

The Hong Kong Polytechnic University

Subject Description Form

Subject Code	HTM4367
Subject Title	Data Visualization Analytics in the Hospitality and Tourism Industry
Credit Value	3
Level	4
Pre-requisite/ Co-requisite/ Exclusion	Nil
Objectives	<p>This subject is designed to provide students with the fundamental concepts and practical applications of data visualization analytics in hospitality and tourism industry. This course will emphasize how to visualize raw data in the hospitality and tourism industry as well as produce original insights from the visualization analytics. Students will perform a variety of visualization analytical practices using data visualization programs to have hands-on experiences. Upon completion of the subject, students will be able to obtain comprehensive understandings of data visualization analytics for facilitating better business decision-making process.</p>
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <p>A. Competent Professional</p> <ul style="list-style-type: none">• possess and be able to apply the skills, knowledge, and abilities relevant to managerial concepts in data visualization analytics• discuss the basic concepts and principles of data visualization analytics <p>B. Critical Thinkers</p> <ul style="list-style-type: none">• execute efficient data visualization analytics to develop optimal solutions for hospitality and tourism business problems• follow and acquire the procedures in implementing data visualization analytics• critically evaluate and review data visualization analytics that create theoretical and practical values• understand and compare a variety of data visualization analytics <p>C. Innovative Problem Solvers</p> <ul style="list-style-type: none">• apply data visualization analytics to identify business insights and

	<p>support better business decision-making in the hospitality and tourism industry</p> <p>D. Effective Communicators</p> <ul style="list-style-type: none"> develop an understanding of the fundamentals of communication and alignment around concepts that are required for effective data presentation <p>E. Lifelong Learners</p> <ul style="list-style-type: none"> transfer their intellectual skills in data visualization and manage their own learning to achieve self-determined goals <p>F. Ethical Leader</p> <ul style="list-style-type: none"> understand global and ethical standards in general data protection regulation <p>G. Socially Responsible Global Citizen N/A</p>
Subject Synopsis/ Indicative Syllabus	<ol style="list-style-type: none"> 1. Data Analytics in the Hospitality and Tourism Industry 2. Data Exploration in Tableau 3. Introduction to Tableau 4. Creating Basic Visualizations (Descriptive Analysis) 5. Connecting Data in Tableau 6. Data Engineering in Tableau 7. Visualization Analytics I (Calculations) 8. Visualization Analytics II (Mapping) 9. Visualization Analytics III (Trends and Forecasting) 10. Visualization Analytics IV (Dashboard and Actions) 11. Interpreting Visualization Analytics Results