Alagappa University

(A State University Established in 1985)
Karaikudi- 630 003. Tamilnadu. India.
www.alagappauniversity.ac.in

2017 — Accredited with A+ Grade by NAAC (CGPA : 3.64)
2018 — Graded as Category-1 & Granted Autonomy
2018 — MHRD Swachh Campus Rank : 4
2021 — NIRF National Institutional Ranking Framework Rank : 33
2022 — QS University Rankings Asia Rank : 220
2022 — THE World University Rankings World Ranking Bandwidth 501 – 600

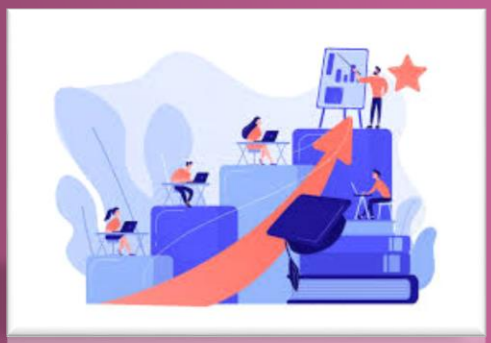
Department of Computer Applications

VALUE ADDED COURSES

Course Code: CAVAD3 Course Name: Introduction to Multimedia

2023-2024

Eligibility: Any Degree Course Duration: 20 hours



COURSE OBJECTIVE:

- It will provide an understanding of the fundamental elements in multimedia.
- The emphasis will be on learning the representations, perceptions and applications of multimedia.
- To develop the skills for developing multimedia projects.

COURSE OUTCOME:

- Understand the technologies behind multimedia applications
- Summarize the key concepts in current multimedia technology.
- Create quality multimedia software titles.

COURSE CO-ORDINATOR:

Dr. A.Nagarajan
Assistant Professor
Department of Computer Applications
Alagappa University
Karaikudi-630 003

ALAGAPPA UNIVERSITY, KARAIKUDI
DEPARTMENT OF COMPUTER APPLICATIONS
VALUE ADDED COURSES

Course Code: CAVAD3	**Introduction to Multimedia**	**20 Hours**
Course Objectives:	• It will provide an understanding of the fundamental elements in multimedia. • The emphasis will be on learning the representations, perceptions and applications of multimedia. • To develop the skills for developing multimedia projects.	
Unit I	Fundamental concepts in Text and Image: Multimedia and hypermedia, world wide web, overview of multimedia software tools. Graphics and image data representation graphics/image data types,File formats.	
Unit II	Color in image and video: color science, color models in images, color models in video.	
Unit III	Fundamental concepts in video and digital audio: Types of video signals, analog video, digital video, digitization of sound, MIDI, quantization and transmission of audio.	
Unit IV	Multimedia data compression: Lossless compression algorithm: Run-Length Coding, Variable Length Coding, Dictionary Based Coding, Arithmetic Coding, Lossless Image Compression, Lossy compression algorithm	
Unit V	Quantization. Basic Video Compression Techniques: Introduction to video compression, video compression based on motion compensation, search for motion vectors, PEG, Basic Audio Compression Techniques.	
References: 1. Tay Vaughan, "Multimedia making it work", Tata McGraw-Hill, 2008. 2. Rajneesh Aggarwal & B. B Tiwari, " Multimedia Systems", Excel Publication, New Delhi, 2007. 3. Li & Drew, " Fundamentals of Multimedia" , Pearson Education, 2009.		
Course Outcomes:	• Understand the technologies behind multimedia applications • Summarize the key concepts in current multimedia technology. • Create quality multimedia software titles.	