Module designation	*Introduction to Mathematical Statistics*
Semester(s) in which the module is taught	*4*
Person responsible for the module	*Dr. Dra. Mathilda Susanti M.Si.*
Language	*Bahasa Indonesia*
Relation to curriculum	*Compulsory course*
Teaching methods	*150 minutes lectures and 180 minutes structured activities per week.*
Workload (incl. contact hours, self-study hours)	*Total workload is 136 hours per semester which consists of 150 minutes lectures, 180 minutes structured activities, and 180 minutes self-study per week for 16 weeks.*
Credit points	*3*
Required and recommended prerequisites for joining the module	*MAT6315 - Probability Theory*
Module objectives/intended learning outcomes	*CO 1. Demonstrate respect for the views, opinions, or original findings of others* *CO 2. Demonstrate critical, creative, innovative, and systematic thinking in the development of science and technology, both independently and in groups* *CO 3. Demonstrate the ability to convey mathematical ideas in writing and orally based on the values of honesty* *CO 4. Explain concepts in mathematical statistics (joint distribution, estimation, central limit theorem, and hypothesis testing)* *CO 5. Prove properties and theorems in mathematical statistics* *CO6. Solving problems using concepts, properties, or theorems in mathematical statistics*
Content	*This course studies random variables, including several methods for determining the probability density function of random variables, distribution limits, statistics and sampling distributions, and point estimation.*
Examination forms	*CO1: Attitude assessment is carried out at each meeting by observation and / or self-assessment techniques using the assumption that basically every student has a good attitude.*

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<td>Study and examination requirements</td>
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The student is given a value of very good or not good attitude if they show it significantly compared to other students in general. The result of attitude assessment is not a component of the final grades, but as one of the requirements to pass the course. Students will pass from this course if at least have a good attitude.

The final mark will be weight as follow:
<table>
<tr><th>No</th><th>CO</th><th>Assessment Object</th><th>Assessment Technique</th><th>Weight</th></tr>
<tr><td>1</td><td>CO 1</td><td>a. Presentation
b. Discussion</td><td>Observation</td><td>5%
10%</td></tr>
<tr><td>2</td><td>CO 2, CO 3, CO 4</td><td>a. Individual assignment
b. Group assignment
c. Quiz
d. Midterm
e. Final test</td><td>Written</td><td>10%
10%
20%
20%
25%</td></tr>
<tr><td colspan="4">Total</td><td>100%</td></tr>
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<td>Reading list</td>
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1. Robert V. Hogg, Allen T. Craig, (1995). Introduction to Mathematical Statistics. Pearson Education.

2. Rice, John A., 1995. Mathematical Statistics and Data Analysis. Belmont: Duxbury Press

3. A. Bain, L.J and Engelhart, M. (1992). Introduction to Probability and Mathemat ical Statistics. Second Edition, Duxbury Press, Belmont, California.

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