



**MANONMANIAM SUNDARANAR UNIVERSITY  
TIRUNELVELI-627 012, TAMILNADU, INDIA**

**Board of Studies Meeting Held on 28.04.2017**

**Certificate Course in Computer Technology (UGC-COP)**

**Regulations, Scheme and Syllabus  
With effect from the academic year 2017-2018 onwards**

**Submitted by  
Adhoc Board of Studies  
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**to**

**The Registrar  
Manonmaniam Sundaranar University  
Tirunelveli - 12**

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## **Certificate Course in Computer Technology (UGC-COP)**

**Regulations, Scheme and Syllabus**

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### **A. REGULATIONS**

Based on the UGC-Career Oriented Programme (COP), the Certificate Course in Computer Technology at undergraduate level, is designed by Manonmaniam Sundaranar University to ensure that graduates who pass out after completing this course acquire knowledge, skills and aptitude for gainful employment in the wage sector in general and self employment in particular.

#### **A1: Duration of the Course:**

The Certificate Course shall run as an add-on course parallel to a semester of the conventional Under Graduation degree level education like B.A., B.Com. and B.Sc. degrees.

#### **A2: Eligibility for Admission:**

Students shall choose the Certificate Course as a parallel sub-discipline while pursuing their degree level education. They shall also have the freedom to diversify into various fields not necessarily related with their core discipline. At the end of three years, the students will be equipped with a Certificate in an add-on orientation course along with a conventional degree in Science/Arts/Commerce.

#### **A3: Credit Requirement for the Degree:**

The general credit requirement of the uniform pattern for Certificate Courses offered by the University is applicable for the Certificate Course in Computer Technology. The University requirement for the Certificate Course is completion of 20 credits of which 6 credits should be through the two theory papers each and 8 credit through the practical paper.

#### **A6: Assessment**

The assessment will be through the end-semester Examination carrying a maximum of 100 marks in each theory subject and practical subject. There are no Internal Examinations. End-semester Examination will be conducted for all subjects of study, at the end of each Semester.

#### **A7: Passing Requirements**

A candidate who secures not less than 40 marks in end-semester examination will be declared to have passed the subject.

A Candidate who successfully completes every subject with minimum 40 marks will be declared to have qualified for the award of the Certificate.

### A8: Classification of successful candidates

The classification is as follows,

<b>Classification</b>	<b>Marks Overall %</b>
1. I Class	60% and above
2. II Class	50% to 59%
3. III Class	less than 50%

These regulations will come into effect from the academic year 2017 - 2018 onwards.

### B. SCHEME for CERTIFICATE COURSE in COMPUTER TECHNOLOGY (For those who joined from the academic year 2017-2018 onwards)

<b>No.</b>	<b>Title of the Subject</b>	<b>Status</b>	<b>Hrs</b>	<b>Credits</b>	<b>Maximum Marks</b>	<b>Passing Minimum Marks</b>
1	MULTIMEDIA TECHNOLOGY	Theory	90	6	100	40
2	WEB DESIGNING	Theory	90	6	100	40
3	MULTIMEDIA AND WEB DESIGNING PRACTICAL	Practical	120	8	100	40
<b>Total Credits</b>				20		

## C. SYLLABUS for CERTIFICATE COURSE in COMPUTER TECHNOLOGY

### Theory 1: MULTIMEDIA TECHNOLOGY

**Objective: To use the basic and intermediate audio, video, photo editing, presentation and Spread sheet tools and make projects using them.**

#### **UNIT I: Photo editing tools:**

**Photoshop:** Photoshop Panel and Tools, Basic Operations, Navigating and Zooming, Global Adjustments, Layers, Selection Tools, Guides and Rulers, History, Cropping, Basic Printing.

**Splashup:** Creating an account in Splashup.com and getting started, Image editing with Splashup, tools, rotating and resizing image in Splashup, Layers in Splashup.

#### **UNIT II: Interactive Video tools:**

**Flash:** Introduction, Layout of Flash Desktop, Flash Library, Movie Clips, Frame by frame animation, Shape tweening, Text masking, Sound editing, Adding sound to movie, Adding sounds and animations to buttons, Importing photoshop file into flash, Publishing flash content.

**Adobe Premiere Pro:** Starting, The Premiere Pro Interface, Importing footage, Adding effects, Editing Basics, Adding audio, Adding titles to videos, Exporting videos, Reconnection media, color correction, Sizing videos and Stills.

#### **UNIT III: Audio editing Tools:**

**ProTools:** Protocol Workspace, Edit modes, Zoom buttons, Edit tools, Creating a project, Importing files, Creating a new track, Saving, Exporting, Audio for film and video.

**Adobe Audition:** Digital Audio Fundamentals, Workspace and setup, Connecting to audio hardware, Importing, Recording and Playing audio, Editing, repairing, and improving audio using Essential Sound panel.

#### **UNIT IV: Multimedia Presentation Tools:**

**MS Office PowerPoint:** PowerPoint Basics, Views, Slide Show, Inserting Graphs and Diagrams, Inserting Pictures, Inserting Sound and Video, Change the playback of your video, inserting video from youtube, Adding Action buttons.

**Prezi:** Getting started, canvas, creating a new prezi, managing, editing, resizing your prezi, starting presentation.

#### **UNIT V: Spread sheet tools:**

**Microsoft Excel:** Getting Started, Excel Window, creating, copying, deleting and saving worksheets, insering, selecting, deleting data, text alignments, merge and wrap, adjust margins, page orientation, Conditional format, creating formulas, copying formulas, formula reference, using functions, built-in functions, data sorting, printing workbooks, workbook security.

## REFERENCES:

1. Steve Bark, Introduction to Adobe Photoshop, Steve Bark and Ventus Publishing, ISBN : 978-87-403-0016-1, 2012.
2. <http://voicesinhistory.wikispaces.com>
3. Adobe"Flash"and"Photoshop"Tutorials, Edited by:Anastasios Maragiannis, School of Architecture and Construction –Greenwich University.
4. A beginners guide to using Adobe Premiere Pro.
5. Adobe Premiere, CC BASICS Tutorial, College of Communication, PennState University.
6. ProTools Reference Guide. ([www.avid.com](http://www.avid.com))
7. Adobe Audition CC Help (<https://helpx.adobe.com> )
8. Working with Microsoft Powerpoint ([www2.eit.ac.nz/library](http://www2.eit.ac.nz/library))
9. Prezi A Quick Start Guide ([www.myteacherpages.com](http://www.myteacherpages.com))
10. Excel 2010, Tutorials point, Simply easy learning ([www.tutorialspoint.com](http://www.tutorialspoint.com))

## Theory 2: WEB DESIGNING

**Objective: To use the common markup and scripting languages to design web pages.**

### **UNIT I: HTML:**

HTML Documents, Basic structure of an HTML document, creating a HTML document, Mark up Tags, Heading-Paragraphs, Line Breaks, HTML Tags, Text Formatting, Links, Lists, Tables, Frames, Head, Meta, Div tags, Events, Working with Hyperlinks, Images and Multimedia, Forms and controls, Fonts, Styles, colors.

### **UNIT II: Introduction to XML**

Extensible Markup Language (XML), Structure of XML, Naming Rules, Components in XML, Using User-Defined Tags in Web Pages, Displaying XML Contents, XML DTDs, Use of XSLT.

### **UNIT III: Cascading Style Sheets:**

Concept of CSS, Creating Style Sheet, CSS Properties, CSS Styling: Background, Text Format, Controlling Fonts, Working with block elements and objects, Lists and Tables, CSS Id and Class

Box Model: Border properties, Padding Properties, Margin properties, CSS Advanced Grouping, Dimension, Display, Positioning, Floating, Align, Pseudo class, Navigation Bar, Image Sprites, Attribute selector, CSS Color, Creating page Layout and Site Designs.

### **UNIT IV: JavaScript**

Syntax, Enabling JavaScript, Working with Variables and Data, Communicating with the User, Using Data More Than Once: Variables, JavaScript Reserved and Keywords, JavaScript Operators, Popup boxes, Comments, JavaScript control Structures (conditional statements, loops)

JavaScript functions, objects, Responding to events, Multimedia.

### **UNIT V: Introduction to Web Publishing or Hosting**

Creating the Web Site, Saving the site, Working on the web site, Creating web site structure, Creating Titles for web pages, Themes-Publishing web sites.

### **REFERENCES:**

1. Murray, Tom, Lynchburg, Creating a Web Page and Web Site, College, 2002
2. Kogent Learning Solutions Inc, HTML 5 in simple steps, Dreamtech Press
3. John Duckett, Beginning HTML, XHTML, CSS, and JavaScript, Wiley India
4. Kogent Learning, Web Technologies: HTML, Javascript, Wiley India
5. <https://www.w3schools.com/xml>
6. JavaScript, Tutorials point, Simply easy learning ([www.tutorialspoint.com](http://www.tutorialspoint.com))

## Practical 1: MULTIMEDIA AND WEB DESIGNING PRACTICAL

1. i) Using Photoshop, make a banner using Layers and relevant tools.  
ii) Create a web template using Photoshop and Splashup.
2. Draw blue and red rectangles and then use shape tween to morph them into a blue and red triangle.
3. Make flash music videos similar to particular examples.
4. Import an audio and do basic editing on it using ProTools.
5. Record an audio using adobe audition, import it into a project and do basic editing, then export and finish the project.
6. Prepare a PowerPoint presentation with graphs, pictures, animations, links to audio and video.
7. Prepare a Prezi presentation with graphs, pictures, animations, links to audio and video.
8. Create a Spreadsheet that calculates statistics regarding the number of students enrolled at a High School during a 5 year time period.
9. Develop static pages (using only HTML) of e-shopping. The website should consist the following pages. Home page, Registration and user Login, User profile page, Products catalog, description about the product, Shopping cart, Payment By credit card, order confirmation.
10. Validate the registration, user login, user profile and payment by credit card pages using JavaScript.
11. Write an XML file which will display about the product which includes the following: Name of the product with picture 2) Price 3) Product Type 4) Manufacturer's name
12. Write a Document Type Definition (DTD) to validate the above XML file. Display the XML file as follows. The contents should be displayed in a table. The header of the table should be in color GREEN. And the product names column should be displayed in one color and should be capitalized and in bold. Use your own colors for remaining columns. Use XML schemas XSL and CSS for the above purpose.

### **D. QUESTION PAPER PATTERN:**

**Theory:** Five questions out of eight questions are to be answered. Each question carries 20 marks. The maximum marks are 100 and the minimum passing mark is 40.