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<tr><td>Module designation</td><td>CE319 Probability and Statistics</td></tr>
<tr><td>Semester(s) in which the module is taught</td><td>2</td></tr>
<tr><td>Person responsible for the module</td><td>Nabila Husna Shabrina
Prianggada I Tanaya
Ariana Tulus Purnomo</td></tr>
<tr><td>Language</td><td>Indonesian</td></tr>
<tr><td>Relation to curriculum</td><td>Compulsory</td></tr>
<tr><td>Didactic Methods</td><td>Lecture, Problem Based, Collaborative, Demonstration, Hands-On, Interactive Multimedia, Independent Learning</td></tr>
<tr><td>Workload (incl. contact hours, self-study hours)</td><td>Total workload: 136.08 hours
- 35.01 hours of synchronous lecture.
- 84.06 hours of self-study and assignments in the form of essays.
- 17.01 hours related to exam and self study</td></tr>
<tr><td>Credit points</td><td>3 SKS (5.04 ECTS)</td></tr>
<tr><td>Required and recommended prerequisites for joining the module</td><td>-</td></tr>
<tr><td>Module objectives/intended learning outcomes</td><td>
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<tr><td>D</td><td>D1</td><td>Ability to operate and coordinate (if necessary) on technical working tasks in a team.</td><td>Students in groups will be able to analyze the results of surveys or statistical experiments according to the distribution of data (C4).
Students in groups will be able to present the results of statistical projects clearly and attractively in the form of video presentations (P4).</td></tr>
<tr><td>F</td><td>F1</td><td>Ability to construct solutions with logical, critical, and systematic thinking based on analytically-identified problems.</td><td>Students will be able to find primary data using the correct methods (C3).
Students will be able to present exploratory data using descriptive statistical techniques (C3).
Students will be able to use the concept of random variables as the basis for inference (C3).
Students will be able to estimate and infer the data from the sample (C3).
Students will be able to apply a</td></tr>
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	<table><tr><td></td><td></td><td></td><td>simple linear regression model to numerical data (C3).</td></tr></table>
Content	This course provides the basics of probability distribution and statistical analysis methods, relevant for students of information and communication technology.
Assessment Instrument	Written Test, Performance, Product Based
Study and examination requirements	The total average score for the assignments&quiz (30%), midterm exam (30%), final exam (40%). Final score must be more than or equal to 55 (C).
Reading list	1. Anthony J Hayter (2012), Probability and Statistics for Engineer and Scientists, 4 ed., Thomson Brooks 2. Ken Black, Business Statistics for Contemporary Decision Making 11 th ed (2023), John Wiley & Sons, Inc 3. Hadley Wickham dan Garret Grolemund (2017), R for Data Science: Import, Tidy, Transform, Visualize, and Model Data, O'Reilly.