## ANNEX 2 – COURSE DESCRIPTION

| ANNEX 2 – COURSE D            | LOCKIFII  | ON              |        |                     |  |
|-------------------------------|---|-----------------|--------|---------------------|--|
| Course title                  | Operations and supply chain management  |                 |        |                     |  |
| Course code                   | MBA 72  | MBA 720         |        |                     |  |
| Course type                   | Compulsory  |                 |        |                     |  |
| Level                         | Master  |                 |        |                     |  |
| Year / Semester               | 1/2   |                 |        |                     |  |
| Teacher's name                |   |                 |        |                     |  |
| ECTS                          | 6   | Lectures / week |        | Laboratories / week |  |
| Course purpose and objectives | This course introduces major concepts and tools used in the design and use of operations systems in organizations. It introduces the discipline and the role the function plays in a value-creating organization. Emphasis is given both to familiarization of various production processes and service systems, and to quantitative analysis of problems/ issues arising in the management of operations.  Businesses create value by supplying their products or services to satisfy customer demand that involves numerous activities and processes across the organization. Operations managers deal with a major issue in any business - how work gets done: setting up processes, uncovering the biggest bottlenecks, finetuning processes to save time and money, managing resources for smooth production of value. |                 |        |                     |  |
| Learning outcomes             | <ul> <li>Acquire highly specialized knowledge in operations and supply chain management, incorporating cutting-edge concepts and practices.</li> <li>Ability to integrate knowledge from diverse fields into operational strategies and problem-solving within the supply chain domain</li> <li>Develop advanced problem-solving skills specific to research and innovation in operations and supply chain management, enabling the creation of novel solutions</li> </ul>  |                 |        |                     |  |
| Prerequisites                 | None  |                 | Requir | ed                  |  |
| Course content                | <ul> <li>Introduction to Operations management</li> <li>Operations Strategy in a Global Environment</li> <li>Project Management</li> <li>Forecasting</li> <li>Design of Goods and Services</li> <li>Process Selection and Facility Layout</li> <li>Capacity and Constraint Management</li> <li>Learning Curves</li> <li>Quality management and Six Sigma</li> <li>Statistical Process Control</li> <li>Inventory Management</li> <li>Aggregate Planning and S&amp;OP</li> <li>Material Requirements Planning (MRP) and ERP</li> <li>Lean Supply Chain</li> <li>Sustainability and Operations Management</li> </ul>  |                 |        |                     |  |
| Teaching<br>methodology       | E-learnir   | ng              |        |                     |  |

| Bibliography | Jay Heizer, Barry Render, Chuck Munson, Amit Sachan (2017). Operations Management. Sustainability and Supply Chain Management. Pearson, 12th Edition.  Krajewski, Samir, K. Srivastava, Manoj, K. Malhotra, Larry, P. Ritzman. (2018). Operations Management: Processes and supply chains. Pearson, 12th Edition. |
|--------------|---|
|              | Analyze a case study focusing on the impact of forecasting on   |
| Assessment   | operational decision-making.  |
|              | Develop a proposal outlining ethical considerations in facility layout.   |
|              | <ul> <li>Analyze a case focusing on challenges in sales and operations planning<br/>and propose effective strategies.</li> </ul>  |
|              | Analyze a case study focusing on operational disruptions and propose  |
|              | resilience strategies.  |
| Language     | English   |