






## Level 5 Diploma in Logistics & Supply Chain (850) 145 Credits



<b>Unit:</b> Business Strategy & Operational Research	<b>Guided Learning Hours:</b> 220
<b>Exam Paper No.:</b> 3	<b>Number of Credits:</b> 22
<b>Prerequisites:</b> Basic knowledge of business procedures.	<b>Corequisites:</b> A Pass or better in Certificate in Business Studies or equivalence.
<p><b>Aim:</b> This course outlines business operational strategies in a given case study. Learners will be introduced to Linear Programming models. The aim of this course is to ensure understand transition plans, key players in a selected sector, business types and supply chain sustainability. Quantitative decision is enhanced through practical Linear Programming model implementation using Excel.</p> <p>On completion, learners would understand the process of integrating business strategy and business operations.</p>	
<b>Required Materials:</b> Recommended Learning Resources.	<b>Supplementary Materials:</b> Lecture notes and tutor extra reading recommendations.
<b>Special Requirements:</b> None	
<p><b>Intended Learning Outcomes:</b></p> <ol style="list-style-type: none"> <li>Using a business case, understand the factors behind such a business model and challenges that might be faced.</li> <li>Understand how to create opportunities and analyse product and company level of analysis of the business case to assess prime products and competitors already in such business sector.</li> <li>Understand Supply Chain Operations within the business case model from production, transportation, storage, handling to consumers.</li> <li>Understand why good planning and decision making is essential in achieving efficient and sustainable supply chains.</li> </ol>	<p><b>Assessment Criteria:</b></p> <ol style="list-style-type: none"> <li>Describe the transition stages involved.</li> <li>Describe contributing factors making the chosen business case important.</li> <li>Describe capital expenses involved.</li> <li>Describe factors affecting investments.</li> <li>Demonstrate innovations behind the business case.</li> <li>Explore the business case strategy.</li> <li>Describe product substitutes.</li> <li>Describe business challenges that could be faced.</li> <li>Demonstrate category levels involved from research to commercial application.</li> <li>Describe different business legal structures.</li> <li>Demonstrate how supply chain can be included in the business case model</li> <li>Describe supply chain.</li> <li>Describe stages in supply chain.</li> <li>Explore challenges with in the business case supply chain management.</li> <li>Describe how these challenges can be overcome.</li> <li>Demonstrate how business case can be sustainable.</li> <li>Describe closed-loop supply chain</li> <li>Describe Supply Chain Planning Matrix.</li> <li>Analyse planning levels in Supply Chain Management.</li> <li>Demonstrate activities in planning.</li> <li>Describe Linear Programming (LP).</li> </ol>

<p>5. Understand key aspects in Strategic Network planning is the selection of locations for processing activities; including allocation of available resources (e.g. capacities) to production targets on a more detailed level (Tactical Network Planning).</p>	<p>4.5 Demonstrate calculating and formulating LP models using Excel</p> <p>5.1 Describe the importance of selecting locations for processing activities.</p> <p>5.2 Demonstrate using Excel Solver to create optimisation models.</p> <p>5.3 Describe how models aid in decision making.</p> <p>5.4 Describe tactical planning.</p> <p>5.5 Demonstrate using models to aid tactical planning</p>
<p><b>Methods of Evaluation:</b> A 2½-hour essay written examination paper with 5 questions, each carrying 20 marks. Candidates are required to answer all questions. Candidates also undertake project/coursework Business Strategy &amp; Operational Research with a weighting of 100%.</p>	

**Recommended Learning Resources:** Business Strategy & Operational Research

<p><b>Text Books</b></p>	<ul style="list-style-type: none"> <li>• Operations and Supply Chain Management Essentials by Vibrant Publishers &amp; Ashley McDonough. ISBN-13 : 978-1949395242</li> <li>• Global Operations Strategy by Yeming Gong. ISBN-13 : 978-3642367076</li> <li>• Manufacturing Operations Strategy by Alex Hill, Terry Hill. ISBN-13 : 978-0230520912</li> </ul>
<p><b>Study Manuals</b></p> 	<p>BCE produced study packs</p>
<p><b>CD ROM</b></p> 	<p>Power-point slides</p>
<p><b>Software</b></p> 	<p>None</p>