



UNIVERSITI TEKNOLOGI MARA

DSC763: CUSTOMER ANALYTICS

Course Name (English)	CUSTOMER ANALYTICS APPROVED
Course Code	DSC763
MQF Credit	3
Course Description	There is a staggering amount of browsing data and buying patterns that can be found on online shop sites. Extracted customers' data such as their preferences and navigations can be used to describe their past, present and future behaviours in relation to their purchasing decisions. This course will offer insight understanding into the key areas of customer analytics: descriptive analytics, predictive analytics, prescriptive analytics, and their application to real-world business practices. By the end of this course, students will understand how data can be used to describe, explain, and predict customer behaviour.
Transferable Skills	Customer analytics, marketing analytics
Teaching Methodologies	Lectures, Lab Work, Discussion
CLO	CLO1 Classify various customer analytics methods CLO2 Diagnose customers' data using predictive analytics. CLO3 Analyze an effective solution to a selected problem. CLO4 Demonstrate the proposed solution using prescriptive analytics
Pre-Requisite Courses	No course recommendations
Topics	
1. Understanding Customer Analytics 1.1) Handling Big Data Problems 1.2) Mining Data for Insights	
2. Descriptive Analytics 2.1) Data Exploration 2.2) Data Visualization 2.3) Descriptive Analytics	
3. Predictive Analytics 3.1) Making Use of Predictive Analytics 3.2) Developing Predictive Models 3.3) Testing Predictive Models 3.4) Implementation of Predictive Model	
4. Prescriptive Analytics 4.1) Introduction to Prescriptive Analytics 4.2) Prescriptive Analytics Applications	

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Assignment (10%) to assess the level of scientific skill in proposing effective solutions to a selected problem.	10%	CLO3
	Assignment	Assignment (20%) to assess the level of competency in diagnosing customers' data using predictive analytics	20%	CLO2
	Final Test	Final Test (30%) to assess the level of scientific skill in proposing effective solutions to a selected problem.	30%	CLO3
	Group Project	Group Project (15%) to assess the level of competency in diagnosing customers' data using predictive analytics	15%	CLO2
	Presentation	Group Project (15%) to assess the level of competency in demonstrating the proposed solution (communication skill)	15%	CLO4
	Quiz	Quiz (10%) to assess the level of knowledge and understanding of classifying various customer analytics methods	10%	CLO1

Reading List	Reference Book Resources	<ul style="list-style-type: none"> • Tom Chavez, Vivek Vaidya, Chris O'Hara 2018, <i>Data Driven: Harnessing Data and AI to Reinvent Customer Engagement</i>, First Edition Ed., McGraw-Hill Education [ISBN: 1260441539] • Mike Grigsby 2018, <i>Marketing Analytics: A Practical Guide to Improving Consumer Insights Using Data Techniques</i>, Second Edition Ed., Kogan Page [ISBN: 978-074948216] • Ilya Katsov 2017, <i>Introduction to Algorithmic Marketing: Artificial Intelligence for Marketing Operations</i> [ISBN: 978-069214260] • Mike Grigsby 2016, <i>Advanced Customer Analytics: Targeting, Valuing, Segmenting and Loyalty Techniques (Marketing Science)</i> First Edition Ed., Kogan Page [ISBN: 978-074947715] • Omer Artun and Dominique Levin 2015, <i>Predictive Marketing: Easy Ways Every Marketer Can Use Customer Analytics and Big Data</i> First Edition Ed., Wiley [ISBN: 978-111903736] • Jeff Sauro 2015, <i>Customer Analytics For Dummies</i>, First Edition Ed., For Dummies [ISBN: 978-111893759] • Thomas W. Miller 2015, <i>Marketing Data Science: Modeling Techniques in Predictive Analytics with R and Python</i>, First Edition Ed., Pearson FT Press [ISBN: 978-013388655]
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	