

MODULE HANDBOOK  
**TIME SERIES  
ECONOMETRICS**



**BACHELOR DEGREE PROGRAM  
DEPARTEMENT OF STATISTICS  
FACULTY OF SCIENCE AND DATA ANALYTICS  
INSTITUT TEKNOLOGI SEPULUH NOPEMBER**

## ENDORSEMENT PAGE



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DEPARTMENT OF STATISTICS  
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<b>Proses Process</b>	<b>Penanggung Jawab Person in Charge</b>			<b>Tanggal Date</b>
	<b>Nama Name</b>	<b>Jabatan Position</b>	<b>Tandatangan Signature</b>	
<i>Perumus Preparation</i>		<i>Dosen Lecturer</i>		<b>March 28, 2019</b>
<i>Pemeriksa dan Pengendalian Review and Control</i>		<i>Tim kurikulum Curriculum team</i>		<b>April 15, 2019</b>
<i>Persetujuan Approval</i>	Dr. Santi Wulan Purnami, S.Si, M.Si	<i>Koordinator RMK Course Cluster Coordinator</i>		<b>July 17, 2019</b>
<i>Penetapan Determination</i>	Dr. Kartika Fithriasari, M.Si	<i>Kepala Departemen Head of Department</i>		<b>July 30, 2019</b>


# MODULE HANDBOOK

## TIME SERIES ECONOMETRICS

Module name	<b>Time Series Econometrics</b>	
Module level	Undergraduate	
Code	KS184627	
Course (if applicable)	Time Series Econometrics	
Semester	8 <sup>th</sup>	
Person responsible for the module		
Lecturer		
Language	Bahasa Indonesia and English	
Relation to curriculum	Undergraduate degree program, <b>mandatory</b> , 8 <sup>th</sup> semester.	
Type of teaching, contact hours	<ol style="list-style-type: none"> <li>1. Lectures : 3 x 50 = 150 minutes per week.</li> <li>2. Exercises and Assignments : 3 x 60 = 180 minutes (3 hours) perweek.</li> <li>3. Private learning : 3 x 60 = 180 minutes (3 hours) per week.</li> </ol>	
Workload		
Credit points	3 credit points (SKS)	
Requirements according to the examination regulations	A student must have attended at least 80% of the lectures to sit in the exams.	
Mandatory prerequisites	Pengantar Teori Ekonomi/ <i>Introduction to Economic Theory</i> Analisis Deret Waktu/ <i>Time Series Analysis</i> Analisis Regresi/ <i>Regression Analysis</i>	
Learning outcomes and their corresponding PLOs	<ol style="list-style-type: none"> <li>1. <i>Can explain the concept of financial econometrics;</i></li> <li>2. <i>Can explain and do financial return predictions;</i></li> <li>3. <i>Can make volatility and risk predictions;</i></li> <li>4. <i>Can predict multiple—related series;</i></li> <li>5. <i>Can understand the concept of random walk and co-integration;</i></li> <li>6. <i>Can understand the models for high frequency price dynamic;</i></li> </ol>	PLO – 1  PLO – 3  PLO – 4
Content	<i>This course introduces students to the models of financial econometrics. This course covers the theoretical and practical aspects of econometrics models used by financial institutions, investment banks, centralbanks, governments, and others. Students will also be introduced to models in finance (financial) which can be nonlinear, and time varying models. Specifically, students will learn how to design, implement, estimate, and</i>	

	<i>analyze observation-driven or parameter-driven models.</i>
Study and examination requirements and forms of examination	
Media employed	LCD, whiteboard, websites (myITS Classroom), zoom.
Reading list	<ol style="list-style-type: none"> <li>1. Gouriéroux, Christian and Jasiak. 2001. <i>Financial Econometrics: Problems, Models and Methods</i>. Princeton University Press.</li> <li>2. Rachev, Svetlozar T. 2006. <i>Financial Econometrics: From Basics to Advanced Modeling Techniques</i>. Wiley.</li> </ol>



	Program Studi	Sarjana, Departemen Statistika, FMKSD-ITS
	Mata Kuliah	Ekonometrika Deret Waktu
	Kode Mata Kuliah	KS184627
	Semester/SKS	VIII/3
	MK Prasyarat	Pengantar Teori Ekonomi, Analisa Deret Waktu, Analisis Regresi
<b>RP-S1</b>	Dosen Pengampu	

**PUSTAKA :**

*References :*