

# The Hong Kong Polytechnic University

## Subject Description Form

<b>Subject Code</b>	HTM4350
<b>Subject Title</b>	Big Data Analytics in Hospitality, Tourism and Events
<b>Credit Value</b>	3
<b>Level</b>	4
<b>Pre-requisite / Co-requisite/ Exclusion</b>	HTM3205 – Analysing and Interpreting Research (or other equivalent subjects)
<b>Objectives</b>	<p>This subject is designed to provide students with the fundamental concepts and practical applications of big data analytics in tourism and hospitality industry. This course will emphasize how to understand, analyze and articulate data analytics as well as produce original insights from big data applications. Students will perform a variety of analytical practices using a big data programming to have hands-on experiences. Upon completion of the subject, students will be able to obtain comprehensive understandings of big data analytics for facilitating better business decision-making process.</p>
<b>Intended Learning Outcomes</b>	<p>Upon completion of the subject, students will be able to:</p> <p><b>A. Competent professional:</b></p> <ul style="list-style-type: none"><li>• possess and be able to apply the skills, knowledge and abilities relevant to managerial concepts in big data analytics</li><li>• discuss the basic concepts and principles of big data analytics</li><li>• possess and be able to apply the skills, knowledge and abilities relevant to managerial concepts in big data analytics</li><li>• discuss the basic concepts and principles of big data analytics</li><li>• use modern IT tools (i.e., R and R Studio) appropriate to AIDA practice (AIDA Outcome 4)</li></ul> <p><b>B. Critical Thinkers</b></p> <ul style="list-style-type: none"><li>• execute efficient big data analytics to solve hospitality and tourism business problems</li><li>• follow and acquire the procedures in implementing big data analytics</li><li>• critically evaluate and review big data analytics that create values</li><li>• understand and compare a variety of big data analytics</li></ul> <p><b>C. Innovative Problem Solvers</b></p> <ul style="list-style-type: none"><li>• identify business problems, formulate and solve the business problems relevant to AIDA, using big data sets (e.g., online review data) (AIDA Outcome 3)</li><li>• apply business analytics to identify business insights and support better</li></ul>

	<p>business decision-making</p> <p><b>D. Effective Communicators (not applicable)</b></p> <p><b>E. Lifelong Learners (not applicable)</b></p> <p><b>F. Ethical Leaders</b></p> <ul style="list-style-type: none"> <li>understand global and ethical standards in general data protection regulation</li> </ul> <p><b>G. Socially Responsible Global Citizen (not applicable)</b></p>
<b>Subject Synopsis/ Indicative Syllabus</b>	<ol style="list-style-type: none"> <li>1. Business analytics and big data in hospitality and tourism</li> <li>2. Data issues / management</li> <li>3. Data analytics programs and foundation of data analytics</li> <li>4. Statistical inference</li> <li>5. Descriptive analytics</li> <li>6. Statistical inferences</li> <li>7. Predictive Analytics 1: Linear / Multiple regression</li> <li>8. Predictive Analytics 2: Logistic regression</li> <li>9. Classification / clustering methods</li> <li>10. Ethical issues related to big data</li> </ol>