

# UNIVERSITAS GADJAH MADA

Faculty of Mathematics and Natural Sciences

Department of Mathematics
Sekip Utara Bulaksumur Yogyakarta 55281 Telp: +62 274 552243 Fax: +62 274 555131 Email: math@ugm.ac.id Website: http://math.fmipa.ugm.ac.id

## **Doctor in Mathematics**

: +62 274 552243

Telp Email Email : maths3@ugm.ac.id; kaprodi-s3-matematika.mipa@ugm.ac.id
Website : http://s3math.fmipa.ugm.ac.id/

## MODULE HANDBOOK

Module name:	Topics in Computation of Financial Statistics and Actuarial Science B				
Code, if applicable:	MMM 7510				
Subtitle, if applicable					
Semester(s) in which the	1 <sup>st</sup> or 2 <sup>nd</sup> semester				
module is taught:					
Person responsible for the	Chair of Computation of Statistics Research Group				
module:					
Language:	Bahasa Indonesia				
Relation to curriculum:	Doctoral Degree in Mathematics, Elective Course				
Teaching methods	Lecture, classroom discussion, project-based learning.				
Workload (incl. contact hours,	Total workload is 232 hours per semester, which consists of 50 minutes				
self-study hours)	lectures per week, 120 minutes of structured activities per week, 120 minutes				
	of individual study per week, in total is 16 weeks per semester, including mid				
	exam and final exam.				
Credit points in Credit Units	3				
Required and recommended	Students have learned some basic course in statistics and statistical				
prerequisites for joining the	mathematics course				
module					
	Students also have some knowledge on statistical software, such as R				
Module objectives/intended	After completing this course, the students have ability to:				
learning outcomes:	CO 1. analyze the theoretical aspect of Database of Financial Services, related				
	to the doctoral research being studied				
	CO2. use software for doing Database of Financial Services related to the				
	doctoral research being studied				
	CO3. analyze some extended Database of Financial Services models and				
	methods related to the doctoral research being studied				
Content:	It will be derived from the research topic of the students. It will be focused				
	on the theory, models, and method of specific data analysis used in the				
	student research.				
Examination forms	Oral presentation, essay, paper				
Study and examination	The final mark will be weighted as follows:				
requirements and forms of	Assessment methods Weight				
examination:	l No				
	(components, activities) (percentage)				
	1 Final Examination (portfolio/essay/oral 35% presentation)				
	2 Mid-Term Examination 35% (portfolio/essay/presentation)				
	3 Class Activities: Presentation 30%				
	To pass the course, the minimum grade is B.				
	To pass the course, the minimum grade is b.				

Media employed:	Board, LCD Projector, Laptop/Computer				
Reading List:	<ol> <li>Köseoğlu, S.D., 2022, Financial Data Analytics: Theory and Application, Springer</li> <li>Recent publication on Database of Financial Services, related to the research</li> </ol>				

## Mapping of The COs and PLOs

	PLO – 1 S3 Mat	PLO – 2 S3 Mat	PLO – 3 S3 Mat	PLO – 4 S3 Mat	PLO – 5 S3 Mat	PLO -6 S3 Mat
CO 1	V	V	V		V	
CO 2	V	V	V		V	
CO 3	V	V	V		V	V

Last Modified Date : February 10, 2024



# UNIVERSITAS GADJAH MADA

Faculty of Mathematics and Natural Sciences

Department of Mathematics
Sekip Utara Bulaksumur Yogyakarta 55281 Telp: +62 274 552243 Fax: +62 274 555131 Email: math@ugm.ac.id Website: http://math.fmipa.ugm.ac.id

## **Doctor in Mathematics**

: +62 274 552243

Telp Email Email : maths3@ugm.ac.id; kaprodi-s3-matematika.mipa@ugm.ac.id
Website : http://s3math.fmipa.ugm.ac.id/

## MODULE HANDBOOK

Module name:	Topics in Computation of Financial Statistics and Actuarial Science B				
Code, if applicable:	MMM 7510				
Subtitle, if applicable	Database of Financial Services				
Semester(s) in which the	1 <sup>st</sup> or 2 <sup>nd</sup> semester				
module is taught:					
Person responsible for the	Chair of Computation of Statistics Research Group				
module:					
Language:	Bahasa Indonesia				
Relation to curriculum:	Doctoral Degree in Mathematics, Elective Course				
Teaching methods	Lecture, classroom discussion, project-based learning.				
Workload (incl. contact hours,					
self-study hours)	lectures per week, 120 minutes of structured activities per week, 120 minutes				
	of individual study per week, in total is 16 weeks per semester, including mid				
	exam and final exam.				
Credit points in Credit Units	3				
Required and recommended	Students have learned some basic course in statistics and statistical				
prerequisites for joining the	mathematics course				
module					
	Students also have some knowledge on statistical software, such as R				
Module objectives/intended	After completing this course, the students have ability to:				
learning outcomes:	CO 1. analyze the theoretical aspect of Database of Financial Services, related				
	to the doctoral research being studied				
	CO2. use software for doing Database of Financial Services related to the				
	doctoral research being studied				
	CO3. analyze some extended Database of Financial Services models and				
	methods related to the doctoral research being studied				
Content:	It will be derived from the research topic of the students. It will be focused				
	on the theory, models, and method of specific data analysis used in the				
	student research.				
Examination forms	Oral presentation, essay, paper				
Study and examination	The final mark will be weighted as follows:				
requirements and forms of examination:	Assessment methods Weight				
	l No				
	(components, activities) (percentage)				
	1 Final Examination (portfolio/essay/oral 35% presentation)				
	2 Mid-Term Examination 35%				
	(portfolio/essay/presentation)				
	3 Class Activities: Presentation 30%				
	To pass the course, the minimum grade is B.				

Media employed:	Board, LCD Projector, Laptop/Computer				
Reading List:	<ol> <li>Köseoğlu, S.D., 2022, Financial Data Analytics: Theory and Application, Springer</li> <li>Recent publication on Database of Financial Services, related to the research</li> </ol>				

## Mapping of The COs and PLOs

	PLO – 1 S3 Mat	PLO – 2 S3 Mat	PLO – 3 S3 Mat	PLO – 4 S3 Mat	PLO – 5 S3 Mat	PLO -6 S3 Mat
CO 1	V	V	V		V	
CO 2	V	V	V		V	
CO 3	V	V	V		V	V

Last Modified Date : February 10, 2024