

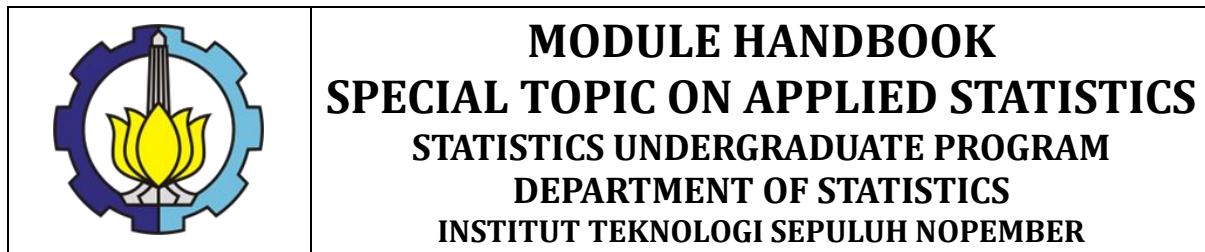
# MODULE HANDBOOK

## SPECIAL TOPIC ON APPLIED STATISTICS



**STATISTICS UNDERGRADUATE PROGRAM  
DEPARTMENT OF STATISTICS  
FACULTY OF SCIENCE AND DATA ANALYTICS  
INSTITUT TEKNOLOGI SEPULUH NOPEMBER  
SURABAYA**

## ENDORSEMENT PAGE



### MODULE HANDBOOK SPECIAL TOPIC ON APPLIED STATISTICS STATISTICS UNDERGRADUATE PROGRAM DEPARTMENT OF STATISTICS INSTITUT TEKNOLOGI SEPULUH NOPEMBER

Proses <i>Process</i>	Penanggung Jawab <i>Person in Charge</i>			Tanggal <i>Date</i>
	Nama <i>Name</i>	Jabatan <i>Position</i>	Tanda tangan <i>Signature</i>	
Perumus <i>Preparation</i>	Dr. Santi Wulan Purnami, S.Si., M.Si	Dosen <i>Lecturer</i>		
Pemeriksa dan Pengendalian <i>Review and Control</i>	Dr. Santi Wulan Purnami, S.Si., M.Si; Dr. Wibawati, S.Si, M.Si	Tim kurikulum <i>Curriculum team</i>		
Persetujuan <i>Approval</i>	Dr. Santi Wulan Purnami, S.Si., M.Si	Koordinator RMK <i>Course Cluster Coordinator</i>		
Penetapan <i>Determination</i>	Dr. Kartika Fithriasari, M.Si	Kepala Departemen <i>Head of Department</i>		

# MODULE HANDBOOK

## SPECIAL TOPIC ON APPLIED STATISTICS

Module name	SPECIAL TOPIC ON APPLIED STATISTICS		
Module level	Undergraduate		
Code	SS234760		
Course (if applicable)	SPECIAL TOPIC ON APPLIED STATISTICS		
Semester	7		
Person responsible for the module	Dr. Santi Wulan Purnami, S.Si., M.Si		
Lecturer	Dr. Santi Wulan Purnami, S.Si., M.Si; Dr. Wibawati, S.Si, M.Si		
Language	Bahasa Indonesia and English		
Relation to curriculum	Undergraduate degree program, elective, 7 <sup>th</sup> semester.		
Type of teaching, contact hours	Case method		
Workload	1. Lectures [L]: $3 \times 50 = 150$ minutes per week. 2. Exercises and Assignments [EA]: $3 \times 60 = 180$ minutes (3 hours) per week. 3. Independent Learning [IL]: $3 \times 60 = 180$ minutes (3 hours) per week.		
Credit points	3 credit points (SKS) Equivalent to 4.8 ECTS		
Requirements according to the examination regulations	A student must have attended at least 80% of the lectures to sit in the exams.		
Mandatory prerequisites	-		
Learning outcomes and their corresponding PLOs	CLO.1 Be able to study and utilize science and technology in order to apply it to the field of statistics, and able to make appropriate decisions from the results of their own work or group work in the form of a final project report or other forms of learning activities whose output is equivalent to a final project through logical, critical, systematic, and innovative thinking CLO.2 Able to manage self-learning and develop oneself as a lifelong learner in order to make a real contribution to solving problems by implementing information and communication technology CLO.3 Able to apply statistical methods correctly and evaluate them to analyze theoretical and real problems		PLO-2 PLO-3 PLO-9 PLO-10

	CLO.4 Able to apply Computing-based Business, Industrial, Financial Economic, Social Population, Environmental or Health Statistics methods to real problems	
Content	-	
Assessment and its weight	Assignment 1 (20%) Assignment 1 (20%) Assignment 1 (30%) Assignment 1 (30%)	
Media employed	LCD, whiteboard, websites (myITS Classroom), zoom	
Reading list	1. -	

	<b>INSTITUT TEKNOLOGI SEPULUH NOPEMBER</b> <b>FAKULTAS SAINS DAN ANALITIKA DATA</b> <b>PROGRAM STUDI SARJANA STATISTIKA</b> <b>DEPARTEMEN STATISTIKA</b>									
<b>RENCANA PEMBELAJARAN SEMESTER/ SEMESTER LEARNING PLAN</b>										
MATA KULIAH (MK)/ <i>Course</i>	KODE/ <i>Code</i>	Rumpun MK/ <i>Course Group</i>	BOBOT (sks)/ <i>Weight (credit)</i>	SEMESTER/ <i>Semester</i>	Tgl Penyusunan/ <i>Drafting Date</i>					
TOPIK KHUSUS STATISTIKA TERAPAN / <i>SPECIAL TOPIC ON APPLIED STATISTICS</i>	SS234760	Statistika Teori dan Pemodelan	T=3 P=0	VII	Januari 2023					
OTORISASI/ <i>AUTHORIZATION</i>	Pengembang RPS/ <i>RPS Developer</i>	Koordinator RMK/ <i>Course Group Coordinator</i>	Ketua PRODI/ <i>Head of Department</i>							
	Dr. Santi Wulan Purnami, S.Si., M.Si; Dr. Wibawati, S.Si, M.Si	Dr. Santi Wulan Purnami, S.Si., M.Si	Dr. Kartika Fithriasari, M.Si							
Capaian Pembelajaran (CP)/ <i>Learning Achievement</i>	<b>CPL-PRODI yang dibebankan pada MK/ <i>PLO</i></b>									
	CPL-2	Mampu mengkaji dan memanfaatkan ilmu pengetahuan dan teknologi dalam rangka mengaplikasikannya pada bidang Statistika, serta mampu mengambil keputusan secara tepat dari hasil kerja sendiri maupun kerja kelompok dalam bentuk laporan tugas akhir atau bentuk kegiatan pembelajaran lain yang luarannya setara dengan Tugas Akhir melalui pemikiran logis, kritis, sistematis dan inovatif Mampu menggunakan perangkat komputasi modern untuk menyelesaikan permasalahan statistik								
	CPL-3	Mampu mengelola pembelajaran diri sendiri, dan mengembangkan diri sebagai pribadi pembelajar sepanjang hayat untuk bersaing di tingkat nasional, maupun internasional, dalam rangka berkontribusi nyata untuk menyelesaikan masalah dengan mengimplementasikan teknologi informasi dan komunikasi dan memperhatikan prinsip keberlanjutan serta memahami kewirausahaan berbasis teknologi								
	CPL-9	Mampu menerapkan metode statistika dengan tepat serta mengevaluasinya untuk menganalisis permasalahan teoritis dan riil								

	CPL-10	Mampu menerapkan metode statistika Bisnis, Industri, Ekonomi, Sosial, Kesehatan, atau Lingkungan pada permasalahan riil																									
	PLO-2	<i>Be able to study and utilize science and technology in order to apply it to the field of statistics, and able to make appropriate decisions from the results of their own work or group work in the form of a final project report or other forms of learning activities whose output is equivalent to a final project through logical, critical, systematic, and innovative thinking</i>																									
	PLO-3	<i>Able to manage self-learning and develop oneself as a lifelong learner to compete at national and international levels, in order to make a real contribution to solving problems by implementing information and communication technology and paying attention to sustainability principles and understanding technologybased entrepreneurship</i>																									
	PLO-9	<i>Able to apply statistical methods correctly and evaluate them to analyze theoretical and real problems</i>																									
	PLO-10	<i>Able to apply business, industrial, economic, social, health or environmental statistical methods to real problems</i>																									
	<b>Capaian Pembelajaran Mata Kuliah (CPMK)/ CLO</b>																										
		CPMK 1. Mampu mengkaji dan memanfaatkan ilmu pengetahuan dan teknologi dalam rangka mengaplikasikannya pada bidang Statistika, serta mampu mengambil keputusan secara tepat dari hasil kerja sendiri maupun kerja kelompok CPMK 2. Mampu mengelola pembelajaran diri sendiri, dan mengembangkan diri sebagai pribadi pembelajar sepanjang hayat dalam rangka berkontribusi nyata untuk menyelesaikan masalah dengan mengimplementasikan teknologi informasi dan komunikasi CPMK 3. Mampu menerapkan metode statistika dengan tepat serta mengevaluasinya untuk menganalisis permasalahan teoritis dan riil CPMK 4. Mampu menerapkan metode Statistika Bisnis, Industri, Ekonomi Finansial, Sosial Kependudukan, Lingkungan atau Kesehatan yang berbasis Komputasi pada permasalahan riil																									
		<i>CLO.1 Be able to study and utilize science and technology in order to apply it to the field of statistics, and able to make appropriate decisions from the results of their own work or group work in the form of a final project report or other forms of learning activities whose output is equivalent to a final project through logical, critical, systematic, and innovative thinking</i> <i>CLO.2 Able to manage self-learning and develop oneself as a lifelong learner in order to make a real contribution to solving problems by implementing information and communication technology</i> <i>CLO.3 Able to apply statistical methods correctly and evaluate them to analyze theoretical and real problems</i> <i>CLO.4 Able to apply Computing-based Business, Industrial, Financial Economic, Social Population, Environmental or Health Statistics methods to real problems</i>																									
	<b>Matrik CPL – CPMK PLO-CLO Matrix</b>																										
		<table border="1"> <thead> <tr> <th></th> <th>CPL-2</th> <th>CPL-3</th> <th>CPL-9</th> <th>CPL-10</th> </tr> </thead> <tbody> <tr> <td>CPMK-1</td> <td>✓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>CPMK-2</td> <td></td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>CPMK-3</td> <td></td> <td></td> <td>✓</td> <td></td> </tr> <tr> <td>CPMK-4</td> <td></td> <td></td> <td></td> <td>✓</td> </tr> </tbody> </table>		CPL-2	CPL-3	CPL-9	CPL-10	CPMK-1	✓				CPMK-2		✓			CPMK-3			✓		CPMK-4				✓
	CPL-2	CPL-3	CPL-9	CPL-10																							
CPMK-1	✓																										
CPMK-2		✓																									
CPMK-3			✓																								
CPMK-4				✓																							

<b>Deskripsi Singkat MK/ <i>Course Description</i></b>	-				
<b>Bahan Kajian: Materi Pembelajaran/ <i>Course Material</i></b>	Praktek Statistika, Teknologi Informasi, Pemrosesan Data, Pemodelan Statistika <i>Statistical Practice, Information Technology, Data Processing, Statistical Modeling</i>				
<b>Pustaka/ <i>References</i></b>	<p><b>Utama/Primary:</b></p> <p>1. -</p> <p><b>Pendukung/Secondary:</b></p> <p>1. -</p>				
<b>Dosen Pengampu/ <i>Lecturers</i></b>	Dr. Santi Wulan Purnami, S.Si., M.Si; Dr. Wibawati, S.Si, M.Si				
<b>Matakuliah syarat/ <i>Pre-requisite Course</i></b>	-				
Mg Ke- <i>Week</i>	Kemampuan akhir tiap tahapan belajar <b>(Sub-CPMK)</b> <i>Final capability for each learning step</i>	<b>Penilaian</b> <i>Evaluation</i>	Bantuk Pembelajaran, Metode Pembelajaran, Penugasan Mahasiswa, <b>[Estimasi Waktu]</b>  <i>Learning Format</i> <i>Learning Methods</i> <i>Assignment for Student</i> <b>[Estimated Time]</b>	Materi Pembelajaran <b>[Pustaka]</b> <i>Learning Material</i> <b>[References]</b>	<b>Bobot Penilaian (%)</b> <i>Evaluation Weight (%)</i>
		<b>Indikator</b> <i>Indicator</i>	<b>Kriteria &amp; Bentuk</b> <i>Criteria and Format</i>	<b>Luring</b> <i>Offline</i>	<b>Daring</b> <i>Online</i>

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1		1.					
8			ETS/ <i>Midterm</i>				
9		1.					
16		Evaluasi Akhir Semester / Ujian Akhir Semester/ <i>Final Exam</i>					

	<b>RENCANA ASESMEN &amp; EVALUASI</b> <i>Assessment and Evaluation Plan</i> Program Studi Sarjana Statistika / <i>Statistics Undergraduate Program</i> <b>TOPIK KHUSUS STATISTIKA TERAPAN / SPECIAL TOPIC ON APPLIED STATISTICS</b>		<b>RA&amp;E</b>  SLK-60
<b>Kode MK:</b> SS234760  <i>Course Code:</i> SS234760	<b>Bobot sks (T/P):</b> 3  <i>CREDITS : 3</i>	<b>Rumpun MK:</b> Statistika Teori dan Pemodelan  <i>Course cluster:</i> <i>Statistical Theory and Modeling</i>	<b>Smt:</b> VII  <i>Semester VII</i>
<b>OTORISASI</b> <i>AUTHORIZATION</i>	<b>Penyusun</b> <i>Author</i>  Dr. Santi Wulan Purnami, S.Si., M.Si; Dr. Wibawati, S.Si, M.Si	<b>Koordinator RMK</b> <i>Coordinator of course cluster</i>  Dr. Santi Wulan Purnami, S.Si., M.Si	<b>Kaprodi</b> <i>Head of Department</i>  Dr. Kartika F, M.Si.

Mg ke (1)	Sub CP-MK (2)		Bentuk Asesmen (Penilaian) / <i>Evaluation Type</i> (3)	Bobot / <i>Scoring</i> (%) (4)
	No	Kemampuan akhir / <i>Final Capability</i>		
1				
8		Evaluasi Tengah Semester <i>Mid Semester Evaluation</i>		
9				
16		Evaluasi Akhir <i>Final Evaluation</i>		
<b>Total Bobot Penilaian</b>				<b>100%</b>