



കേരള സ്റ്റേറ്റ് റൂട്രോണിക്സ്

www.keralastaterutronic.com



ഈ അവധിക്കാലം
അറിവ് നേടാം
ആഘോഷമാക്കാം
**3D PRINTING
TECHNOLOGY**
പഠിക്കാം
Spoken English course & School Bag
സൗജന്യമായി നേടാം

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Summer Vacation Activity Camp is a multi-disciplined learning program initiated by KERALA STATE RUTRONIX for school-going students /college youth across the State of Kerala. This is a student-centric, fun-filled, activity-based creative Arts & IT camp for summer vacation. It helps students build upon their interests to create a visible improvement in their Knowledge, Skills, and Attitudes



I hear and I forget
I see and I remember
I do and I understand



Learning Pyramid

Benefits of Activity Based Learning

- Enhances Analytical thinking by nurturing inquisitiveness & creativity
- Students' centric approach
- Problem-solving skills
- Better Social Skills
- Collaboration & Presentation skills
- Expressing oneself
- Project-based learning
- Improves students' confidence and self-esteem

Activity Camp

This is a 60 hours/ 30 day specialized workshop with 25 days of activity-centric curriculum plan and 5 days of student-centric activity project. There are 33 multi-disciplinary course options in Creative Arts & IT. Our activity based learning programme will help students to setup an action plan towards their project goal and will equip them with tools and techniques to accomplish their objective in the chosen stream.



ADMISSION

Registration and Admission

For registration and admission, the student can report at one of our authorized training centers of Kerala State Rutronix and register for the course of their choice. Registration Fees can be paid by payment system online at the centre. Vacation classes start by the first week of April.

Examination and Certification

The examination for this vacation programme will be conducted by Kerala State Rutronix at the Authorized Training Centre. The examination schedule will be informed to the students through concerned training centre. No extra examination fee shall be collected from students. The right of preparation and issuing certificates is reserved by Kerala State Rutronix, Thiruvananthapuram. The mark secured by students will be indicated in the certificate issued to students, soon after their examination.

01

Foundation
programme in

Drawing & Painting



Course Objective

This course will enable you to learn basic drawing techniques through a practical study of form, shading, color, perspective and painting skills, which you will use to produce a range of observational studies for finishing the paintings.

What will I learn?

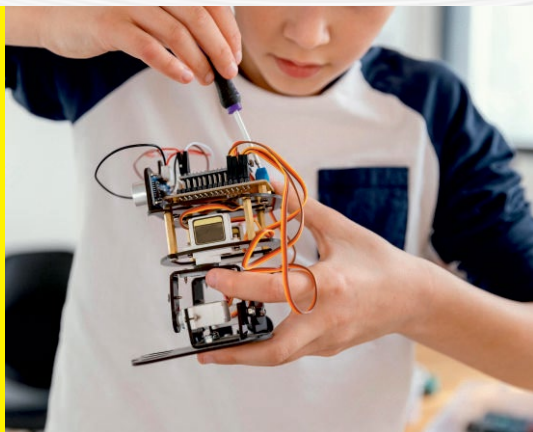
- Basic principles of Drawing and Painting
- Recognize the nuances of subtle Pencil Shading
- Significance of focused Observation
- How to safely use and store Equipment and Materials in the right way

Activity Curriculum

Day	Topics
01	Introduction to Drawing Activity
02	How to Draw a Cube and other Objects?
03	Shade and Shadow
04	Easy Way to Draw – Bird, Animal Etc
05	Gesture Drawing – Bird, Animal, Humans Etc
06	Grid Drawing – Apple, Flower, Bird Etc
07	Gesture Drawing – Characters
08	Grid Drawing – Animal, Landscape Etc
09	Grid Drawing Enlarged – Bird, Animal Etc
10	Grid Drawing Enlarged – Human, Landscape Etc
11	Contour Drawing
12	Perspective – ONE Point Perspective
13	Perspective – 2-point & 3-point
14	Outdoor Study
15	Still Life Drawing – Flower Vase
16	Still Life Drawing – Fruits, Books Etc
17	Color Theory – Basic
18	Primary Color, Secondary Colors
19	Using Color Pencils
20	Tertiary Colors, Warm & Cool Colors
21	Using Oil Pastels
22	Using Water Colors
23	Object Study In Water Color
24	Still Life – Painting
25	Landscape – Painting

02

Foundation
programme in
**STEM
Robotics**



Course Objective

This course introduces robotics in a simplistic approach to the application of electronics that students in elementary and high school levels can cope with, and appreciate. In this course, we look at Robotics with a STEM point of view and understand its subtle and not so subtle benefits.

What will I learn?

- The art of crafting with a scientific approach
- Crafting mechanical products in a fun based learning approach
- Robocrafts that will amaze you

Activity Curriculum

Day	Topics
01	Introduction to STEM Robotics
02	Creativity and Innovation- interactive session
03	Tallest structure
04	3D Drawing and 3D Shapes, Fold and cut letters
05	Balloon rocket
06	Building a park- basic structure, swing
07	Building a park- merry-go-round, structures
08	Building a park- slide, well
09	Building a park- see-saw
10	Building a park- arranging the products
11	Pencil electrolysis of water
12	Hydraulic elevator
13	Circuit basics
14	Lamp post
15	RC Robo Car-Chassis fitting
16	RC Robo Car-Switch box connection
17	RC Robo Car-Testing and robocraft race
18	Line follower-Introduction to sensors, ideation
19	Line follower-Chassis fitting
20	Line follower-L293D module fitting
21	Line follower-IR sensor fitting, completion
22	Line follower-Making path, robocraft race
23	Phototropic robot-Ideation
24	Phototropic robot-Chassis fitting
25	Phototropic robot-L293D and sensor fitting, completion and robocraft race

03

Foundation
programme in

DATA SCIENCE & VISUALIZATION



Course Objective

The main objective of data visualization is to make it easy for identifying patterns, trends, and outliers in large data sets. The term is often used interchangeably with others, including information graphics, information visualization and statistical graphics.

What will I learn?

- Knowledge for applying data science concepts and methods
- The real-world contexts and will communicate the problem solving solutions effectively

Activity Curriculum

Day	Topics
01	Basic Statistical Concepts, Data measures
02	Statistical Graphs and Charts
03	Introduction to Data Analysis and Visualization
04	Introduction to Tableau features, Interface
05	Tableau file types, Green and Blue Pills
06	Set up Data sources, working with extracts
07	Data interpreter, Split fields
08	Pivoting Data in Tableau
09	Joins and Union in Tableau
10	Visual Analytics with Tableau, best practices
11	Case study- Build Cross tabs, Heat maps, Bar
12	Case study- Build Stacked bar, Side-by-side bars
13	Case study- Pie charts, Line charts, Scatter plot
14	Calculation Functions: Number, String, Date
15	Boolean and logical functions
16	Mapping Concepts – longitude, latitude
17	Case study- Standard map view, Marks Card
18	Sorting and examples
19	Filtering and examples
20	Grouping and examples
21	Sets and examples
22	Trend lines and reference lines
23	Create Dashboard
24	Story points
25	Sales Dashboard Management report

04

Foundation
programme in

JUNIOR PYTHON PROGRAMMER



Course Objective

The main objective is to understand programming skills and data structures in core Python language and to develop the Object Oriented Skills in Python.

What will I learn?

- Learn basic principles of Python programming language
- Learn perceiving object-oriented concepts and implementing the database and GUI applications

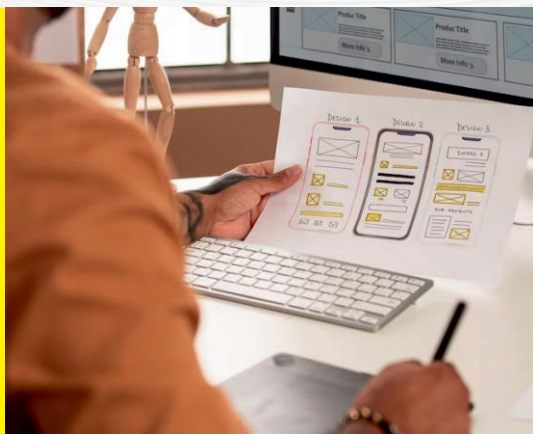
Activity Curriculum

Day	Topics
01	Introduction to Python
02	Identifiers
03	Variables
04	Data Types
05	Operators: Arithmetic, Comparison, Assignment
06	Operators: Logical, Membership, Identity
07	Conditional Statements: If, if else, if elif, nested if
08	Conditional Statements: switch case, Ternary
09	Looping Statements: while, while else, for loop etc...
10	Looping Statements: Break, continue
11	Looping Statements: Pass, range, import, return
12	Strings
13	Lists
14	Tuples
15	Dictionaries
16	Functions: Defining, Calling, Types of functions
17	Functions: Parameters & Arguments, Anonymous Functions
18	Modules
19	Files I/O: Printing, Reading, Opening, Closing, Writing files
20	Files I/O: Positions, Renaming, Deleting, Directories
21	OOPS concepts: Class and Object, Attributes
22	OOPS concepts: Inheritance, Types of Inheritance
23	OOPS concepts: Overloading, Overriding, Data hiding
24	Regular Expressions: Match, Search Function
25	Regular Expressions: Modifiers, Patterns

05

Foundation
programme in

JUNIOR MOBILE APP DEVELOPER



Course Objective

Junior Mobile Application Development Course using Thunkable is designed to teach computational thinking concepts through development of mobile applications. Students create applications by dragging and dropping components into a design view and using a visual blocks language to program application behaviour.

What will I learn?

- Students will have gained knowledge of the techniques and processes involved in development of mobile applications.

Activity Curriculum

Day	Topics
01	Basics of App Development: Basics of Thunkable
02	Text To Speech: UI, UX, Buttons, Text to speech
03	Speech To Text: Speech recognizer
04	Rolling Dice: Variables, Random number, Importing Images
05	Camera App
06	Object Recognizer: Camera, Image Recognizer
07	Barcode Scanner
08	Calculator: Variables, Mathematical operations, Conditional Statements
09	Music Player:
10	BMI Calculator
11	Alarm Clock
12	Drawing App 1: Stage, Canvas, Colourpicker, RGB
13	Drawing App 2: Stage, Canvas, Colourpicker, RGB
14	Rock Paper Scissors Game 1
15	Rock Paper Scissors Game 2
16	Login and Signup Pages: Multiple Screen navigation
17	Login and Signup Pages: Firebase Database
18	Survey Application 1
19	Survey Application 2
20	City Finder App : API, Fetching data from web, Maps, Location sensor
21	Weather App 1 :API Keys, Getting data from web
22	Weather App 2 :Design and code of the app
23	Space Game 1: Design and Learn sprites & canvas
24	Space Game 2: Design of the app interface
25	Space Game 3: Coding

06

Foundation
programme in

JUNIOR YOUTUBER



Course Objective

Having a YouTube channel is a fun way for kids to express themselves. It also helps them to develop their skill sets such as acting, broadcasting and editing. They can create their own ideas, activities, and happiness as videos.

What will I learn?

- Creating YouTube content about anything
- Enable children to reach high by becoming the best version of themselves

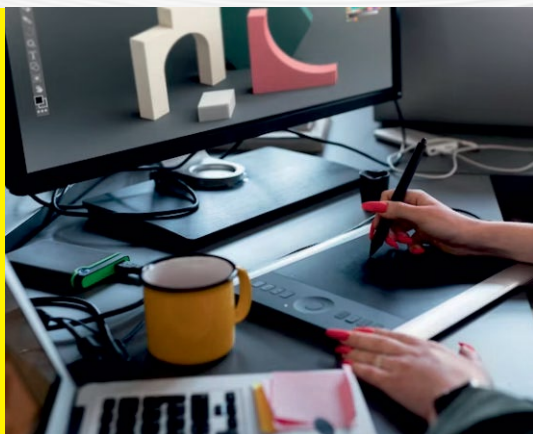
Activity Curriculum

Day	Topics
01	Intro to YouTube and Create a Google account
02	Identifying Your Niche
03	Activity 1: How to create a YouTube Channel, Creating Logo and Cover Art
04	Understanding with YouTube Control Panel & Channel Settings
05	Activity 2: Creating Your Channel Trailer: Self Intro and Welcome Message
06	Customizing Your Channel
07	Create Content Strategy & Research on video content
08	Understand Your Audience
09	Script your video
10	How to record high quality content
11	Activity 3: Recording Your Second Video
12	Intro to YouTube policies and guidelines
13	Editing footage
14	Activity 4: Editing Second Video
15	Upload & optimize video, adding effective video title
16	Make effective thumbnails, Activity 5: Create a thumbnail for the second video
17	Activity 6: Create an Intro & Outro Video for channel
18	Activity 7: Create a Third Video
19	Activity 8: Editing 3rd Video
20	Activity 9: Create and Promote Playlist
21	Add comments to help your channel growth
22	Monetization and Channel promotions
23	Intro to YouTube Shorts
24	Activity 10: YouTube Shorts Video
25	Scaling your YouTube Channel

07

Foundation
programme in

JUNIOR ANIMATOR



Course Objective

Blender is a free and open-source 3D computer graphics software tool set used for creating animated films, visual effects, art, 3D-printed models, motion graphics, interactive 3D applications, virtual reality, and, formerly, video games. Blender's features include 3D modelling, UV mapping, texturing, digital drawing, raster graphics editing, rigging and skinning, fluid and smoke simulation, particle simulation, soft body simulation, sculpting, animation, match moving, rendering, motion graphics, video editing, and compositing.

What will I learn?

- The student will learn the fundamentals of 3D Blender software
- They can create basic 3D models using different kind of methods in Blender

Activity Curriculum

Day	Topics
01	Introduction
02	Blender Interface
03	Curves and NURBS
04	2D Shapes
05	Modeling basics
06	Furniture Modeling
07	Vehicle Modeling
08	Simple character modeling
09	Working with Materials
10	Applying Textures
11	UV Mapping
12	Lighting
13	Cameras
14	Animation
15	Rigging
16	Working with Bones
17	Rendering Still Images
18	Rendering Still Animations
19	Blender Modifiers
20	Blender Particles
21	Blender Activity I
22	Blender Activity II
23	Blender Activity III
24	Blender Activity IV
25	Blender Activity V

08

Foundation
programme in
**VIDEO
EDITING**



Course Objective

Adobe Premiere Pro is a timeline-based and non-linear video editing software application (NLE) developed by Adobe Inc. and published as part of the Adobe Creative Cloud licensing program. First launched in 2003, Adobe Premiere Pro is a successor of Adobe Premiere (first launched in 1991). It is geared towards professional video editing, while its sibling, Adobe Premiere Elements, targets the consumer market.

What will I learn?

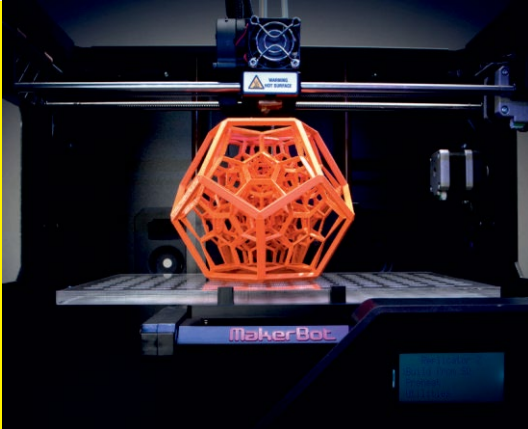
- Understand terminology used in video editing : create, edit & combine sequences
- Edit and combine audio, video & still images
- Create titles and credits for videos
- Publish a video to a format suitable for web use

Activity Curriculum

Day	Topics
01	Introduction to Video editing & Adobe Premiere Pro
02	Adobe Premiere Pro interface and tools
03	Project Settings
04	An Insight to Importing Footage
05	Knowing the Process of Importing Photoshop and After Effects Files
06	Exploring Organizing Media
07	Understanding Fundamentals of Video Editing
08	Using Clips and Markers
09	Adding Transitions
10	Editing Techniques
11	Understanding Clips in Motion
12	Knowing Multi-camera Editing
13	Learn Editing and Mixing Audio
14	Adding Video Effects
15	Color Grading and Correction
16	Understanding Compositing Techniques
17	Exploring Titles
18	Working with Graphics
19	Understanding Motion Graphics
20	Exporting – Sequences, Clips, and frames
21	Video editing Activity I
22	Video editing Activity II
23	Video editing Activity III
24	Video editing Activity IV
25	Video editing Activity V

09

Foundation
programme in
**3D
PRINTING**



Course Objective

The goal of this course is to equip students with the core knowledge and tools needed for learning basics of CAD software and creating prototypes utilizing 3D printing.

What will I learn?

- Demonstrate knowledge of key historical factors that have shaped manufacturing over the centuries Explain current and emerging 3D printing applications in a variety of industries.
- Evaluate real life scenarios & recommend the appropriate use of 3D printing technology.
- Identify opportunities to apply 3D printing technology for time and cost savings.

Activity Curriculum

Day	Topics
01	Introduction to Dimensions
02	Introduction to 3D modelling in TinkerCad
03	Login with TinkerCad and making an account
04	Design and Modification of 3D objects
05	Creation of 3D Models (basic)
06	Activity 1: Design of Simple objects
07	Activity 2: Design of Simple objects
08	Design of 3D models (intermediate)
09	Activity 3: Design of 3D objects using tools
10	Activity 4: Design of 3D objects using tools
11	Importing files in TinkerCad
12	Activity 4: Design of Sketch models
13	Making of Assembly Models
14	Activity 5: Design of Assembly models
15	Activity 6: Design of Assembly models
16	Introduction to Slicing software
17	Role of slicing in 3D Printing
18	Introduction to FDM Printers
19	FDM machine anatomy
20	Machine setup Understanding
21	Activity 1: 3d printing of simple objects
22	Activity 2: 3d printing of hollow objects
23	Activity 3: 3d printing of Sketch objects
24	Activity 4: 3d printing using student's creativity
25	Current and Future Application

10

Foundation
programme in

CAD FOUNDATION PROGRAM



Course Objective

The purpose of this course is to provide students with the fundamental skills and resources required for utilising AutoCAD for skilled 2D drawing, design, and drafting.

What will I learn?

- By the end of the course, students will have learned the steps involved in solving a design challenge and will be able to develop extremely accurate designs and 2D drawings.

Activity Curriculum

Day	Topics
01	Introduction to CAD
02	Exploring the AutoCAD interface.
03	AutoCAD Basic commands.
04	Absolute Cartesian coordinate method.
05	Relative Rectangular Co-ordinate method.
06	Relative Polar Co-ordinate method.
07	Direct distance entry method
08	Drawing Commands in AutoCAD[Ray, X-line or Construction line. Multiline. Polyline.]
09	Drawing Commands in AutoCAD: [Polygon, Rectangle.]
10	Drawing Commands in AutoCAD: Circle & Arc
11	Drawing Commands in AutoCAD: Donut, Ellipse
12	Object Snap tools in AutoCAD
13	Object Selection Methods in AutoCAD
14	Modifying Commands in AutoCAD
15	Modifying Commands in AutoCAD
16	Modifying Commands in AutoCAD
17	Modifying Commands in AutoCAD
18	Advanced Tools in AutoCAD
19	Advanced Tools in AutoCAD: Text
20	Advanced Tools in AutoCAD: line type
21	Dimensions
22	About dimensioning tools.
23	Layers
24	2D skill development section
25	2D skill development section

11

Foundation programme in **MEHNDI DESIGNING**



Course Objective

To create basic yet stunning Indian, Arabic, and bridal designs as practice for mehndi art. Giving the students an opportunity to earn and learn and make them self employed

What will I learn?

- Students will learn different types & styles of mehndi design art.
- Students' creativity skills and hidden talents will be unleashed
- They will also be able to run Mehndi classes of their own.
- After completion of this course students will be able to become self-employed.

Activity Curriculum

Day	Topics
01	Introduction & Drawing of different forms of lines and symbols
02	Information about making cones and preparing mehndi paste
03	Information about the designs and removal of mehndi
04	How to draw lines.
05	How to draw Arabic leafs.
06	How to draw Arabic Flowers.
07	Simple Mehndi designs : Arabic floral designs.
08	Simple Arabic designs :Arabic leafs designs
09	Indian Mehndi Designs: Mesh and Mango Motifs
10	How to draw Humps and Swirls.
11	Full Arm Mehndi Design
12	Indian Mehndi Designs : Motif Design
13	Full Leg and Arms Indian Mehndi Design
14	Indian Mehndi designs : filling elements.
15	Spiral Back Hand Mehndi Design
16	Arabic Designs And Bridal Designs Introduction
17	Rose Arabic Bridal Mehndi Design
18	Indian Mandala designs.
19	Simple Finger Tip Arabic Mehndi Design
20	Arabic feet designs.
21	Indian feet designs.
22	Jewellery designs for feet.
23	Simple Arabic Mehndi Design with Motifs
24	Geometric Arabic Mehndi Design
25	Lotus Arabic Mehndi Design

12

Foundation
programme in

CLAY MODELING & SCULPTING



Course Objective

This course introduces to provide learning of clay modelling and visual expression through two dimensions and three dimensions. To provide opportunity to enhance and enrich imagination and creativity.

What will I learn?

- Playing with modelling clay.
- Making different shapes.
- Hand-eye coordination.
- Making colourful things using clay

Activity Curriculum

Day	Topics
01	Learning Clay Materials (introduction)
02	Making Caterpillar & Starfish
03	Clownfish & Flies
04	Plates And Bowls
05	Polymer Clay- Emojis & Rainbow
06	Bear & Monkey
07	Octopus & Sheep
08	Diya Making Using Clay
09	Clay Flowers
10	Clay Mushroom
11	Polymer Clay Jewellery
12	Clay Leaf Bowl
13	Home Made Clay- Panda
14	Clay Minion
15	Clay Character
16	Clay Pot
17	Blue Whale Phone Holder
18	Clay House
19	Clay Parrot
20	Fruit Basket
21	Natural Clay Making & Tools Usage
22	Armature Modeling
23	Armature Model Detailing
24	Face Sculpting (section 1)
25	Face Sculpting (section 2)

13

Foundation
programme in
**ORIGAMI
CRAFT**



Course Objective

Origami Art is a series of workshop and program for children. The main objectives is to explore the creativity fun of a single sheet or multiple sheets of 2D papers into 3D objects through the use of paper folding (also known as Origami) techniques.

What will I learn?

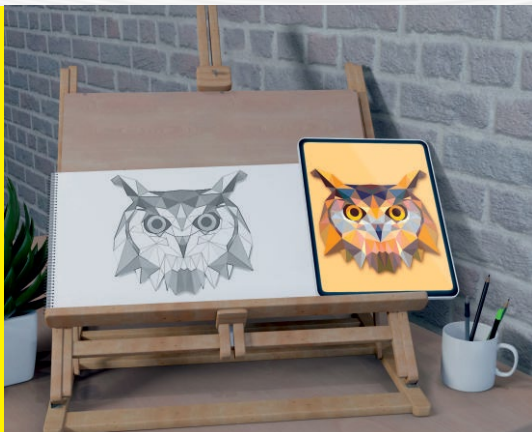
- Creativity and logic thinking.
- Will involve both our hands and mind to be active.
- Innovative idea development.

Activity Curriculum

Day	Topics
01	Introduction To Origami
02	Paper Boat
03	Bookmarks
04	Origami Christmas Tree
05	Flowers
06	Origami Penguin
07	Origami Fish
08	Origami Butterfly
09	Origami Whale
10	Origami Crane
11	Origami Box
12	Origami Envelope
13	Shapes Making
14	Origami Owl
15	Modular Cube
16	Jumping Frog
17	Origami Crab
18	Ninja Star
19	Origami Bag
20	Origami Car
21	Paper Cup
22	Origami Pikachu
23	Origami Dog
24	Origami Rabbit
25	Origami Horse

14

Foundation
programme in
**DIGITAL
PAINTING**



Course Objective

This course focuses on creating high-quality digital paintings. Students will focus on learning the software to create images. In digital painting, students use painting techniques to create the image directly on the computer.

What will I learn?

- Basic knowledge in Photoshop Software.
- Basic drawing skills.
- Colour theory.
- Painting in digitally.

Activity Curriculum

Day	Topics
01	Digital painting (software used, pros and cons)
02	Drawing Basics (Pencil sketches)
03	Drawing Basics 2 (Pencil sketches)
04	Drawing objects
05	Drawing Cartoon Face
06	Color theory, color values- RGB, CMYK
07	Photoshop Interface
08	Basic Brush Tool
09	Basic Pen Tool
10	Painting and Blending Techniques
11	How to Resize an Image
12	Remove an Object or Person from a Photo
13	How to Change the Color of an Object
14	Paint an Easy 3D Circle
15	Digital Character Design
16	Incorporating Photo Textures
17	Flat design to 3D Painting
18	Creating Leathery Texture
19	Character sketching (cartoon)
20	Detailing section 1
21	Detailing section 2
22	Detailing section 3
23	Detailing section 4
24	Detailing section 5
25	Detailing & Digital output

15

Foundation
programme in

2D CARTOON ANIMATION



Course Objective

At the end of the course the student will learn basic concepts of Classical 2D Animation, Story boarding and create animated digital multimedia content for media using the tools and techniques as available in the Adobe Animated software.

What will I learn?

- The basic principles of cartoon drawing.
- The principles of animation.
- The importance of timing and movements of animation.
- A basic knowledge of 2D animation.

Activity Curriculum

Day	Topics
01	Introduction Animation And Story Telling
02	How To Draw Shade & Shadow
03	Let's Practice Basic Shapes & Manipulating Shapes
04	How To Draw Cartoon Heads – Part I
05	How To Draw Cartoon Heads – Part II
06	Let's Start Constructing Cartoon Characters
07	Let's Start Learning Perspective Drawing
08	Know More About Object & Nature Study
09	Let's Start Character Designing
10	Introduction To Principles Of Animation – I
11	Introduction To Principles Of Animation – II
12	How To Animate Special Effects
13	How To Draw Movements & Action
14	How To Write A Cartoon Scripting
15	How To Create A Storyboard
16	Introduction To Adobe Animate And Tools
17	Know More About Draw With Adobe Animate
18	Know More About Timeline Control and Basics
19	Let's Start Digital Character Designing
20	Let's Start Background Designing
21	Let's Start Walk Cycle Animation
22	Let's Start Character Animation
23	Let's Start Background Animation
24	Know More About Integrating Background & Characters
25	How To Convert The Animation Project in to Final Out

16

Foundation
programme in
**3D
ANIMATION**



Course Objective

If you can imagine it, you can model it! Dive into 3D art creation with Autodesk Maya, the modeling and animation software package used by the pros. Utilize techniques like digital sculpting and surface modeling to make your models from scratch and then bring them to life with animation. This course turns your imagination into reality so you can share your vision to inspire others

What will I learn?

- The basic principles of modeling
- Texturing, lighting and rigging fundamentals
- Character animation techniques
- Basics of rendering process

Activity Curriculum

Day	Topics
01	Introduction Animation Around The World
02	Understanding The Maya Interface & Basic Tools
03	Creating And Open The Maya Projects
04	Modeling Basics – I
05	Modeling Basics – II
06	Basics Of Texturing
07	Lighting And Shading Fundamentals
08	Introduction To Rigging
09	Understanding The Animation And Keyframe
10	Animation Timing And Frame Settings
11	Animation Using Motion Paths
12	Importing The Rigged Character To Maya Project
13	Animation – Character Happy Face Impression
14	Character Angry Face Impression
15	Lips Movement
16	Various Hands Action
17	Character To Pick Up Objects
18	Throwing A Ball
19	Kicking The Ball Action
20	Walk Cycle
21	Walk And Sit Action
22	Running Action Action
23	Adding Background
24	Creating And Animating Cameras
25	Basic Of Rendering Process

17

Foundation
programme in



ACCOUNTING



Course Objective

This course will enable you to learn basics of Manual Accounting, and gain Practical Accounting knowledge in Computerized Environment. Finally you can prepare Financial Reports of Small and Medium Business Enterprises

What will I learn?

- The Basics of Business Organisations
- The Basic principles of Book keeping and Accounting procedures
- Practical Accounting with theoretical background
- The Basics of Computerised Accounting
- Practical Accounting in Computerised Environment
- Preparation of Financial Reports

Activity Curriculum

Day	Topics
01	Introduction to Business and Business Transactions
02	Maintenance of Accounting Records
03	What is ERP
04	Defining Groups in Tally ERP-9
05	Defining Ledgers in Tally ERP-9
06	Inventory Management – Stock Group Creation
07	Inventory Management – Stock Category Creation
08	Inventory Management – Units of Measure
09	Inventory Management – Stock Item Creation
10	Managing Accounting Vouchers in Tally ERP-9
11	Vouchers – Purchase
12	Vouchers – Payment
13	Vouchers – Receipt
14	Voucher – Contra
15	Voucher – Journal
16	Voucher – Credit Note
17	Voucher – Debit Note
18	Bank Reconciliation in Tally ERP9
19	Order Processing through Tally ERP9
20	Accounting of Bill of Materials
21	Session about Budget and Control
22	Security Control
23	MIS – Report Preparation
24	Tax System in India
25	Tally to Excel, JPEG, PDF

18

Foundation
programme in

DTP & INTERACTIVE DESIGN



Course Objective

In this program students will learn to create eBooks using InDesign. It will help them to create children's eBooks, do it yourself books, recipe or cook books or any media rich eBook. Design and publish ebooks and transition your workflow from print to digital publications. The course cover a wide range of digital publishing concepts, ebook software and design applications including InDesign and Canva.

What will I learn?

- Fundamentals of desktop publishing and typesetting
- The importance of layout and structuring
- Understanding online publications

Activity Curriculum

Day	Topics
01	Introduction To DTP & Interactive Design
02	Exploring Modern E-Book Ideas
03	Why InDesign?
04	Introduction To InDesign Platform
05	Importance of Layout
06	Creating and Viewing Documents
07	Exploring Pages
08	Working With Type and Fonts
09	Working With Graphics
10	Formating Objects
11	Working With Color
12	Points and Paths
13	Managing & Transforming Objects
14	Character and Paragraph Formatting
15	Using Styles
16	Tables Day
17	Images Day
18	File Formats E-Book
19	Digital Publishing and Device Compatibility
20	E-Readers
21	Templates Day
22	Online E-Book Creators
23	E-Book In Canva
24	How To Create E-Book In Canva
25	How To Publish E-book

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Foundation programme in **WEB DESIGN**



Course Objective

In this course you'll learn how to design a website in Photoshop, HTML & CSS. We'll start right at the basics of web design principles, use Photoshop for creating, HTML basics, tags, tables, CSS, CSS Cheat Sheet, layout for a web page to perfecting the webpage.

What will I learn?

- Fundamentals of Design Principle
- Web Design Using Photoshop and HTML
- To create your own Website

Activity Curriculum

Day	Topics
01	Introduction to Web & Web Designing
02	Design Principals & Web Components
03	Manual Web Designing: Layout & Structuring
04	Basics of Photoshop
05	Photoshop Environment and Tools
06	Photoshop- Website Layout Setting
07	Photoshop- Header & Navigation Menu
08	Photoshop- Content Slider & Body Structuring
09	Photoshop- Text and Style Implementation
10	Photoshop- Image Process, Placing & Structuring
11	Photoshop- Navigation Button Lay-outing
12	Introduction to HTML
13	Brief on HTML Components
14	Essentials of HTML Component Properties
15	Image in HTML
16	URL component
17	Introduction to Table
18	Introduction to CSS
19	Types of CSS
20	CSS cheat sheet
21	CSS text formatting
22	CSS dropdown & Colours
23	Image gallery
24	Website layout
25	Create a simple website

20

Foundation
programme in

GRAPHIC ART & DESIGN



Course Objective

This course will help you to learn the basic principle of print design. In this course students will learn the importance of color theory, layout and typography to produce different kinds of print designs using CorelDraw and Photoshop.

What will I learn?

- The basic principles of Print Design
- Graphic and Layout Fundamentals
- Image Editing
- Understanding and creating print outputs

Activity Curriculum

Day	Topics
01	Introduction to Print Media Design
02	Drawing Practice Lines and Basic Shapes
03	Drawing Practice Shading
04	Color Theory and Psychology
05	Painting Basics and color Practice
06	Color Theory
07	Photoshop Interface
08	Basics of Photoshop
09	Photoshop Environment and Tools
10	Basic Brush Tool
11	Basic Pen Tool
12	Photoshop- Editing Basics
13	How to Change the Color of an Object
14	Photoshop- Image Retouch
15	How to Remove an Object or Person From a Photo
16	Corel Draw Basics
17	Corel Draw Platform and Tools
18	Corel Draw Typography and Colours
19	Importance of Alignment & Hierarchy
20	CorelDraw Visual Element Placing
21	Digital Designing – Poster
22	Floral Logo Design
23	3D Logo Effect
24	Making File Print Ready
25	Making Print outputs

21

Foundation
programme in

PHOTOSHOP CREATIVATOR



Course Objective

Visual representations are known to enhance online content. Graphic designers constantly churn out great designs to amplify that experience. This course provides activity based Photoshop training for newbies, where students not only get to experiment with a variety of software tools, but also provide tips and tricks to smarter techniques. The level of skill & progress of each student is evaluated.

What will I learn?

- Colours, Graphics and Layout.
- Image retouching.

Activity Curriculum

Day	Topics
01	Introduction to Photoshop
02	Photoshop Interface Essentials
03	Working With Selection Tools
04	Cropping and Straightening Images
05	Transforming, Distorting and Warping Images
06	Working with Layers
07	Vector Drawing
08	Colours in Photoshop
09	Working with Brushes
10	Working with Layer Masks
11	Work With Slices
12	Working with Filters
13	Working with Text
14	Essential Layer Effects and Styles
15	Blending multiple images
16	Basic Photo Corrections
17	Retouching & Repairing
18	Logo Designing using drawing tools
19	Create Text effect
20	Business card design
21	Promotional Flyer Design
22	Brochure Design
23	Product Package Design
24	Photo Manipulation
25	Make an Animated GIF

22

Foundation programme in **SHORT FILM CUTS**



Course Objective

This course will enable you to learn the basics of film making giving a glance through the various areas of film making from pre production to post production.

What will I learn?

- Art of Story Telling
- Conversion Of Story To Screenplay
- Basics of Screenplay
- Basics of Scriptwriting
- Understanding DSLR and Mirrorless Camera
- Basics of Lighting and Composition
- Art of Editing
- Secret Tips In Post-Production

Activity Curriculum

Day	Topics
01	What is cinema
02	Art of observation
03	Art of Storytelling
04	The conversion of story to screenplay
05	Basics of Screenplay
06	Basics of Scriptwriting
07	Three Act Structure
08	Introduction to DSLR & Mirrorless Camera
09	Basic Structure & Parts in Camera
10	Sensors in Camera's & What is the uses of Filter?
11	Shooting Using DSLR & Mirrorless Camera
12	Basics of Lighting
13	Photography Rules & Compositions
14	Understanding Camera Movements & its Types
15	Basics of Camera Rigging
16	Introduction to Post-Production & Art of Editing
17	Introduction to Editing Software
18	Assembling Clip In Prelude & Use's of Proxy File
19	Different Tools & Methods In Editing Software
20	Rules & Composition In Editing
21	Uses of Editing Monitors & Secret Tips
22	Basics Of Colour grading
23	Basics in Adding Metadata & Copywriter
24	Basics of Post-Production
25	Secret Tips In Post-production

23

Foundation
programme in

C PROGRAMMING



Course Objective

This course is designed to provide complete knowledge of the C language. Students will develop logical thinking that will help them create program applications in C. Beginner's learn the basic concepts of programming while those with prior knowledge can pursue with enhanced coding through our activity based learning model.

What will I learn?

- The basic concept of programming
- How to work with textual information, characters and strings.
- How to work with arrays of complex objects.
- How to define and manage data structures.

Activity Curriculum

Day	Topics
01	Overview Of Programming Language
02	Variables And Data Types
03	Operators
04	Basic Input / Output
05	Control Structures
06	Control Structures Loops Iteration Structures
07	Control Structures Loops/ Iteration Structures
08	Control Structures Loops Jump Statements – I
09	Control Structures Loops Jump Statements – II
10	Arrays Initializing, Accessing Values Of Array
11	Pointers
12	Dynamic Memory Allocation, Strings
13	Functions, Function Definition, Declaration Calling
14	Functions, Function Arguments
15	Functions Interaction Between Functions
16	Structured Data Types Simple Structure
17	Structured Data Types Complex Structure
18	Structured Data Types Pointers
19	Structured Data Types Pointers To Complex
20	Structured Data Types Union
21	Files / Types of Files
22	Files Simple File Operations
23	Files Complex File Operations
24	Files Reading and Writing To A Binary File
25	Files Get Data Using Fseek()

24

Foundation
programme in

C++ PROGRAMMING



Course Objective

This course provides fundamental knowledge of the Object Oriented Programming concepts and their implementation using C++. Students can work-out on logic building which will help them create program applications in C++. Beginners learn the basic concepts of programming while those with prior knowledge can pursue with enhanced coding through our activity based learning model.

What will I learn?

- The basic concept of Object-Oriented paradigm
- Syntax and semantics of the C++ programming language.
- How to design C++ classes for code reuse.

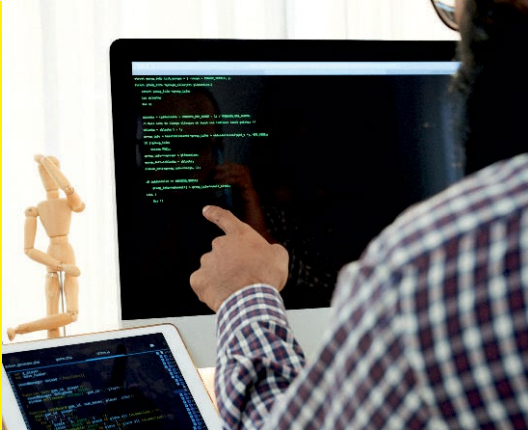
Activity Curriculum

Day	Topics
01	Introduction to C++ Programming
02	Variable and Data Types In C++
03	Operators in C++
04	Basic Input / Output in C++
05	Control Structures Loop Iteration Structures
06	Control Structures In C++
07	Control Structures Loops Iteration Structures
08	Control Structures Loops Jump Statements
09	String Functions
10	Arrays Initializing, Accessing Values of Array
11	Pointers Pointer Variable Operators Expression
12	Dynamic Memory Allocation, Strings
13	Functions Function Arguments
14	Functions Interaction Between Functions
15	Object Oriented Programming (OOP) Class
16	Functions Function Definition Declaration Call
17	Object Oriented Programming (OOP) Object
18	Friend Function
19	Operator Overloading
20	Inheritance
21	Polymorphism
22	Constructors
23	Destructors
24	File and Templates I
25	File and Templates II

25

Foundation
programme in

JAVA PROGRAMMING



Course Objective

This course is designed to introduce you to some of the most powerful programming concepts in Java, including: objects, inheritance and collections. Students will learn how to use these object-oriented programming concepts in code examples, discover how these concepts are used in applications that require user input, and understand the benefits of mastering these concepts in Java.

What will I learn?

- Java Syntax and semantics to write Java programs.
- Concepts such as variables, conditional & iterative execution methods etc.
- Understand the fundamentals of OOP's in java

Activity Curriculum

Day	Topics
01	Introduction to java
02	Variables & Data Types
03	Operators & Java Conditions and If Statements
04	Looping Statements/iteration Statements in Java
05	Arrays
06	Java Classes
07	Java Strings
08	Java Methods
09	Java Encapsulation & Polymorphism
10	Java Inheritance
11	Java- Packages
12	Java – Interface
13	Exception Handling
14	Multi Threading
15	Multi Threading-Synchronization
16	Files and I/O
17	Applets:Life cycle>Loading applets in a webpage
18	Start with Applets/Graphical Components
19	Applets- Graphical components
20	Event Listeners
21	Action Listeners
22	Mouse Listeners
23	Java DB Connectivity : JDBC API, JDBC and etc.
24	Java DB Connectivity : JDBC Test suite
25	Java DB Connectivity : Layers of JDBC Architecture

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Foundation
programme in
**VISUAL
BASIC**



Course Objective

The goal of this course is to help students gain knowledge in the basic concepts of Object Oriented Programming and build skills to develop modern software programmes using the Visual Basic language. The course covers most of the Visual Basic language structure and syntax, as well as how to use features of Windows Forms and ActiveX Controls to make graphical user interface (GUI) applications.

What will I learn?

- Colours, Graphics and Layout.
- Image retouching.

Activity Curriculum

Day	Topics
01	Introduction to visual basic
02	VB syntax
03	VB variables
04	VB strings
05	VB dates and time
06	Operators in visual basic
07	VB math
08	Decision statement – if
09	Decision statement – select case
10	Loops
11	Loops- while statement
12	Loop – do loops
13	Arrays
14	Visual basic methods
15	Methods – optional parameters
16	Error handling
17	Try, catch, finally statement
18	Creating and managing classes
19	Graphics
20	Creating a pen
21	Drawing a rectangle
22	Printing text
23	Database
24	Building and connecting to database
25	Creating a database application

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Foundation
programme in
SCRATCH



Course Objective

This course introduces students to Animation, Multimedia and Interactive Elements combined together to develop interactive stories, games, animations through Scratch programming. Scratch is a block based visual programming language that introduces students to the world of algorithms & programming. The activities encourage exploration of key computational thinking concepts and practices.

What will I learn?

- Basic animation with scratch.
- Create interactive stories
- Create online games.

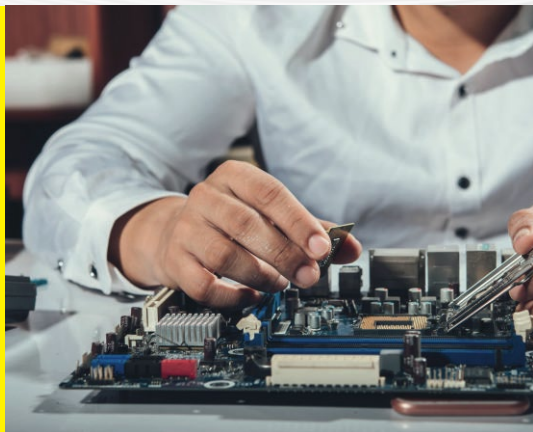
Activity Curriculum

Day	Topics
01	Block Based Visual Programming Language Basics-
02	Add Effects or Actions, Make A Music
03	Create Chase/catch/clicker Game
04	Basics of Scratch- Maze Cat
05	Basics of Scratch-create Greetings Cards
06	Animation Chatbot
07	Animation and Music
08	Dance Party Animation
09	Story Telling Samples
10	Art-paint Box
11	Drawing Polygons
12	Programming Features
13	Lists- Questions and Answers
14	Creating a Basic Calculator
15	Function With Parameters
16	Game Boat Race
17	Game Analysis- Memory Game
18	Game Analysis- Dodge Ball
19	Brain Game
20	Catch The Dots
21	Clone Wars
22	Create Your Own World- Treasure Hunt
23	Butterfly Tree
24	Ping Pong Game
25	Shooter Game

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Foundation
programme in

BUILD A PC & NETWORKS



Course Objective

This course will enable you to learn basics on how to assemble PCs and configure networks to connect between PCs, so that you get a thorough understanding on the office or company network infrastructure design.

What will I learn?

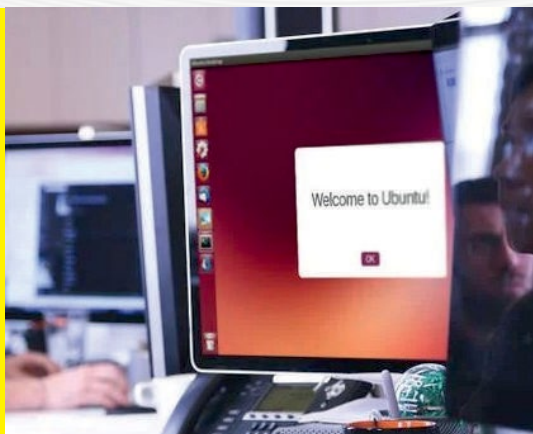
- Types of computer hardware components.
- Types of networking components.
- Assembling a PC.
- Setting up a basic network.
- Connecting PCs via network.
- The configuration of software.

Activity Curriculum

Day	Topics
01	Introduction to Computer System
02	Components of A Computer System
03	Input Devices
04	Output Devices
05	Memory Storage Devices
06	Safety Precautions and Tools
07	Installing Motherboard and Processor
08	Installing SMPs, Harddisk, RAM and NIC
09	Installing Peripherals
10	Boot Process and BIOS
11	OS Concepts And Windows OS Installation
12	Ubuntu Linux Installation
13	Understanding and Installing Drivers
14	Installing Software
15	Installing Printer and Scanner
16	Basics of Networking and Devices
17	Types of Area Networks
18	Types of Network Topology
19	Types of Network Cables
20	Types of Twisted-pair Cables
21	Color Coding and Crimping
22	Workgroup, Domain and Ip Addressing
23	Setting Ip and Connecting 2 PC
24	Transferring Files Between PC's
25	Internet Basics and Troubleshooting

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Foundation
programme in
LINUX



Course Objective

This course explores the various tools and techniques commonly used by Linux users. It is designed for those with limited or no previous exposure to Linux. Upon completion of this training you should have a good working knowledge of Linux, from both Graphical and Command Line perspective, allowing you to easily navigate through any of the major Linux distributions.

What will I learn?

- The basic concepts & operations of Linux.
- Working with Apps in Linux.
- The basic Linux Commands.

Activity Curriculum

Day	Topics
01	Introduction to Linux
02	Understanding Ubuntu Linux
03	Difference between Linux, Windows & UNIX
04	Navigating the Ubuntu Desktop
05	Knowing Ubuntu Unity Dash
06	Basics of installing applications
07	Installing Web Browsers
08	Installing Open Source Desktop applications
09	Understanding GIMP
10	Working with GIMP
11	Understanding Inkscape
12	Working Inkscape
13	How to Browse the Web with Ubuntu
14	How to Keep Ubuntu up to Date
15	Understanding Thunderbird Email Client
16	Working with Libre Office
17	Libre Office- Writer, Calc
18	Libre Office- Impress, Base
19	Libre Office- Draw, Math
20	Editors- Gedit Editor basics
21	Editors- vi Editor basics
22	How to Manage Photos, Music and Videos
23	Linux File System basics
24	Creating users and groups
25	Basic Linux commands

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Foundation programme in **CERTIFIED BLOGGER**



Course Objective

Blogging is an excellent way of sharing your passion of knowledge to public in a creative online environment. Blogging gives a sense of satisfaction that you are doing something that involves the creative part of your brain. This program provides a support to explore and present your creative ideas in online media and help you to build an impressive outlook to your viewers. A best way to publish in a profitable and an authoritative way.

What will I learn?

- To share their own knowledge & Learn, earn at the same time.
- To promote a product and Building relations.
- Blogging as side income & Creating an online empire

Activity Curriculum

Day	Topics
01	Introduction to Blogging
02	Blogging Platforms
03	Blogging Essentials
04	Keyword Research Tools for Blogging
05	Getting Started- blogger.com
06	Customize your Blog – Page, Post, Labels
07	Gadgets and The Blogger Layout
08	Comments and Backlinks
09	Publish, Archive and share you Blog
10	Creating a Blogging Strategy
11	Integrating Blogging into a Business Strategy
12	Benefits of Blogging
13	Concepts of Vlogging
14	Living Through Blogging
15	Tips yo Run a Successful Blog
16	Mistakes yo Avoid When Blogging
17	Popular Tools for Bloggers
18	Getting Started on Blogging- Wordpress
19	Customize your Wordpress Blog
20	Plugins and Wordpress Layout
21	Importance And Methods of Backlinks
22	Publish, Archive and share you Blog
23	Promote your Blog
24	Make Money from Blogging- Adsense
25	Optimization of Blogging – SEO Tips

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Foundation
programme in
**OFFICE
SUITE**



Course Objective

This course is meant to introduce students to the Microsoft Office suite with a package of industry-leading software programs including Word, Excel, and PowerPoint. In this short course, the student gets an introduction to what Office has to offer. They get an awareness of how MS Office Suite works, short cuts that can be used throughout the suite etc; and provides students with hands-on experience in practising what they study.

What will I learn?

- To work in MS Word, MS Excel
- MS Access & Power Point.

Activity Curriculum

Day	Topics
01	Impact of office automation, Letter Drafting
02	To prepare an enquiry form
03	To create a bio data
04	Templates using MS Word
05	To create a picture based story book
06	Watermark in MS Word
07	To create a Textbook/ Report
08	To create a stock list using MS Excel
09	Keyboard shortcuts as a periodic table
10	Sort and Filter in MS Excel
11	Table creation
12	Mathematical calculations in MS Excel
13	Graphical representations in MS Excel
14	Tracking planner
15	Loan calculation
16	Mail merge
17	To create a pivot table
18	Data validation
19	VLOOKUP
20	Presentation using MS PowerPoint
21	Tables and Hyperlink
22	Transitions and custom slide
23	MS Access- Tables and Forms
24	Queries in MS Access
25	Reports in MS Access

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Foundation
programme in
**LET'S TALK
ENGLISH**



Course Objective

This course will enable you to develop the English communication skill through reading, listening, writing & speaking skill as well as the basic grammar and effective personality development techniques. This will make you an effective speaker in English.

What will I learn?

- The reading techniques using phonetic sound
- The importance of listening skill for communication
- Implementing the methods in writing skill
- The basic knowledge in grammar usage for communication
- How to develop public speaking skill & Personality development techniques

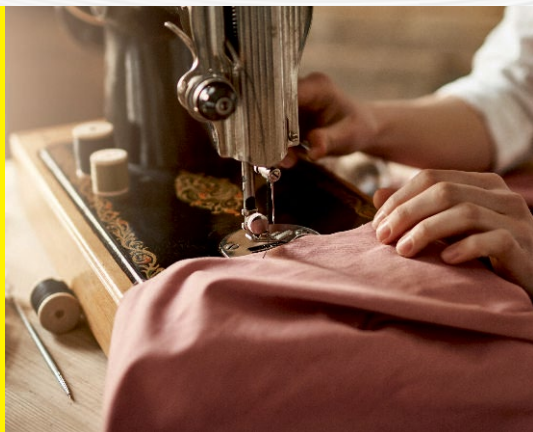
Activity Curriculum

Day	Topics
01	Listen Up
02	My Day
03	Stages of Life
04	Types of Co-workers
05	Friendship Phrases
06	My House
07	My Health
08	My Interests
09	Study Phrases
10	Confusing Words
11	Driving Expressions
12	Remembering someone/something
13	Daily Telephone Phrases
14	No 'OMG'
15	Wish 'GOOD LUCK'
16	Words for Sadness
17	English for difficult situations
18	Few & Little
19	Accepting Apologies
20	Asking Questions
21	Miss & Lose
22	Book Phrases
23	Different ways to 'EAT'
24	Money Talks
25	Workplace idiom

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Foundation
programme in

STITCHING BASICS & EMBROIDERY



Course Objective

This course focuses on garment stitching and surface ornamentation techniques. Students will develop skills and knowledge related to historical and contemporary applications of needlepoint, embroidery and other stitching methods, and use these as a means for the creative expression of ideas through a series of class and individual projects.

What will I learn?

- Basic Stitching
- Basic Embroidery
- Mirror work
- Beads work & Sequence work

Activity Curriculum

Day	Topics
01	Introduction to Stitching & Embroidery
02	Straight Stitch
03	Stem Stitch
04	Feather Stitch
05	Face mask
06	Chain Stitch
07	Detached Chain Stitch or Lazy Daisy Stitch
08	Woven Wheel Stitch or Spider Web Stitch
09	French Knot
10	Jhabla
11	Bullion Knot Stitch
12	Couching Stitch
13	Fly Stitch
14	Herringbone Stitch
15	Satin Stitch
16	Ribbon embroidery
17	Mirror Work
18	Beads work
19	Sequins Work and Sardosi Work
20	Fabric paint
21	Petticoat
22	Cut & Stitch Normal Chudidar bottom
23	Cut & Stitch Chudipant
24	Cut & Stitch Normal Chudidar top without slit
25	Cut & Stitch Normal Chudidar top with slit

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Foundation
programme in

BEAUTY CARE & STYLING



Course Objective

This course is designed to train the students in the Beauty & Wellness space by enhancing their skill sets through practical & theoretical knowledge and developing a professional attitude in handling the customers and managing the saloon. This course will also create an entrepreneurial mindset among the students.

What will I learn?

- Students will learn the basic etiquettes they should follow once they get into the Beauty care & Styling area.
- They will learn the core concepts of Skin Care, Face Care, Hair Styling & Makeup tips.
- They will end up in generating Self Employment.

Activity Curriculum

Day	Topics
01	Current Trends & Scope in Beauty Care & Styling
02	Hygiene Etiquette for Beauty Saloon & their Staffs
03	Grooming & Body Language Tips
04	Customer Service Etiquette
05	Skin Anatomy & Skin Care Secrets
06	More about Skin Care – Hands-on Experience
07	Health & Nutrition
08	All About Facial Massage- Tips & Tricks
09	Approach to Facial Massage
10	More about Facial Massage :Hands-on Experience- 1
11	More about Facial Massage :Hands-on Experience- 2
12	An Intro to Face Masks
13	Peel of Masks & Thermo Herb Mask
14	More about Face Masks: Hands-on Experience- Part 1
15	More about Face Masks: Hands-on Experience- Part 2
16	Entering into the space of Hair Styles
17	Structure, Divisions, Life, and Density of Hair
18	Stages of Hair Growth & Types of Hair
19	Hair Disorders & its Treatments
20	Threading, Bleaching & Waxing
21	An Intro to Hair Spa & Hair Dye
22	More about Hair Spa – Hands-on Experience
23	More about Hair Dye – Hands-on Experience
24	All about Nail Care
25	Make Up-Tips & Tricks



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