

Course Name	Multimedia Systems Design					
Course Information	Course Code	Course No.	Credit Hour	Prerequisite(s)		
	0912628	IS 628	3(3-0-6)			
Course Track	☐ Program Core ☒ Electives					
Course Description						
Multimedia systems explores the fundamental aspects of multimedia computing, including multimedia operating systems, networking, communication, and middleware. This course provides a comprehensive understanding of multimedia applications by integrating user interface development with underlying system components such as operating systems, networks, security, and multimedia devices. The course is structured into two main parts. The first part covers the design and construction of multimedia delivery systems, including human perception, data coding, and storage techniques to ensure realistic multimedia experiences. The second part focuses on advanced concepts for achieving true multimedia computing, emphasizing the generation and interaction with multimedia content.						
Course Outcomes						
After the completion of this course, the student will be able to:						
1. Explain the fundamental concepts of multimedia computing and security. 2. Design and develop multimedia applications by integrating user interfaces with underlying system components such as operating systems, networks, and multimedia devices. 3. Apply appropriate data coding, storage, and processing techniques to enhance the realism and efficiency of multimedia content delivery. 4. Recognize the ethical, legal, and security considerations in multimedia system development and their impact on users and society..						
Assessment Policy	Assignments	10%	Quiz	-	Project	25%
	Midterm	25%	Final	40%	Others	-
Textbook	Tim Morris, “Multimedia Systems Delivering, Generating and Interacting with Multimedia”, 2000, Springer London.					
References	1. Multimedia Systems, Ralf Steinmetz, Klara Nahrstedt, Springer Verlag, 2004					