

G.VENKATASWAMY NAIDU COLLEGE

(An Autonomous Institution)

(Re-Accredited with 'A' Grade by NAAC | STAR College Scheme by DBT-MST, Govt. of India)

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

KOVILPATTI – 628 502

Department of Computer Science

Value Added Course Syllabus

2021-2022

ADOBE FLASH

Category	Course Type	Course Code	Course Title	Lecture (L)	Tutorial (T)	Practical (P)	Credit (C)
			Adobe Flash	25	05	-	

Contact hours per semester: 30

Contact hours per week: 2

Year	Semester	Internal Marks (CIA)	External Marks (ESE)	Total Marks
Third	III	-	100	100

Preamble

Adobe Flash is a complex graphics and image editing software and paint program. Adobe's Flash program has become a mainstay with graphics designers, professional photographers, and even hobbyists to edit graphics as well as create and manipulate images.

Course Outcomes (COs)

On successful completion of the course, the learners should be able to

S.No.	Course Outcome	Knowledge Level (RBT)
CO1	learn the basic concepts and skills required.	K1, K2
CO2	apply the skills and knowledge acquired in Adobe Flash are sufficient to be able to understand the Flash screen.	K3
CO3	analyze the work with image editing and graphic design features.	K4
CO4	evaluate the use of more advanced editing Tools	K5
CO5	to solve visual problems in real world applications.	K6

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create.

CO-PO Mapping (Course Articulation Matrix)

POs Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	2	2	2	2	3	3
CO2	2	3	-	3	3	3	-
CO3	3	3	2	2	3	2	3
CO4	2	2	2	2	2	2	2
CO5	2	3	3	2	3	2	3
Total Contribution of COs to POs	11	13	09	11	13	12	11
Weighted Percentage of COs Contribution to POs	73.33	86.66	60	73.33	86.66	80.00	73.33

(3-Strong, 2-Medium, 1-Low, 0-Correlation)

COURSE CONTENT

UNIT - I Creating Simple Drawings

(L – 5 HOURS)

Panels and Tool bars-The Flash CS6 Test Drive-Plan Before You Draw- Preparing to draw Drawing a Shape-Choosing a Drawing Mode-Creating Original Artwork-Copying and Pasting Drawn Objects-Adding Colour.

UNIT - II Animate Your Art

(L- 5 +T-3HOURS)

Frame by frame Animation-Editing Your Frame by frame Animation-Making It Move with Motion Tweens-Editing the Motion Path-Copying and Pasting Properties-Shape Tweening-Morphing.

UNIT - III Advanced Drawing and Animation

(L-5 + T-2HOURS)

Working with Frames-Working with Multiple Layers-Organizing Layers-Using Mask Layers-Selecting and Manipulating Graphic Elements-Spray Painting Symbols-Drawing with the Deco Tool-Advanced Color and Fills-Buttons.

UNIT - IV Text and Audio

(L-5 HOURS)

Classic Text-About Typefaces and Fonts-Adding Text to Your Documents-Choosing and Using Text Containers-Text Properties-Working with Sound-Using Sound in Flash-Exporting Sounds – Sound and Action Script.

UNIT - V Symbols and Templates

(L-5 HOURS)

Symbols and Instances-Graphic Symbols- Converting an existing image to a graphics- Creating a graphic symbol in symbol editing mode- Using a graphic symbol- Button Symbols-Templates

TEXT BOOKS:

1. Flash CS6: The Missing Manual, By Chris Grover, Published by O'Reilly Media, Inc., 2012.
2. Using Adobe® Flash® CS3 Professional for Windows® and Mac OS, Sorenson Spark, Sorenson Media, Inc, 2017.

REFERENCE BOOKS:

1. Adobe Flash Professional CS6: A Tutorial Approach, Sham Tickoo, CADCIM Technologies, 2012.
2. Adobe Flash Professional CS6 Classroom in a Book, by Sandee dobe Creative Team, Adobe Press, 1st edition, 2012.

WEB REFERENCES:

1. https://help.adobe.com/archive/en/flash/cc/2014/flash_reference.pdf
2. https:///flash-cs6-the-missing-manual_compress.pdf

Department of Computer Science
VALUE ADDED COURSE
(For II B.A(Eng),B.Com,B.Com(P.A),M.A(Eng))
2022-2023

OFFICE AUTOMATION

Lecture Hours	: 30	Tutorial Hours	:
Lab Practice Hours	: -	No. of Credit	:
Contact Hours Per Semester	: 30		
Contact Hours Per Week	: 2		
Internal Marks	:		
External Marks	:		
Total Marks	: 100		

Objectives of the Course:

The Course aim at giving overall view of the

- This Office automation course is designed with an aim to expertise students and to provide an in-depth training in use of Office Automation.
- MS. Office course trains students how to use MS Office applications use in office work such as creating professional-quality documents store, organize and analyze information. Arithmetic operations and functions to create dynamic slide presentations with animation, narration, images, and much more, digitally and effectively in Office.

Course Learning Outcomes:

On successful completion of the course the students will be able

CO1: to understand the basics of computer systems and its components

CO2: to learn the basic concepts of a word processing package.

CO3: to apply the basic concepts of electronic spreadsheet.

CO4: to create a presentation Power-Point tool.

CO5: to apply the basic concepts of database management system.

CO-PO mapping (course Articulation matrix)

	PO 1	PO2	PO3	PO4	PO5	PO 6	PO 7	PSO 1	PSO 2	PSO 3
CO1	3	2	2	3	1	2	2	3	2	3
CO2	2	2	2	1	2	2	2	1	2	2
CO3	3	2	2	3	2	3	1	3	2	3
CO4	1	2	1	2	2	2	3	2	2	1
CO5	1	1	2	2	2	2	2	2	1	2
Total Contribution of COs to POs	10	9	9	11	9	11	10	11	9	11
Weighted Percentage of COs Contribution to POs	66	60	60	73	60	73	66	73	60	73

0 - No Correlation**1 - Weak****2 - Moderate****3 - Strong****COURSE CONTENT****Unit-I: Introduction to Computer****(L- 6 hrs)**

Introduction to Computer- Definition - History and Generation of Computer – Advantages of Computer - Characteristics of Computer: Speed, Storage-Hardware & Software. Block Diagram and Working Principle of Computer - Types of Computer, Components of CPU - Hard disk, RAM, ROM – Input, Output devices.

Unit-II: MS-Office Word**(L- 6 hrs)**

Introduction to MS-Office- Working with Documents - Opening & Saving files, Editing text documents, Menus and Toolbar - Inserting, Deleting, Cut, Copy, Paste, Undo, Redo, Find, Replace, Formatting page & Margins, Formatting Documents - Setting Font styles, Paragraph style, Page style. Creating Tables, Borders, Alignments, Insertion, deletion, Drawing - Inserting ClipArts, Picture - Printing Documents.

Unit-III: MS-Excel**(L- 6 hrs)**

Introduction to MS-Excel-Opening Spreadsheet-Menus- Formatting, Toolbars, Using Icons, Shortcuts. Working with Spreadsheets - Rows, Columns & Cells- Selecting Cells. Entering & Deleting Data- Setting Formula - Mathematical operations, Formatting Spreadsheets- Formatting- Cell, row, column- Alignment, Font, Border- Charts.

Unit-IV: MS-PowerPoint

(L- 6 hrs)

Introduction to presentation – Opening new presentation, Setting backgrounds, Selecting presentation layouts. Creating a Presentation-Adding text to the Presentation Formatting a Presentation - Adding style, Colour, Adding Header & Footer, Slide Background, Slide layout. Adding Graphics to the Presentation, Drawing Pictures. Adding Effects to the Presentation- Setting Animation & transition effect.

Unit-V: MS-Access

(L- 6 hrs)

Introduction- Planning a Database, Starting Access, Creating a New Database, Creating Tables, Creating queries, Creating Reports, Types of Reports, Printing & Print Preview.

Recommended Texts:

1. V. Rajaraman, “*Fundamentals of computers*”- Prentice- Hall of India, 2003
2. John Walkenbach, Herb Tyson, Faithe Wempen, Cary N. Prague, Michael R. Groh, Peter G. Atiken and Lisa A. Bucki- “*Microsoft Office 2007 Bible*”- Wiley India Pvt. Ltd.

Reference Books:

1. Peter Norton, “*Introduction to Computers*” by Second Hand Book Paperback,2018
2. P.K. Sinha, “*Computer Fundamentals*”, BPB Publications,2004

Website and E-Learning Sources

1. <https://www.geeksforgeeks.org/types-of-computers/?ref=lbp>
2. <https://support.microsoft.com/en-us/office/work-with-documents-in-word-for-windows-7eb6d9c8-d7a1-441d-acb0-9e55c32e83f7>
3. <https://edu.gcfglobal.org/en/excel/creating-and-opening-workbooks/1/>
4. <https://support.microsoft.com/en-us/office/add-and-format-in-powerpoint-4ce97df7-f8fa-454c-8441-2d3be0c54711>
5. <https://www.makeuseof.com/how-to-create-database-microsoft-access/>

Department of Computer Science

VALUE ADDED COURSE (for B.Sc Computer Science)

2023-2024

FLASH

Lecture Hours	: 30	Tutorial Hours	:
Lab Practice Hours	: -	No. of Credit	:
Contact Hours Per Semester	: 2		
Contact Hours Per Week	:		
Internal Marks	:		
External Marks	:		
Total Marks	: 50		

Objectives of the Courses:

The Course aim at giving overall view of the

- Enable the students to learn 3DS Max animation software and make them to design animated applications
- Learn adding and optimization sounds, video and tween for creating 3D animations.
- Enrich the student knowledge in animating with action script primer.

Course Learning Outcomes: (for mapping with PO's and PSO's)

On successful completion of the course the student will be able

- CO1** to remember the features in Flash, menu items, apply these to draws simple animation problems.
- CO2** to understanding the time line animation concepts.
- CO3** to understanding on adding and optimizing sounds, importing and using video, also tweens.
- CO4** to understanding masking techniques, optimizing the movies using flash for pocket PC.
- CO5** to knowledge on action script primer, applying action script to applications.

CO-PO Mapping (Course Articulation Matrix)

POs COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	2	3	3	3	2	3	3
CO2	2	2	2	3	3	2	1
CO3	2	2	2	3	2	3	3
CO4	2	2	2	2	2	2	2
CO5	2	2	2	2	2	3	2
Total Contribution of COs to POs	10	11	11	13	11	13	11
Weighted Percentage of COs Contribution to POs	66.67	73.33	73.33	13	73.33	86.67	73.33

COURSE CONTENT

UNIT I: INTRODUCTION TO FLASH

(L-6 Hours)

An Introduction to Flash – What’s New in Flash MX 2004 – Simple Drawing Techniques – Adding Some Easy Animation – Learning about the Tools.

UNIT II: USING THE TIMELINE

(L-6 Hours)

Using the TimeLine – Controlling Drawn Objects – Creating Symbols – Using the Library – Importing & Optimizing Graphics.

UNIT III: ADDING & OPTIMIZING SOUNDS

(L-6 Hours)

Adding & Optimizing Sounds – Importing & Using Video – Understanding Tweens - Adding Interactions.

UNIT IV: USING MASKING TECHNIQUES

(L-6 Hours)

Using Masking Techniques – Guiding Animations – Optimizing Your Movies – Creating Flash Movies - Creating Flash Movies for the Pocket PC.

UNIT V: ACTION SCRIPT PRIMER

(L-6 Hours)

An Action Script Primer – Applying Action Script – Intermediate Action Script Examples.

VACCS-2

Text Book:

1. Brian Underdahl, The Complete Reference – Macromedia Flash Mx2004, 2nd edition – TMH.

Reference Book:

1. Flash MX 2004, Thyagarajan Anbumani, TMH.

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2024-2025

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CO3	analyze the work with image editing and graphic design features.	K4
CO4	evaluate the use of more advanced editing Tools	K5
CO5	to solve visual problems in real world applications.	K6

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COURSE CONTENT**UNIT - I Creating Simple Drawings****(L – 5 HOURS)**

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UNIT - IV Text and Audio**(L-5 HOURS)**

Classic Text-About Typefaces and Fonts-Adding Text to Your Documents-Choosing and Using Text Containers-Text Properties-Working with Sound-Using Sound in Flash-Exporting Sounds – Sound and Action Script.

UNIT - V Symbols and Templates**(L-5 HOURS)**

Symbols and Instances-Graphic Symbols- Converting an existing image to a graphics- Creating a graphic symbol in symbol editing mode- Using a graphic symbol- Button Symbols-Templates

TEXT BOOKS:

3. Flash CS6: The Missing Manual, By Chris Grover, Published by O'Reilly Media, Inc., 2012.
4. Using Adobe® Flash® CS3 Professional for Windows® and Mac OS, Sorenson Spark, Sorenson Media, Inc, 2017.

REFERENCE BOOKS:

3. Adobe Flash Professional CS6: A Tutorial Approach, Sham Tickoo, CADCIM Technologies, 2012.
4. Adobe Flash Professional CS6 Classroom in a Book, by Sandee dobe Creative Team, Adobe Press, 1st edition, 2012.

WEB REFERENCES:

3. https://help.adobe.com/archive/en/flash/cc/2014/flash_reference.pdf
4. https:///flash-cs6-the-missing-manual_compress.pdf

Department of Computer Science

Value Added Course for B. Sc (Computer Science)

FLUTTER

2025-2026

Lecture Hours	: 45	Tutorial Hours	: -
Lab Practice Hours	: -	No. of Credit	: -
Contact Hours per Semester	: 45		
Contact Hours per Week	: 3		
Internal Marks	: -		
External Marks	: -		
Total Marks	: 100		

Objectives of the Course:

The course aims at giving an overall view of the

- **features and installation of Flutter.**
- **basic programming constructs of Dart.**
- **simple mobile applications in Flutter using Dart language.**
- **mobile applications using database Connections.**

Course Learning Outcomes:

On the successful completion of the course, student will be able to:

CO1: learn the basic concepts and skills required.

CO2: apply the skills and knowledge acquired in Flutter are sufficient to be able to
. understand the Flash Screen.

CO3: analyze the work with Flutter packages and tools.

CO4: evaluate the use of more advanced winget tools.

CO5: solve visual problems in real world applications.

CO-PO Mapping (Course Articulation Matrix)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3
CO1	2	2	2	2	2	3	3	3	2	3
CO2	2	3	-	3	3	3	-	1	2	2
CO3	3	3	2	2	3	2	3	3	2	3
CO4	2	2	2	2	2	2	2	2	2	1
CO5	2	3	3	2	3	2	3	2	1	1
Total Contribution of COs to POs	11	13	09	11	13	12	11	11	9	10
Weighted Percentage of COs Contribution to POs	73.33	86.66	60	73.33	86.66	80.00	73.33	73.33	60	66

0-Correlation,

1-Low,

2-Medium,

3-Strong

COURSE CONTENT

Unit - I Introduction to Flutter

(L – 9 hrs)

Panels and Tool bars-The Flash CS6 Test Drive-Plan Before You Draw- Preparing to draw Drawing a Shape-Choosing a Drawing Mode-Creating Original Artwork-Copying and Pasting Drawn Objects-Adding Colour.

Unit - II Flutter Basics

(L - 9 hrs)

Widgets- Gestures- Concept of State- Layers- Introduction to Dart Programming- Variables and Data types- Decision Making and Loops. Functions- Object Oriented Programming. Introduction to Widgets- Widget Build Visualization.

Unit - III Introduction to Layouts

(L-9 hrs)

Type of Layout Widgets- Single Child Widgets- Multiple Child Widgets- Advanced Layout Application-Introduction to Gestures- Statement Management in Flutter. Ephemeral State Management-Application State - scoped model- Navigation and Routing.

Unit - IV Animation on Flutter

(L-9 hrs)

Introduction to Animation Based Classes-Work flow of the Flutter Animation- Working Application- Android Specific Code on Flutter- Introduction to Package- Types of

Packages- Using a Dart Package- Develop a Flutter Plugin Package- Accessing Rest API- Basic Concepts- Accessing Product service API.

Unit - V Database Concepts

(L-9 hrs)

SQLite- Cloud Fire store- Internalization on Flutter- Using intl Package-Testing on Flutter- Types of Testing- Widget Testing- Steps Involved- Working Example- Deployment- Android Application- IOS Application- Development Tools- Widget Sets- Flutter Development with Visual Studio Code- Dart Dev Tools- Flutter SDK.

Recommended Text:

1. **Rap Payne** *Beginning App Development with Flutter: Create Cross-Platform Mobile Apps*, 1st edition. Edition, 2019.
2. **Marco L. Napoli** *Beginning Flutter: A Hands On Guide to App Development*, 2019.

Reference Books:

1. **Thomas Bailey**, Alessandro Biessek, Trevor Wills *Flutter for Beginners: An introductory guide to building cross-platform mobile applications with Flutter 2.5 and Dart* 2nd edition, 2021.
2. **Carmine Zac Cagnino** *Programming Flutter Native, Cross-Platform Apps the Easy Way*, 2020.

Website And E-Learning Sources:

1. **<https://docs.flutter.dev/platform-integration/web/building>**
2. **<https://www.tahlildadeh.com/Files/Beginning>**