IT6501 GRAPHICS AND MULTIMEDIA

DETAILED SYLLABUS

UNIT I OUTPUT PRIMITIVES

Basic − Line − Curve and ellipse drawing algorithms − Examples – Applications - Attributes − Two- Dimensional geometric transformations − Two-Dimensional clipping and viewing – Input techniques.

UNIT II THREE-DIMENSIONAL CONCEPTS

Three-Dimensional object representations − Three-Dimensional geometric and modeling transformations − Three-Dimensional viewing − Hidden surface elimination − Color models – Virtual reality - Animation.

UNIT III MULTIMEDIA SYSTEMS DESIGN

Multimedia basics − Multimedia applications − Multimedia system architecture – Evolving technologies for multimedia − Defining objects for multimedia systems − Multimedia data interface standards − Multimedia databases.

UNIT IV MULTIMEDIA FILE HANDLING

Compression and decompression − Data and file format standards − Multimedia I/O technologies − Digital voice and audio − Video image and animation − Full motion video − Storage and retrieval technologies.

UNIT V HYPERMEDIA

Multimedia authoring and user interface − Hypermedia messaging − Mobile messaging − Hypermedia message component − Creating hypermedia message − Integrated multimedia message standards − Integrated document management − Distributed multimedia systems.

TEXT BOOKS:

1. Donald Hearn and M. Pauline Baker, "Computer Graphics C Version", Pearson Education, 2003.

2. Andleigh, P. K and Kiran Thakrar, "Multimedia Systems and Design", PHI, 2003.

OBJECTIVES:

The student should be made to:

- Develop an understanding and awareness of how issues such as content, information architecture, motion, sound, design, and technology merge to form effective and compelling interactive experiences for a wide range of audiences and end users.

- Be familiar with various software programs used in the creation and implementation of multimedia (interactive, motion/animation, presentation, etc.).

- Be aware of current issues relative between new emerging electronic technologies and graphic design (i.e. social, cultural, cognitive, etc). understand the relationship between critical analysis and the practical application of design.

- Appreciate the importance of technical ability and creativity within design practice