

Course Code	TKIT163102													
Course Name	Multimedia Technology													
Course Instructors	Ridi Ferdiana; Rudy Hartanto													
Course Type	Required													
Course Classification	Basic Science & Math													
Credit / Contact Hour per Week	2 /100 minutes per Week													
Course Description	Able to understand the concept of multimedia data both analogue and digital, multimedia data compression model and its manipulation.													
Prerequisites Courses														
Covered Student Outcome	Fundamental Engineering Knowledge (a) Development of Engineering Solution (b) Modern Tools Utilization (e) Engineering Awareness and Society (j)													
Learning Outcome														
		Study Program Student Outcome												
No	Learning Outcome	SO (a) – SO (k)												
1.	Students are able to explain the basic concept of multimedia data and its use.	Engineering Awareness and Society (j)												
2.	Students are able to explain the basic concepts of multimedia data compression and multimedia data standards	Fundamental Engineering Knowledge (a)												
3.	Students are able to organize and manage various data and information and pack it into multimedia files	Modern Tools Utilization (e)												
4.	Students are able to evaluate multimedia files and also perform substantive assessments of multimedia files	Development of Engineering Solution (b)												
Topic	1. Introduction to multimedia technology 2. Representation of multimedia data 3. Analog and digital television systems 4. Multimedia data compression 5. Image and video data manipulation 6. Multimedia animation techniques 7. Development of multimedia content													
Direct Assessment	<table border="1"> <thead> <tr> <th>Direct Assessment Plan</th> <th>Measured Learning Outcome</th> </tr> </thead> <tbody> <tr> <td>Mid Exam</td> <td>LO1, LO2</td> </tr> <tr> <td>Final Exam</td> <td>LO3, LO4</td> </tr> <tr> <td>Assignment</td> <td>LO3, LO4</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> </tbody> </table>		Direct Assessment Plan	Measured Learning Outcome	Mid Exam	LO1, LO2	Final Exam	LO3, LO4	Assignment	LO3, LO4				
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Mid Exam	LO1, LO2													
Final Exam	LO3, LO4													
Assignment	LO3, LO4													
Indirect Assesment	Questionnaire and direct communication													
References	[1]. Andleigh,PK,1996, <i>Multimedia System Design</i> , Prentice Hall, Inc. [2]. Chapman, Nigel, <i>Digital Multimedia</i> , John Wiley & Sons Ltd, 2002 [3]. Gibson, D. ,Jerry, <i>Multimedia Communication</i> , Academic Press, 2001. [4]. Gregory K. Wallace, 1991, <i>The JPEG Still Picture Compression Standard</i> , IEEE Transactions on Consumer Electronics. [5]. K.S. Thyagarajan, <i>Still image and video compression with MATLAB</i> , John Wiley & Sons, Inc., 2011 [6]. Oliver Dicks, 1993, <i>Tricks of TheGraphics Gurus</i> , Sams Publishing. [7]. Philip A. Chou, Mihaela van der Schaar, <i>Multimedia over IP and wireless networks : compression, networking, and systems</i> , Elsevier Inc., 2007.													