



UNIVERSITI TEKNOLOGI MARA

DSC721: ENTERPRISE DATA ANALYTICS

<b>Course Name (English)</b>	ENTERPRISE DATA ANALYTICS <b>APPROVED</b>
<b>Course Code</b>	DSC721
<b>MQF Credit</b>	3
<b>Course Description</b>	This course covers data collection and cleansing, and examine elements that contribute to building reliable predictive models by taking into account the complexities inherent in an enterprise. The technical concepts of analytics and Big Data is discussed. The analytics tools will be used to construct and analyze the models and finally propose a solution for improving the enterprise's overall performance. The course mixes lectures, readings, group projects, exercises, case studies and discussion
<b>Transferable Skills</b>	Problem identification and solving using data analytics methodology. Machine learning algorithms in light of predictive analytics.
<b>Teaching Methodologies</b>	Lectures, Discussion
<b>CLO</b>	CLO1 Examine elements that contribute to building reliable predictive models by taking into account the complexities inherent in an enterprise CLO2 Construct technical concepts of predictive analytics at an enterprise-scale dealing with Big Data CLO3 Evaluate a solution by using analytical tools in improving the enterprise's overall performance
<b>Pre-Requisite Courses</b>	No course recommendations
<b>Topics</b>	
<b>1. The Building Blocks of Enterprise Data Analytics</b> 1.1) Overview of Enterprise Data Analytics	
<b>2. Data Analytics Life Cycle</b> 2.1) CRISP-DM	
<b>3. Enterprise Analytics Use Cases</b> 3.1) Use cases commonly found in enterprises	
<b>4. Data Preprocessing</b> 4.1) Big data preprocessing techniques	
<b>5. Predictive Analytics</b> 5.1) Conducting prediction for enterprises	
<b>6. Analytical Techniques</b> 6.1) Machine learning algorithms used in prediction	
<b>7. Model Evaluation</b> 7.1) Validating model performance	
<b>8. Emerging Technologies</b> 8.1) Emerging Technologies Case Study	

Assessment Breakdown	%
Continuous Assessment	100.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Assignment 1	20%	CLO1
	Assignment	Assignment 2	20%	CLO2
	Final Project	Group Project	30%	CLO3
	Test	Online test - Final assessment	10%	CLO1
	Test	Online test - Final assessment	10%	CLO2
	Test	Hands-on test on student's ability to conduct data analytics individually - Final assessment	10%	CLO3

Reading List	Reference Book Resources
	<ul style="list-style-type: none"> <li>Herbert Jones 2019, <i>Data Science for Business Predictive Modeling, Data Mining, Data Analytics, Data Warehousing, Data Visualization, Regression Analysis, Database Querying, and Machine Learning for Beginners</i> 1 Ed., 14, Bravex Publications [ISBN: 1647483263]</li> <li>Tanushri Banerjee, Arindam Banerjee 2019, <i>Business Analytics: Text and Cases</i>, 1 Ed., SAGE Publications Pvt. Limited [ISBN: 9353287103]</li> <li>Peter Schryvers 2019, <i>Bad Data: Why We Measure the Wrong Things and Often Miss the Metrics That Matter</i>, 1 Ed., 10, Prometheus Books [ISBN: 1633885909]</li> <li>John D. Kelleher 2018, <i>Data Science</i>, 1 Ed., MIT Press [ISBN: 0262535432]</li> <li>Matt Taddy 2019, <i>Business Data Science: Combining Machine Learning and Economics to Optimize, Automate, and Accelerate Business Decisions</i> 1 Ed., McGraw-Hill Education [ISBN: 1260452778]</li> </ul>
Article/Paper List	This Course does not have any article/paper resources
Other References	This Course does not have any other resources