topic
Day 1 9am – 12.30pm	Introduction to Data Analytics How to Segment your Customers using Cluster Analysis
Day 1 1.30pm – 5pm	How to Determine the most important factors using Principal Component Analysis (PCA)
Day 2 9am – 12.30pm	How to classify your customers using the Logistic Regression Model
Day 2 1.30pm – 5pm	How to make predictions using Decision Trees Q&A Session

If you have any questions or would like to register this course, please email us at [DACC@nus.edu.sg](mailto:DACC@nus.edu.sg)

## COURSE INSTRUCTORS



Prof Carol Hargreaves is the Director of the Data Analytics Consulting

Centre. She is an analytics and artificial intelligence (AI) professional with over 30 years of experience.

She has held leading roles in the pharmaceutical, healthcare, retail, telecommunications and education industries.



Dr Wai Hoh Tang is a Senior Data Scientist at the Data Analytics Consulting

Centre. Prior to his PhD in Statistics, he has more than 8 years of working experience in the aviation and oil & gas industries – in the areas of call center operations, crew planning and software development.

Course Fee: \$1700.00 (GST-exclusive)

Session (days): 2

Date: 21 March & 22 March 2022

Duration (hrs): 14

Level: Beginner

Venue: Online

