UIN SUNAN KALIJAGA YOGYAKARTA
FACULTY OF SCIENCE AND TECHNOLOGY
Jl. Marsda Adisucipto Yogyakarta 55281, Telp:+62274519739, Fax:+62274540971,
E-mail: fst@uin-suka.ac.id, website: http://saintek.uin-suka.ac.id/

Undergraduate Programme in Physics

Telp : +62274 519739
Email : fisika@uin-suka.ac.id
Website : https://fisika.uin-suka.ac.id/

MODULE HANDBOOK

Module Name	Image Instrumentation System
Module level, if applicable	Bachelor
Code, if applicable	FIS425070
Subtitle, if applicable	-
Courses, if applicable	Image Instrumentation System (Sistem Instrumentasi Citra)
Semester(s) in which the module is taught	6th (sixth)
Person responsible for the module	Chair of Instrumentation Interest Area
Lecturer(s)	Rochan Rifai, S.Si. , M.Sc.
Language	Indonesia
Relation to curriculum	Elective course in the third year (6th semester) Bachelor Degree
Type of teaching, contact hours	150 minutes lectures and 180 minutes structured activities per week.
Workload	Total workload is 136 hours per semester, which consists of 150 minutes lectures per week for 14 weeks, 180 minutes structured activities per week, 180 minutes individual study per week, in total is 16 weeks per semester, including mid exam and final exam
Credit points	3
Requirements according to the examination regulations	Minimum attendance 75% All assignments must be submitted before the exam
Recommended prerequisites	No prerequisites stated on
Module objectives/intended learning outcomes	After completing this course, the students: CO 1 Understanding concepts of image instrumentation systems and their application CO 2 Understanding various of imaging methods in image instrumentation systems CO 3 Understanding components of image instrumentation system and how they work CO 4 Understanding methods of image processing to support image instrumentation systems CO 5 Understand methods of image analysis in image instrumentation systems CO 6 Developing an image instrumentation system and its implementation
Content	1. Basics of image instrumentation systems 2. Various methods in image instrumentation 3. Components of image instrumentation system 4. Methods of image processing 5. Methods of image analysis 6. Application of iImage instrumentation system
Study and examination requirements and forms of examination	The final mark will be weighted as follows:

NO	Assessment methods (components, activities)	Weight (percentage)

UIN SUNAN KALIJAGA YOGYAKARTA
FACULTY OF SCIENCE AND TECHNOLOGY
Jl. Marsda Adisucipto Yogyakarta 55281, Telp:+62274519739, Fax:+62274540971,
E-mail: fst@uin-suka.ac.id, website: http://saintek.uin-suka.ac.id/

1	Final Examination	35%
2	Mid-Term Examination	35%
3	Class Activities : Quiz, Homework, etc.	30%

The final assessment is expressed in the form of a letter value converted from a number value with the following categories:

NO	Number Value	Letter Value	NO	Number Value	Letter Value
1	≥ 95	A	7	65-69.99	B/C
2	90-94.99	A-	8	60-64.99	C+
3	85-89.99	A/B	9	55-59.99	C
4	80-84.99	B+	10	50-54.99	C-
5	75-79.99	B	11	55-34.99	D
6	70-74.99	B-	12	<35	E

Media employed	White-board, Lcd Projector, e-learning (https://daring.uin-suka.ac.id/)
Reading list	1. Rafael C Gonzales dan Richarnd E Wood. 2008. *Digital Image Processing*, 3rd Edition. Pearson Education,Inc. 2. Chris Solomon dan Toby Breckon. 2011.*Fundamentals of Digital Image Processing*. Jhon Wiley & Sons, Ltd 1. Jhon G Webster. 2020. Medical Instrumentation Aplication and Design. Jhon Wiley & Sons, Ltd

PLO and CO Mapping

	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9
CO 1		√							
CO 2		√	√						
CO 3		√	√						
CO 4		√	√	√					
CO 5		√	√	√					
CO 6		√	√	√	√				