SYLLABUS

Department	Department of Computer Science	**Program**	Vocational Courses/SEC
Level	UG	**Semester**	I
Course Code		**Course Type**	Vocational/SEC
Paper	NA	**Course Title**	Web Designing
Credit	3	**Session**	2026-2027

Course Outcomes

CO1. To get knowledge of basics about Websites (Understanding, Apply)

CO2. To create a basic web page. (Knowledge)

CO3. Use of different HTML tags. (Understanding)

CO4. Form creation using HTML. (Understanding, Analyze)

CO5. Use and implementation of CSS for any Website (Understanding)

UNIT	Content	Duration
1	Introduction to Web Development: Topics Introduction to the Internet and its applications, World Wide Web (WWW), difference between static and dynamic websites, introduction to web browsers and web servers, introduction to HTML and CSS, Uniform Resource Locator (URL), software for web designing.	6
2	Web development overview: internet and web basics, types of websites: static, dynamic, single-page, multi-page, frontend and backend roles, HTTP and HTTPS protocols, domain names and extensions, web hosting, localhost setup, website file structure, URL anatomy, web browsers, text editors.	6
3	HTML: The Foundation of Web Pages Topics: HTML introduction and structure, tags and attributes, headings, paragraphs, FORMATTING- Bold Text, Bold Text, Underlined Text, Strike Text, Superscript Text, Subscript Text, Larger Text, Smaller Text, Strong Text, Text Direction, Text Citations, Computer Code, Address Text.	6
4	HTML-links, images, lists ordered, unordered, nested, tables rows, columns, forms input, select, checkbox, radio, submit. anchor tag, creating website homepage using basic tags. HTML Frames. Grouping Content(div, span)	6
5	CSS: Styling Web Pages: CSS introduction, syntax and selectors: element, class, ID, Types of CSS-inline, internal, external. Properties: color, font, background, text alignment, spacing, borders, padding, positioning - static, relative, absolute, fixed. Text Fonts: color, background-color, font-family, font-size, font-style, font-variant, font-weight. Lists: List-style-type, list-style-position, list-style-image, list-style.	6

Assessment Scheme

Component	Credit	Internal	External	Total
Theory	1	—	100	100
Practical	2	—	100	100

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Total	47			200

Practical List

P1. Create a simple HTML page using headings and paragraphs.

P2. Insert images and hyperlinksinto a web page.

P3. Design a navigation bar using HTML lists.

P4. Create a registration form using HTML form elements.

P5. Style a web page using external CSS.

P6. Build a web page ~~that~~ that show cases ~~showcases~~ Indian festivals with images

P7. Develop a multi-page website for an Indian traditional music school.

Reference Books

- Introduction to Web Technology by Rachana Dubey, Blue Rose Publishers, ISBN: 9789389888966.Edition: First, 2020.
- Web Designing" by C. Xavier, New Age International, ISBN: 9789395161268. 9395161264 Edition Second, 2022.
- Web Programming" by Neclam Sharma, Publisher: Kalyani Publishers, ISBN-13. 978-9327294231,2018.

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SYLLABUS

Department	Department of Computer Science	**Program**	Vocational Courses/SEC
Level	UG	**Semester**	I
Course Code		**Course Type**	Vocational/SEC
Paper	NA	**Course Title**	Desktop Publishing
Credit	3	**Session**	2026-2027

Course Outcomes

CO1. Understand (Level-1) the essentials of Desktop Publishing. (Understand , Apply)

CO2. Understand (Level-2) the importance of typography in Indian Manuscripts. (Apply)

CO3. Use (Level-4 to 6) of Image and graphics in DTP software. (Understand , Apply)

CO4. Creating publications with basics and resolution. ((Understand , Apply , Analyze)

CO5. Understanding digital publication and career pathways in DTP (Apply)

UNIT	Content	Duration
1	Introduction to Desktop Publishing : History evolution of DTP , DTP vs Word Processing , Common DTP Software (CorelDraw, Adobe InDesign, MS Publisher, Scribus Introduction), Page layout principles, Indian Design aesthetics, Contribution of India to early printing methods and calligraphy , Indian language typography and typesetting challenges.	6
2	Typography and Layout design : Font selection and pairing ,Typefaces in Indian script fonts , Grids , margins and alignment , Visual Hierarchy , Readability and legibility. Importance of typography in Indian Manuscript. PageMaker -Introduction	6
3	Working with Images and Graphics – Raster vs Vector images ,Image editing , Use of Indian motifs in graphics , Color theory in Indian Context (e.g. festival colors), importing and places , Corel Draw-Drawing-lines, shapes, inserting pictures, objects, tables, templates, Use of various tools such as Pick tools, Zoom tools, Free hand tool, square tool, rectangle tool, Text tool, Fill tool etc. Multi page layout design , using master pages and templates , Text wrapping and styles.	6
4	Creating Publications - Design Principles & Color Harmony Introduction to colors - Primary and Secondary in both RGB & CMYK schemes/modes, designing brochures, pamphlets ,invitation , Printing basics and resolution, Government publishing standards and vernacular content practices	6
5	Digital Publishing and Career Pathways – Exporting and publishing formats (PDF, epub), Web vs Print publishing , Freelancing and job roles in DTP , Legal aspects (copyrights , open fonts) , Digital India and egovernance initiatives in digital publishing , Growth of Indian regional language content online.	6

Assessment Scheme

Component	Credit	Internal	External	Total

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Theory	1		100	100
Practical	2		100	100
Total	**3**			**200**

Practical List

P1. Create a business (visiting)card for yourself in Corel Draw.

P2. Create a poster for Independence Day in CorelDraw.

P3. Create a banner for an college event (Diwali celebration) in Corel draw using festive color .

P4. Use the master page feature of CorelDraw and create header and footer.

P5. Create a border design in Corel Draw showcasing some Indian motif.

P6. Use any template available in CorelDraw and customize it according to your need .

Reference Books

- Desktop Publishing - Bharihoke Deepak (ISBN : 9788120341881)
- PageMaker 7 Training Guide – Satish Jain (ISBN : 9788170086996)
- CorelDraw X7 Training Guide – Kogent Learning Solutions Inc. (ISBN : 9789350048720)

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Department	Department of Computer Science	**Program**	Vocational Courses/SEC
Level	UG	**Semester**	V
Course Code		**Course Type**	Vocational/SEC
Paper	NA	**Course Title**	Desktop Publishing With Photoshop
Credit	4	**Session**	2025-26

Course Outcomes

CO1. Gain in depth knowledge of Photoshop and its practical Applications.(Applying , Understanding)

CO2. Apply various concepts of Photoshop for Desktop publishing and gain knowledge of various types of images formats.(Applying)

CO3. Gain deep insights of applicability of various types of tools available in Photoshop.(Understanding , Applying)

CO4. Understand about Layers, Styles, Filters and Printing in Photoshop (Understanding)

CO5. Build Flyers, Posters, graphic design, web design and images using Photoshop.(Analyzing , Applying)

UNIT	Content	Duration
1	Basics of Photoshop : Introduction, Selecting a Workspace, Managing Palettes, Changing the Position of a Palette Group, Working with Keyboard Shortcuts and Menu Settings, Working with Images :Types of Image Formats, Bitmap and Vector Images, Understanding the Image Resolution, About the Pixel Logic, Understanding the Image Size, Editing Images, Rotating an Image, Cropping an Image, Hiding Instead of Cropping, Duplicating an Image, Color Mode, RGB Mode, CMYK, Gray scale Mode, HSB Mode Making Color Adjustments Levels, Curves, Brightness/Contrast, Hue/ Saturation, Variations.	15
2	Creating and transforming the selections: Using Selections Tools, The Marquee Tools, Lasso Tools, Magic Wand Tool, Making Color Range Selections, Modifying a Selection, Adding and Subtracting Selection, Expand and Contract Commands, Grow and Similar Commands, Transforming a Selection, Scale, Rotate, Distort, Skew, Perspective, and Warp, Saving and Loading Selection	15
3	Drawing Painting and Retouching Tools: Setting the Current Foreground and Background Colors, Color Picker Dialog Box ,Eyedropper Tool, Color Palette, Drawing Tools Using the Rectangle Tool, Using the Custom Shape Tool, Pen Tool, Painting Tools, Gradient Tool, Paint Bucket Tool, Brush Tool, Pencil Tool, The Color Replacement Tool, Retouching Tools, Spot Healing Brush Tool, Healing Brush Tool, Patch Tool, Clone Stamp Tool, Pattern Stamp Tool, Eraser Tool, Background Eraser Tool The Magic Eraser Tool, Blur Tool, Sharpen Tool, Smudge Tool, Dodge Tool, Bum Tool, Sponge Tool.	15

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4	Layers, Styles, Filters and Printing in Photoshop : About the Layers Palette, Working with Layers, Creating a New Layer Using the Layer via Cut Command, Creating a New Layer Using the Layer via Copy Command, Merging Layers, Flattening Images, Moving Layers between Images, Linking and Unlinking Layers, Working with Adjustment Layers, Applying Blend Modes, Masking Layers, Smart Objects and Filters, Editing Smart Object, The Filter Gallery, Applying the Extract Filter, Applying the Liquefy Filter, Applying the Artistic Filters, Applying the Blur Filters, Applying the Brush Stroke Filters, Applying the Distort Filters, Applying the Noise Filters, Applying the Pixilated Filters, Applying the Render, Filters Printing in Photoshop: The Paths to Illustrator Command, Printing in Photoshop, Page Setup, Various Print Commands in Photoshop.	15

Assessment Scheme

Component	Credit	Internal	External	Total
Theory	32	40	60	100
Practical	12	40	60	100
Total	**4**			**200**

Practical List

P1. Edit, rotate, crop images using Photoshop.

P2. Use color modes in Photoshop.

P3. Making Color Adjustments Levels in Photoshop.

P4. Use Print Commands in Photoshop

P5. Use Page set up for printing in Photoshop.

P6. Create advertisement and wallpapers using Photoshop

P7. Design animations and create web galleries.

P8. Apply various selection tools for selections on image

P9. Use different tools to select a color range, make your selections more/less precise and the movements to vertical/horizontal

P10. Make a gradiation of colors, foreground color and background color.

P11. Create New Layer in Photoshop

P12. Use Layer Options Menu in Photoshop.

P13. Apply different layer styles.

P14. Use filter gallery and apply different filters.

P15. Apply Retouching Tools in Photoshop.

P16. Customize shape and use Transform, Scale, Rotate, Distort, Skew.

P17. Auto Blend Layers, Auto Align layers, RGB or grayscale images

P18. Use various drawing painting tools.

P19. Design brochures in Photoshop

P20. Build logos in Photoshop

Reference Books

- Adobe Photoshop CC Classroom in a Book by Faulkner Andrew and Chavez Conrad
- Adobe Photoshop CS6 Bible by Brad Dayley and Lisa Danae Dayley
- Photoshop CS6 Training Guide by Saish Jain
- 4. Beginner's Guide to Digital Painting in Photoshop by Nykolai Aleksander and Richard

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- 5. Tilbury
- 6. Adobe Photoshop develop by Staff of Adobe
- 7. Adobe Photoshop CS2 Classroom in a Book(2020), Adobe Press

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Department	Department of Computer Science	**Program**	Vocational Courses/SEC
Level	UG	**Semester**	V
Course Code		**Course Type**	Vocational/SEC
Paper	NA	**Course Title**	Web Designing Techniques
Credit	4	**Session**	

Course Outcomes

CO1. Understand the fundamentals of Angular JS and its architecture. (Understanding , Analyzing)

CO2. Get Knowledge of bootstrap built-in components design, grids, fluid grids, and responsive layout. (Knowledge)

CO3. Understand global Bootstrap CSS classes for images, typography, tables, grids, forms, buttons, and more. (Understanding)

CO4. Set up a Canva account and become familiar with the user interface and dashboard for efficient navigation. (Understanding)

CO5. Explore and utilize the Canva homepage to start new projects and access various design resources.(Understanding , Applying)

UNIT	Content	Duration
1	Introduction to Canva: Overview of Canva interface and features, Creating an account and setting up a profile, Understanding the different types of design formats. Design Basics: Using different fonts and understanding color combinations, Designing with grids and layouts. Creating Designs: Uploading Images, Using Canva's templates and elements, Creating presentations, posters, and flyers.	20
2	Introduction to AngularJS: Overview of AngularJS and its architecture, Setting up an AngularJS development environment, Creating a basic AngularJS application, AngularsJS Expressions and Modules, AngularJS Directives Controllers and Services: AngularJS Contollers, Creating and using controllers Data Binding and Scope: AngularJS Data Binding, Using data binding to update the view in real-time, AngularJS Scopes, AngularJS Filters, AngularJS Tables Forms and Validations: Creating and validating forms with AngularJS	20
3	Introduction to Bootstrap: Overview of Bootstrap and its features, Setting up the development environment, Understanding the Bootstrap grid system Layout and Navigation: Creating and using the navbar component, Creating and using the grid system for layout Typography and Tables: Using typography classes to style text, Creating and using tables Forms and Buttons: Creating and using forms, Styling forms with Bootstrap classes, Creating and using buttons and button groups	20

Assessment Scheme

Component	Credit	Internal	External	Total
Theory	~~3~~ 2	- 40	~~100~~ 60	100

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Practical	12	40	~~100~~ 60	100
Total	**4**			**200**

Practical List

P1. PART-I (CANVA)

P2. Create a new design in Canva for your College Website.

P3. Design graphics for social media platforms such as Instagram and Facebook.

P4. Upload your own images to use in Canva designs and add text in it?

P5. Use different file formats to use when exporting Canva designs?

P6. Use any design templates in Canva that can be used for specific purposes, such as business cards or resumes?

P7. PART-II (AngularJS)

P8. Write a simple program that displays Hello with some text using AngularJS.

P9. Write a simple program for any number expressions using AngularJS.

P10. Write a simple program for any string expressions that concatenate string using AngularJS.

P11. Write a simple program for AngularJS directives.

P12. Write a simple program that demonstrates how to create an AngularJS application that displays a list of items.

P13. Create a simple example program in AngularJS that demonstrates data binding.

P14. Write a program that uses AngularJS to create a simple to-do list.

P15. Create a form with input field and apply validation rules such as min/max length using AngularJS

P16. Creating a simple calculator using AngularJS.

P17. Write a program for AngularJS Filters(lowercase, Uppercase, Number, Date, Orderby).

P18. PART-III (Bootstrap)

P19. Write a program to use Bootstrap's grid system to create a responsive layout of a Webpage.

P20. Create a responsive navigation bar using Bootstrap.

P21. Write a program to use Bootstrap to style HTML forms.

P22. Using Bootstrap's form components, create user registration form

P23. Write a program to use Bootstrap for text formatting.

P24. Write a program to use Bootstrap for creating responsive table of employee details

Reference Books

- Angular: Up and Running: Learning Angular, Step by Step by Shyam Seshadri
- Bootstrap 4 Quick Start A Beginner's Guide to Building Responsive Layouts By Jacob D Lett · 2018
- Design Better and Build Your Brand in Canva A Beginner's Guide to Producing Professional Branding, Marketing, and Social Content for Businesses By Laura Goodsell · 2023
- Ng-book: The Complete Book on AngularJS Book by Ari Lerner
- Bootstrap: Responsive Web Development Book by Jake Spurlock

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Department	Department of Computer Science	**Program**	Vocational Courses/SEC
Level	UG	**Semester**	V
Course Code		**Course Type**	Vocational/SEC
Paper	NA	**Course Title**	Cyber Crime And Laws
Credit	4	**Session**	

Course Outcomes

CO1. Identify cyber risk associated with online activities Outcomes. (Understanding)

CO2. Prepare them for safe working in the vertical having varied access points, data sources, network and system related issues, especially in online transactions. (Applying)

CO3. Generate and preserve electronic evidences for personal and professional use.(Critical Thinking)

CO4. Work in virtual space safely and with business process or products confirming to the regulatory framework and not falling under the ambit of cybercrimes. (Applying)

CO5. Analyze the cases and find pertinent facts for resolutions. (Analysing)

UNIT	Content	Duration
1	Introduction to Cyber World, Cyber Security V/s Cyber Law, Types of Cyber Threats, Difference between Cyber Crimes and Conventional Crimes, Areas Comes under Cyber Law, Jurisdiction area of cyber law. Type of Cyber Crimes like — Piracy, Phishing, Hacking of information, Data Breach, CSS Attacks, Cyber Harassments, SQL Injection, Identity Hack, Cyber terrorism, DOS, Insider Attacks, Dark Web using TOR, Credit Card/Debit Card/UPI Hackings, Cyber Stalking, Cyber bullying, Eaves dropping attack, online libel/slander, Social Engineering, Cryptojacking, Virtual Currency Fraud, Vishing (Voice phishing), IOT Attacks, Phone Hacking, Child Pornography, Human Trafficking, Malicious Advertisement Campaign (Malvertising), online gambling, Hacking into voting systems, Breach of IPR, patent & Copyright etc	10
2	Definitions under IT Act, 2000; Concept of Internet, Web Centric Business, E Business , Electronic Governance, Cyber jurisdiction. Contemporary Business Issues in Cyber Space. Security risks: Instant messaging platform, social networking sites, mobile applications and Internet of Things (IOT). Domain name dispute and their resolution, Eforms; EMoney, regulations of PPI (Pre-Payment Instruments) by RBI, Electronic Money Transfer, Privacy of Data and Secure Ways of Operation in Cyber Space.	10
3	Electronic Records Authentication of Electronic Records; Legal Recognition of Electronic Records; Legal Recognition of Digital Signatures; Applications and usage of electronic records and Digital Signatures in Government and its Agencies; Retention of Electronic Records, Intermediaries and their liabilities; Attribution, Acknowledgement and Dispatch of Electronic Records; Secure Electronic Records and Digital Signatures.	10

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4	Regulatory Framework Regulation of Certifying Authorities; Appointment and Functions of Controller; License to issue Digital Signatures Certificate; Renewal of License; Controller's Powers; Procedure to be Followed by Certifying Authority; Issue, Suspension and Revocation of Digital Signatures Certificate, Duties of Subscribers; Penalties and Adjudication; Appellate Tribunal; Offences; Overview of GDPR and Indian data protection regime.	10

Assessment Scheme

Component	Credit	Internal	External	Total
Theory	3 2	- 40	~~100~~ 60	100
Practical	1 2	- 40	~~100~~ 60	100
Total	**4**			**200**

Practical List

P1. Social Media Identity Hack Memo.

P2. Domain Name Registration.

P3. Testing Franchise News.

P4. Using the CEIR.gov.in Portal

P5. Using the cybercrime.gov.in portal.

P6. Discuss Case Study on Financial Cyber Fraud.

P7. Discuss the case study on the use of IT Act 2000

Reference Books

- Arora, Sushma. and Arora R. Cyber crimes and laws, Taxmann Pvt Ltd, New Delhi
- Brian, Craig. Cyber Law: The Law of the Internet and Information Technology. Pearson Education.
- Rattan J, Cyber Crime and Information Technology, Bharat Law House, Pvt Ltd.
- Sharma J. P., and Kanojia, $. (2018).E Business and Cyber Laws. Bharat Law house Pvt Ltd.
- Rajanikant Verma Amarjeet, Cyber Crimes & Laws, Bharti Publications, New Delhi.
- Pavan Duggal ,Cyber Laws, Lexis Nexis Publication

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