

## The Hong Kong Polytechnic University

<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
<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> </ul> <p>• possess and be able to apply the skills, knowledge and abilities relevant to managerial concepts in big data analytics</p> <ul style="list-style-type: none"> <li>• discuss the basic concepts and principles of big data analytics</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>• apply business analytics to identify business insights and support better business decision-making</li> </ul> <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>
<p><b>Subject Synopsis/ Indicative Syllabus</b></p>	<ol style="list-style-type: none"> <li>1. Business analytics and big data in hospitality and tourism</li> <li>2. Smart city and smart tourism</li> <li>3. Data issues / management</li> <li>4. Statistical inference</li> <li>5. Descriptive analytics</li> <li>6. Data visualization</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. Geospatial analytics</li> <li>11. Spatial data visualization</li> <li>12. Ethical issues related to big data</li> </ol>