

REVISED UG SYLLABUS UNDER CBCS
(To Be Implemented from Academic Year, 2020-21)

PROGRAMME: FOUR YEAR B.Sc. (Hons)

Domain Subject: **Multimedia**

Skill Enhancement Courses for Semester V

(Syllabus with Learning Outcomes, References, Co-curricular Activities & Model Q.P. Pattern)

Structure for ERP

Year	Semester	Paper Code	Subject	Hrs. per Week	Credits	IA	ES	Total
First Year	I	CS1	Enterprise Resource Planning	4	3	25	75	100
	I	CS 1 -P	Enterprise Resource Planning Lab	2	2		50	50
	II	CS 2	MYSQL – CSS –Word Press	4	3	25	75	100
	II	CS 2-P	MYSQL – CSS –Word Press Lab	2	2		50	50
Second Year	III	CS 3	Advanced accounts with Tally - I	4	3	25	75	100
	III	CS 3-P	Tally – I Lab	2	2		50	50
	IV	CS 4	RODUCTION TO DATA SCIENCE AND R PROGRAMMING	4	3	25	75	100
	IV	CS 4-P	R programming lab	2	2		50	50
	IV	CS 5	E-Commerce and Net Banking	4	3	25	75	100
	IV	CS 5-P	E-Commerce Lab	2	2		50	50
Third Year	V	CS 6A	C Programming	4	3	25	75	100
	V	CS 6A-P	C Programming Lab	2	2		50	50
	V	CS 7A	Java Script	4	3	25	75	100
	V	CS 7A - P	Java Script Lab	2	2		50	50

Structure for Multimedia

Year	Semester	Paper Code	Subject	Hrs. per Week	Credits	IA	ES	Total
First Year	I	MM1	WORKING WITH 3D	4	3	25	75	100
	I	MM -P	WORKING WITH 3D - LAB	2	2		50	50
	II	MM 2	BASICS OF 3D ANIMATION	4	3	25	75	100
	II	MM 2-P	BASICS OF 3D ANIMATION - LAB	2	2		50	50
Second Year	III	MM 3	CHARACTER ANIMATION	4	3	25	75	100
	III	MM 3-P	CHARACTER ANIMATION - LAB	2	2		50	50
	IV	MM 4	ADVANCED CHARACTER	4	3	25	75	100
	IV	MM 4-P	ADVANCED CHARACTER ANIMATION - LAB	2	2		50	50
	IV	MM 5	FACIAL & BLEND MODES	4	3	25	75	100
	IV	MM 5-P	FACIAL & BLEND MODES – LAB	2	2		50	50
Third Year	V	MM 6A	LIVE INTEGRATION	4	3	25	75	100
	V	MM 6A-P	LIVE INTEGRATION - LAB	2	2		50	50
	V	MM 7A	VISUAL EFFECTS	4	3	25	75	100
	V	MM 7A - P	VISUAL EFFECTS - LAB	2	2		50	50

Structure for Web designing

Year	Semester	Paper Code	Subject	Hrs. per Week	Credits	IA	ES	Total
First Year	I	CG1	BASICS OF COMPUTER GRAPHICS	4	3	25	75	100
	I	CG -P	PHOTOSHOP - LAB	2	2		50	50
	II	CG 2	WEBDESIGN & APPLICATION	4	3	25	75	100
	II	CG 2-P	WEBDESIGN - LAB	2	2		50	50
Second Year	III	CG 3	INTRODUCTION TO 3D	4	3	25	75	100
	III	CG 3-P	MAYA - LAB	2	2		50	50
	IV	CG 4	PHOTOGRAPHY & VIDEOGRAPHY	4	3	25	75	100
	IV	CG 4-P	PHOTO & VIDEO SHOOT - LAB	2	2		50	50
	IV	CG 5	SCIENCE OF SOUND	4	3	25	75	100
	IV	CG 5-P	SCIENCE OF SOUND - LAB	2	2		50	50
Third Year	V	CG 6A	AV EDITING	4	3	25	75	100
	V	CG 6A -P	AV EDITING - LAB	2	2		50	50
	V	CG 7A	YOUTUBE & ONLINE STREAMING	4	3	25	75	100
	V	CG 7A -P	YOUTUBE & ONLINE STREAMING - LAB	2	2		50	50

Four-year B.Sc.,
Domain Subject: **ERP**
IV Year B. Sc., – Semester – V

Max Marks: 100 + 50

Course CS 7 – Javascript
(Skill Enhancement Course (Elective), Credits: 03+02)

I. Learning Outcomes:

Students after successful completion of the course will be able to:

- Understand the JavaScript language & the Document Object Model.
- Alter, show, hide and move objects on a webpage.
- Check information inputted into a form.
- Javascript allows programming to be performed without server interaction.
- Javascript can respond to events, such as button clicks.
- Javascript can validate data before sending out a request.
- Javascript can adjust an HTML document for special effects.
- Javascript can create cookies! Cookies can be used to store and retrieve information from the user's computer.

II. Syllabus: (Hours: Teaching: 50, Lab: 30, Field training: 05, Others incl. unit tests: 05)
(*Syllabi of theory and practical together shall be completed in 80 hours*)

Unit - I (10 hours)

Introduction to JavaScript: What is DHTML, JavaScript, basics, variables, string manipulations, mathematical functions, operators, arrays, functions.

Unit - II (10 hours)

Objects in JavaScript: Data and objects in JavaScript, regular expressions, exception handling, built-in objects, events.

Unit - III (10 hours)

JavaScript – Cookies: What are Cookies, How it works, storing cookies, reading cookies, setting cookies Expiry Date, Deleting a Cookie.

HTML DOM: HTML Document object Model, Working with HTML form and its elements, Other Document Object Model.

Unit - IV (10 hours)

DHTML with JavaScript: Data validation, opening a new window, messages and confirmations, the status bar, rollover buttons, moving images, multiple pages in single download, text only menu system.

Unit - V (10 hours)

AJAX :Ajax Fundamentals ,JavaScript Libraries, The Prototype Library ,The Fade Anything Technique Library ,Form Completion. Realtime Validation,Propagating Client- Side View State Direct Web Remoting,AjaxComponents,HybridComponents,Keeping JavaScript Out of Renderers

III. References

1. Uttam Kumar Roy, Web Technologies, Oxford University Press.
2. Black Book HTML 5.0
3. Complete reference HTML 5.0
4. Web Technology, PHI Publications.

5. Web Resources

a) <https://www.coursera.org/learn/html-css-javascript-for-web-developers>

6. Other web sources suggested by the teacher concerned and the college librarian including reading material.

IV. Co-Curricular Activities (Lab/field training of students by teacher: (lab:10 + field: 05):

a) Mandatory:

1. **For Teacher:** Field related training of students by the teacher in classroom or in laboratory or field for a total of not less than 15 hours on identifying the case study for javascript, design a website.
2. **For Student:** Students shall (individually) search online to identify problems to solve javascript and submit a hand-written Fieldwork Report not exceeding 10 pages. .
3. Max marks for Field Work Report: 05.
4. Suggested Format for Fieldwork: *Title page, student details, index page, details of websites searched, place visited, observations, findings, proposed model, implementation and acknowledgements.*
5. Unit tests (IE).

b) Suggested Co-Curricular Activities

1. Training of students by related industrial experts.
2. Assignments
3. Preparation and presentation of power-point slides, which include videos, animations, pictures, graphics, etc by the students.
4. Seminars, Group discussions, Quiz, Debates etc. (on related topics).
5. Field visits to implement a website to any organization.

Course 7P: Javascript Lab– PRACTICAL SYLLABUS

V. Learning Outcomes:

On successful completion of this practical course, student shall be able to:

- ❖ Develop familiarity with the JavaScript language.
- ❖ Learn to use best-practice idioms and patterns.
- ❖ Understand concepts commonly used in dynamic language programming, such as introspection, higher-order functions, and closures.
- ❖ Understand advanced language features such as prototypical inheritance.
- ❖ Become adept at implementing client-side interfaces through the use of the DOM, and AJAX.

VI. Practical (Laboratory) Syllabus: (30 hrs)

1. Display a simple message "Welcome!!!" on your demo webpage and when the user hovers over the message, a popup should be displayed with a message "Welcome to my WebPage!!!".
2. Create a webpage using javascript to display data and time.
3. Create a student admission form for a college.
4. Create a simple multiplication table with given number of rows and columns.
5. Write a javascript program applying different types of conditional statements
6. Write a javascript program to create functions with and without arguments.
7. Create a webpage with frames dividing the page as you need, each frame referring to a different webpage.
8. Create a cookie with a domain to the current page and path to the entire domain.
9. Write a java script program to delete a Cookie
10. Create a sample form program that collects the first name, last name, email, user id, password and confirms password from the user. All the inputs are mandatory and email address entered should be in correct format. Also, the values entered in the password and confirm password textboxes should be the same. After validating using JavaScript, In output display proper error messages in red color just next to the textbox where there is an error.

Four-year B.Sc.,
Domain Subject: **ERP**
IV Year B. Sc., – Semester – V

Max Marks: 100 + 50

Course CS 6 – C Programming
(Skill Enhancement Course (Elective), Credits: 03+02)

I. Learning Outcomes:

Students after successful completion of the course will be able to:

- Solve common types of computing problems.
- Understand data types and control structures of C
- Understand to map problems to programming features of C.
- Learn to write good portable C programs.
- Design, develop and test programs written in C.

II. Syllabus: (Hours: Teaching: 50, Lab: 30, Field training: 05, Others incl. unit tests: 05)
(*Syllabi of theory and practical together shall be completed in 80 hours*)

Unit - I (10 hours)

Introduction to Algorithms and Programming Languages: Generation of Programming languages, Algorithm, Key features of Algorithms, Some more Algorithms, Flow Charts.

Introduction to C: Structure of C Program, File used in C Program Compiling and Executing C Programs ,Using Comments, Keywords, Identifiers, Basic Data Types in C, Variables, Constants, I/O Statements in C, Operators in C, Programming Examples Type Conversion and Type Casting

Unit - II (10 hours)

Decision Control and Looping Statements: Introduction to Decision Control Statements, Conditional Branching Statement, Switch case, Iterative Statements, Nested Loops, Break and Continue Statement.

Unit - III (10 hours)

Functions: Introduction, Uses of functions, Function declaration/ prototype, Function Definition of function call, return statement, passing parameters, Scope of variables, Storage Classes, Recursion.

Unit - IV (10 hours)

Arrays: Introduction, Advantages of Arrays, Declaration of Arrays, Accessing elements of the Array, Storing Values in Array, Calculating the length of the Array, Operations on Array, one dimensional array for inter-function communication, Two dimensional Arrays, Operations on Two Dimensional Arrays.

Unit - V (10 hours)

Strings:-Introduction, String and character functions, Declaration of Strings, Reading Strings.

III. References

1. Reema Thareja, Introduction to C programming, Oxford University Press.
2. E Balagurusamy, Computing Fundamentals & C Programming – Tata McGraw-Hill, 2008.
3. Ashok N Kamthane, Programming with ANSI and Turbo C, Pearson Publisher, 2002.
4. Henry Mulish & Hubert L.Coo Reema Thareja: The Spirit of C: An Introduction to Modern Programming, Jaico Publishing House, 1996.

5. Web Resources

a) Introduction to Programming in C, By Dr. Satyadev Nandakumar | IIT Kanpur, https://onlinecourses.nptel.ac.in/noc19_cs42/preview

6. Other web sources suggested by the teacher concerned and the college librarian including reading material.

IV. Co-Curricular Activities (Lab/field training of students by teacher: (lab:10 + field: 05):

a) Mandatory:

1. **For Teacher:** Field related training of students by the teacher in classroom or in laboratory or field for a total of not less than 15 hours on identifying the case study for C Programming, design a solution for any problems.
2. **For Student:** Students shall (individually) search online to identify problems to solve in C Programming and submit a hand-written Fieldwork Report not exceeding 10 pages. .
3. Max marks for Field Work Report: 05.
4. Suggested Format for Fieldwork: *Title page, student details, index page, details of websites searched, place visited, observations, findings, proposed model, implementation and acknowledgements.*
5. Unit tests (IE).

b) Suggested Co-Curricular Activities

1. Training of students by related industrial experts.
2. Assignments
3. Preparation and presentation of power-point slides, which include videos, animations, pictures, graphics, etc by the students.
4. Seminars, Group discussions, Quiz, Debates etc. (on related topics).
5. Field visits to implement problems in C Programming.

Course 6P: C Programming Lab– PRACTICAL SYLLABUS

V. Learning Outcomes:

On successful completion of this practical course, student shall be able to:

1. Acquire the skills to develop a program.
2. Enhance skill on problem solving by constructing algorithms.
3. Identify solution to a problem and apply control structures and user defined functions for solving the problem
4. Demonstrate the use of Strings and string handling functions

VI. Practical (Laboratory) Syllabus: (30 hrs)

1. Find out the given number is perfect number or not using c program.
2. Write a C program to check whether the given number is Armstrong or not.
3. Write a C program to find the sum of individual digits of a positive integer.
4. A Fibonacci sequence is defined as follows: the first and second terms in the sequence are 0 and 1 Subsequent terms are found by adding the preceding two terms in the sequence. Write a C program to print the Fibonacci series
5. Write a C program to generate the first n terms of the Fibonacci sequence.
6. Write a C program to generate all the prime numbers between 1 and n, where n is a value supplied by the user.
7. Write a C program to find both the largest and smallest number in a list of integers.
Write a program to perform various string operations

Four-year B.Sc.,
Domain Subject: **Multimedia**
IV Year B. Sc., – Semester – V

Max Marks: 100 + 50

Course 6A: LIVE INTEGRATION
(Skill Enhancement Course (Elective), Credits: 05)

I. Learning Outcomes:

Students after successful completion of the course will be able to:

1. Identify 3D camera and live camera
2. Match the perspective in a 3D animation program
3. Develop the skill of camera calibration
4. Analyze the difference between match move and roto scoping

II. Syllabus: (Hours: Teaching: 50, Lab: 30, Field training: 05, Others incl. unit tests: 05)
(*Syllabi of theory and practical together shall be completed in 80 hours*)

UNIT – I (10 hours)

INTRODUCTION: Introduction to Autodesk Match mover–Interface and tools – Interaction with live cameras using in production - working on 3D camera and 2D camera–understanding camera formats – Knowing 3D camera and live camera – familiarizing in camera animation.

UNIT – II (10 hours)

2D AND 3D: Understanding visual effects pipe line - Understand the basic principles of match moving - matching the perspective in a 3D animation program - integrating 2D and 3D - Understand the core principles of photogrammetric - key concepts and procedures involved with 2D tracking - identify and correct problems with 2D tracking.

UNIT – III (10 hours)

CAMERAS: camera calibration - underlying mechanisms involved with calibration – Solve Cameras – working on 2D tracking - understand what a “good” calibration looks like and how to achieve it in a match moving program - Understand the core concepts of camera calibration –Understand the concepts and procedures used in automatic tracking - Working on automatic tracking.

UNIT – IV (10 hours)

TRACKING: working on cameras and lenses – film gate sizes and lens distortion – basic process of integrating the solution from a match moving program into a 3D scene - adjust the coordinate system - perform final checks of the match move - strategies for delivering scenes to downstream artists - how to fit a match moved camera to a 3D environment - how to adjust a coordinate system in a 3D animation program.

UNIT – V (10 hours)

INTEGRATING: using tracking markers - highly recommend to work on green screen - Understand the various aspects of a match mover's job- Match move blends techniques from animation and roto scoping - Demonstrate the integration.

III. References

1. Auto desk maya 2011 sybex ISBN:978-81-265-2711-3
2. The Art of Maya: An Introduction to 3D Computer Graphics (Paperback) Autodesk Maya Press (ISBN: 978-1897177471)
3. Behind the Scenes with Geniuses of Visual and Special Effects
4. Other web sources suggested by the teacher concerned and the college librarian including reading material.

IV. Co-Curricular Activities (Lab/field training of students by teacher: (lab:10 + field: 05):

a) Mandatory:

1. **For Teacher:** Field related training of students by the teacher in classroom or in laboratory or field for a total of not less than 15 hours on demonstrating how to identify various calibrations of a camera, lens distortion, match move, etc
2. **For Student:** Students shall (individually) search online or visit any of the studios and submit a hand-written fieldwork Report on various calibrations of cameras, types of lenses available, etc not exceeding 10 pages.
3. Max marks for Field Work Report: 05.
4. Suggested Format for Fieldwork: *Title page, student details, index page, details of place or websites visited, details of findings and acknowledgements.*
5. Unit tests (IE).

b) Suggested Co-Curricular Activities

1. Arrange expert lectures by IT experts working professionally in the area of web content development
2. Assignments (in writing or implementing contents related to syllabus or outside the syllabus. Shall be individual and challenging)
3. Seminars, Group discussions, Quiz, Debates etc. (on related topics).
4. Presentation of works done by students on visual effects.
5. Arrange a competition on students works among small groups of students.

Course 6A: LIVE INTEGRATION– PRACTICAL SYLLABUS

V. Learning Outcomes:

On successful completion of this practical course, student shall be able to:

1. Learn using camera lenses , matching 3D coordinate system in Maya
2. Understand and practice automatic tracking, rendering image sequence for composition
3. Set and calculate focal Length, Pixel Aspect Ratio, lens distortion for camera Calibration

4. Practice working with 3D objects, exporting 3d file format

VI. Practical (Laboratory) Syllabus: (30 hrs)

1. Working on cameras and lenses, Use the automatic tracker to compute the 3D camera path and the 3D scene.
2. Start Match Mover and set to Light mode adjust film gate sizes and lens distortion
3. Basic process of integrating, use image sequence Information, length, format, and frame rate.
4. Adjust the coordinate system and run the automatic tracker, checking the 3D tracked points in the Workspace, Render the tracked image sequence.
5. Export the tracking results into 3D animation or compositing program.
6. Specifying the key points and location to track manually Use a supervised tracking technique
7. Create and edit tracks manually, Launch the solver, Define a coordinate system, Add a 3D object to verify the tracked sequence
8. Editing a point track Using the time line controls to adjust tracking point positions
9. Calibrating the camera with parameters of Principal Point, Focal Length, Pixel Aspect Ratio, and Distortion.
10. Adding 3D object to workspace, adjusting coordinate system, plying sequence in Ping-Pong mode, export to 3D file format

Four-year B.Sc.,
Domain Subject: Multimedia
IV Year B. Sc., – Semester – V

Max Marks: 100 + 50

Course 6B: VISUAL EFFECTS
(Skill Enhancement Course (Elective), Credits: 05)

I. Learning Outcomes:

Students after successful completion of the course will be able to:

5. Acquainted with cinematic color correction & keying
6. Acquainted with motion graphics and logo designing
7. Creating 3D motion graphics titles.
8. Creating 3D Cinematic titles.
9. Develop the skill of matte Clearing
10. Motion Tracking Workflow and Controls

II. Syllabus: (Hours: Teaching: 50, Lab: 30, Field training: 05, Others incl. unit tests: 05)
(Syllabi of theory and practical together shall be completed in 80 hours)

Unit-1 (10 hours)

USER INTERFACE: Work Space Importing, Compositions, Views and Previews Layers and Properties & Animation Colors, Masks, Transparency and Keying Text, Drawing and Painting Motion Tracking, Effects and Animation Presets, Rendering and Exporting

UNIT – II (10 hours)

MOTION GRAPHICS: What is motion graphics – introduction – the rules of design – visual communication, rules regarding color, typography, composition and sound. the design process – preparation – write down the ideas and sketches that come to your mind – understanding brief about target audience , preferred color schemes, fonts, logos, program information before giving visual representation

UNIT – III (10 hours)

EFFECTS & TITLE EFFECTS: Elements of composition include space, shape, line , size, depth, motion, color, texture, creating 3d Channel, Audio, Blur and Sharpen, Color Correction, Distort, Expression Control, Generator, Keying, Matte, Noise and Grain, Paint, Perspective,

UNIT – IV(10 hours)

COLOR CORRECTION & KEYING: Auto Colors, Auto Contrast, Auto Levels, CC Color Offset, CC Toner Channel Mixer, Color Balance, Color Link, Color mapping, Curves, Equalizers, Exposures, Levels, Levels (Individual Controls), Photo Filters, Shadows / Highlights, Tint, Triton, CC Simple Wire Removal, Color Difference Key, Color Key, Color Range, Difference Matte, Extract, Inner /Outer Key, Key Light , Linear Color key, Lama Key, Spill Suppressor.

UNIT – V (10 hours)

MATCH MOVER: Motion tracking Overview, Motion Tracking Workflow and Controls, Tracking, Roto scoping, Wire Removal, Motion Tracking Options and Properties, arrangements of composition – framing, staging, using garbage matte clearing unwanted data, 3rd Party Plug-in

III. References

1. Behind the Scenes with Geniuses of Visual and Special Effects
- 2.. Other web sources suggested by the teacher concerned and the college librarian including reading material.

IV. Co-Curricular Activities (Lab/field training of students by teacher: (lab:10 + field: 05):

a) Mandatory:

1. **For Teacher:** Field related training of students by the teacher in classroom or in laboratory or studio for a total of not less than 15 hours on demonstrating various challenges in preproduction, production and post production related to visual effects.
2. **For Student:** Students shall (individually) search online and visit any of the studios or production houses and submit a hand-written Fieldwork Report not exceeding 10 pages on Documentaty film making or Short film making or Animation film making. Example: Choosing a Genaer, working on pre production, production and Post production.
3. Max marks for Field Work Report: 05.
4. Suggested Format for Fieldwork: *Title page, student details, index page, details of place visited, Workflow and acknowledgements.*
5. Unit tests (IE).

b) Suggested Co-Curricular Activities

1. Arrange expert lectures by IT experts working professionally in the area of web content development
2. Assignments (in writing or implementing contents related to syllabus or outside the syllabus. Shall be individual and challenging)
3. Seminars, Group discussions, Quiz, Debates etc. (on related topics).
4. Presentation of various creative works of students.
5. Arrange a competition among small groups of students on creative works with visual effects.

Course 6B: Visual Effects – PRACTICAL SYLLABUS

V. Learning Outcomes:

On successful completion of this practical course, student shall be able to:

1. Understanding the effects & plug-ins to use in aftereffects and premier pro
2. Getting the knowledge on stop motion animation
3. Able to work on layers, alpha channels, and mat generation

4. Able to work on time ramping.

VI. Practical (Laboratory) Syllabus: (30 hrs)

1. Setting up a project - using interface, work area, timeline. Various transition effects, and import/ export files, edit parameters, menus and tools in after effects.
2. Add special effects to video using different platforms like After Effects and Premier, working on audio editing
3. Create motion graphic content and stop motion animation
4. Using various properties of 3d comp layers and different options in hiding and un-hiding layers. Working on editing parameters.
5. Use masking and mattes. Adding effects to polish the scene modify layers & alpha channel, generate Matte.
6. Working on colour scheme using the build-in effects for colour correction, colour mapping? Resolving colour problems.
7. Working on cinematic titles and effects, title animation.
8. Using animation and key frames working on different types of text layers and other layers.
9. Use time stretching and time remapping working on Strobe and animating properly.
10. Applying the Time Difference effect to locate colour difference, using the Time Displacement

Four-year B.Sc.,
Domain Subject: **Web designing**
IV Year B. Sc., – Semester – V

Max Marks: 100 + 50

Course 6A: AV Editing
(Skill Enhancement Course (Elective), Credits: 05)

I. Learning Outcomes: Students after successful completion of the course will be able to:

11. Get basic knowledge on recording sound and editing video
12. Equip with the knowledge of Audio recording equipment
13. Develop the skill of using DAW
14. Acquire the skills of editing audio and video.
15. Able to create different formats of Sound & Video render.

II. Syllabus: (Hours: Teaching: 50, Lab: 30, Field training: 05, Others incl. unit tests: 05)
(*Syllabi of theory and practical together shall be completed in 80 hours*)

Unit - I (10 hours)

Premiere Pro Creating custom workspaces - Workflow enhancements - Changes to exporters - AAC Audio ("Audio Only" in previous versions) H.264 H.264 Blu-ray MPEG4 Windows Media (Windows only) For compatibility reasons, Dolby Digital Surcode audio encoding is not available in the new exporter. 11 H.264 Blu-ray (Legacy) MPEG4 (Legacy)

Unit - II (10 hours)

About workspaces - Working with Panels - Tools panel and Options panel - Source Monitor and Program Monitor overview - Setting display quality for the Source and Program Monitors - Navigate clips in the Source menu in the Source Monitor - Viewing Source and Program Monitor controls (CS6)

Unit - III (10 hours)

Change Project panel views - Select format for timecode display in the Project panel - Start or open a project - Capture and import video and audio - Assemble and refine a sequence - Add titles - Add transitions and effects

Unit - IV (10 hours)

. Mix audio – Audio Hardware preferences - Audio Output Mapping preferences - Change the Auto Save settings

Unit – V (10 hours)

Setting up your system - Setting up your system To the top To the top Premiere Pro trial versions Set up a DV or HDV system Set up an SD-SDI, HD-SDI, or component system Set up a file-based system Set up an S-Video or composite system Specify the default audio device Specify ASIO device settings (Windows only) Specify whether to render audio when rendering video Specify the duration for preroll and postroll pauses.

III. References

1. Adobe Premiere Pro Focal press
2. Adobe premiere 101.
3. Other web sources suggested by the teacher concerned and the college librarian including reading material.

IV. Co-Curricular Activities (Lab/field training of students by teacher: (lab:10 + field: 05):

a) Mandatory:

1. **For Teacher:** Field related training of students by the teacher in classroom or in laboratory or studio for a total of not less than 15 hours on getting a video, audio and video editing using Premier software, Working on Nuendo for audio editing.
2. **For Student:** Students shall (individually) submit a hand-written Fieldwork Report not exceeding 10 pages edit audio and video professionally, giving voice over for videos and giving dubbing for a small video clip and has to finally submit the edited video.
3. Max marks for Field Work Report: 05.
4. Suggested Format for Fieldwork: *Title page, student details, index page, details of place visited, observations, findings and acknowledgements.*
5. Unit tests (IE).

b) Suggested Co-Curricular Activities

1. Build a website with 10 pages for the case study identified.
2. Training of students by related industrial experts.
3. Assignments
4. Seminars, Group discussions, Quiz, Debates etc. (on related topics).
5. Presentation by students on best websites.

Course 6A: Web Interface Designing Technologies – PRACTICAL SYLLABUS

V. Learning Outcomes:

On successful completion of this practical course, student shall be able to:

1. Create a basic website with the help of HTML and CSS.
2. Acquire the skill of installing word press and various plugins of Wordpress.
3. Create a static website with the help of Wordpress.
4. Create an interface for a dynamic website.
5. Apply various themes for their websites using Word press.

VI. Practical (Laboratory) Syllabus: (30 hrs)

1. Setting up hardware connections and calibrating audio
2. Working with basic recording concepts
3. Record both audio and MIDI tracks recording
4. Working on record format, sample rate, project length etc.
5. Using MIDI hardware connections sync with relevant software
6. Using single track or multiple tracks record-enabling in Nuendo
7. Recording (audio and/or MIDI) simultaneously.
8. Creating final premier Project.

Four-year B.Sc.,
Domain Subject: **Web Designing**
IV Year B. Sc., – Semester – V

Max Marks: 100 + 50

Course 6B: Broadcasting and Live streaming
(Skill Enhancement Course (Elective), Credits: 05)

I. Learning Outcomes:

Students after successful completion of the course will be able to:

16. Understand what is live streaming and broadcasting.
17. Create a youtube channel
18. Acquire the skill of using OBS software
19. Able to create streaming studio

II. Syllabus: (Hours: Teaching: 50, Lab: 30, Field training: 05, Others incl. unit tests: 05)
(*Syllabi of theory and practical together shall be completed in 80 hours*)

Unit-1 (10 hours)

Introduction to youtube – working with youtube – creating youtube channel – youtube terms & conditions to generate revenue – youtube content creation hardware.

Unit – II (10 hours)

Introduction to OBS Studio - comprehensive environment for professional streamers and involved people to create sophisticated video broadcasting and recordings for Web services.

Unit – III (10 hours)

Installing OBS Studio - System requirements - An Overview of Open Broadcaster Software Studio - Canvas Preview - Studio Mode – Layers

Unit – IV (10 hours)

unlimited creative options Filters - Plugin Sources – Transitions - Hardware acceleration - Encoding acceleration - Studio Mode - Multi-Track - Multi-Output

Unit – V (10 hours)

Menu bar - Canvas preview area - Post OBS Studio log-file online - Tools menu - Scene Collections menu - Profile menu

III. References

1. Open Source Broadcast software for beginners
2. Other web sources suggested by the teacher concerned and the college librarian including reading material.

IV. Co-Curricular Activities (Lab/field training of students by teacher: (lab:10 + field: 05):

a) Mandatory:

1. **For Teacher:** Field related training of students by the teacher in classroom or in laboratory or in a studio for a total of not less than 15 hours on demonstrating ways to create a you tube channel, setting OBS for live steaming, live steaming equipment like mixer, router, playout, etc and how to live steam a small event.
2. **For Student:** Students shall (individually) search online or visit any of the studios to identify apt live streaming equipment, identify various elements of a good live steaming content, how to live steam a small event and submit a hand-written Fieldwork Report not exceeding 10 pages.
3. Max marks for Field Work Report: 05.
4. Suggested Format for Fieldwork: *Title page, student details, index page, details of studio or online sites visited, Suitable equipment, elements of good live streaming content, how to live stream and acknowledgements.*
5. Unit tests (IE).

b) Suggested Co-Curricular Activities

1. Arrange expert lectures by IT experts working professionally in the area of web content development
2. Assignments (in writing or implementing contents related to syllabus or outside the syllabus. Shall be individual and challenging)
3. Seminars, Group discussions, Quiz, Debates etc. (on related topics).
4. Preparation by students on best websites.
5. Arrange a webpage development competition among small groups of students.

Course 6B: Broadcasting and Live streaming – PRACTICAL SYLLABUS

V. Learning Outcomes:

On successful completion of this practical course, student shall be able to:

5. Create a youtube channel.
6. Setting up cameras and other equipment for live streaming.
7. Streaming live content.

VI. Practical (Laboratory) Syllabus: (30 hrs)

11. Camera setup for live stream
12. composition
13. Quickie
14. Setting up three point lighting
15. Audio testing for live
16. Creating Scenes in OBS Studio
17. Switch scene's layout
18. Scene transitioning
19. Switching into live