

# **GURU KASHI UNIVERSITY**



## **Bachelor of Vocation (Multimedia)**

**Faculty of Computing**  
**Department of Computer Applications**

**2025-26**

## **GRADUATE OUTCOME OF THE PROGRAMME**

The Bachelor of Vocation in Multimedia program equips graduates with strong creative skills and technical abilities, enabling them to excel in diverse animation roles and drive innovation in digital media and entertainment.

## **PROGRAM EARNING OUTCOMES**

- To impart the necessary macro and micro English language skills to learners to enable them to express their feelings, opinions, ideas and thoughts fluently and accurately in a variety of personal and professional contexts.
- To create in learners a definitive sense of the stylistic variations of English and how they are used in real life situations.
- To inculcate in learners a taste for deeper pursuit and acquisition of advanced level of skills in English.
- To guide them on how to participate in discussions and make seminar presentations with special focus on specific vocabularies and styles of usage in such contexts.

<b>Semester I</b>									
<b>Course Code</b>	<b>Course Title</b>	<b>Type of Course</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>	<b>INT</b>	<b>EXT</b>	<b>Total Marks</b>
			<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>	<b>INT</b>	<b>EXT</b>	<b>Total Marks</b>
BVM101	Introduction to Computers and Multimedia	Core	4	0	0	4	30	70	100
BVM109	Multimedia and Its Applications	Core	4	0	0	4	30	70	100
BVM103	Computer Fundamentals	Compulsory Foundation	2	0	0	2	15	35	50
BVM104	Communication Skills in English-I	Compulsory Foundation	2	0	0	2	15	35	50
BVM105	Office Automation Lab	Technical Skill	0	0	6	3	25	50	75
BVM106	Introduction to Internet Lab	Technical skill	0	0	6	3	25	50	75
BVM110	Entrepreneurship Setup & Launch	ESE	0	0	4	2	15	35	50
<b>Disciplinary Elective- I (Any one of the following)</b>									
BVM107	Corel draw	Disciplinary Elective-I	3	0	0	3	25	50	75
BVM108	Photoshop								
<b>Total</b>			<b>15</b>	<b>0</b>	<b>16</b>	<b>23</b>	<b>180</b>	<b>395</b>	<b>575</b>

<b>Semester II</b>									
<b>Course Code</b>	<b>Course Title</b>	<b>Type of Course</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>	<b>INT</b>	<b>EXT</b>	<b>Total Marks</b>
BVM201	Multimedia Tools & Techniques	Core	4	0	0	4	30	70	100
BVM202	Markup Languages (HTML & DHTML)	Core	4	0	0	4	30	70	100
BVM203	Communication Skills- II	Compulsory Foundation	2	0	0	2	15	35	50
BVM204	Database Management Systems	Ability Enhancement Course	0	0	6	3	25	50	75
BVM205	Markup Languages (HTML & DHTML) Lab	Technical skill	0	0	6	3	25	50	75
<b>Disciplinary Elective- II (Any one of the following)</b>									
BVM206	Graphic Design	Disciplinary Elective-I	3	0	0	3	25	50	75
BVM207	Story Boarding								
<b>Value Added Course</b>									
BVM208	Gender Equality	VAC	2	0	0	2	15	35	50
<b>Total</b>			<b>15</b>	<b>0</b>	<b>12</b>	<b>21</b>	<b>165</b>	<b>360</b>	<b>525</b>

<b>Semester III</b>									
<b>Course Code</b>	<b>Course Title</b>	<b>Type of Course</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>	<b>INT</b>	<b>EXT</b>	<b>Total Marks</b>
			<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>	<b>INT</b>	<b>EXT</b>	<b>Total Marks</b>
BVM301	Web Programming with PHP-I	Core	4	0	0	4	30	70	100
BVM302	Audio and Video Editing	Core	4	0	0	4	30	70	100
BVM303	Photography & Visual Effects	Compulsory Foundation	2	0	0	2	15	35	50
BVM305	RDBMS	Ability Enhancement Course	0	0	4	2	15	35	50
BVM306	Web Programming with PHP-I Lab	Technical skill	0	0	4	2	15	35	50
<b>Disciplinary Elective- III (Any one of the following)</b>									
BVM308	Digital painting	Disciplinary Elective-I	3	0	0	3	25	50	75
BVM309	Color Grading								
<b>Total</b>			<b>13</b>	<b>0</b>	<b>8</b>	<b>17</b>	<b>130</b>	<b>295</b>	<b>425</b>

<b>Semester IV</b>									
<b>Course Code</b>	<b>Course Title</b>	<b>Type of Course</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>	<b>INT</b>	<b>EXT</b>	<b>Total Marks</b>
			<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>	<b>INT</b>	<b>EXT</b>	<b>Total Marks</b>
BVM401	Cinematography	Core	4	0	0	4	30	70	100
BVM402	JavaScript-I	Core	4	0	0	4	30	70	100
BVM403	Project Management	Compulsory Foundation	2	0	0	2	15	35	50
BVM404	Design & Layout (Dreamweaver)	Technical skill	0	0	6	3	25	50	75
BVM405	Java script lab-1	Technical skill	0	0	6	3	25	50	75
<b>Disciplinary Elective- IV (Any one of the following)</b>									
BVM406	Fundamentals of Professional Skills	Disciplinary Elective-I	3	0	0	3	25	50	75
BVM407	Introduction to Animation								
<b>Value Added Course</b>									
BVM408	Environmental Studies – I	VAC	2	0	0	2	15	35	50
<b>Total</b>			<b>15</b>	<b>0</b>	<b>12</b>	<b>21</b>	<b>165</b>	<b>360</b>	<b>525</b>

<b>Semester V</b>									
<b>Course Code</b>	<b>Course Title</b>	<b>Type of Course</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>	<b>INT</b>	<b>EXT</b>	<b>Total Marks</b>
BVM501	Web Technologies Using ASP.NET- I	Core	4	0	0	4	30	70	100
BVM502	Computer Networks	Core	4	0	0	4	30	70	100
BVM503	Graphics and Animation in Advertising	Core	4	0	0	4	30	70	100
BVM504	Media Laws and Ethics	Compulsory Foundation	2	0	0	2	15	35	50
BVM505	Web Technologies Using ASP.NET- I Lab	Technical skill	0	0	4	2	15	35	50
BVM506	Graphics and Animation in Advertising Lab	Technical skill	0	0	4	2	15	35	50
<b>Disciplinary Elective- V (Any one of the following)</b>									
BVM507	Entrepreneurship Development	Disciplinary Elective-I	3	0	0	3	25	50	75
BVM508	Human Resource Management								
<b>Total</b>			<b>17</b>	<b>0</b>	<b>8</b>	<b>21</b>	<b>160</b>	<b>365</b>	<b>525</b>

Semester VI										
Course Code	Course Title	Type of Course					INT	EXT	Total Marks	
			L	T	P	Credits				
BVM601	3D, Scripting and Game Development	Core	4	0	0	4	30	70	100	
BVM602	Digital Video Production	Core	4	0	0	4	30	70	100	
BVM603	Advanced Techniques In Graphics and Animation	Compulsory Foundation	2	0	0	2	15	35	50	
BVM604	Digital Video Production Lab	Technical skill	0	0	6	3	25	50	75	
BVM605	3D, Scripting and Game Development Lab	Technical skill	0	0	6	3	25	50	75	
<b>Disciplinary Elective- VI (Any one of the following)</b>										
BVM606	Life Skill Development	Disciplinary Elective-I	3	0	0	3	25	50	75	
BVM607	Creative writing TV and Film									
<b>Value Added Course</b>										
BVM608	Drug Abuse	VAC	2	0	0	2	15	35	50	
<b>Total</b>			<b>15</b>	<b>0</b>	<b>12</b>	<b>21</b>	<b>165</b>	<b>360</b>	<b>525</b>	
<b>Grand Total</b>			<b>90</b>	<b>0</b>	<b>68</b>	<b>124</b>	<b>965</b>	<b>2135</b>	<b>3100</b>	

**SEMESTER I**

<b>Course Title: Introduction to Computers and Multimedia</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM101</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**Total Hours:60****Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand basic computer systems, including hardware, software, operating systems, and file management.
- CO2. Learn networking and internet concepts, including the fundamentals of networking, internet usage, and cyber security principles.
- CO3. Develop skills in multimedia tools and applications, such as creating, editing, and managing images, audio, and video.
- CO4. Apply multimedia in real-world scenarios, using it for presentations, web development, and marketing, while addressing ethical and social implications.

**Course Content****UNIT I****15 Hours**

Introduction to Computers Computer basics, History of computers, Classification of computers, Hardware and software, Data representation. Components of Computer Operating system, Input and output devices, Motherboard, CPU, Memory, Storage devices.

**UNIT II****15 Hours**

Internet and World Wide Web, Search engine tools and techniques, Web servers, Web browsers, Email. Graphics Devices and Supporting Software Graphic cards, Open GL, Hardware drivers.

**UNIT III****15 Hours**

Multimedia Basics Introduction to multimedia, Multimedia authoring tools and new digital media Components of Multimedia Text: About fonts and faces, Using text for multimedia, Introduction to Typography, Designing with text. Image: Pixel, Vector and Raster graphics, Color Depth, Resolution, Aspect ratio, File formats, Compression.

**UNIT IV****15 Hours**

Audio and Video: TV and video standards, Time code, Digital audio and video, File Formats, Compression, Codes, Digital editing tools. Animation: History of Animation, Types of Animation, Animation tools and Development.

**Transactional Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

**Suggested Reading**

- "Computers Are Your Future" by Catherine LaBerta
- "Multimedia: Making It Work" by Tay Vaughan
- "Computer Networking: A Top-Down Approach" by James F. Kurose and Keith W. Ross
- "The Fundamentals of Computer Graphics" by Steve Marschner and Peter Shirley

### **Web Sources**

- <https://www.khanacademy.org/computing>
- <https://www.w3schools.com>
- <https://computer.howstuffworks.com>
- <https://www.tutorialspoint.com>

				B.VOC (2025-26)
<b>Course Title: Multimedia and Its Applications</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>CourseCode:BVM109</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**Total Hours:60**

### **Learning Outcomes**

After the completion of the course the learner will be able to

CO1. To understand the technologies behind multimedia applications

CO2. To learn representations, perceptions and applications of Multimedia

CO3. To understand the basic concepts of Multimedia Systems

### **Course Content**

#### **UNIT I**

**15 Hours**

Definition - Classification - Multimedia application -Multimedia Hardware - Multimedia software - CDROM - DVD. Multimedia Audio: Digital medium - Digital audio technology - sound cards - recording - editing - MP3 - MIDI fundamentals - Working with MIDI - audio file formats - adding sound to Multimedia project.

#### **UNIT II**

**15 Hours**

Multimedia Text: Text in Multimedia -Multimedia graphics: coloring - digital imaging fundamentals - development and editing - file formats - scanning and digital photography

#### **UNIT III**

**15 Hours**

Multimedia Animation: Computer animation fundamentals - Kinematics - morphing - animation s/w tools and techniques. Multimedia Video: How video works - broadcast video standards - digital video fundamentals – digital video production and editing techniques - file formats.

#### **UNIT IV**

**15 Hours**

Multimedia Project: stages of project - Multimedia skills - design concept - authoring - planning and costing –Multimedia Team. Multimedia-looking towards Future: Digital Communication and New Media, Interactive Television, Digital Broadcasting, Digital Radio, Multimedia Conferencing

### **Transactional Mode**

Lecture Method, E-Team Teaching, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, and Collaborative Learning.

### **Suggested Readings:**

- Kiran Thakrar, Prabhat k. andleigh, “*Multimedia System Design*”, Prentice Hall India.
- Malay k Pakhira, “*Computer graphics, Multimedia and Animation*”, Prentice Hall India, 2<sup>nd</sup> Edition.
- Shalu Gupta and Amandeep Kaur, “*Fundamentals of Multimedia and Applications*”, Kalyani Publishers, 2025.
- NPTEL & MOOC courses titled Multi media
- <https://nptel.ac.in/courses/106105163/>
- [W3schools.com/html/html-media.asp](http://W3schools.com/html/html-media.asp)

**Web Sources:**

- <https://www.khanacademy.org/computing>
- [https://www.tutorialspoint.com/office\\_automation/index.htm](https://www.tutorialspoint.com/office_automation/index.htm)
- <https://www.microsoft.com/en-us/learning/microsoft-office-training.aspx>
- <https://www.geeksforgeeks.org/microsoft-office-suite/>

<b>Course Title: Computer Fundamentals</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM103</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

**Total Hours: 30**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Classify binary, hexadecimal and octal number systems and their arithmetic operations.
- CO2. Analyze the concept of computer devices and the recognition of the basic terms used in computer programming.
- CO3. Identify and learn the details of the components of a personal computer system.
- CO4. Demonstrate the functions of computer programming languages.

### **Course Content**

#### **UNIT I**

**8 Hours**

Computer Fundamentals: Block diagram of a computer, characteristics of computers and generations of computers. Number System: Bit, byte, binary, decimal, hexadecimal, and octal systems, conversion from one system to the other, representation of characters, integers and fractions.

#### **UNIT II**

**8 Hours**

Input Devices: Keyboard, Mouse, Joy tick, Track Ball, Touch Screen, Light Pen, Digitizer, Scanners, Speech Recognition Devices, Optical Recognition devices – OMR, OBR, OCR, Output Devices: Monitors, Printer and its Types. Memories: Units of Memory, Main Memories - RAM, ROM and Secondary Storage Devices - Hard Disk, Compact Disk, DVD.

#### **UNIT III**

**7 Hours**

Computer languages: Machine language, assembly language, higher level language, 4GL. Introduction to Compiler, Interpreter, Assembler, Assembling, System Software, Application Software.

MS Word: Introduction, Creating & Editing Word Document. Saving Document, Working with Text: Selecting, Formatting, Aligning, Finding Replacing Text, Bullets & Numbering, Header & Footer, Working with Tables, Properties Using spell checker, Grammar, Auto Correct Feature, Graphics: Inserting Pictures, Clip art, Drawing Objects, Setting page size and margins; Printing documents, Mail-Merge.

#### **UNIT IV**

**7 Hours**

MS-Excel: Environment, Creating, Opening & Saving Workbook, Range of Cells, Formatting Cells, Functions: Mathematical, Logical, Date Time, Auto Sum, Formulas. Graphs: Charts. Types & Chart Toolbar, Printing: Page Layout, Header and Footer Tab. MS PowerPoint: Environment, Creating and Editing presentation, Auto content wizard using built-in templates, Types of Views: Normal, Outline, Slide, Slide Sorter, Slide Show, Creating, customized templates; formatting presentations, AutoShapes, adding multimedia contents, printing slides. Internet: Basic Internet terms: Web Page, Website, Home page, Browser, URL, Hypertext, Web Server, Applications: WWW, e-mail, Instant Messaging, Videoconferencing.

### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

### **Suggested Readings**

- *Sinha P.K. and Sinha P. (2002). Foundations of Computing, First Edition, BPB.*
- *Sanders D.H. (1988). Computers Today, Fourth Edition, McGraw Hill.*
- *Rajaraman V. (1996). Fundamentals of Computers, Second Edition, Prentice Hall of India, New Delhi.*
- *Jain Satish (1999). Information Technology, Paperback Edition, BPB.*

### **Web Sources**

- <https://byjus.com/govt-exams/computer-fundamentals/>
- <https://www.ctlips.com/computer-fundamentals/what-is-computer-fundamentals/>
- [https://www.tutorialspoint.com/computer\\_fundamentals/index.html](https://www.tutorialspoint.com/computer_fundamentals/index.html)

<b>Course Title: Communication Skill – I</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM104</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>Total Hours: 30</b>				

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Formulate an outline for effective Organizational Communication.
- CO2. Summarize the information, ideas, concepts and opinions from a variety of sources.
- CO3. Attain the competence in oral, written, and visual communication.
- CO4. Learn the correct practices about the strategies of Effective Business writing.

### **Course Content**

#### **UNIT I**

**8 Hours**

English Language: Sentence, Sentence Formation, Parts of speech, Tenses, Active passive voice, Direct/Indirect speech, Vocabulary. Business Communication: Definition, Types, Medias, Objectives, Modals, Process and Barriers to communication in an organization & ways to handle and improve barriers of business communication.

#### **UNIT II**

**8 Hours**

Oral Communication: Verbal communication and its types, Non- Verbal Communication and its types. Listening Skills: Types of listening and Traits of a good listener, Note taking, barriers to listening & remedies to improve listening barriers, Cambridge Tests of listening.

#### **UNIT III**

**7 Hours**

Reading Skills: Newspaper, Magazine, Article Reading from English Newspaper, Cambridge Readings.

#### **UNIT IV**

**7 Hours**

Writing Skills: Essay Writing, Letter writing: Formal, informal and Job – application, Resume writing. Presentation Skills: Presentation Purpose in Business world, how to Prepare PPT, Tips for the required body language while delivering the presentation in front of a third party.

### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

### **Suggested Readings**

- Kumar, S., &Lata, P. (2011). Communication skills. Oxford University Press.
- Training, M. T. D. (2012). Effective communication skills. Bookboon.
- Hargie, O. (Ed.). (1986). The handbook of communication skills (p. 37). London: Croom Helm.

### **Web Sources**

- <https://haiilo.com/blog/top-5-communication-skills-and-how-to-improve-them/>
- <https://corporatefinanceinstitute.com/resources/management/communication/>
- <https://www.thebalance.com/communication-skills-list-2063779>

- <https://www.skillsyouneed.com/ips/communication-skills.html>

<b>Course Title: Office Automation Lab</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM105</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>3</b>

**Total Hours: 90**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Compose, format and edit a word document.
- CO2. Edit and forward email messages (with or without attachments).
- CO3. Utilize the MS PowerPoint with custom animation and slide orientation.
- CO4. Perform coding in different programs with practical knowledge.

### **Course Content**

#### **List of Experiments**

1. **Word Processing:** Students will learn to create and format documents using Microsoft Word or Google Docs. This includes tasks such as inserting tables, images, hyperlinks, and executing mail merges for bulk mailing.
2. **Spreadsheet Applications:** The course will cover creating and formatting spreadsheets in Microsoft Excel or Google Sheets. Students will engage with data entry, basic formulas (like SUM and AVERAGE), and advanced functions such as VLOOKUP and IF statements.
3. **Presentation Software:** Students will design visually appealing presentations using Microsoft PowerPoint or Google Slides, incorporating multimedia elements and animations.
4. **Database Management:** This segment introduces students to creating simple databases in Microsoft Access or Google Tables. They will learn to perform queries and generate reports based on their data.
5. **Email and Calendar Management:** Students will set up email accounts, organize emails, and manage calendar events effectively using popular email platforms.
6. **Project Management:** Students will utilize project management software like Microsoft Project or Trello, creating Gantt charts and tracking project milestones.
7. **Collaboration Tools:** The curriculum will explore collaboration tools such as Slack or Microsoft Teams, emphasizing real-time document sharing and group task management.
8. **Automation with Macros:** Students will learn about automation through macros in Excel, including recording simple macros and writing VBA scripts for more complex tasks.
9. **Cloud Storage and File Management:** This section covers uploading and sharing files on cloud platforms like Google Drive or Dropbox, as well as organizing files with proper permissions.
10. **Data Visualization:** Students will be taught data visualization techniques using tools like Microsoft Power BI or Google Data Studio, enabling them to analyze datasets and create informative dashboards.
11. **Optional Projects:** Additional projects will include creating a professional resume, building a personal budget tracker, and organizing a group project using collaboration tools.

### **Lab Requirements**

- Access to Microsoft Office 365, Google Workspace, or equivalent office suites. Recommended Textbooks and Resources
- *Microsoft Office 365 Administration Inside Out* by Ed Fisher.
- *Google Workspace: The Ultimate Guide* by Kyle Burke.
- *Excel VBA Programming for Dummies* by Michael Alexander.

<b>Course Title: Introduction to Internet Lab</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM106</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>3</b>

**Total Hours:90**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand fundamental concepts of the internet, including its structure, protocols, and services.
- CO3. Develop skills in using web browsers effectively, including navigation, bookmark management, and privacy settings.
- CO4. Gain proficiency in using search engines to find, evaluate, and synthesize information from various online sources.
- CO5. Learn to communicate effectively using email and other online communication tools, including proper etiquette and security practices.

### **Course Content**

#### **List of Experiments**

1. **Web Browsing Basics:** Students will learn how to effectively navigate the internet using various web browsers. This includes understanding browser settings, bookmarks, and browsing history.
2. **Search Engine Techniques:** The curriculum will cover advanced search techniques, including the use of Boolean operators, filters, and specialized search engines to improve research efficiency.
3. **Creating a Personal Blog:** Students will create and publish their own blog using platforms like WordPress or Blogger, focusing on content creation, design, and audience engagement.
4. **Online Collaboration Tools:** This segment will introduce students to online collaboration tools such as Google Docs and Microsoft OneDrive, where they will practice real-time document sharing and editing.
5. **Social Media Management:** Students will explore various social media platforms, learning how to create and manage accounts, post content, and analyze engagement metrics.
6. **Email Communication:** Students will set up email accounts and learn best practices for professional email communication, including etiquette, organization, and management of email tasks.
7. **Web Development Basics:** This section will introduce students to the basics of HTML and CSS, allowing them to create and style simple web pages.
8. **Internet Safety and Security:** Students will learn about online safety practices, including password management, recognizing phishing scams, and protecting personal information.
9. **Cloud Computing:** The curriculum will cover cloud computing concepts, including the use of cloud storage solutions (like Google Drive and Dropbox) and understanding the benefits of cloud services.

**10. E-commerce and Online Transactions:** Students will explore the fundamentals of e-commerce, learning how to safely conduct online transactions and understand payment gateways.

10. **Data Privacy and Ethics:** This section will address issues related to data privacy, including regulations such as GDPR, and the ethical implications of data usage in the digital age.
11. **Creating Online Surveys:** Students will design and distribute online surveys using tools like Google Forms or SurveyMonkey, and analyze the collected data for insights.
12. **Optional Projects:** Additional projects may include developing a simple website for a local business, conducting a market research survey, or creating a presentation on internet trends.

<b>Course Title: Entrepreneurship Setup &amp; Launch</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Cr.</b>
<b>Course Code: BVM110</b>	<b>0</b>	<b>0</b>	<b>04</b>	<b>02</b>

### **Introduction:**

This semester lays the foundation for the learner to understand what entrepreneurship is, beyond just starting a business. It introduces key ideas like problem-solving, value creation, and self-awareness. The learner will begin exploring basic business concepts while discovering their own interests and strengths.

### **Learners Objective:**

- CO1. Understand the core concepts of entrepreneurship through relatable, real-life examples.
- CO2. Begin to see themselves as problem-solvers and creators.
- CO3. Learn about business paths and choose one to try based on interest or local fit.
- CO4. Launch a micro-hustle (online or offline) to earn their first income.
- CO5. Build confidence and self-belief by doing.

**Outcome:** By the end of this semester, learners will start a simple business activity, earn their first income, and build belief in their ability to do business.

### **Guiding Principles/Approach:**

This syllabus is built on principles of **experiential learning, growth mindset development, and identity-first learning**. Drawing from learning science and behavior design, the course shifts students from passive learning to *active doing*, where they try out small business activities in real contexts. The design helps students not just learn entrepreneurship, but begin to see themselves as entrepreneurs. Emphasis is placed on *small wins, peer collaboration, and locally relevant opportunities* to ensure learning feels achievable and connected to their realities. The curriculum focuses on conceptual understanding without heavy theory, combining *practical action, reflection, and*

*collaboration.* By making progress visible and success feel possible, it plants the seeds of self-reliance, initiative, and long-term motivation.

### **Semester Syllabus:**

**Format:** 12 weeks, 4 hours/week | 2 credits

**Revenue Target:** ₹10,000

<b>Week</b>	<b>Learning Goal</b>	<b>Measurable Outcome</b>
1	Understand what entrepreneurship is and who can be an entrepreneur	Students define entrepreneurship in their own words and list 2 entrepreneurs from their local area or community
2	Connect personal identity to entrepreneurship (strengths, interests, struggles)	Students create a “value map” showing how a skill/interest/problem from their life could become a business opportunity
3	Learn about 5 business paths: content creation, dropshipping, cloud kitchen/food business, gig economy and local services	Students explore 1-2 examples from each domain and share one they’re most curious to try and why
4	Choose a path and generate a basic business idea	Students write down a clear offer (what, for whom, why) and one way to reach their customer
5	Take first real action: message, post, pitch, or sell	Students reach out to or serve 1 real potential customer and record what happened

6	Reflect on first attempt and share with peers	Students share their result, a challenge faced, and one idea to improve next time
7	Improve and try again: aim for first ₹100	Students apply a change, try again, and aim to make their first ₹100 or get meaningful response
8	Learn how to identify and understand your target customer	Students talk to 2 potential customers or observe them and list 3 insights about their needs
9	Learn how to serve your target audience better	Students improve one part of their offer (product, delivery, messaging, or interaction) based on customer feedback or need
10	Explore core entrepreneurial values (resilience, honesty, effort)	Students reflect on 1 value they're building and show it in a business task or peer story
11	Focus on earning and staying consistent	Students complete a second earning task and track their consistency (e.g., same product or message for 3 days)
12	Reflect on earnings, grit, and how to keep going	Students record total earnings, one resilience moment, and one support system or habit they'll continue with

### **Weekly Component:**

<b>Component</b>	<b>Duration</b>	<b>Description</b>
Learning Module	~1.5 hrs	<ul style="list-style-type: none"> <li>- Introduces key concepts in a simple and engaging way</li> <li>- Includes, examples, and 1-2 interactive discussions or quizzes</li> </ul>

Action Lab	~2 hrs	<ul style="list-style-type: none"> <li>- Hands-on task on the weekly concept</li> <li>- Includes step-by-step guidance, templates, and worksheets</li> <li>- Ends with a submission (e.g., video, reflection, or proof of action)</li> </ul>
Resources	Self-paced	<ul style="list-style-type: none"> <li>- Supplementary videos, short readings, real-life stories, and tools to deepen understanding at their own pace</li> </ul>

### Evaluation Criteria

<b>Evaluation Component</b>	<b>Description</b>	<b>Weightage</b>
<b>Weekly Task Completion</b>	Timely submission of weekly tasks including reflections, activities, quizzes etc.	40%
<b>Target Completion</b>	Performance-based evaluation on hitting <b>revenue or profit targets</b> (e.g., generating ₹10,000 revenue)	30%
<b>Final Project</b>	A comprehensive project based on the semester's theme	30%

<b>Course Title: CorelDRAW</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM107</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Total Hours:90**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental concepts of graphic design and the role of vector graphics, particularly in CorelDRAW.
- CO2. Develop proficiency in using CorelDRAW tools and features for creating and editing vector graphics, including shapes, lines, and colors.
- CO3. Learn to manipulate text within CorelDRAW, including the use of typography, text formatting, and special effects.
- CO5. Gain skills in using layers, groups, and object management to create complex designs efficiently.

### **Course Content**

#### **UNIT I**

**10 Hours**

**Introduction to CorelDRAW:** Overview of Vector Graphics: Differences between vector and raster graphics, Getting Started with CorelDRAW: Interface, tools, and workspace customization, Basic Drawing Tools: Lines, shapes, curves, and Bezier tools Working with Color: Color palettes, fills, and outlines, Basic Text Handling: Adding, formatting, and editing text.

#### **UNIT II**

**12 Hours**

**Advanced Drawing Techniques:** Object Management: Grouping, ungrouping, locking, and aligning objects, Layers and Organization: Using layers for complex designs, Advanced Shapes and Paths: Node editing, shape tools, and path operations, Creating and Editing Symbols: Symbol libraries and usage, Effects and Styles: Applying shadows, glows, transparency, and blends.

#### **UNIT III**

**12 Hours**

**Design and Layout:** Page Layout: Setting up multi-page documents, margins, and guidelines, Working with Images: Importing, tracing, and editing bitmaps. Typography: Advanced text effects, font management, and text wrapping Designing with Precision: Using grids, rulers, and snapping, Templates and Styles: Creating and using templates and graphic styles.

#### **UNIT IV**

**Hours 11**

**Practical Applications and Projects:** Branding and Identity Design: Creating logos, business cards, and stationery, Print Design: Designing brochures, flyers, and posters, Web Graphics: Creating web assets, buttons, and banners. Advanced Illustration Techniques: Vector illustration, digital painting, and artistic effects. Final Project: Designing a comprehensive project integrating all learned skills.

### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

### **Suggested Readings:**

- CorelDRAW X8: The Complete Beginner's Guide" by David McNair
- CorelDRAW Graphics Suite X7: The Official Guide" by Gary David Bouton

- CorelDRAW X9: A Complete Guide" by Sumit Bansal
- Digital Graphic Design with CorelDRAW" by J. L. Collins

**Web Sources:**

- <https://www.coreldraw.com>
- <https://www.tutorialspoint.com/coreldraw/index.htm>
- <https://www.lynda.com/Corel-DRAW-training-tutorials/176-0.html>
- <https://www.udemy.com/topic/coreldraw/>

<b>Course Title: Photoshop</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM108</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Total Hours: 45**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental concepts of image editing and manipulation using Adobe Photoshop.
- CO2. Develop proficiency in using key Photoshop tools and features, including selection tools, brushes, layers, and filters.
- CO3. Gain skills in photo retouching techniques, such as color correction, blemish removal, and enhancing images for various purposes.
- CO4. Learn to create and manipulate text and graphics for design projects, including posters, social media graphics, and digital art.

### **Course Content**

#### **UNIT I**

**12 Hours**

**Introduction to Adobe Photoshop:** Overview of Raster Graphics: Understanding pixels and resolution, Getting Started with Photoshop: Interface, tools, and workspace customization, Basic Image Editing: Cropping, resizing, and rotating images, Working with Layers: Layer management, blending modes, and layer masks, Color and Brushes: Color modes, swatches, gradients, and brush tool basics.

#### **UNIT II**

**12 Hours**

**Advanced Image Editing:** Selection Tools: Marquee, lasso, magic wand, and quick selection tools, Advanced Retouching: Healing brush, clone stamp, and content-aware fill, Adjustment Layers: Brightness/contrast, levels, curves, and color balance, Filters and Effects: Applying and customizing filters, smart filters, Text and Typography: Adding and formatting text, text effects.

#### **UNIT III**

**12 Hours**

**Compositing and Creative Techniques:** Layer Styles: Drop shadows, bevel and emboss, and other effects, Masking Techniques: Layer masks, clipping masks, and vector masks, Compositing Images: Combining multiple images, blending techniques. Pen Tool and Paths: Creating and editing paths, vector shapes, Smart Objects: Using smart objects for non-destructive editing.

#### **UNIT IV**

**9 Hours**

**Practical Applications and Projects:** Photo Manipulation: Advanced retouching and creative edits, Graphic Design: Creating posters, flyers, and social media graphics, Web Design: Designing web layouts, optimizing images for web, Digital Painting: Custom brushes, painting techniques, and textures, Final Project: Developing a comprehensive project incorporating all learned skills.

### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

### **Suggested Readings**

- Adobe Photoshop Classroom in a Book (2022 release)" by Andrew Faulkner and Pamela Pfiffner

- Photoshop for Beginners: A Complete Guide to Learning Photoshop" by Anna E. Collins
- The Adobe Photoshop CC Book for Digital Photographers" by Scott Kelby
- Photoshop CC: The Missing Manual" by Lesa Snider

### **Web Sources**

- <https://www.adobe.com/products/photoshop.html>
- <https://helpx.adobe.com/photoshop/tutorials.html>
- <https://www.lynda.com/Photoshop-training-tutorials/279-0.html>
- <https://www.udemy.com/courses/search/photoshop>

**Semester II**

<b>Course Title: Multimedia Tools &amp; Techniques</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM201</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>
<b>Total Hours:60</b>				

**Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental concepts of multimedia, including its components such as text, audio, video, and graphics.
- CO2. Develop proficiency in using various multimedia tools and software for creating and editing multimedia content.
- CO3. Gain skills in designing and producing engaging presentations and interactive media using multimedia techniques.
- CO4. Learn to integrate different forms of media (audio, video, and graphics) to create cohesive and effective multimedia projects.

**Course Content****UNIT I****15 Hours**

Features and application of photo editing software; image sizes and resolutions; creating new images; placing images; file browser; tool selections; colour models and modes; adjusting colour display for cross platform variations; working with layers; features of layer masks and clipping path; blending modes; adjustment layers; 3D editor.

**UNIT II****15 Hours**

Features and applications of illustrator; vector and raster images: resolution in images: illustrator environment; documents; working with colours.

**UNIT III****15 Hours**

Features and applications of drawing software; interface and toolbox; common tasks; creating basic shapes: reshaping objects; applying colour fills and outlines; text tools; text formatting; embedding objects into text; text wraps; text object links.

**UNIT IV****15 Hours**

Applying effects – distortion effects, contour effects, transparency and lens effects; depth effects; working with bitmaps; editing and applying bitmaps.

**Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

**Suggested Readings:**

- "Multimedia: Making It Work" by Tay Vaughan
- "Digital Multimedia" by Nigel Chapman and Jenny Chapman
- "The Multimedia Handbook" by John B. Carpinelli
- "Designing Multimedia" by Daniel K. G. Lee

**Web Sources:**

- <https://www.khanacademy.org/computing>
- <https://www.lynda.com/learning-paths/Creative/Become-a-Multimedia-Designer>

- <https://www.adobe.com/creativecloud.html>
- <https://www.tutorialspoint.com/multimedia/index.html/>

<b>Course Title: Markup Languages (HTML &amp; DHTML)</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM202</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Total Hours: 45**

### **Learning Outcomes**

- CO1. Understand the fundamental concepts of markup languages, specifically HTML and DHTML, and their role in web development.
- CO2. Develop proficiency in writing and structuring HTML documents, including the use of elements, attributes, and semantic markup.
- CO3. Gain skills in implementing DHTML to create interactive and dynamic web pages using JavaScript and CSS.
- CO4. Learn to use web standards and best practices for accessibility and search engine optimization (SEO) in HTML and DHTML coding.

### **Course Content**

#### **UNIT I**

**10 Hours**

Introduction to HTML and Web Structure- Overview of HTML: Syntax and structure of an HTML document., Basic HTML elements: headings, paragraphs, links, images., Attributes and their significance, Introduction to forms and basic form elements (text fields, buttons).

#### **UNIT II**

**12 Hours**

Advanced HTML elements: forms (<input>, <select>, <textarea>), lists (<ol>, <ul>), and tables. Embedding multimedia: audio and video using HTML5 elements.,HTML5 structural elements: <header>, <footer>, <article>, <section> for semantic markup, Understand how to use tables and lists to structure data, Implement semantic HTML for more accessible and organized websites.

#### **UNIT III**

**10 Hours**

Introduction to CSS and Styling: What is CSS and how it integrates with HTML, Basic CSS properties: colors, fonts, borders, margins, padding, CSS selectors: element, class, and ID selectors., Inline, internal, and external CSS, Apply styling rules to web pages using CSS, Understand the difference between inline, internal, and external stylesheets.

#### **UNIT IV**

**15 Hours**

CSS box model: margins, borders, padding, and content, Positioning elements: static, relative, absolute, and fixed positioning, Flexbox and CSS grid for advanced layouts, what is DHTML: combining HTML, CSS, and JavaScript, Event handling in JavaScript: click, hover, form submit events, Dynamic content updates using JavaScript, Modifying HTML and CSS dynamically.

#### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

#### **Suggested Readings**

- "HTML and CSS: Design and Build Websites" by Jon Duckett
- "Learning Web Design: A Beginner's Guide to HTML, CSS, JavaScript, and Web Graphics" by Jennifer Niederst Robbins
- "Head First HTML and CSS" by Elisabeth Robson and Eric Freeman
- "HTML5: Up and Running" by Mark Pilgrim

#### **Web Sources**

- <https://www.w3schools.com>
- <https://developer.mozilla.org/en-US/docs/Web/HTML>
- <https://www.codecademy.com/learn/learn-html>
- <https://www.freecodecamp.org>

<b>Course Title: Communication Skill – II</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM203</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

**Total Hours: 30**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Formulate an outline for effective Organizational Communication.
- CO2. Summarize the information, ideas, concepts and opinions from a variety of sources.
- CO3. Attain the competence in oral, written, and visual communication.
- CO4. Learn the correct practices about the strategies of Effective Business writing.

### **Course Content**

#### **UNIT I**

**8 Hours**

Reading Skills: Newspaper / Magazine/ Article Reading from English Newspaper, Cambridge Readings.

#### **UNIT II**

**8 Hours**

Writing Skills: Essay Writing, Letter writing: Formal, informal and Job – application, Resume writing.

#### **UNIT III**

**7 Hours**

Presentation Skills: Presentation Purpose in Business world, how to Prepare PPT, Tips for the required body language while delivering the presentation in front of a third party.

#### **UNIT IV**

**7 Hours**

Business Communication: Quotation, Place of order, Complaints and adjustments.

### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

### **Suggested Readings**

- Kumar, S., &Lata, P. (2011). Communication skills. Oxford University Press.
- Training, M. T. D. (2012). Effective communication skills. Bookboon.
- Hargie, O. (Ed.). (1986). The handbook of communication skills (p. 37). London: Croom Helm.

### **Web Sources**

- <https://haiilo.com/blog/top-5-communication-skills-and-how-to-improve-them/>
- <https://corporatefinanceinstitute.com/resources/management/communication/>
- <https://www.thebalance.com/communication-skills-list-2063779>
- <https://www.skillsyouneed.com/ips/communication-skills.html>

<b>Course Title: Database Management Systems</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM204</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**Total Hours: 60**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental concepts of database management systems, including data models, schemas, and database architectures.
- CO2. Develop proficiency in using SQL (Structured Query Language) for querying, updating, and managing databases.
- CO3. Gain skills in database design, normalization, and the implementation of relational databases.
- CO4. Understand the concepts of transaction management, concurrency control, and data integrity in a DBMS environment.

### **Course Content**

#### **Unit I**

**15 Hours**

Introduction of DBMS, Data Modelling for a Database, Three level Architecture of DBMS, Components of a DBMS. Introduction to Data Models, Hierarchical, Network and Relational Model, Comparison of Network, Hierarchical, Relational & Entity Relationship Model.

#### **Unit II**

**15 Hours**

Relational Database, Relational Algebra and Calculus, SQL Fundamentals, DDL, DML, DCL, PL/SQL Concepts, Cursors, Stored Procedures, Stored Functions, Database Triggers

#### **Unit III**

**15 Hours**

Introduction to Normalization, First, Second, Third Normal Forms, Dependency Preservation, Boyce-Codd Normal Form, Multi-valued Dependencies and Fourth Normal Form, Join Dependencies and Fifth Normal Form, Domain-key normal form (DKNF).

#### **Unit IV**

**15 Hours**

Database Recovery, Concurrency Management, Database Security, Integrity and Control. Structure & Design of a Distributed Database.

### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning

### **Suggested Readings:**

- "Database System Concepts" by Abraham Silberschatz, Henry Korth, and S. Sudarshan
- "Fundamentals of Database Systems" by Ramez Elmasri and Shamkant B. Navathe
- "SQL in 10 Minutes, Sams Teach Yourself" by Ben Forta
- "Database Management Systems" by Raghu Ramakrishnan and Johannes Gehrke

### **Web Sources:**

- <https://www.w3schools.com/sql/>
- <https://www.tutorialspoint.com/dbms/index.htm>
- <https://www.geeksforgeeks.org/dbms/>

<b>Course Title: HTML and DHTML Lab</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM205</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>3</b>

**Total Hours: 90**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the basic structure and syntax of HTML and DHTML, including elements, tags, and attributes.
- CO2. Develop skills in creating and styling web pages using HTML and CSS, including layout techniques and design principles.
- CO3. Gain proficiency in implementing DHTML features to create dynamic and interactive web pages using JavaScript.
- CO4. Learn to integrate multimedia elements such as images, audio, and video into web pages using HTML.

### **Course Content**

#### **List of Experiments**

1. Create a basic webpage with an appropriate HTML structure (head, body, title).
2. Include headings, paragraphs, lists, links, and images.
3. Create a simple webpage with multiple sections.
4. Apply inline, internal, and external CSS to style a webpage.
5. Use CSS properties for font, color, background, margin, padding, and borders.
6. Design a simple webpage layout using CSS.
7. Create a form with text fields, radio buttons, checkboxes, and a submit button.
8. Use form elements like `<input>`, `<textarea>`, `<select>`, and `<button>`.
9. Add form validation using basic HTML attributes.
10. Write basic JavaScript to handle events (e.g., `onClick`, `onHover`).
11. Add alert messages and validate form inputs using JavaScript.
12. Implement a simple interactive element like a button that changes content.
13. Use JavaScript to access and modify HTML elements .
14. Create a button that dynamically updates content when clicked.
15. Create, update, and remove HTML elements dynamically using JavaScript.

				B.VOC (2025-26)
<b>Course Title: Graphic Design</b>		<b>L</b>	<b>T</b>	<b>P</b>
<b>Course Code: BVM206</b>		<b>3</b>	<b>0</b>	<b>Credits</b> <b>0 3</b>
<b>Total Hours: 45</b>				

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental principles of graphic design, including composition, color theory, typography, and layout.
- CO2. Develop proficiency in using graphic design software such as Adobe Photoshop, Illustrator, and InDesign to create visual content.
- CO3. Gain skills in conceptualizing and designing various graphic materials, including logos, posters, brochures, and digital media.
- CO4. Learn to communicate ideas effectively through visual storytelling and design elements tailored to specific audiences.

### **Course Content**

#### **UNIT I**

**10 Hours**

Introduction to Graphic Design: Overview of the field, history, and modern applications., Elements of Design: Line, shape, color, texture, space, and form, Principles of Design: Balance, contrast, emphasis, movement, pattern, rhythm, unity, Color Theory: Color wheel, primary, secondary, and tertiary colors, color schemes (complementary, analogous, triadic), psychological effects of colors, Typography Basics: Typeface classifications (serif, sans-serif, script, etc.), fonts, readability, and hierarchy in design, Composition and Layout: Grids, alignment, proximity, whitespace, and visual hierarchy.

#### **UNIT II**

**10 Hours**

Introduction to Adobe Illustrator: Understanding the workspace, tools, and vector graphics, Creating Shapes and Paths: Drawing basic shapes, using the pen tool, and creating custom paths, Working with Text in Illustrator: Typing, text on a path, and manipulating type, Introduction to Adobe Photoshop: Overview of raster vs. vector graphics, Photoshop workspace and tools, Photo Editing Basics: Cropping, resizing, adjusting brightness and contrast, color correction, Layers and Masks in Photoshop: Using layers for non-destructive editing, blending modes, and layer masks, Exporting for Print and Web: File formats (JPEG, PNG, PDF), resolution for print vs. web

#### **UNIT III**

**12 Hours**

Introduction to Branding: Understanding what branding is and its role in business and design, Logo Design: Principles of effective logo design, creating scalable logos, and using shapes and symbols, Brand Identity Systems: Consistency in design (color palettes, typography, imagery), creating brand guidelines, Designing for Different Platforms: Print materials (business cards, letterheads) vs. digital platforms (web, social media).Mood Boards and Concept Development: Gathering visual inspiration and developing design concepts.

#### **UNIT IV**

**13 Hours**

Introduction to UI/UX Design: Basics of user interface and user experience design, wireframing, and prototyping, Web Design Principles: Designing for web layouts, responsive design, and user-friendly interfaces, Social Media Graphics: Creating engaging visual content for social platforms (banners, posts, ads),Animation and Motion Graphics: Introduction to basic motion graphics using tools like Adobe After

Effects, Portfolio Development: Compiling and organizing design work, creating a digital portfolio.

**Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

**Suggested Readings:**

- "The Elements of Graphic Design" by Alex W. White
- "Thinking with Type" by Ellen Lupton
- "Graphic Design: The New Basics" by Ellen Lupton and Jennifer Cole Phillips
- "How to Be a Graphic Designer Without Losing Your Soul" by Adrian Shaughnessy

**Web Sources:**

- <https://www.adobe.com/creativecloud.html>
- <https://www.canva.com/learn/design/>
- <https://www.smashingmagazine.com/category/design/>

<b>Course Title: Story Boarding</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM207</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Total Hours: 45**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental principles of storyboarding and its role in visual storytelling across various media, including film, animation, and video games.
- CO2. Develop skills in creating effective storyboard sequences that communicate narrative, pacing, and character development.
- CO3. Gain proficiency in visualizing scripts and concepts through sketches and illustrations, capturing the essence of scenes and transitions.
- CO4. Learn to incorporate elements such as shot composition, camera angles, and timing into storyboards to enhance storytelling.

### **Course Content**

#### **UNIT I**

**10 Hours**

##### **Introduction to Storyboarding**

Understanding the role and importance of storyboarding in visual storytelling, History and evolution of storyboarding in filmmaking and animation, Overview of storyboarding software and tools, Fundamental principles of composition, framing, and shot design.

#### **UNIT II**

**10 Hours**

##### **Storytelling Techniques**

Narrative structure and pacing in storyboarding, creating compelling characters and environments through visual storytelling, Sequential storytelling and panel layout, Shot types and camera angles for effective storytelling, Emotion and storytelling, Visualizing sound and motion in storyboards.

#### **UNIT III**

**12 Hours**

##### **Advanced Storyboarding Concepts**

Storyboarding for different genres such as action, comedy, drama, and horror, Creating storyboards for complex sequences like action scenes, chase sequences, and dialogue-driven scenes, Storyboarding for visual effects and animation, Understanding continuity and visual storytelling consistency.

#### **UNIT IV**

**13 Hours**

##### **Professional Storyboarding Practices**

Storyboarding for previsualization and pitching, Collaboration and communication in the storyboarding process, Feedback and revision techniques, Creating animatics and previsualization sequences, Portfolio development and presentation skills for storyboard artists.

#### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

#### **Suggested Readings:**

- The Storyboard Artist: A Guide to Freelancing in Film, TV, and Advertising" by Giuseppe Cristiano
- Storyboarding Essentials: SCAD Creative Essentials" by David Harland Rousseau and Benjamin Reid Phillips
- The Art of the Storyboard: A Filmmaker's Introduction" by John Hart

- "Framed Ink: Drawing and Composition for Visual Storytellers" by Marcos Mateu-Mestre

**Web Sources:**

- <https://www.thefutur.com/storyboarding>
- <https://www.storyboardthat.com/>
- <https://www.w3schools.com/> (for general graphic design resources)
- <https://www.skillshare.com/browse/storyboarding>

<b>Course Title: Gender Equality</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM208</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

**Total Hours: 30**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental concepts of gender equality and its significance in various social, economic, and political contexts.
- CO2. Analyze the impact of gender discrimination and inequalities on individuals and communities.
- CO3. Develop critical thinking skills to assess and evaluate policies and practices related to gender equality.
- CO4. Recognize the intersectionality of gender with other identities such as race, class, and sexuality, and its implications for social justice.

### **Course content**

#### **UNIT I**

**8 Hours**

Introduction to Gender Equality, Definition and importance of gender equality. Historical overview of gender roles and rights. Key concepts: sex vs. gender, gender identity, and gender expression. Global perspective on gender equality: progress and challenges. International frameworks and agreements: CEDAW, Beijing Platform for Action, Sustainable Development Goals (SDG 5).

#### **UNIT II**

**8 Hours**

Gender in Society and Culture, Gender stereotypes and their impact. Media representation of gender and its societal effects. Intersectionality: understanding how gender intersects with race, class, sexuality, and other identities. Gender roles in different cultures and societies, Case studies: influential gender equality movements and leaders.

#### **UNIT III**

**7 Hours**

Gender Equality in the Workplace and Education, Gender disparities in education: access, quality, and outcomes. Strategies for promoting gender equality in educational settings. Workplace gender equality: understanding the gender pay gap, glass ceiling, and work-life balance. Legal frameworks and policies promoting workplace equality. Best practices for creating inclusive and equitable work environments.

#### **UNIT IV**

**7 Hours**

Gender differences in health outcomes, Gender Equality and Health Reproductive rights and health, Addressing gender-based violence and its impact on health, Mental health and gender, Policies and programs promoting gender-sensitive healthcare.

### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

### **Suggested Readings:**

- "Gender Equality: Transforming Family Divisions of Labor" by J. Scott
- "The Gendered Society" by Michael Kimmel
- "We Should All Be Feminists" by Chimamanda Ngozi Adichie
- "Gender Equality and Sustainable Development" by G. Smith

**Web Sources:**

- <https://www.un.org/en/gender-equality>
- <https://www.weforum.org/agenda/archive/gender-equality/>
- <https://www.gender.org/>
- <https://www.genderatlas.org/>

**Semester III**

<b>Course Title: Web Programming with php-1</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM301</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**Total Hours: 60****Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental concepts of web programming and the role of PHP in server-side scripting.
- CO2. Develop skills in writing PHP scripts to create dynamic web applications and manage data.
- CO3. Gain proficiency in using PHP in conjunction with HTML, CSS, and JavaScript to enhance web functionality.
- CO4. Learn to interact with databases using PHP and SQL for data storage and retrieval.

**Course Content****UNIT I****15 Hours**

INTRODUCTION TO PHP Basic Syntax, Integrating PHP with HTML, PHP Data type, Defining variable and constant OPERATORS & EXPRESSIONS Concatenation, Bitwise, Error Suppression, Increment, Arithmetic, Assignment, Comparison, Logical Operators & Ternary operator, Decrement operators

**UNIT II****15 Hours**

WORKING WITH FLOW CONTROL THROUGH CONTROL STATEMENT if statement I If-else statement If-else ladder statement If-elseif-else statement Switch statement  
WORKING WITH FLOW CONTROL THROUGH LOOP STATEMENT For statement, While statement, Do-while statement, For statement

**UNIT III****15 Hours**

PHP FUNCTIONS Returning a value from a function, Defining User functions, Using built-in functions, Defining functions, Passing values to a function, Using variables in functions, Recursion, Nesting of Functions, Passing parameter (Call By Value & Call By Reference) & Importing content of one page into another Trends of PHP Functions (Missing Parameter, Formal parameter declaration), return value

**UNIT IV****15 Hours**

ARRAYS IN PHP Accessing array Element, Storing Data in Arrays, Creating index based and Associative Arrays, Anatomy of an Arrays, STRINGS IN PHP Introduction to string. Creating and Working with String, Creating string, Viewing string, Modifying string, HANDLING HTML FORM WITH PHP Capturing Form Data, Dealing with Multi-value filed, Generating File uploaded form, Redirecting a form after submission.

**Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

**Suggested Readings:**

- "PHP and MySQL Web Development" by Luke Welling and Laura Thomson
- "Learning PHP, MySQL & JavaScript" by Robin Nixon
- "Modern PHP: New Features and Good Practices" by Josh Lockhart

- "PHP Objects, Patterns, and Practice" by Mika Schwartz

### **Web Sources**

- <https://www.php.net/>
- <https://www.w3schools.com/php/>
- <https://www.tutorialspoint.com/php/index.htm>
- <https://www.codecademy.com/learn/learn-php>

<b>Course Title: Audio and Video Editing</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM302</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**Total Hours: 60**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental concepts of audio and video editing, including terminology, techniques, and tools used in the industry.
- CO2. Develop skills in using audio and video editing software to create and edit high-quality content.
- CO3. Gain proficiency in audio recording, mixing, and mastering techniques to enhance sound quality.
- CO4. Learn to edit video footage, including cutting, sequencing, and applying visual effects and transitions.

### **Course Content**

#### **UNIT I**

**15 Hours**

Introduction to Adobe Audition & Premiere Pro Adobe Audition: Introduction to Adobe Audition, exploring the software interface, and setting up your project. Comparing the Waveform and Multitrack editors, understanding basic components of the editors. Adobe Premiere Pro:Introduction to Premiere Pro, understanding its purpose and the concept of non-linear editing. Overview of digital video principles such as video formats, frame rates, aspect ratios, and video outputs. Introductory project workflow, including adding footage, time code, and the basic interface of Premiere Pro.

#### **UNIT II**

**15 Hours**

Audio and Video Editing Basics Adobe Audition: Recording audio, appending audio files, importing raw data, and inserting audio files into a multitrack session. Supported import formats, visual fading, amplitude changes, working with markers, converting sample types, and waveform editing enhancements. Adobe Premiere Pro:Basic video editing, rough editing, working with layers, using the Ripple edit, Slip edit, and Razor tools. Navigating and understanding the tools for editing clips. Helpful editing techniques such as markers, replacing footage, and exporting stills. Adjusting clip properties (position, size, anchor) and working with time (speed, rate, and backward edits).

#### **UNIT III**

**15 Hours**

Advanced Sound and Video Mixing Adobe Audition: Mixing different genres of music (Pop Rock, Hip Hop, EDM), Foley, Reverb, Modify Routing, Gain Structure, Automation, and Master Harmonic Distortion. Metering, mid and side techniques, fixing hum and broadband noise, and working with various audio file formats and encoding methods. Adobe Premiere Pro:Attributes of video: Understanding pixels, frame rates, and HD formats. Creating moving elements with layered animations, fading effects, and applying various video transitions. Working with audio in video clips: cutting, changing, and fixing audio issues. Applying video effects like flare, lightning, mirror, and creating titles, credits, and lower thirds.

#### **UNIT IV**

**15 Hours**

Exporting and Compositing Adobe Audition: Exporting audio, EQ, loudness normalization, learning compression techniques, panning, level balancing, delay, EQ types, and filters. Synchronizing sound effects (SFX) and exporting audio and video in various formats. Adobe Premiere Pro:Basic compositing techniques, including green

screen keying and color correction (brightness, contrast, hue saturation, and color balance). Exporting video sequences using Media Encoder and understanding various video formats.

### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

### **Suggested Readings**

- The Art of Video Editing" by Christopher J. Bowen
- Adobe Premiere Pro Classroom in a Book" by Maxim Jago
- The Complete Guide to Sound Design for the Moving Image" by Ben Burtt
- Audio Post Production for Film and Video" by Douglas Spotted Eagle

### **Web Sources**

- <https://www.adobe.com/creativecloud/video.html>
- <https://www.lynda.com/> (now LinkedIn Learning)
- <https://www.coursera.org/courses?query=video%20editing>
- <https://www.udemy.com/courses/search/?q=audio%20editing>

<b>Course Title: Photography &amp; Visual Effects</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM303</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

**Total Hours:30****Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the core principles of photography, including composition, lighting, exposure, and camera settings.
- CO2. Develop technical skills in digital photography, including the use of DSLR and mirrorless cameras, as well as mobile photography techniques.
- CO3. Learn the fundamentals of visual effects (VFX) and how to integrate them with photography to create compelling visual narratives.
- CO4. Gain proficiency in post-production software such as Adobe Photoshop, Lightroom, and After Effects for photo editing and VFX creation.

**Course Content****UNIT I****8 Hours**

Various Camera Modes and their uses, Flash Modes, ISO settings, White Balance, Drive Modes, Lens Focal Length, Exposure Compensation, Focusing Options, Depth of Field (Depth of Focus), Macro Photography, Portraiture, Landscape, Action Photography, Still Life, Candid Photography, Indoor photography, Fine Art Photography, Black and White (Monochrome)

**UNIT II****8 Hours**

Basic Techniques of Lighting (Including: Front, Side, Back, Defused, etc.), Basic Photo Composition (Including: Rule of 3rds, Leading Lines, Framing Subjects, etc.), Basic Photo Editing (Using Photoshop and Picasa), Special Photoshop Creative Ideas involving use of layers, High Dynamic Range (H.D.R.) Photography, Knowledge of Pixels, Mega Pixels, DPI, PPI.

**UNIT III****7 Hours**

Visual Effects- Description- Types- Particles – Analysis- Size- Sand Effects – Smoke Effects Fire Effects – Cloud Effects – Snow Effects Fluid Effects-Coloring- designing Clouds Background – Designing Fog Effects – Explosion Effects- Fire Effects with flames - Space Effects and designs- Designing Thick Smoke.

**UNIT IV****7 Hours**

Designing Paint Effects – Coloring paints- Designing Trees and green effects –Designing Weather and seasons –Effects on seasons- Designing Glass image – Designing Different glass reflection- Designing Glow Effects – Liquid Effects and reflection design, Visual Effects Tool and advanced functions- Converting images from 2D to 3D Pictures. Creating 3D Effects- Differentiation 2D effects and 3D effect.

**Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

**Suggested Readings**

- "The Photographer's Eye" by Michael Freeman
- "Understanding Exposure" by Bryan Peterson
- "Adobe After Effects Classroom in a Book" by Lisa Fridsma and Brie Gyncild
- "Photoshop for Photographers" by Scott Kelby

## **Web Sources**

- <https://www.digital-photography-school.com/>
- <https://www.lynda.com/After-Effects-training-tutorials/>
- <https://www.adobe.com/products/photoshop.html>
- <https://www.videocopilot.net/> (for visual effects tutorials)

<b>Course Title: RDBMS</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM305</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**Total Hours: 60****Learning Outcomes**

CO1. After the completion of the course the learner will be able to  
 CO2. Identify the difference about database systems from the file systems by enumerating their features.  
 CO3. Acknowledge the role of the database administrator.  
 CO4. Retain the knowledge about physical and logical database designs.  
 CO5. Converts an Entity-Relationship diagram to Relational Schema.

**Course Content****UNIT I****15 Hours**

Introduction of DBMS: Data Modeling for a Database, Three level Architecture of DBMS, Components of a DBMS. Introduction to Data Models: Hierarchical, Network and Relational Model, Comparison of Network, Hierarchical and Relational Model, Entity Relationship Model.

**UNIT II****15 Hours**

Relational Database: Relational Algebra and Calculus, SQL Fundamentals, DDL, DML, DCL, PL/SQL Concepts, Cursors, Stored Procedures, Stored Functions, Database Triggers.

**UNIT III****15 Hours**

Introduction to Normalization: First, Second, Third Normal Forms, Dependency Preservation, Boyce-Codd Normal Form, Multi-valued Dependencies and Fourth Normal Form, Joins: Inner join, leftjoin, Rightjoin, Full join, Join Dependencies and Fifth Normal Form, Domain-key normal form (DKNF).

**UNIT IV****15 Hours**

Database Recovery: Concurrency Management, Database Security, Integrity and Control. Structure of a Distributed Database, Design of Distributed Databases.

**Transactional Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

**Suggested Readings**

- Ramakrishnan, R., Gehrke, J., & Gehrke, J. (2003). Database management systems (Vol. 3). New York: McGraw-Hill.
- Korth, F. Henry. Database System Concepts, McGraw Hill.
- Lu, G. (1999). Multimedia database management systems. Boston: Artech House.
- Date, C. J. (1975). An introduction to database systems. Pearson Education India.

**Web Sources**

- <https://www.geeksforgeeks.org/introduction-of-dbms-databasemanagement-system-set-1/>
- <https://www.javatpoint.com/dbms-tutorial>
- <https://www.techopedia.com/definition/24361/databasemanagement-systems-dbms>

<b>Course Title: Web Programming with PHP Lab</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM306</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>2</b>

**Total Hours: 60**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the basics of PHP and its role in server-side web development.
- CO2. Learn how to embed PHP code in HTML and process user input via forms.
- CO3. Develop basic PHP scripts that include variables, arrays, functions, and control structures.
- CO4. Understand how to interact with databases using PHP (MySQL).
- CO5. Build basic dynamic web pages and applications using PHP.

### **Course Content**

#### **Lab Exercises**

1. Set up a local web server environment using XAMPP/WAMP.
2. Write a PHP script that displays "Hello, World!" in a browser.
3. Experiment with different PHP data types and output functions.
4. Write a PHP script using if-else to display different messages based on user input.
5. Create a loop in PHP that prints the numbers 1 to 10.
6. Write a custom function to calculate the factorial of a number.
7. Create a login form that uses PHP to process and display the user's input.
8. Build a form with input validation to collect user data (e.g., contact form).
9. Implement a file upload system using an HTML form and PHP. Implement a file upload system using an HTML form and PHP.
10. Build a simple web application that allows users to insert data into a MySQL database.
11. Create a dynamic web page that fetches data from a MySQL database and displays it in a table.
12. Implement prepared statements in PHP for secure database interaction.

#### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning

#### **Suggested Readings**

- "PHP & MySQL: Novice to Ninja" by Tom Butler and Kevin Yank
- "Learning PHP, MySQL & JavaScript" by Robin Nixon
- "PHP Objects, Patterns, and Practice" by Mika Schwartz
- "Modern PHP: New Features and Good Practices" by Josh Lockhart

#### **Web Sources**

- <https://www.w3schools.com/php/>
- <https://www.php.net/>
- <https://www.tutorialspoint.com/php/index.htm>
- <https://www.codecademy.com/learn/learn-php>

<b>Course Title: Digital Painting</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM308</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Total Hours: 45**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental principles of digital painting, including color theory, lighting, and composition.
- CO2. Develop proficiency in using digital painting software (e.g., Adobe Photoshop, Corel Painter, or Procreate) for creating artwork.
- CO3. Learn various digital brush techniques, textures, and tools to mimic traditional painting styles or create new ones.
- CO4. Gain an understanding of layering, blending modes, and non-destructive editing in digital artwork creation.

### **Course content**

#### **UNIT I**

**10 Hours**

Introduction to Digital Painting: Understanding the basics of digital painting and its applications in various industries such as illustration, concept art, and digital media. Exploring the advantages of digital painting compared to traditional painting techniques.

#### **UNIT II**

**10 Hours**

Digital Painting Tools and Software: Introduction to digital painting software such as Adobe Photoshop, Corel Painter, and Procreate. Exploring the interface, tools, and basic functionalities of digital painting software. Learning how to set up a digital workspace and customize brushes and settings.

#### **UNIT III**

**12 Hours**

Basic Painting Techniques: Learning the fundamental painting techniques used in digital painting, including brushwork, blending, layering, and masking. Understanding the principles of color theory, value, and composition in digital painting.

#### **UNIT IV**

**13 Hours**

**Understanding Light and Shadow:** Exploring the principles of light and shadow in digital painting. Learning how to create realistic lighting effects, cast shadows, and highlights using digital painting techniques. Understanding how light interacts with different surfaces and materials.

#### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning

#### **Suggested Readings**

- Beginner's Guide to Digital Painting in Photoshop" by 3DTotal Publishing
- Digital Painting Techniques: Practical Techniques of Digital Art Masters" by 3DTotal Publishing
- ImagineFX: How to Draw and Paint Anatomy" by ImagineFX
- Mastering Digital Painting Techniques: Drawing and Painting in Adobe Photoshop and Corel Painter" by Gary Tonge

## **Web Sources**

- <https://www.ctrlpaint.com/>
- <https://www.artstation.com/>
- <https://www.skillshare.com/browse/digital-painting>
- <https://www.udemy.com/courses/search/?q=digital+painting>

<b>Course Title: Color Grading</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM309</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Total Hours: 45**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental principles of color theory and its application in color grading for video and film.
- CO2. Develop proficiency in using color grading software such as DaVinci Resolve, Adobe Premiere Pro, or Final Cut Pro.
- CO3. Learn how to adjust exposure, contrast, saturation, and hue to enhance the visual tone and mood of footage.
- CO4. Gain expertise in matching shots for visual consistency across scenes and maintaining a cohesive color palette.

### **Course content**

#### **UNIT I**

**10 Hours**

**Introduction to Color Grading** Color Theory and Principles: Introduction to the basics of color theory and how it applies to color grading in video. Understanding color models (RGB, HSL) and their impact on image correction and aesthetics. Overview of the role of color grading in storytelling and mood creation. Software Interface and Tools: Introduction to professional color grading software like DaVinci Resolve, Adobe Premiere Pro, and Final Cut Pro. Understanding software interfaces, scopes, and tools (Waveform Monitor, Histogram, Vector scope). Setting up a color grading project and understanding timeline workflow for grading.

#### **UNIT II**

**10 Hours**

Basic Color Correction Techniques Primary Color Correction: Adjusting exposure, contrast, and white balance to achieve proper color balance. Understanding shadows, midtones, and highlights. Introduction to LUTs (Look-Up Tables) and using basic LUTs for color correction. Secondary Color Correction: Isolating specific colors using qualifiers (e.g., hue, saturation) and modifying them. Targeting skin tones and fixing color issues with selective color grading. Understanding masking tools and how to apply them in selective color adjustments.

#### **UNIT III**

**12 Hours**

Advanced Color Grading Techniques Working with Log and RAW Footage: Understanding log and raw video formats and their importance in advanced color grading. Grading log and raw footage to bring out dynamic range and detail. Using curves, hue vs. saturation, and hue vs. hue controls for fine-tuned adjustments. Matching Shots and Creating Mood: Color grading techniques to match shots within a scene and across different scenes. Using color to create mood and emotion in a scene, from warm and cool tones to dramatic looks. Applying stylized color grades to enhance the visual narrative (e.g., cinematic grading, vintage looks).

#### **UNIT IV**

**13 Hours**

Exporting and Delivering Graded Projects Finalizing the Color Grade: Applying finishing touches, ensuring consistency across the timeline, and finalizing the grade. Reviewing graded projects using scopes for accurate color rendition. Exporting and Encoding for

Different Media: Exporting color-graded projects in different formats for various platforms (e.g., web, broadcast, film). Understanding export settings, compression techniques, and maintaining color accuracy during rendering.

### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning

### **Suggested Readings**

- "Color Correction Handbook: Professional Techniques for Video and Cinema" by Alexis Van Hurkman
- "The Art and Technique of Digital Color Correction" by Steve Hullfish
- "Color Grading 101: Getting Started with Color Grading in DaVinci Resolve" by Darren Mostyn
- "Digital Color Grading for Film and Video" by Charles Haine

### **Web Sources**

- <https://www.blackmagicdesign.com/products/davinciresolve/>
- <https://www.premiumbeat.com/blog/color-grading-tutorials/>
- [https://www.tutorialspoint.com/davinci\\_resolve/index.htm](https://www.tutorialspoint.com/davinci_resolve/index.htm)
- <https://www.filmmaker.com/resources/color-grading>

<b>Course Title: Cleanup</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM310</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Total Hours: 45****Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the essential role of cleanup in the animation and digital art production pipeline.
- CO2. Develop the ability to refine rough sketches or animation frames into clean, final line art suitable for production.
- CO3. Gain proficiency in using digital tools such as Adobe Animate, Toon Boom Harmony, or Photoshop for the cleanup process.
- CO4. Learn to maintain the integrity of the original animation while improving clarity, consistency, and detail.

**Course content****UNIT I****10 Hours**

Introduction to Cleanup: Understanding the role and importance of cleanup in the animation production process. Exploring the difference between rough animation and cleanup, and the significance of maintaining consistency and quality in cleanup work.

**UNIT II****10 Hours**

Tools and Software: Introduction to the tools and software used in cleanup work, including digital drawing tablets, software such as Adobe Photoshop, Adobe Animate, Toon Boom Harmony, and TV Paint Animation. Exploring the interface, tools, and basic functionalities of cleanup software.

**UNIT III****12 Hours**

Understanding Line Quality: Learning how to analyse and improve the line quality in animation drawings. Understanding the principles of clean lines, line weight, and line consistency. Exploring techniques for creating smooth, fluid lines with proper spacing and thickness.

**UNIT IV****13 Hours**

Character Cleanup: Understanding the process of cleaning up character animation drawings. Learning how to refine and polish rough character designs, ensuring accuracy and consistency in proportions, anatomy, and details. Exploring techniques for cleaning up facial expressions, gestures, and movements.

**Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning

**Suggested Readings**

- "The Animator's Survival Kit" by Richard Williams
- "Cartoon Animation" by Preston Blair
- "Character Animation Crash Course!" by Eric Goldberg
- "The Illusion of Life: Disney Animation" by Frank Thomas and Ollie Johnston

**Web Sources**

- <https://www.toonboom.com/>
- <https://www.animationmentor.com/>

- <https://www.3dtotal.com/>
- <https://www.ctrlpaint.com/>

<b>Course Title: Digital Marketing</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM311</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>Total Hours: 30</b>				

### Learning Outcomes

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

- CO1. Understanding the digital marketing concepts and its usefulness in business.
- CO2. Planning steps for digital marketing strategy and successfully executing it.
- CO3. Applying Search Engine Optimization techniques (SEO) and Search Engine Marketing (SEM) to maximize reach and enhance engagement of users.
- CO4. Analyzing web using analytics tools and gaining insights to various tools for Social Media Marketing.

### Course Content

#### UNIT I

**8 Hours**

Digital Marketing Basics: Digital Marketing meaning and its importance, Traditional vs Digital Marketing, Benefits of Digital Marketing, Internet Marketing basics, Digital Marketing channels, Types of Business models, Digital Marketing strategies (P.O.E.M framework), Inbound and Outbound marketing, Digital Transformation model, 4Cs of Digital Marketing.

#### Unit II

**8 Hours**

Social Media Marketing – Introduction, Social Media marketing strategies, Overview of Social media platforms – Instagram, Snapchat, Facebook, Mobile, Twitter, Content Planning and Strategy, Influential marketing, Content marketing, Digital Marketing campaign.

#### Unit III

**7 Hours**

Search Engine Optimization – Introduction to SEO, On-Page and Off-Page Optimization, Role of Keywords in SEO, Organic vs Non-Organic SEO, Blogging as marketing strategy, Types of Blogs. Search Engine Marketing – Introduction to Paid marketing, Google Adwords, Types of campaigns and Campaign creation.

#### Unit IV

**7 Hours**

Tools for SMM and Marketing communication – Overview of Buffer, Hoot suite, Canva, Trello and Hot jar. Web Analytics: Meaning, Purpose and process, Types, Tools for analytics – Google analytics, Audience analytics, Acquisition analytics, Behavior analytics, and Conversion analytics.

### Transactional Mode

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning

### Suggested Readings

- Rajan Gupta, Supriya Madan, “Digital Marketing”, BPB Publication, 1st Edition, 2022
- Seema Gupta, “Digital Marketing”, McGraw Hill, 2nd Edition, 2018.
- Puneet Singh Bhatia, “Fundamentals of Digital Marketing”, Pearson, 2nd Edition, 2020.

### Web Sources

- [https://josephscollege.ac.in/lms/Uploads/pdf/material/DigitalMarketing\\_Notes.pdf](https://josephscollege.ac.in/lms/Uploads/pdf/material/DigitalMarketing_Notes.pdf)

- <https://www.digitalmarketer.com/digitalmarketing/assets/pdf/ultimate-guide-to-digital-marketing.pdf>

**Semester IV**

<b>Course Title: Cinematography</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM401</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**Total Hours: 60****Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the foundational principles of cinematography, including framing, composition, and camera movement.
- CO2. Develop technical skills in using cameras, lenses, lighting setups, and other cinematography equipment.
- CO3. Gain an understanding of how lighting and camera angles affect mood, tone, and storytelling in film.
- CO4. Learn how to plan and execute visual storytelling through shot lists, storyboards, and scene blocking.

**Course Content****Unit I****15 Hours**

Fundamentals of photography, types of camera, history of photography, growth and development of photography. Types of shots, camera movements, studio equipment's, lens and the frames, image control at the lens, ISO Color contrast, visual language aperture, white balance, camera control with or without tripod. Indoor shoot and outdoor shoot, use of different lens, depth of field, rules of composition.

**UNIT II****15 Hours**

ISO Color contrast, visual language aperture, white balance, camera control with or without tripod. Indoor shoot and outdoor shoot, use of different lens, depth of field, rules of composition. Use of video camera, concept and tools of cinematography, creativity in cinematography, different types of video.

**UNIT III****15 Hours**

Concept of shot and scenes. Shoot through dolly, tripod, track, trolley and cranes. Difference between camera shots and angles. Lighting: basics of lighting, indoor lighting and outdoor lighting, lighting equipment, three-point lighting, lighting techniques, tools of lighting, color correction.

**UNIT IV****15 Hours**

Visual story telling: script writing, fundamentals of script writing, types of script writing. Natural light and studio light, direction techniques. Various production stages: pre-production, production, post production.

**Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

**Suggested Readings**

- "Cinematography: Theory and Practice" by Blain Brown
- "Master Shots: 100 Advanced Camera Techniques to Get an Expensive Look on Your Low-Budget Movie" by Christopher Kenworthy
- "the Five C's of Cinematography: Motion Picture Filming Techniques" by Joseph V. Mascelli
- "Film Lighting: Talks with Hollywood's Cinematographers and Gaffers" by Kris Malkiewicz

### **Web Sources**

- <https://www.theblackandblue.com/>
- <https://www.studiobinder.com/blog/cinematography/>
- <https://nofilmschool.com/cinematography>
- <https://www.lynda.com/Cinematography-training-tutorials/>

<b>Course Title: Java Script-1</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM402</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**Total Hours: 60**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental concepts of JavaScript, including variables, data types, and operators.
- CO2. Learn how to use JavaScript to manipulate the Document Object Model (DOM) to create interactive web pages.
- CO3. Develop skills in writing JavaScript functions, loops, and conditional statements to build dynamic web applications.
- CO4. Gain knowledge of event handling and form validation using JavaScript.

### **Course Content**

#### **UNIT I**

**15 Hours**

Introduction to JAVASCRIPT, Client-Side JavaScript, Comments in JavaScript, Structure of JavaScript, JavaScript Data types, JavaScript Variables, JavaScript Reserved Words, JavaScript Operators.

#### **UNIT II**

**15 Hours**

JavaScript control Structures: If Statement, If...else Statement, If...else if... Statement, Loop Control, While Loop, Do...while Loop, For Loop, For-in Loop, Switch-Case. Functions: Function Definition, Calling a Function, Function Parameters, The return Statement, Nested Functions, Function () Constructor, Function Literals.

#### **UNIT III**

**15 Hours**

Events: Introduction to an event, on click event type, On submit event type, On mouse over and on mouse out, Html 5 standard events. Page Redirect: What is Page Redirection? JavaScript Page Refresh, Auto Refresh, How Page Re-direction Works?

#### **UNIT IV**

**15 Hours**

Dialog Box: Alert Dialog Box, Confirmation Dialog Box, Prompt Dialog Box. Void Keyword Page Printing: How to Print a Page?

#### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning

#### **Suggested Readings**

- "Eloquent JavaScript: A Modern Introduction to Programming" by Marijn Haverbeke
- "JavaScript: The Good Parts" by Douglas Crockford
- "You Don't Know JS (book series)" by Kyle Simpson
- "JavaScript & JQuery: Interactive Front-End Web Development" by Jon Duckett

#### **Web Sources**

- <https://developer.mozilla.org/en-US/docs/Web/JavaScript>
- <https://www.w3schools.com/js/>
- <https://javascript.info/>
- <https://www.freecodecamp.org/learn/javascript-algorithms-and-data-structures/>

<b>Course Title: Project Management</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM403</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Total Hours: 45**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental principles of project management, including project initiation, planning, execution, monitoring, and closure.
- CO2. Learn to define project scope, goals, deliverables, and develop comprehensive project plans.
- CO3. Gain proficiency in resource allocation, time management, and cost estimation techniques.
- CO4. Understand how to manage project risks, identify potential issues, and implement mitigation strategies.

### **Course content**

#### **UNIT I**

**10 Hours**

What is Project Management? Definition and key concepts. Project Lifecycle: Stages of a project (Initiation, Planning, Execution, Monitoring, and Closure). The Role of a Project Manager: Responsibilities, skills, and competencies of a project manager. Project Stakeholders: Identifying and managing stakeholders.

#### **UNIT II**

**10 Hours**

Project Constraints: Understanding the triple constraint (scope, time, cost) and their trade-offs. Project Charter: Developing a project charter and defining project goals. Scope Management: Defining the scope, Work Breakdown Structure (WBS), and project deliverables. Time Management: Project scheduling, defining tasks, dependencies, and timelines.

#### **UNIT III**

**12 Hours**

Gantt Charts: Creating Gantt charts to visualize project timelines. Resource Management: Allocating resources (human, financial, and material). Cost Management: Budgeting and cost estimation techniques. Risk Management: Identifying, analyzing, and mitigating risks.

#### **UNIT IV**

**13 Hours**

Project Management Tools: Introduction to tools like Microsoft Project, Trello, or Asana for task tracking and scheduling. Executing the Project: Managing teams, communication, and delivering project outcomes. Project Leadership and Team Dynamics: Leading project teams, team building, and conflict resolution. Performance Measurement: Key performance indicators (KPIs), earned value management (EVM). Project Monitoring: Tracking project progress and adjusting (scope, schedule, and cost).

#### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning

#### **Suggested Readings**

- A Guide to the Project Management Body of Knowledge (PMBOK Guide)" by Project Management Institute (PMI)
- Project Management for Dummies" by Stanley E. Portny
- Agile Project Management for Dummies" by Mark C. Layton
- Scrum: The Art of Doing Twice the Work in Half the Time" by Jeff Sutherland

#### **Web Sources**

- <https://www.pmi.org/>

- <https://www.projectmanager.com/>
- [https://www.tutorialspoint.com/project\\_management/index.htm](https://www.tutorialspoint.com/project_management/index.htm)
- <https://www.wrike.com/project-management-guide/>

<b>Course Title: Design and Layout (Dreamweaver)</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM404</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>2</b>

**Total Hours: 60**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Develop proficiency in using Adobe Dreamweaver for web design and layout.
- CO2. Understand and implement HTML, CSS, and JavaScript for creating functional and visually appealing websites.
- CO3. Design responsive web pages that adapt to various screen sizes and devices.
- CO4. Create interactive elements like forms, navigation menus, and multimedia content using Dreamweaver.

### **Course Content**

1. **Basic Webpage Layout:** Create a simple webpage using HTML5 elements such as `<header>`, `<nav>`, `<section>`, and `<footer>`. Add text, images, and links to the page.
2. **CSS Styling for a Webpage:** Develop a webpage and apply CSS styles for layout, text formatting, background, margins, padding, and borders to enhance the design.
3. **Responsive Web Design:** Design a responsive webpage using media queries in CSS. Ensure the layout adjusts for various screen sizes like desktop, tablet, and mobile devices.
4. **Navigation Bar Design:** Create a horizontal navigation bar using HTML and CSS. Include dropdown menus and hover effects for interactivity.
5. **Grid Layout Using CSS:** Implement a grid-based layout for a webpage using CSS Grid or Flexbox. Organize content blocks in a structured and responsive manner.
6. **Webpage Template Creation:** Develop a reusable webpage template with consistent design elements like headers, footers, and sidebars. Use this template across multiple pages of the website.
7. **Interactive Forms Design:** Create a webpage with an interactive contact form using HTML5 form elements (input fields, text areas, and buttons). Style the form using CSS.
8. **Image Gallery with Lightbox:** Design an image gallery with thumbnails, and implement a lightbox effect where larger versions of images appear when thumbnails are clicked.
9. **Embedding Multimedia Content:** Embed external media such as YouTube videos, audio files, and maps on a webpage. Ensure the content is responsive and well-placed within the design.
10. **Using JavaScript for Interactivity:** Implement simple JavaScript code on a webpage to create interactive features such as image sliders, pop-up windows, or form validation.
11. **Building a Multi-Page Website:** Create a complete multi-page website with a consistent design across all pages. Include a homepage, about page, services page, and contact page with working links.
12. **Final Project: Website for a Business:** Design and develop a fully responsive, multi-page website for a fictional or real business. Use all the skills learned, including HTML5, CSS3, JavaScript, responsive design, and multimedia embedding

<b>Course Title: Java Script (Lab)</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM405</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>2</b>

**Total Hours: 60**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Develop hands-on experience in writing JavaScript code to build dynamic and interactive web applications.
- CO2. Gain proficiency in manipulating the Document Object Model (DOM) to dynamically update HTML content and CSS styles.
- CO3. Implement JavaScript functions, loops, conditionals, and events to control the behavior of web elements.
- CO4. Understand how to use JavaScript for form validation, data handling, and interacting with user inputs.

### **Course Content**

#### **UNIT I**

Write basic JavaScript programs that utilize variables, operators, and control structures. Understand how to integrate JavaScript into an HTML document. Perform basic input/output using alert (), console.log (), and prompt ()�

#### **UNIT II**

Create a function that calculates the sum of two numbers and returns the result. Write a script that uses arrays to store a list of names and prints each name to the console. Implement a function that filters out even numbers from an array and returns the odd numbers.

#### **UNIT III**

Create a button that changes the color of a webpage's background when clicked. Write a script that adds new list items to an unordered list dynamically based on user input. Implement form validation to ensure all fields are filled in before submission.

#### **UNIT IV**

Create an object that represents a car and includes properties like make, model, and year. Write a class in JavaScript to represent a user with methods to update user information. Fetch data from an API (e.g., JSONPlaceholder) and display it dynamically on the web page.

<b>Course Title: Fundamental of professional skills</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM406</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Total Hours: 45**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the essential soft skills needed for professional success, including communication, time management, and problem-solving.
- CO2. Develop effective interpersonal and teamwork skills to collaborate in diverse professional environments.
- CO3. Gain proficiency in professional writing, including email etiquette, report writing, and presentations.
- CO4. Learn critical thinking and decision-making techniques to handle workplace challenges.

### **Course Content**

#### **UNIT I**

**10 Hours**

Communication Skills This UNIT focuses on the importance of communication in professional settings. Students will learn about verbal, non-verbal, and written communication, and will practice techniques for effective listening. Topics include public speaking, business writing, and interpersonal communication. Students will deliver presentations, participate in mock interviews, and practice professional writing.

#### **UNIT II**

**12 Hours**

Time Management and Organizational Skills In this unit, students will explore the significance of time management and how it affects productivity. The UNIT will cover goal setting, prioritization techniques, scheduling, and strategies to avoid procrastination. Students will also learn how to balance their personal and professional lives. Exercises will include creating weekly schedules and setting SMART goals.

#### **UNIT III**

**13 Hours**

Teamwork and Collaboration This UNIT highlights the role of teamwork in professional environments. Students will learn how to build effective teams, resolve conflicts, and collaborate using various tools like Slack and Trello. The UNIT also emphasizes giving and receiving constructive feedback. Students will work on group projects, conduct peer evaluations, and reflect on team experiences.

#### **UNIT IV**

**10 Hours**

Critical Thinking and Problem-Solving Students will develop their critical thinking and problem-solving skills in this unit. They will learn various problem-solving models, decision-making strategies, and creative thinking techniques. The UNIT covers analyzing information and overcoming obstacles in professional challenges. Assignments include working on case studies and participating in brainstorming sessions to develop innovative solutions.

#### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

#### **Suggested Readings**

- "The 7 Habits of Highly Effective People" by Stephen R. Covey
- "How to Win Friends and Influence People" by Dale Carnegie
- "Emotional Intelligence: Why It Can Matter More Than IQ" by Daniel Goleman
- "The Art of Communicating" by Thich Nhat Hanh

## **Web Sources**

- <https://www.mindtools.com/>
- <https://hbr.org/topic/leadership>
- <https://www.coursera.org/courses?query=professional%20skills>
- <https://www.skillsyouneed.com/>

<b>Course Title: Introduction to Animation</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>B.VOC (2025-26) Credits</b>
<b>Course Code: BVM407</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Total Hours: 45**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the basic principles and history of animation, including key techniques like frame-by-frame, tweening, and stop-motion.
- CO2. Learn how to create simple animations using both traditional and digital tools, including 2D and 3D animation software.
- CO3. Gain skills in character design, storyboarding, and timing to develop fluid and compelling animations.
- CO4. Understand the animation production process, from concept development to the final rendering of an animated sequence.

### **Course content**

#### **UNIT I**

**10 Hours**

Flash Environment and Tools Fundamentals, Exploring the Flash Interface, Working with images, Basic drawing and Selections, Shapes, Colour, Text.

#### **UNIT II**

**10 Hours**

Symbols, Animation and Organizing Projects Layers, Scenes and Frame Labels, Symbols and Instances, Animation

#### **UNIT III**

**12 Hours**

Action Scripting and Interactivity Introduction to ActionScript, Creating ActionScript Movies, Controlling the Timeline with ActionScript, Controlling Movie Content with Action script,

#### **UNIT IV**

**13 Hours**

Creating Action Script Loops, Working with Variables and Arrays, Modifying an Object with Action Script, Flash UI Components, Adding Media and Publishing Flash Movies Working with Sound, Embedding Video building user defined functions, creating and calling a scalar function, implementing triggers, creating triggers, multiple trigger interaction.

#### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning

#### **Suggested Readings**

- "The Animator's Survival Kit" by Richard Williams
- "The Illusion of Life: Disney Animation" by Frank Thomas and Ollie Johnston
- "Cartoon Animation" by Preston Blair
- "Timing for Animation" by Harold Whitaker and John Halas

#### **Web Sources**

- <https://www.animationmentor.com/>
- <https://www.animschool.edu/>
- <https://www.toonboom.com/resources/learn>

<b>Course Title: Environmental studies-1</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM408</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

**Total Hours: 30**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the basic concepts of ecology, ecosystems, and biodiversity, and their relevance to environmental sustainability.
- CO2. Gain knowledge of environmental issues such as pollution, climate change, deforestation, and resource depletion.
- CO3. Learn about environmental policies, laws, and initiatives aimed at conservation and sustainable development.
- CO4. Develop the ability to critically analyze the human impact on the environment and explore sustainable solutions.

### **Course Content**

#### **UNIT I**

**8 Hours**

The Multidisciplinary Nature of Environmental Studies This UNIT explains the scope and importance of environmental studies and describes the need for public awareness about environmental issues. It includes an overview of natural resources, their types, and the problems associated with their overexploitation. Topics include forests, water, mineral, food, energy, and land resources. This UNIT explores how these resources are used and managed and emphasizes the importance of conservation and sustainable development.

#### **UNIT II**

**8 Hours**

Ecosystems and Biodiversity. This UNIT focuses on ecosystem concepts, types, and functions. It introduces the structure and functions of ecosystems, including the energy flow, food chains, and ecological succession. Students will study the importance of biodiversity, its levels (genetic, species, and ecosystem), and the significance of hotspots and endangered species. The UNIT also covers the concept of conservation, including in-situ and ex-situ methods, and highlights international efforts towards biodiversity preservation.

#### **UNIT III**

**7 Hours**

Environmental Pollution and Its Impact This UNIT addresses various types of environmental pollution, including air, water, soil, and noise pollution, along with their causes, effects, and control measures. It explores the impact of human activities on the environment and highlights global environmental issues such as climate change, ozone layer depletion, acid rain, and global warming. The UNIT further discusses solid waste management and the problems associated with urban waste, pollution-related hazards, and disaster management strategies.

#### **UNIT IV**

**7 Hours**

Social Issues and the Environment This UNIT focuses on the link between society and the environment, exploring the role of individuals in addressing environmental issues. It covers topics such as sustainable development, urbanization, and environmental ethics. Students will study environmental legislation and policies at the national and international levels, with a focus on key laws and protocols like the Environmental Protection Act, Forest Conservation Act, and international agreements like the Kyoto Protocol. The UNIT also introduces the concept of environmental impact assessment and the importance of creating environmental awareness.

#### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning

### **Suggested Readings**

- Environmental Studies: From Crisis to Cure" by R. Rajagopalan
- Environmental Science: A Global Concern" by William P. Cunningham and Mary Ann Cunningham
- The Sixth Extinction: An Unnatural History" by Elizabeth Kolbert
- Silent Spring" by Rachel Carson

### **Web Sources**

- <https://www.unep.org/>
- <https://www.conserve-energy-future.com/>
- <https://www.epa.gov/>
- <https://www.environmentalscience.org/>

<b>Semester V</b>				
<b>Course Title: Web Technologies Using ASP.NET – I</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM501</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>
<b>Total Hours: 60</b>				

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental concepts of web development using ASP.NET and the .NET framework.
- CO2. Learn how to create dynamic, data-driven web applications using ASP.NET web forms and MVC architecture.
- CO3. Gain proficiency in handling server-side programming, including form validation, session management, and authentication using ASP.NET.
- CO4. Develop skills in working with databases through ADO.NET and Entity Framework to perform CRUD operations.

### **Course Content**

#### **UNIT I**

**15 Hours**

Basics: OOPs Concept, Classes and Objects, Inheritance, Polymorphism, Abstraction and Encapsulation Introduction to Standard Controls: Display information, Accepting user input, Submitting form data, Displaying images, Using the panel control, Using the hyperlink control.

#### **UNIT II**

**15 Hours**

Introduction to Validation Controls: Using the required field validator control, Using the range validator control using the compare validator control, Using the regular expression validator control, Using the custom validator control, Using the validation summary controls.

#### **UNIT III**

**15 Hours**

Introduction to Rich Controls: Accepting file uploads, Displaying a calendar, Displaying advertisement, Displaying different page views, Displaying a wizard.

#### **UNIT IV**

**Hours 15**

Designing Website with Master Pages: Creating master pages, Modifying master page content, Loading master page dynamically. List Controls: Dropdown list control, Radio button list controls, list box controls, bulleted list controls, custom list controls. Grid View Controls: Grid view control fundamentals, Using field with the grid view control, Working with grid view control events extending the grid view control.

#### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

#### **Suggested Readings**

- "ASP.NET Core in Action" by Andrew Lock
- "Professional ASP.NET MVC 5" by Jon Galloway, Phil Haack, Brad Wilson, and K. Scott Allen

- Pro ASP.NET Core MVC 2" by Adam Freeman
- C# 9.0 and .NET 5 – Modern Cross-Platform Development" by Mark J. Price

## **Web Sources**

- <https://docs.microsoft.com/en-us/aspnet/core/>
- <https://www.tutorialspoint.com/asp.net/index.htm>
- <https://www.w3schools.com/asp/>
- <https://www.c-sharpcorner.com/technologies/asp-net>

<b>Course Title: Computer Network</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM502</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**Total Hours: 60**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental concepts of computer networks, including network architecture, protocols, and standards.
- CO2. Gain knowledge of the OSI and TCP/IP models, and understand how data is transmitted through different layers.
- CO3. Learn about different networking devices (routers, switches, firewalls) and their roles in establishing a network.
- CO4. Develop skills in configuring, managing, and troubleshooting basic network infrastructures.

### **Course Content**

#### **UNIT I**

**15 Hours**

Data communications concepts: Digital and analog transmissions Modem, parallel and serial transmission, synchronous and asynchronous communication. Modes of communication: Simplex, half duplex, full duplex. Types of Networks: LAN, MAN, WAN Network Topologies: Bus, Star, Ring, Mesh, Tree, Hybrid Communication Channels: Wired transmissions: Telephone lines, leased lines, switch line, coaxial cables-base band, broadband, optical fiber transmission. Communication Switching Techniques: Circuit Switching, Message Switching, Packet Switching

#### **UNIT II**

**15 Hours**

Network Reference Models: OSI Reference Model, TCP/IP Reference Model, Comparison of OSI and TCP/IP Reference Models. Transmission impairments – Attenuation, Distortion, Noise. Multiplexing – Frequency division, Time division, Wavelength division. Data Link Layer Design Issues: Services provided to the Network Layer, Framing, Error Control (error detection and correction code), Flow Control, Data Link Layer in the Internet (SLIP, PPP).

#### **UNIT III**

**15 Hours**

MAC sub layer: CSMA/CD/CA, IEEE standards (IEEE802.3 Ethernet, Gigabit Ethernet, IEEE 802.4 Token Bus, IEEE 802.5 Token Ring). Network Layer: Design Issues, Routing Algorithms: Optimality Principle, Shortest Path Routing, Congestion Control Policies, Leaky bucket and token bucket algorithm, Concept of Internetworking

#### **UNIT IV**

**15 Hours**

Transport Layer: Design issues, Elements of transport protocols – Addressing, Connection establishment and release, Flow control and buffering, Introduction to TCP/UDP protocols. Session, Presentation and Application Layers: Session Layer – Design issues, remote procedure call. Presentation Layer – Design issues, Data compression techniques, Cryptography. Application Layer – Distributed application (client/server, peer to peer, cloud etc.), World Wide Web (WWW), Domain Name System (DNS), E-mail, File Transfer Protocol (FTP), HTTP as an application layer protocol.

### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning

### **Suggested Readings**

- Computer Networking: A Top-Down Approach" by James Kurose and Keith Ross

- Data Communications and Networking" by Behrouz A. Forouzan
- Computer Networks" by Andrew S. Tanenbaum and David J. Wetherall
- Networking All-in-One For Dummies" by Doug Lowe

## **Web Sources**

- <https://www.coursera.org/courses?query=computer%20networks>
- [https://www.tutorialspoint.com/data\\_communication\\_computer\\_network/index.htm](https://www.tutorialspoint.com/data_communication_computer_network/index.htm)
- <https://www.cisco.com/c/en/us/solutions/enterprise-networks/what-is-computer-networking.html>
- <https://www.geeksforgeeks.org/computer-network-tutorials/>

<b>Course Title: Graphics and Animation in Advertising</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM503</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**Total Hours: 60**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the role and significance of graphics and animation in creating effective advertising campaigns.
- CO2. Learn the principles of visual communication, design aesthetics, and animation techniques used in digital and print advertising.
- CO3. Develop skills in using industry-standard software tools like Adobe Photoshop, Illustrator, and After Effects to create compelling visual content for advertisements.
- CO4. Gain proficiency in creating animated advertisements, motion graphics, and dynamic visual elements that engage audiences.

### **Course Content**

<b>UNIT I</b>	<b>15 Hours</b>
Advertising, definitions, functions, types of advertising, ad agencies, world famous advertising agencies, marketing, marketing mix, media mix. social and ethical issues	
<b>UNIT II</b>	<b>15 Hours</b>
Online advertising, web banner ad, expanded ad, polite ad, wallpaper ad, trick banner, pop up, pop under, video ad, map ad, mobile ad, interstitial ad, contextual advertising.	
<b>UNIT III</b>	<b>15 Hours</b>
Outdoor publicity, point of purchase ads, hoardings, banner, wall posters, flex, sky writing, balloon ads, illuminated hoardings.	
<b>UNIT IV</b>	<b>15 Hours</b>
New trends in advertising, environmental conscious ads, talking babies, interactive tablet advertising, animated ads, cartoon ads. Episodes, viral videos, convergent advertising cultural icons, cultural jamming, universal advertising, creative ads Writing & creating advertising for TV & new media	

### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

### **Suggested Readings**

- Graphic Design, Referenced: A Visual Guide to the Language, Applications, and History of Graphic Design" by Bryony Gomez-Palacio and Armin Vit
- The Advertising Concept Book" by Pete Barry
- The Animator's Survival Kit" by Richard Williams
- Creative Advertising: Ideas and Techniques from the World's Best Campaigns" by Mario Pricken

### **Web Sources**

- <https://www.adobe.com/creativecloud/>
- <https://99designs.com/blog/creative-inspiration/advertising-design/>
- <https://www.awwwards.com/>
- <https://www.creativebloq.com/advice/the-best-advertising-campaigns-of-all-time>

<b>Course Title: Media Laws and Ethics</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM504</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>Total Hours:30</b>				

### Learning Outcomes

After the completion of the course the learner will be able to

- CO1. Understand the fundamental principles of media laws and regulations, including copyright, defamation, and freedom of speech.
- CO2. Analyze the ethical responsibilities of media professionals in reporting and content creation.
- CO3. Gain knowledge of various media-related legal frameworks, such as the First Amendment and privacy laws.
- CO4. Develop critical thinking skills to assess ethical dilemmas faced by media practitioners in different contexts.

### Course Content

#### UNIT I

**8 Hours**

Basic Legal concepts - Judicial system in India, fundamental rights; directive principles.

#### UNIT II

**8 Hours**

Freedom of the press - evolution of the concept of freedom of the press – freedom of speech and expression in Indian Constitution: article 19 (1) (a) and reasonable restrictions. Defamation –libel, slander and defenses of media professional.

#### UNIT III

**7 Hours**

Press Laws: Official Secrets Act, Press & Registration of Books Act, Copyright Act, Contempt of Court Act, Young Person's Harmful Publication Act, Indecent Representation of Women's Act, Drug & Magic Remedies Act, Working Journalists Act, Wage Boards, Film Certification Rules, Intellectual Property Rights, Privacy and Cyber laws. Right to Information Act.

#### UNIT IV

**7 Hours**

Media Ethics and Issues - code of ethics for media personnel; Press Council of India; censorship versus self-regulation; privacy versus public good; embedded journalism and sting journalism.

### Transaction Mode

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning

### Suggested Readings

- "Media Law and Ethics" by Roy L. Moore and Michael A. Smith
- "The Law of Journalism and Mass Communication" by Barbara A. Chisholm
- "Ethics in Media Communications: Cases and Controversies" by Louis A. Day
- "The Associated Press Stylebook" by The Associated Press

### Web Sources:

- <https://www.mediaethics.ca/>
- <https://www.natcom.org/>
- <https://www.splc.org/>
- <https://www.thebalancecareers.com/media-law-and-ethics-2315628>

<b>Course Title: Web Technologies Using ASP.NET – I Lab</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code:BVM505</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>2</b>

**Total Hours:60**

### **Learning Outcomes**

After the completion of the course the learner will be able to

1. Develop hands-on experience in creating web applications using ASP.NET Web Forms and MVC frameworks.
2. Gain practical skills in implementing client-side technologies such as HTML, CSS, and JavaScript within ASP.NET projects.
3. Learn to utilize ADO.NET and Entity Framework for database connectivity and data manipulation in web applications.
4. Understand and apply state management techniques in ASP.NET to maintain user sessions and data across web pages.

### **Course Content**

#### **List of Experiments**

##### **Lab 1: Introduction to ASP.NET and Setup**

Students will install Visual Studio and set up their development environment. They will create a basic ASP.NET Web Forms application, exploring the project structure and key components.

##### **Lab 2: ASP.NET Web Forms and Controls**

This lab focuses on building user interfaces using ASP.NET server controls. Students will create a web form application that includes controls such as text boxes, labels, buttons, and data-bound controls like GridView.

##### **Lab 3: Data Validation and User Input**

Students will implement validation controls to ensure correct user input in forms. They will learn to use required field validators, range validators, and custom validation techniques to enhance user experience.

##### **Lab 4: State Management Techniques**

This lab will cover different state management techniques in ASP.NET. Students will create a web application that utilizes ViewState, Session State, and Application State to manage user data across multiple pages.

##### **Lab 5: ADO.NET Basics and Data Access**

Students will learn to use ADO.NET for data access. They will connect to a SQL Server database and perform basic CRUD operations. This includes displaying data in a GridView and allowing users to add, update, and delete records.

##### **Lab 6: Introduction to ASP.NET MVC**

Students will explore the Model-View-Controller (MVC) architecture. They will create a simple MVC application, understand routing, and implement controllers and views to manage user interactions and data.

##### **Lab 7: Creating and Consuming Web Services**

This lab introduces students to web services in ASP.NET. They will create a simple

SOAP or RESTful web service and learn how to consume it in an ASP.NET application, displaying the returned data on a web page.

**Lab 8: Introduction to Client-Side Technologies**

Students will learn about client-side technologies such as HTML, CSS, and JavaScript. They will enhance their ASP.NET applications by integrating client-side scripts for better interactivity and user experience.

<b>Course Title: Graphics and Animation in Advertising Lab</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code:BVM506</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>2</b>

**Total Hours:60**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Gain practical experience in creating visually appealing graphics for advertising campaigns using industry-standard software.
- CO2. Develop skills in animation techniques to produce engaging animated content for various advertising platforms.
- CO3. Understand the principles of design and visual communication in the context of advertising graphics and animations.
- CO4. Learn to apply branding strategies and color theory effectively in the creation of advertising materials.

### **Course Content**

**Experiment 1:** Branding Design - Create a complete branding package for a fictional company, including a logo, business card, and letterhead using Adobe Illustrator and Photoshop.

**Experiment 2:** Print Advertisement Creation - Design a print advertisement for a product or service, focusing on layout, typography, and color theory using Adobe InDesign and Photoshop.

**Experiment 3:** Social Media Advertisement - Develop a series of graphics for a social media advertising campaign, considering platform specifications and audience engagement using Canva, Photoshop, and Illustrator.

**Experiment 4:** Motion Graphics Introduction - Create a simple animated logo using After Effects to understand keyframes and animation principles.

**Experiment 5:** Character Animation - Design and animate a character that can be used in advertisements, focusing on motion and expression using Adobe Animate or After Effects.

**Experiment 6:** Interactive Advertisement - Create an interactive advertisement using basic HTML/CSS and integrating graphics and animations with Adobe Animate and HTML/CSS.

**Experiment 7:** Infographic Design - Develop an infographic to visually represent data related to a marketing campaign or product features using Adobe Illustrator and Canva.

**Experiment 8:** Storyboarding for Ads - Create a storyboard for a commercial, outlining key scenes, dialogue, and transitions using paper/whiteboard or digital tools like Storyboard That.

**Experiment 9:** Video Advertisement Production - Produce a short video advertisement, incorporating live-action and animated elements, focusing on editing techniques using Adobe Premiere Pro and After Effects.

**Experiment 10:** Peer Review and Critique - Present and critique peer projects, focusing on design effectiveness, creativity, and adherence to advertising principles using presentation software and feedback forms.

<b>Course Title: Entrepreneurship Development</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM507</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Total Hours:45**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental concepts of entrepreneurship and the role of entrepreneurs in the economy.
- CO2. Develop skills in identifying and evaluating business opportunities in various industries.
- CO3. Learn to create a comprehensive business plan, including market analysis, financial projections, and operational strategies.
- CO4. Gain insights into the entrepreneurial mindset, including creativity, innovation, and risk-taking.

### **Course Content**

#### **UNIT I**

**10 Hours**

Entrepreneur and fundamentals of entrepreneurship: - entrepreneurial competencies characteristics of entrepreneurship – barriers to entrepreneurship, factors affecting entrepreneurial growth – role of entrepreneur in economic development – challenges of women entrepreneurs.

#### **UNIT II**

**10 Hours**

Micro small and medium enterprises – legal framework – licenses – role of promotional institutions with special reference to kinfra, kitco. msme&dics – concessions – incentives and subsidies.

#### **UNIT III**

**Hours 12**

Project management – feasibility and viability analysis – technical – financial – network – appraisal and evaluation – project report preparation, Identification of business opportunities in the context of Kerala – rate of Ed clubs – industrial policies – skill development for entrepreneurs. Business incubation – meaning – setting up of business incubation centres.

#### **UNIT IV**

**13 Hours**

Strategic importance HRM; objectives of HRM; challenges to HR professionals; role, Responsibilities and competencies of HR professionals; HR department operations; Human Resource Planning - objectives and process; human resource information system. Talent acquisition, recruitment and selection strategies

#### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

#### **Suggested Readings**

- The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses" by Eric Ries
- Start with Why: How Great Leaders Inspire Everyone to Take Action" by Simon Sinek
- Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers" by Alexander Osterwalder and Yves Pigneur

- The E-Myth Revisited: Why Most Small Businesses Don't Work and What to Do About It" by Michael E. Gerber

### **Web Sources**

- <https://www.entrepreneur.com/>
- <https://www.startupgrind.com/>
- <https://www.forbes.com/entrepreneurs/>
- <https://www.sba.gov/>

<b>Course Title: Human Resource Management</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM508</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Total Hours:45**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamental principles and practices of human resource management (HRM) within organizations.
- CO2. Develop skills in recruitment, selection, and on boarding processes to attract and retain talent.
- CO3. Gain knowledge of performance management systems and employee evaluation techniques.
- CO4. Learn to implement training and development programs to enhance employee skills and career growth.

### **Course Content**

#### **UNIT I**

**10 Hours**

Introduction to Human Resource Management. This UNIT covers the role and importance of HRM in organizations, HRM functions, and the evolution of HR practices. Students will explore strategic HRM and its alignment with organizational goals. Recruitment and Selection, Students will learn about the recruitment process, including job analysis, sourcing candidates, and selection methods. This UNIT covers interview techniques, assessment tools, and the legal aspects of hiring.

#### **UNIT II**

**10 Hours**

Training and Development This UNIT focuses on employee training and development strategies. Students will explore needs assessment, training methods, program evaluation, and the role of continuous learning in organizations. Performance Management Students will understand the principles of performance management systems, including setting performance standards, conducting appraisals, and providing feedback. This UNIT discusses performance improvement plans and employee development.

#### **UNIT III**

**12 Hours**

Compensation and Benefits This UNIT covers compensation strategies, salary structures, and incentive programs. Students will learn about employee benefits, total rewards, and the impact of compensation on employee motivation and retention. Employee Relations Students will explore the importance of employee relations, including communication, conflict resolution, and labour relations. This UNIT discusses the role of HR in fostering a positive workplace culture and managing employee grievances.

#### **UNIT IV**

**13 Hours**

Legal and Ethical Issues in HRM This UNIT covers the legal framework surrounding employment, including labour laws, workplace safety, and equal employment opportunity. Students will explore ethical considerations in HR practices and decision-making. HRM Trends and Technology Students will learn about current trends in HRM, including the impact of technology on HR practices, such as HR information systems (HRIS), data analytics, and remote work. This UNIT discusses the future of work and the evolving role of HR professionals.

### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning

### **Suggested Readings**

- Human Resource Management" by Gary Dessler
- The New HR Leader's First 100 Days: How To Get Success From Day One" by Alan Collins
- Armstrong's Handbook of Human Resource Management Practice" by Michael Armstrong
- Work Rules!: Insights from Inside Google That Will Transform How You Live and Lead" by Laszlo Bock

### **Web Sources**

- <https://www.shrm.org/>
- <https://www.hrcouncil.ca/>
- <https://www.forbes.com/human-resources/>
- <https://www.hrbartender.com/>

**Semester VI**

<b>Course Title:3D, Scripting and game development</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM601</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**Total Hours:60****Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamentals of 3D modeling, animation, and rendering techniques used in game development.
- CO2. Develop proficiency in scripting languages commonly used in game engines (e.g., C#, JavaScript) for creating game mechanics and interactions.
- CO3. Gain practical experience in using game development platforms such as Unity or Unreal Engine to build and deploy 3D games.
- CO4. Learn to integrate sound, graphics, and user interfaces to enhance the gaming experience.

**Course Content****UNIT I****15 Hours**

Character Design, Animation Principles & Fundamentals, Drawing the Key Tool, 3D Max (Interior Designing + AutoCAD), Animation Layout, Advanced 2D Animation, Stop motion Animation, 3D- MAYA, 3D (Modelling and Texturing / Animation / Lighting), 2D (2D Classical Animation/2D Flash Animation)

**UNIT II****15 Hours**

Editing (Post Production), EDIUS Software, Adobe Premier, Adobe AfterEffects, Motion Graphics, Music and Sound Effects

**UNIT III****15 Hours**

Adobe Director, Compositing and Visual Effects, Visual and Sound Editing, Advanced Production Tools and Technique Course Overview and C/Win32 game-full circle games introduction -Game Building and Modelling Introduction, Modelling and Animations, Interiors - More complex UV mapping, Programmatic movement, Advance C++ techniques -Intro to DirectX 3D - Camera -Meshes -Geometry,

**UNIT IV****15 Hours**

Vertices & Indices -Texture and Lighting -Particles -Intro to Networking, Direct play, Multiplayer gaming, Introduction to Torque Game engine - Focus on final projects, installers, triggers -Torque internals, physics, Pathing-Torque Script, Data blocks, Agile Programming -Camera Pathing, Camera Control "The Ethical Journalist: Making Responsible Decisions in the Digital Age" by Gene Foreman.

**Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

### **Suggested Readings**

- "Game Programming Patterns" by Robert Nystrom
- "The Art of Game Design: A Book of Lenses" by Jesse Schell
- "Introduction to Game Development" by Chris Marzio
- "Unity in Action: Multiplatform Game Development in C#" by Joseph Hocking

### **Web Sources**

- <http://learn.unity.com/>
- <http://docs.unrealengine.com/en-US/index.html>
- <http://www.gamedev.net/>
- <http://www.coursera.org/specializations/game-development>

<b>Course Title: Digital Video Production</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM602</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>

**Total Hours: 60**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamentals of digital video production, including pre-production, production, and post-production processes.
- CO2. Develop skills in using video production equipment, including cameras, lighting, and audio recording devices.
- CO3. Gain proficiency in video editing software to create polished video content.
- CO4. Learn to develop scripts, storyboards, and shot lists for effective video storytelling.

### **Course Content**

<b>UNIT I</b>	<b>15 Hours</b>
Moving pictures, Terminology, shot selection, Storyboards, Shot lists	
<b>UNIT II</b>	<b>15 Hours</b>
Overview of Premiere, File formats and other settings, the interface, Video and audio tracks, Basic timeline editing, In and Out points, The Trim monitor, Markers, Lift and Extract, Linking and unlinking footage	
<b>UNIT III</b>	<b>15 Hours</b>
Output, Camera operation, Transitions, Opacity control, Volume control, Titles and text tools Slates, Movie promos, Specialized editing tools, Sunc lock and lock track, changing speed, freeze frames & frame holds,	
<b>UNIT IV</b>	<b>15 Hours</b>
Subclips, using still images, putting clips into motion, Keyframes, Keyframe Interpolation, Effects basics Time remapping, Concept development for original video, Multicamera editing, Nested sequences.	

### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning

### **Suggested Readings**

- "The Bare Bones Camera Course for Film and Video" by Tom Schroepel
- "Digital Filmmaking for Kids For Dummies" by Nick Willoughby
- "In the Blink of an Eye: A Perspective on Film Editing" by Walter Murch
- "The Filmmaker's Handbook: A Comprehensive Guide for the Digital Age" by Steven Ascher and Edward Pincus

### **Web Source**

- <http://www.videomaker.com/>
- <http://www.lynda.com/Video-Editing-training-tutorials/1774-0.html>
- <http://www.indiefilmhustle.com/>
- <http://www.premiumbeat.com/blog/>

<b>Course Title: Advanced techniques in Graphics and Animations</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM603</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>

**Total Hours: 30****Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand advanced concepts and techniques in graphics design, including 3D modeling, rendering, and animation.
- CO2. Develop proficiency in using advanced graphic design software and tools such as Adobe Photoshop, Illustrator, and Blender.
- CO3. Learn to create complex visual effects and animations for various media, including web, film, and print.
- CO4. Gain insights into typography, color theory, and composition in advanced graphic design projects.

**Course Content****UNIT I****8 Hours**

Concept of dimensionality of objects/ images; 2D/ 3D graphic software; 2D object/ image creation methods; using primitives and mapping on-line cameras and lights

**8 Hours**

Basics of 3 D modelling: use of primitives - Polygons, curves and surface; 3D objects creation methods; Boolean operations; lofting: 3D transformation and projection; rendering.

**UNIT III****7 Hours**

Principles of animation- cell animation and computer animation, Key frame animation, Non linier animation, Path Animation, Motion capture. Animation tools, Animation Menus, Animation windows and editors, Character animation

**UNIT IV****7 Hours**

Story board and Animation, animation software; basic animation techniques; kinematics; using cameras and lights, basics of animal animation, live Action, rendering

**Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

**Suggested Readings**

- "Digital Graphics for Designers" by David K. Farkas
- "Graphic Design: The New Basics" by Ellen Lupton and Jennifer Cole Phillips
- "Designing Brand Identity: An Essential Guide for the Whole Branding Team" by Alina Wheeler
- "Adobe Photoshop CC Classroom in a Book" by Andrew Faulkner and Conrad Chavez

**Web source**

- <http://www.adobe.com/creativecloud.html>
- <http://www.smashingmagazine.com/>
- <http://www.creativebloq.com/>
- <http://www.gdusa.com/>

<b>Course Title: Digital video Production Lab</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM604</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>3</b>

**Total Hours: 90**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Gain hands-on experience with video production equipment, including cameras, lighting, and audio recording devices.
- CO2. Develop skills in shooting, editing, and producing high-quality video content.
- CO3. Understand the workflow of digital video production, from pre-production planning to post-production editing.
- CO4. Learn to apply video editing techniques using industry-standard software.

### **Course Content**

#### **List of Experiments**

##### **Lab 1: Introduction to Digital Video Production**

Students will learn the basics of digital video production, including different types of cameras, formats, and resolutions. They will familiarize themselves with the equipment and software used in video production.

##### **Lab 2: Pre-Production Planning**

In this lab, students will develop skills in scriptwriting, storyboarding, and shot planning. They will create a production plan for a short video project, including determining the target audience, purpose, and key messages.

##### **Lab 3: Camera Techniques and Shooting**

Students will practice various camera techniques, including framing, composition, and camera movement. They will shoot footage for their video projects, focusing on lighting, sound, and capturing high-quality visuals.

##### **Lab 4: Audio Recording and Sound Design**

This lab focuses on the importance of audio in video production. Students will learn about different microphones, audio recording techniques, and sound design principles. They will practice recording dialogue and ambient sound for their projects.

##### **Lab 5: Editing Techniques**

Students will learn how to use video editing software (e.g., Adobe Premiere Pro, Final Cut Pro) to edit their footage. This includes cutting, arranging clips, adding transitions, and incorporating audio tracks.

##### **Lab 6: Visual Effects and Graphics**

In this lab, students will explore the use of visual effects and motion graphics in their videos. They will learn how to create titles, credits, and other graphical elements to enhance their projects.

##### **Lab 7: Color Correction and Grading**

Students will understand the importance of color correction and grading in post-

production. They will practice adjusting color, contrast, and brightness to achieve a polished final look.

**Lab 8: Final Project Presentation**

In the final lab, students will complete and present their video projects. They will showcase their work, explain their creative choices, and receive feedback from peers and instructors.

<b>Course Title:</b> 3d Scripting and game development Lab	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code:</b> BVM605	<b>0</b>	<b>0</b>	<b>6</b>	<b>3</b>

**Total Hours:90**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Acquire hands-on experience in 3D modeling, animation, and scripting within game development environments.
- CO2. Develop proficiency in using game engines such as Unity or Unreal Engine for building and deploying 3D games.
- CO3. Implement complex game mechanics using programming languages relevant to the chosen game engine (e.g., C#, Blueprints).
- CO4. Learn to design and develop interactive game environments and characters.

### **Course Content**

#### **List of Experiments**

##### **Lab 1: Introduction to Game Development**

Students will learn the basics of game development, including game engines (e.g., Unity or Unreal Engine), project structure, and game design principles. They will set up their development environment and explore sample projects.

##### **Lab 2: 3D Modeling Fundamentals**

In this lab, students will create basic 3D models using software such as Blender or Autodesk Maya. They will learn about geometry, textures, and materials, focusing on creating assets for their games.

##### **Lab 3: Introduction to Scripting**

Students will learn the basics of scripting in a game engine, focusing on languages like C# (Unity) or Blueprints (Unreal Engine). They will create simple scripts to control game objects and interactions.

##### **Lab 4: Game Mechanics Development**

This lab focuses on implementing core game mechanics, such as player movement, collision detection, and game physics. Students will script these mechanics and test them within their game environment.

##### **Lab 5: User Interface (UI) Design**

Students will design and implement user interfaces for their games, including menus, health bars, and score displays. They will learn about UI elements and how to script interactions.

##### **Lab 6: Sound and Music Integration**

In this lab, students will explore the role of sound in games. They will learn how to integrate audio assets, such as background music and sound effects, into their projects and script audio triggers.

##### **Lab 7: Level Design**

Students will create and design game levels using their 3D models and assets. They

will learn about environment design, pacing, and player experience, focusing on creating engaging gameplay.

### **Lab 8: Final Project Development**

In the final lab, students will work on their capstone project, which involves developing a complete 3D game. They will implement all the skills learned throughout the course, from scripting to asset integration.

<b>Course Title: Life Skills Development</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM606</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Total Hours:45**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Develop effective communication skills, including verbal, non-verbal, and written communication.
- CO2. Enhance problem-solving and critical thinking abilities to tackle everyday challenges.
- CO3. Cultivate interpersonal skills, including teamwork, empathy, and conflict resolution.
- CO4. Gain self-awareness and emotional intelligence to manage personal emotions and relationships.

### **Course Content**

#### **UNIT I**

**10 Hours**

Introduction to life skill education, definition, components, pillars of learning, need for life skill training, approaches - critical thinking skills/decision making skills, interpersonal/communication skills, criteria for using life skills.

#### **UNIT II**

**10 Hours**

Communication skills, communication, definition, components- sender, message, channel, receiver, feedback, types of communication, effective interpersonal communication, barriers, communication noise, listening, ways to improve interpersonal communication, effective public speaking interview, group discussion etc

#### **UNIT III**

**13 Hours**

Career planning, career planning steps, choosing a career, career development, career guidance and career guidance Centre, need and importance of career guidance, career guidance center and sources, making a career decision, preparing a resume and tips , Self-management, self-esteem, definitions, practice self-acceptance, practice self-acceptance characteristics of people with high self-esteem, low self-esteem, characteristics and causes, self-esteem building, self-awareness importance, develop self-awareness, self-control, developing self-control, emotional intelligence or emotional quotient, emotional quotient , two aspects of emotional intelligence, five domains of emotional eq or ei, social intelligence, coping with emotions, emotional intelligence

#### **UNIT IV**

**12 Hours**

Stress and strain: concept of stress, meaning and definition of stress, types of stress, major symptoms of stress, manage everyday stress. strain-mental strain, causes of strain, conflict, conflict resolution, understanding conflict in relationships, emotional awareness, managing and resolving conflict, stages of healthy conflict resolution, styles of conflict resolution, styles of dealing with conflict, developing positive thinking, positive and 39 negative self-talk, better self-talk, impacts , assertiveness, behavior , importance of assertive behavior.

#### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

#### **Suggested Readings**

- The 7 Habits of Highly Effective People" by Stephen R. Covey
- Emotional Intelligence: Why It Can Matter More Than IQ" by Daniel Goleman

- "How to Win Friends and Influence People" by Dale Carnegie
- "Mindset: The New Psychology of Success" by Carol S. Dweck

**Web Source**

- <http://www.skillsyouneed.com/>
- <http://www.mindtools.com/>
- <http://www.coursera.org/>
- <http://www.edx.org/>

<b>Course Title: Creative writing TV and Films</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
<b>Course Code: BVM607</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**Total Hours: 45**

### **Learning Outcomes**

After the completion of the course the learner will be able to

- CO1. Understand the fundamentals of storytelling and narrative structure specific to television and film.
- CO2. Develop skills in creating compelling characters, dialogue, and settings.
- CO3. Learn to write for different genres, including drama, comedy, and thriller.
- CO4. Gain proficiency in script formatting and industry-standard writing practices.

### **Course Content**

#### **UNIT I**

**10 Hours**

Creative skills, creativity factors, imagination, and visualization, ability to create, information and creativity, creative thinking, clarity and precision, coherence and logical sequence in writing, the nature and role of intuition. Universalizing the personal experience. Importance of research. Adaptation from literary works, the elements of visual story telling.

#### **UNIT II**

**10 Hours**

The Elements of Scriptwriting: Action, Character, Setting, Theme, Structure. structure, clarity, coherence, flow of ideas: stages of scripting ideas: proposal, treatment, script development, revision of the script.

#### **UNIT III**

**13 Hours**

Choosing the genre: Event/, Drama, Action Adventure, Suspense thriller, Romance, Comedy, Crime/Detective Mystery, Road Movie, Film noir, etc. Logistics: Form, Format, Software, Text, Dialogue, Parentheticals, Plots, exposition, storyline, themes, character, conflict setting, developing characters, character casting, dialogues, storyboard, point of view, setting and pacing, lyrics, music.

#### **UNIT IV**

**12 Hours**

Writing for operas –short films, fiction. Docu-fiction. dramas, cinema script, music albums.

### **Transaction Mode**

Lecture Method, E-Team Teaching, Video based learning, Demonstration, Peer Discussion, Open talk, Cooperative Teaching, Flipped Teaching, Collaborative Learning.

### **Suggested Readings**

- "Save the Cat! Writes a Novel" by Jessica Brody
- "The Anatomy of Story: 22 Steps to Becoming a Master Storyteller" by John Truby
- "Screenplay: The Foundations of Screenwriting" by Syd Field
- "The Writer's Journey: Mythic Structure for Writers" by Christopher Vogler

### **Web source**

- <http://www.scriptmag.com/>
- <http://www.finaldraft.com/>
- <http://www.writersstore.com/>
- <http://www.screencraft.org/>