

**Description of Course Unit**  
**according to the ECTS User's Guide 2015**

Course unit title	Science Management
Course unit code	MNJ6205
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (according to EQF: first cycle Bachelor, second cycle Master)	Bachelor
Year of study when the course unit is delivered (if applicable)	2021/2022
Semester/trimester when the course unit is delivered	Semester 5
Number of ECTS credits allocated	90,56 hours ~ 3,234 ECTS (1 ECTS = 28 hours per semester)
Name of lecturer(s)	Nindya Nuriswati Laili
Learning outcomes of the course unit	<p>CLO-1 Students will be able identify the need for quantitative managerial decision-making tools to improve decision making in a business context and apply the appropriate tools.</p> <p>CLO-2 Students will be able to explain building blocks of quantitative managerial decision-making models.</p> <p>CLO-3 Students will be able to solve and analyze quantitative decision-making models using spreadsheets.</p> <p>CLO-4 Students will be able to analyze the best solution with respect to changes in the parameters of the problem, and evaluate solutions.</p> <p>CLO-5 Students will be able to produce reports and analyzed the problem for a professional audience.</p>
Mode of delivery (face-to-face, distance learning)	Distance Learning
Prerequisites and co-requisites (if applicable)	<ol style="list-style-type: none"> <li>1. Business Mathematic</li> <li>2. Statistics</li> </ol>
Course content	<ol style="list-style-type: none"> <li>1. Linear programming</li> <li>2. Integer programming</li> <li>3. Transportation, network flow models</li> <li>4. Project management</li> <li>5. Nonlinear programming</li> <li>6. Probability and statistics</li> <li>7. Decision analysis</li> <li>8. Queuing analysis</li> </ol>

	9. Simulation 10. Forecasting 11. Inventory management.
Recommended or required reading and other learning resources/tools	Book: <b>Taylor, B. W.</b> (2019). <i>Introduction to Management Science</i> . (13th ed.), Prentice Hall.  <b>Taha, H. A.</b> (2017). <i>Operations Research: An Introduction</i> . (10th ed.), Prentice Hall  Software: ExcelQM
Planned learning activities and teaching methods	Lecture. Project-Based Learning Drill (practice) Report Preparation and/or Presentation
Language of instruction	Indonesian
Assessment methods and criteria	There are Assignments, Midterms, Final Examination, and Term-Project Presentation. (Appendices □ assessment criteria)