Course Code		TKEE163223	
Course Name		Techniques of Sourcing Coding	
Course Instructors		Bondhan Winduratna; I Wayan Mustika; Risanuri Hidayat;	
Course Type		Selected Elective	
Course Classification		Engineering Topics	
Credit / Contact Hour per Week		3 / 150 minutes per Week	
Course Description		This course aims to provide an understanding of information theories, the concept of source encoding based on the minimization of redundancy components and irrelevans. It also awakens and stimulates students' ability to understand standard data compression technology for images, videos and images such as JPEG, JPEG200, MJPEG, Mpeg and ITU	
Prerequisites Courses		-	
Covered Student Outcome		Fundamental and Engineering Knowledge (a) Development of Engineering Solution (b)	
Learning Outcome	1. Students are able to expect to master the basic science of source encoding, understand the concept of stadart data compression technology, able to develop or design the source encoding system as needed. And at least		
	have a sufficient stock of science and good to take the next courses.Students are able to develop system/source coding techniques as needed		
Topic	 Students are able to develop system/source coding techniques as needed Introduction Information Theory Source Model Minimal Redudance Coding Minimal Irrelevances Coding Encoding in Time and Frequency Domain Perceptual Encoder Standard Coding Technology 		
Direct Asessment			
	Direct Asess Assigment Mid Term Exa Final Term E	am am xam	Measured Learning OutcomeLO1LO1LO1, LO2
Indirect Assesment	Direct Asess Assigment Mid Term Exa Final Term Exa Questionnaire	am xam (EDOM)	Measured Learning OutcomeLO1LO1LO1, LO2
Indirect Assesment References	Direct Asess Assigment Mid Term Exa Final Term Exa Questionnaire [1] Chiariglione [2] Gallager, R	am am xam (EDOM) e, L., The MPEG Repres .G., Information Theor	Measured Learning Outcome LO1 LO1 LO1, LO2 sentation, Springer New York, 2011 y and Reliable Communication, J. Wiley
Indirect Assesment References	Direct Asess Assigment Mid Term Exa Final Term Exa Questionnaire [1] Chiariglione [2] Gallager, R and Sons, 1968	am am xam (EDOM) e, L., The MPEG Repres .G., Information Theor	Measured Learning Outcome LO1 LO1 LO1, LO2 Sentation, Springer New York, 2011 y and Reliable Communication, J. Wiley
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Indirect Assesment References	Direct Asess Assigment Mid Term Exa Final Term E: Questionnaire ([1] Chiariglione [2] Gallager, R and Sons, 1968 [3] Gray, R. M., [4] Max J., (ament Plan am xam (EDOM) e, L., The MPEG Repres .G., Information Theor , Source Coding Theory Quantizing for Minim	Measured Learning Outcome LO1 LO1 LO1, LO2 Sentation, Springer New York, 2011 y and Reliable Communication, J. Wiley , Kluwer Academic Press, 1990 num Distortion, IRE Transactions on
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Indirect Assesment References	Direct Asess Assigment Mid Term Exa Final Term Exa Questionnaire [1] Chiarigliona [2] Gallager, R and Sons, 1968 [3] Gray, R. M., [4] Max J., O Information Th [5] Panter, P. I	ment Plan am xam (EDOM) e, L., The MPEG Repres .G., Information Theory , Source Coding Theory Quantizing for Minim teory, Vol. IT–6, pp. 7–1 F., Dite, W. Quantizatio	Measured Learning Outcome LO1 LO1 LO1, LO2 sentation, Springer New York, 2011 y and Reliable Communication, J. Wiley , Kluwer Academic Press, 1990 num Distortion, IRE Transactions on 2, March 1960 on Distortion in Pulse Count Modulation
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