

CERTIFICATE COURSE – 1ST YEAR

2012-13 ONWARDS

**Syllabus for Computer Graphic, Animation, Multimedia and Web
Designing**

Semester I

Paper Code : CGWD – 1

Paper Name : Fundamental of Computer and web
Applications

Course Duration : 6 months

Total Course length : (Theory-12 Credits /180 Hrs)
(Practical/Fields work -08 Credits/ 120 Hrs)
*1 credit =15 Hrs

Max Marks : 100(Theory Marks : 80 /Internal Assessment : 20)

Times Allowed : 3hrs

NOTE: The examiner will set 9 questions, first (I) question will be compulsory which will be set from the entire syllabus. This question will be short answer type carrying 2 mks each. 8 question will be set out of four units, 2 questions from each unit and the student will be required to attempt 1 question from each unit

UNIT - I

MS Word

(1 Credit)

An overview of the basics of word processing, how to use spell check, grammar check, and the thesaurus, gain proficiency in editing and formatting a document, how to use the undo and redo commands,

moving and copying text within a document, typography, paragraph formatting and column formatting, how to enhance a document, wizards and templates, and tables

MS Excel

(1 Credit)

Creating an excel worksheet, saving an excel worksheet, Opening an existing workbook, Using formula and functions, Printing a worksheet, Creating a simple expense worksheet

MS PowerPoint

(1 Credit)

Creating a PowerPoint presentation, saving a PowerPoint presentation, Working with an existing PowerPoint presentation, Using templates to create a presentation, Adding animation to slides

UNIT - II

Internet

(1 Credit)

Basics of Internet, History of Internet , ARPAnet, NSFnet, Site Surfing, Search Engines, Email Accounts, Receiving Mails, Composing Mails, Spam, Calender

HTML

(1Credit)

Introduction, HTML Documents, Structural Elements of HTML Documents, Formatting HTML Documents , Managing Images in HTML, Tables In HTML Documents, Hypertext And Link In HTML Documents, Special Effects In HTML Documents, Multimedia, Managing Forms

UNIT - III

JavaScript

(2 Credits)

Basics of Programming JavaScript & Java comparison Relation to HTML4.x and XHTML1.1 The <script> tag — Basic Syntax, Events, Event Listeners, and Handlers Placement of Scripts. Variables, Arrays, Conditionals Loops Functions Entities, Dynamically Alert, Confirm, and Prompt Windows, Changing Text Reading Tag Attribute Values, Arrays of Elements Form Handlers Checkboxes Radio Buttons Selects on Change in Various Form Elements Hidden Text Field values Dynamically Modifying Select Lists Validating Form Entries Processing Forms, Cookies and Script Libraries, Image Swaps Graphical Navigational Bar, Interactive Image Maps Using JavaScript, Browser detection Browser compatibility Event object compatibility, JavaScript Links Using JavaScript to Manipulate the Layer.

UNIT – IV

Dreamweaver

(3 Credits)

Internet Access and HTML, Planning Web Sites, The Dreamweaver Environment, Viewing and Managing, HTML Code, Defining a Web Site, Creating a Basic Web Page and Page Properties, The Site Panel and Templates, List Formats and Graphic File Types, Inserting a Table and Adjusting Table Properties, Using Graphics in Table Cells and Nested Tables, Using Table Layout View, Creating and Using a Repeating Region Template, Creating Internal and External Hyperlinks, Creating an Image Map and Anchors, Framesets Reusable Navigation Bars, The Site Map

CSS

(2 Credits)

Creating a <style> section in the document Head, Changing defaults for the document Body, Using the font-family rule to select fonts, Specifying font-size by em-heights, Changing text colour with the color rule, Using the background-color rule, Selecting colours with, the 140 standard Colour Names, the decimal or hex RGB values, Using the tag for emboldening text, Using font-weight as an alternative to the tag, Creating custom mixes of colours, backgrounds, and fonts with, the tag for inline spans of text, the <div> tag for blocks of text, Defining a re-usable Class of rules to apply to several tags, Using multiple rules inside a tag to customise it.

Recommended Books

- Adobe Dreamweaver cs5 classroom in a book : By Adobe creative Team.
- Computer with M.S.Office 2000 -By Icon and Icon(TM)
- Computer today -By Donald (Mc Graw Hill)
- Web standards programmer's reference: HTML, CSS, JavaScript, Perl, Python, and PHP
- Dynamic HTML: the definitive reference By Nicholas C. Zakas

CGWD– 2 (Practical)

(8 Credits/120 Hrs)

Practical will be based on the syllabus of theory paper of Fundamentals of Computer And web Applications

Max Marks : 100

(Practical Marks : 75 Viva Voce : 10 & Practical file :15)

Semester I I

Paper Code : CGWD – 3

Paper Name : Design Graphic Application

Course Duration : 6 months

Total Course length : (Theory-12 Credits /180 Hrs)

(Practical/Fields work -08 Credits/ 120 Hrs)

*1 credit =15 Hrs

Max Marks : 100(Theory Marks : 80 /Internal Assessment : 20)

Times Allowed : 3 hrs

NOTE: The examiner will set 9 questions, first (I) question will be compulsory which will be set from the entire syllabus. This question will be short answer type carrying 2 mks each. 8 question will be set out of four units, 2 questions from each unit and the student will be required to attempt 1 question from each unit

UNIT – I

Flash

(3 Credits)

Introduction, logging onto server, basic Macintosh skills, Working in Flash, Drawing with Flash, Basic animation, Working in the timeline, Working with symbols, Shape tween, staggering animation effect, Animation Review, Break apart and distribute, Intro to Motion Guide, Motion Guide Paths, Mask layers, Button Intro, Intro to scripting

UNIT – II

Photoshop

(3 Credits)

Photoshop's Environment, Raster and Vector Graphics, Photoshop Environment Elements, Navigating in Photoshop, Sizing Images Image Size and Resolution , Cropping, Selecting Image Areas, The Rectangular and Elliptical Marquee Tools , The Lasso Tools, Saving Selections, Layers, Floating Versus Fixed Selections, Undoing Previous

Steps, Copying Selections, Creating Layers, Transforming Layers, Copying Layers between Images , Arranging Layers, Saving Images in Photoshop Format, The Magic Wand Tool, The Magnetic Lasso Tool, Modifying Selections, Blending and Compositing, Defringing, Opacity and Blending Modes , Feathering Edges, Image Modes, Mode Characteristics, Grayscale and Bitmap Modes , Color Modes, Color and Painting, Selecting Colors , Painting Tools , The Clone Stamp Tool, Text, Layer Effects, and Filters, Type Layers , Layer Effects , Filters , Merging and Flattening Layers, Adjusting Images, Brightness/Contrast , Levels Adjustment Layers, Toning Tools , Hue/Saturation

UNIT – III

Front page

(3 Credits)

Introduction to FrontPage, Viewing a Completed Web, Overview of the FrontPage Environment, Creating a Web Page, Linking Web Pages, Creating Internal Links, Creating External Links, Creating a Navigation Bar, Enhancing Web Pages, Formatting Text on a Web Page, Applying Themes, Adding Pictures to a Web Page, Inserting Pictures, Using Pictures as Hyperlinks, Working with Tables. Creating and Modifying a Table. Enhancing a Table, Introduction to Web Page Management, Importing a Web, Working with Web Pages and Webs, Publishing Your Webs

UNIT – IV

Corel Draw

(3 Credits)

Introduction to CorelDRAW , Getting Started, Moving Around and Viewing Drawings, Basic Drawing Skills, Selecting and Manipulating Objects, Drawing and Shaping Objects, Arranging Objects, Using Text, Working With Text, Working With Objects, Outlining and Filling

Objects, Using Symbols and Clipart, Transforming Objects, Adding Special Effects, Special Effects, Creating Output, Exporting Drawings. Printing

Recommended Books

- Macromedia Flash mx express- By Leon cych,
- Macromedia flash mx for windows & macintosh-By Katherine Ulrich.
- Photoshop cs2 for windows and macintosh: visual quick start guide- By Elaine weinmann & peter lourekas.
- Adobe photoshop cs2: classroom in a book- By Adobe creative team
- Corel draw x5 The official guide: By Gray David Bouton.
- The corel draw wow! Book : By Linnea Dayton.
- Corel draw! 5 for dummies:By Deke McClelland.

CGWD– 4 (Practical)

(8 Credits/120 Hrs)

Practical will be based on the syllabus of theory paper of Design Graphic Applications

Max Marks : 100

(Practical Marks : 75 Viva Voce : 10 & Practical file :15)

DIPLOMA COURSE – 2ND YR.

2013-14 ONWARDS

Semester I II

Paper Code :	CGWD – 5
Paper Name :	Adobe Applications and Design
Course Duration :	6 months
Total Course length :	(Theory-12 Credits /180 Hrs) (Practical/Fields work -08 Credits/ 120 Hrs) *1 credit =15 Hrs
Max Marks :	100(Theory Marks : 80 /Internal Assessment : 20)
Times Allowed :	3 hrs

NOTE: The examiner will set 9 questions, first (I) question will be compulsory which will be set from the entire syllabus. This question will be short answer type carrying 2 mks each. 8 question will be set out of four units, 2 questions from each unit and the student will be required to attempt 1 question from each unit

UNIT – I

Adobe Indesign

(3 Credits)

Getting to know tools, panels, and workspaces, Learning how to navigate and zoom in a document, Working with layers for efficiency and organization, Setting up master pages in a document, Building automatic page numbering and sections, Creating text and graphics placeholder frames, Understanding text and graphics frames, Grouping and transforming frames, Formatting text using paragraph and character styles, Flowing, threading, and spell-checking text in text frames, Adding color: swatches, gradients and tints, shortcuts and techniques, Working with typography, including tracking and kerning, drop caps, rules, tabs, dot leaders and hanging indents, paragraph, character and object styles,

Nesting character styles, Working with clipping paths and alpha channel masks, Workflow tips for placing graphics into InDesign, Using the Library panel.

UNIT –II

(3 Credits)

Adobe Indesign

Using Adobe Bridge, Creating tables from spreadsheets; formatting , Placing graphics in cells, Working with Live Preflight, Exporting documents to PDF for commercial printing, Setting up preferences and color management, Using advanced frame techniques, Bezier Pen, Transparency features, feathering, drop shadows, transparency settings to text, Working with transparency flattener preview, Adding and editing hyperlinks, bookmarks, and page transitions, Placing video, and building JavaScript buttons for web-enabled PDFs, preflighting, and packaging, PDF files, Exporting to Flash, Automating repetitive tasks with presets, Preserving your presets from loss, GREP queries, GREP styles and Working with Glyph and Object Find/Change,

UNIT – III

(3 Credits)

Adobe Illustrator

Understanding paths, views, selection tools, fills and strokes, Setting up preferences and color settings, Creating basic geometric shapes Using a grid and smart guides, Using the Bezier Pen, Direct Selection tool, and Convert tool efficiently, Applying and editing color gradients, Creating and using swatches, tints, gradients, and patterns on filled regions, Transform tools including scaling, rotating, distorting, shearing, and reflecting, Using the pathfinder panel to make complex shapes, Working with the Blend tool / command and its options, Creating a compound path, Changing blending modes and opacity, Using and editing an opacity mask, Using layers to keep your art project organized.

UNIT IV

(3 Credits)

Adobe Illustrator

Creating clipping masks, Tracing a scanned image with LiveTrace, Applying warp effects and the envelope feature, Understanding the Appearance panel, Creating effects and styles, Using multiple strokes and fills, Creating and manipulating type, Creating symbols and using the symbol tools, four kinds of custom brushes, Using the mesh tool for complex gradients, Applying 3-D effects, Creating realistic shadows, repeating patterns for fills and borders, Drawing 3-D artwork— isometric, dimetric, and trimetric views, Drawing using custom guides for perspective, Creating line effects for maps, LiveTrace to LivePaint to LiveColor explorations, Creating type effects—masks, applying a paintbrush effect, and circle text.

Recommended Books

- Adobe Creative Suite 2 all-in-one desk reference for dummies –By Jennifer Smith, Christopher Smith
- Mastering InDesign CS5 for Print Design and Production- By Pariah S. Burke

CGWD– 6 (Practical)

(8 Credits/120 Hrs)

Practical will be based on the syllabus of theory paper of Adobe Applications and Design

Max Marks : 100

(Practical Marks : 75 Viva Voce : 10 & Practical file :15)

Semester I V

Paper Code : CGWD – 7

Paper Name : Computer 2D Animation

Course Duration : 6 months

Total Course length : (Theory-12 Credits /180 Hrs)
(Practical/Fields work -08 Credits/ 120 Hrs)
*1 credit =15 Hrs

Max Marks : 100(Theory Marks : 80 /Internal Assessment : 20)

Times Allowed : 3 hrs

NOTE: The examiner will set 9 questions, first (I) question will be compulsory which will be set from the entire syllabus. This question will be short answer type carrying 2 mks each. 8 question will be set out of four units, 2 questions from each unit and the student will be required to attempt 1 question from each unit

UNIT – I

2D Design & Animation Suite (3 Credits)

Anatomy study, Working with audio, Video streaming & editing, Concepts of 2D Animation, 2D graphics & animation with Flash, Principles of animation using Flash, Flash scripting, 2D Animation Portfolio (Case Study), Sound Fore 9, Adobe Premier Pro CS 4, Action Script 3.0 ,User interface design, Interactive animated web pages, E-cards Funny cartoon shorts animation.

UNIT – II

(3 Credits)

2D Graphics-Creation Features

Underlying data type: raster, vector, Raster painting and/or import features, Vector shapes, Vector free-form and control-point placement tools, Features specific to the program in use.

Digital 2D Animation Orientation

Prevailing file format standards and other compatibility issues, History and future trends of computer animation applications in the visual arts, 2D animation application software interface, Default settings and user preferences, Document setup. Import and export formats, Document and timeline window features, Tools and commands palettes, Media-selection tools and techniques, Asset-management features.

UNIT – III

(3 Credits)

2D graphics editing features.

Basic geometric transformations, Boolean operations on shapes, Object stroke attributes, Object fill attributes, Shading techniques (blends, gradients), Packaged effects (extensions, plug-ins), Features specific to the program in use.

UNIT – IV

(3 Credits)

2D animation frame-sequencing features.

Straight-ahead animation, Key frames animation, Motion paths, Applying geometric transformations over time, Inbetweening options, Looping and palindrome motion, Features specific to the program in use.

Recommended Books

- The illusion of life: Disney animation: By Ollie Johnston.

- Timing for animation: By Harold Whitaker.
- The animator's survival kit: By Richard Williams.

CGWD– 8 (Practical)

(8 Credits/120 Hrs)

Practical will be based on the syllabus of theory paper of Computer 2D Animation

Max Marks : 100

(Practical Marks : 75 Viva Voce : 10 & Practical file :15)

ADVANCED DIPLOMA – 3rd Yr.

2014-15 ONWARDS

Semester V

Paper Code : CGWD – 9

Paper Name : Computer 3D Animation

Course Duration : 6 months

Total Course length : (Theory-12 Credits /180 Hrs)

(Practical/Fields work -08 Credits/ 120 Hrs)

*1 credit =15 Hrs

Max Marks : 100(Theory Marks : 80 /Internal Assessment : 20)

Times Allowed : 3 hrs

NOTE: The examiner will set 9 questions, first (I) question will be compulsory which will be set from the entire syllabus. This question will be short answer type carrying 2 mks each. 8 question will be set out of four units, 2 questions from each unit and the student will be required to attempt 1 question from each unit

UNIT – I

3D Animation Suite

(3 Credits)

Claymation: A stop-motion animation technique, 3D basics: Modeling to animation, Modeling with 3D, Lights, camera & materials, 3D Motion Graphics & FX, Rendering with V-Ray, Digital FX, 3D Animation/ Architectural Visualization Portfolio, Stop Motion Pro, 3ds Max 2010, Adobe After Effects CS4 Professional

UNIT – II

(3 Credits)

Multimedia and interactive features.

Audio editing features, Incorporating 3D models and 3D rendering ,Linking digital video, User interface building principles, User interface toolkit and interaction scripting, Embedding completed animations in web pages and other media containers, Features specific to the program in use.

UNIT – III

(3 Credits)

Motion pictures for visual communications.

Typology of sound/image relationships, Exaggerated action to enhance the perception of motion, Constructing meaning in narrative and documentary animations, Shot , scene, and sequence assembly.

UNIT – IV.

(3 Credits)

Interplay with other Internet-based media and resources, Application area case studies.

Recommended Books

- The illusion of life: Disney animation: By Ollie Johnston.
- Timing for animation: By Harold Whitaker.
- The animator’s survival kit: By Richard Williams.

CGWD– 10 (Practical)

(8 Credits/120 Hrs)

Practical will be based on the syllabus of theory paper of Computer 3D Animation

Max Marks : 100

(Practical Marks : 75 Viva Voce : 10 & Practical file :15)

Semester VI

Paper Code : CGWD – 11

Paper Name : Maya 2010 Applications

Course Duration : 6 months

Total Course length : (Theory-12 Credits /180 Hrs)
(Practical/Fields work -08 Credits/ 120 Hrs)
*1 credit =15 Hrs

Max Marks : 100(Theory Marks : 80 /Internal Assessment : 20)

Times Allowed : 3 hrs

NOTE: The examiner will set 9 questions, first (I) question will be compulsory which will be set from the entire syllabus. This question will be short answer type carrying 2 mks each. 8 question will be set out of four units, 2 questions from each unit and the student will be required to attempt 1 question from each unit

UNIT – I **(3 Credits)**

Maya 2010: Introduction of Maya, features of Maya, Role of Maya in various fields

UNIT – II **(3 Credits)**

Various Maya tools, Principles of animation using Maya, Flash scripting with Maya, Modeling with Maya, Modeling with Z Brush, Texturing with Maya, Lighting & rendering with Maya, Rigging with Maya

UNIT – III **(3 Credits)**

Character animation with Maya, Paint effects & dynamics using Maya, Realistic features with Maya, Matchmoving & camera tracking, Modeling & Texturing, Lighting & Rendering, Rigging & Animation, Portfolio Demo Reel

UNIT – IV

(3 Credits)

Interplay with other Internet-based media and resources, Application area case studies.

Recommended Books

Maya cosmogenesis 2012: the true meaning of the maya callender end date: By John Major Jenkins.

CGWD– 12 (Practical)

(8 Credits/120 Hrs)

Practical will be based on the syllabus of theory paper of Maya 2010 Applications

Max Marks : 100

(Practical Marks : 75 Viva Voce : 10 & Practical file :15)