Title of the Course : DIGITAL AND TECHNOLOGICAL SOLUTIONS

Course Code : VAC 3 (OPTION 2)

Nature of the Course : VALUE ADDED COURSE

Total Credits : 02

Distribution of Marks : End Sem : 20 TH + 10 PR, In-Sem: 10 TH + 10 PR

COURSE OBJECTIVES:

• To provide advanced digital skills and knowledge.

• To develop critical thinking and problem-solving abilities in the digital realm.

• To prepare leaders in the digital landscape.

• To enhance employability by providing relevant and in-demand digital skills.

UNITS	CONTENTS	L	T	P	Total Hours
1 (Marks) 5TH + 2PR	Advanced Internet Skills Advanced search techniques and web development using HTML, CSS, and JavaScript, Understanding, and using web APIs, Building a responsive website.	02	01	08	11
2 (Marks) 5TH +2PR	Digital Media and Content Creation Advanced photo editing using Photoshop or GIMP, Video and audio editing using Final Cut Pro or Adobe Premiere Pro, Creating digital content for marketing and branding.	04	01	08	13
3 (Marks) 10 TH + 6PR	Advanced encryption techniques for data security, Understanding and mitigating advanced cyber threats, Implementing advanced digital privacy measures. Advanced data analysis using Excel or Tableau, understanding data visualization, and creating compelling visualizations, analyzing complex data sets to derive insights.	06	01	14	21
	Total (in Hrs)	12	03	30	45

Where, L: Lectures T: Tutorials P: Practicals

MODES OF IN-SEMESTER ASSESSMENT: One Internal(TH) Examination One Internal(PR) Examination Others (20 Marks) 5 Marks 5 Marks

- o Quiz
- Seminar presentation
- Assignment

COURSE OUTCOMES:

After the completion of this course, the learner will be able to:

- CO1: Utilize advanced search techniques and web development tools to create responsive websites
- CO2: Implement digital media editing including photos, videos, and audio using advanced software
- CO3: Implement advanced cybersecurity and privacy measures to protect digital assets
- CO4: Analyze complex data sets using Excel or Tableau and create compelling visualizations
- CO5: Lead digital transformation and drive innovation in organizations

SUGGESTED READINGS/ REFERENCES:

- 1. P. N. Thomas and A. Raghuramaraju, "Digital India: Understanding Information, Communication and Social Change," New Delhi, India: Sage Publications India Pvt Ltd, 2017.
- 2. R. Thareja, "Computer Fundamentals and Programming in C," New Delhi, India: Oxford University Press, 2021.
- 3. R. P. Jain and S. K. Jain, "Introduction to Information Technology," New Delhi, India: Firewall Media, 2015.
- 4. K. D. Tripathi, "Social Media: Concepts, Practices and Trends," New Delhi, India: PHI Learning Pvt. Ltd., 2020.
- 5. N. K. Venkateswaran, "Cyber Security and Digital Forensics: A Practical Approach," Boca Raton, FL: CRC Press, 2018.
- 6. S. Gandhi and R. Sharma, "Digital Privacy and Security," New Delhi, India: Springer Nature Singapore Pte Ltd, 2021.

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Cognitive Map of Course Outcomes with Bloom's Taxonomy

Knowledge Dimension	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual Knowledge						
Conceptual Knowledge		CO1, CO2	CO3	CO4	CO4	CO5
Procedural Knowledge		CO1, CO2	CO3		CO4	
Metacognitive Knowledge						CO5

Mapping of Course Outcomes to Program Outcomes

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
CO1	M	M	S	M	S	L	M	S	S	S	S
CO2	M	M	S	M	S	M	S	M	S	S	S
CO3	L	M	M	M	M	M	S	S	S	S	S
CO4	S	M	M	M	S	S	S	S	M	M	M
CO5	S	S	S	S	S	S	M	S	M	M	S