

**0944 - DIPLOMA IN INFORMATION TECHNOLOGY & ENGINEERING**  
**SEMESTER - IV**  
**094444 - MULTIMEDIA APPLICATIONS**

**RATIONALE**

Multimedia is a new concept emerged in the recent times. Now this technology is being widely used in web pages, motion pictures and interactive presentations, animation etc. Multimedia has made a significant impact in training/education, business presentations, public information access etc. This course intends to introduce and expose multimedia technology and various factors and features of authoring software. It will also help in making the internet application richer in content and presentation

**DETAILED CONTENTS**

**1. Introduction**

Introduction to multimedia, hypertext, hypergraphics, animation, application in education and training, science and technology, kiosks, business and games

**2. Multimedia Hardware**

Multimedia PC configuration, features and specifications of sound and video interfaces, OCR, touch-screen, scanners, digital cameras, speakers, printers, plotters, optical disks and drives as CDROM and DVD. multimedia networks

**3. Multimedia Files**

Image and sound file formats, multimedia file formats, compression, standards and techniques, features of software to read and write such files.

**4. Photo-shop**

Photo-shop workshop, image editing tools, specifying and adjusting colors, using gradient tools, selection and move tools, transforming path drawing and editing tools, using channels, layers, filters and actions

**5. Flash**

Exploring interface, using selection and pen tools, working with drawing and painting tools, applying color, viewing and manipulating time line, time line/stage relationship, animating (frame-by-frame, tweening), guiding layers, importing and editing sound and video clips in flash, working with 3-D graphics

**6. Director**

Exploring interface: score editor, cast editor, toolbars, library, palette, inspector, menu bar, cast libraries, painting techniques, importing images, working with stage, sprites and score; using text, using sound, using digital video, creating behaviour, using behaviour inspector, basics of lingo

**LIST OF PRACTICALS**

1. Configuring multimedia devices to PC (Personal computer)
2. Installing and use of various multimedia devices
  - Scanner
  - Digital camera, web camera
  - Mike and speakers
  - Touch screen
  - Plotter and printers

- DVD
- Audio CD and Video CD
- Reading and writing of different format on a frame CD
- Transporting audio and video files
- Using various features of Director
- Using various features of Flash
- Using various features of Photo-shop
- Making multimedia presentations combining Director, Flash, Photo-shop, such as department profile, lesson presentation, games and project presentations

### **INSTRUCTIONAL STRATEGY**

As the subject is practice oriented, more stress should be given to students to do the work practically. The features of software packages Photo-shop, Flash and Director are to be demonstrated in class using LCD projector.

### **RECOMMENDED BOOKS**

1. Multimedia An Introduction by Villam Casanova and Molina; Prentice Hall of India, New Delhi
2. Multimedia Bible by Win Rosch
3. Multimedia Making it work by Baughan, Jay
4. Director and Lingo Bible by John and Nyquist and Rober Martin, IDG Books India Pvt. Ltd.,
5. Mastering Macro Media Director 5 by Feudnon; BPB Publication, New Delhi
6. Photo-shop for Windows Bible by Deke Maclelland IDG Books India Pvt. Ltd., New Delhi
7. Multimedia Technology and Application by Hillman, Galgotia Publications, New Delhi
8. Flash 5 Bible by Rein Hardit, IDG Books India Pvt. Ltd.
9. Flash 5 in easy steps by Vandome IDG Books India Pvt. Ltd.