



## **CRITERION I - CURRICULAR ASPECTS**

### **1.3 Curriculum Enrichment**

#### **1.3.2 Certificate Courses/Value-added Courses**

## ***Value added Courses***

**Department of Computer Science  
2022-2023**

### **Syllabus**

- 1. Web Designing**
- 2. PC Hardware and Troubleshooting**
- 3. .Net Programming**
- 4. Digital Image Processing using MAT Lab**
- 5. DTP (Page Maker & Coreldraw)**

## VALUE ADDED COURSE I – WEB DESIGNING

Theory : 30  
Practical :-  
Exam Hour: 2

Course Code: 22VACCS01  
Credits : 2  
Mark : 100

### **OBEJECTIVE**

To learn HTML tags, CSS and JavaScript Language programming concepts and techniques.

### **UNIT – I**

HTML: Elements, attributes, heading, paragraph, styles, comments, links, images, tables.

### **UNIT – II**

CSS: Types of CSS, colors, background, margins, padding, height, width, text, font, icon, links, list, tables, image gallery, forms.

### **UNIT – III**

JavaScript- script, function, output statement, variables, operators, data types, if else, switch, for loop.

### **UNIT – IV**

Intermediate JavaScript , JS Expressions, Operators, Statements and Declarations.

### **UNIT – V**

Object-Oriented Programming- JS Objects and Prototypes, `This`, Scope and Closures Objects and Prototypes Refactoring and Debugging.

### **TEXTBOOK**

1. HTML, CSS, and JavaScript All in One: Covering HTML5, CSS3, and ES6, Sams Teach Yourself, Meloni, J. C., Kyrnin, J. (2018), United Kingdom: Pearson Education.

### **REFERENCE BOOKS**

1. Web Design with HTML, CSS, JavaScript and JQuery Set, Duckett, J. (2014), United Kingdom: Wiley.



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## VALUE ADDED COURSE II – PC HARDWARE AND TROUBLESHOOTING

Theory : 30  
Practical :-  
Exam Hour: 2

Course Code: 22VACCS02  
Credits : 2  
Mark : 100

### Objective :

To understand basic concept & structure of Computer Hardware and troubleshooting.

### UNIT-I

Introduction to computers: Personal computers-Mainframe computers-Super Computers-Hardware- Software.

### UNIT-II

Memory: RAM: SDRAM,DDR1,DDR2,DDR3,DDR4 – ROM:(Hard Drives).

### UNIT-III

Components : Mother Board: Chipset-Power Supply-Buses-PCI-AGP- –BIOS-SMPS.

### UNIT-IV

Processor: Arithmetic and Logic Unit-Control Unit .

### UNIT-V

PC Troubleshooting: No Power – No Display –Auto Restart- Slow Process – Update Issue – DOS Commands-Handling without Antivirus – Handling With Antivirus.

### Text Book:

1. The Complete Reference PC Hardware: Craig Zacker, John Rourke – Tata McGrawHill, 2001.

### Reference Books:

1. Govindarajulu. B, IBM PC and clones : Hardware, Trouble shooting and Maintenance. Second edition, Tata-McGraw Hill.
2. Rosch. Winn L., Hardware bible, Sixth edition, Que/Techmedia publishers.

  
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## VALUE ADDED COURSE III - .NET PROGRAMMING

Theory : 30	Course Code: 22VACCS03
Practical :-	Credits : 2
Exam Hour: 2	Mark : 100

### Objective:

To provide the learners understanding of the techniques in .NET using suitable Hardware and Software Tools.

### Unit I

.Net introduction – ADO .Net Architecture – ADO .Net Connected and Disconnected models.

### Unit II

.Net Coding design guidelines – Application Domains in .Net – Simple and Complex Data Binding in .Net

### Unit III

Web Service Client – Web service with Complex Data types – Web service Performance.

### Unit IV

Web Service Performance – WSDL AND SOAP – Building an XML Web Service.

### Unit V

Data Grid view class – Remoting in .Net – Leasing and Sponsorship.

### Text Book

Stephen C. Perry “ Core C# and .Net”, Pearson Edition, 2006

### Refernces

Andrew Troelsen, “C# and the .Net Platform”, A Press 2003

  
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# VALUE ADDED COURSE IV – DIGITAL IMAGE PROCESSING USING MAT LAB

Theory : 20  
Practical : 10  
Exam Hour: 2

Course Code: 22VACCS04  
Credits : 2  
Mark : 100

## Objective:

To provide the learners understanding of the techniques in Digital Image Processing using MAT Lab.

## Unit I

Overview of Image Processing- Digital Image Representation- Types of images

## Unit II

Fundamentals Steps in Image Processing - Image Enhancement- Image Restoration – Image Compression – Image Analysis – Image Synthesis

## Unit III

Classification of Image Processing Operations- Arithmetic Operation- Logical Operation

## Unit IV

Image Enhancement and Restoration – Image quality and need for Image Enhancement- Histogram- based Techniques.

## Unit V

Image Type Conversion- Extraction of colour bands- Image Addition- Histogram operations- Image Segmentation using Thresholding types

## Text Book

Digital Image Processing – S. Sridhar Oxford University Press 2011.

## Reference

Fundamental of Digital Image Processing – Anil K. Jain, Prentice Hall Information and System Sciences Series

  
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## VALUE ADDED COURSE V – DTP (PAGEMAKER AND CORELDRAW)

Theory :-

Practical : 30

Exam Hour: 2

Course Code: 22VACCS05

Credits : 2

Mark : 100

### Objective :

To provide the learners understanding of the techniques in Desktop Publishing using suitable Hardware and Software Tools.

### Unit I

Getting Started with Adobe Page Maker 7.0 - Creating a Publication - Working with Text.

### Unit II

Modifying Text - Working with Multiple Pages - Working with Graphics - Formatting Text .

### Unit III

Working with Long Publications - Publishing Electronically - Creating a PDF document in PageMaker.

### Unit IV

CorelDraw Basics– CorelDraw Interface – Tool Box – Moving from Adobe Illustrator to CorelDraw.

### Unit V

Drawing and Selecting – Use of various tools and all fonts used in designing of monograms, logos, posters.

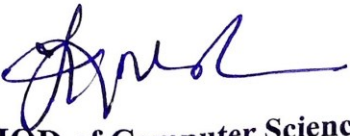
### Text Book

1. Adobe PageMaker 7.0, Kevin Proot, Cengage Learning.
2. DTP Course Kit, Vikas Gupta, Dreamtech Press, 2009.

### Reference Book

1. Adobe Pagemaker 7.0 (Tamil), Graphics B. Kannan
2. Dynamic Memory Advanced DTP Course, Davinder singh

  
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