

Academic Year-2020-2021

| S.NO | Name of the value added courses (with 30 or more contact hours) offered | Course Code (if any) | Year of offering | No. of times offered during the same year | Duration of course | Number of students enrolled in the year | Number of Students completing the course in the year |
|------|-------------------------------------------------------------------------|----------------------|------------------|-------------------------------------------|--------------------|-----------------------------------------|------------------------------------------------------|
| 1    | WEB DEVELOPMENT                                                         | VAL1001              | 11/24/2020       | 1                                         | 30                 | 120                                     | 115                                                  |
| 2    | ARTIFICIAL INTELLIGENCE FOR BEGINNERS                                   | VAL 1002             | 11/24/2020       | 1                                         | 30                 | 42                                      | 40                                                   |
| 3    | MOBILE APPLICATION DEVELOPMENT                                          | VAL1004              | 11/24/2020       | 1                                         | 30                 | 45                                      | 42                                                   |
| 4    | PYTHON PROGRAMMING                                                      | VAL 1003             | 11/23/2020       | 1                                         | 30                 | 120                                     | 115                                                  |
| 5    | DATASCIENCE                                                             | VAL1008              | 31-3-2021        | 1                                         | 30                 | 55                                      | 50                                                   |
| 6    | DATA VISUALIZATION                                                      | VAL1009              | 9-4-2021         | 1                                         | 30                 | 42                                      | 40                                                   |

by Project Team - Wednesday, 18 November 2020, 2:04 PM

**Date of Commencement : 23.11.2020**

| Course Name                           | Course ID | Days                        | Time                 | Course handling Faculty |
|---------------------------------------|-----------|-----------------------------|----------------------|-------------------------|
| Python Programming                    | VAL 1003  | Monday,Wednesday<br>Friday  | 9 AM to 10 AM        | Dr.P.Asha               |
| Artificial Intelligence for beginners | VAL 1002  | Monday,Wednesday,<br>Friday | 10.30 AM to 11.30 AM | Ms.R.Yogitha            |
| Web Development                       | VAL 1001  | Tuesday,Thursday,Saturday   | 9 AM to 10 AM        | <b>Dr.A.Sivasankar</b>  |
| Mobile Application Development        | VAL 1004  | Tuesday,Thursday,Saturday   | 10.30 AM to 11.30 AM | Ms. R.Aishwarya         |

Course Name: WEB DEVELOPMENT

Course Code: VAL1001

Faculty In charge: Dr. Siva Sankari

Course Duration: 30 Hours

Course Start Date:24.11.2020

No of Students Registered:120

No of Students Completed: 115

**COURSE OBJECTIVES:**

- To develop dynamic Web pages with high level of design and graphics.
- To apply prevailing technologies in the development of Web pages.

- To provide a platform for the learners to become a full stack developer.
- To Become a Full Stack Developer
- To understand the basics of Content Management Systems (CMS)

#### COURSE OUTCOMES:

Upon successful completion of this course students should be able to:

- Develop Web Applications using the current technologies and Web standards
- Apply styling, dynamic interaction with the Web components
- Develop Interactive Web Apps using jQuery and JavaScript
- To develop Server-Side Scripting with PHP
- Able to communicate between front end and back end applications.

#### COURSE CONTENT:

##### WEEK 1: (3 Hours)

HTML 5 - Getting Started, Client-Side Scripting, Server-Side Scripting, Tools for Web Application Development, HTML Tags, Labels, Input, Dropdowns and Radio Buttons, Lists, Div and Span, Attributes, Tables, Buttons, Forms.

##### WEEK 2: (3 Hours)

CSS 4 – Basics, Inline CSS, Internal CSS, External CSS, Selectors, Colours, Fonts, Alignment, Cascading, Animation.

##### WEEK 3: (3 Hours)

Bootstrap 4.5 - Colors and Backgrounds, Input Controls, Spacings, Tables, Forms, Layout.

##### WEEK 4: (3 Hours)

JavaScript – Variables, Operators, Conditional Statements and Loops, Arrays, Functions, Objects: Math, Date, Numbers, String.

##### WEEK 5: (3 Hours)

jQuery – Selectors, Attr and Val, Text and Html, Events, Effects, Controls.

##### WEEK 6: (3 Hours)

PHP – Basics, Variables, Operators, Conditional Statements, Arrays, Functions.

##### WEEK 7 & 8: (6 Hours)

PHP – Sessions, Cookies, Classes, Forms, Validation, Filters, File Handling.

##### WEEK 9 & 10: (6 Hours)

MySQL – Database, Tables, Queries, Procedures, Building a web application.

## List of Students Enrolled

| S.No | Reg.No   | Roll.No   | Name                           |
|------|----------|-----------|--------------------------------|
| 1    | 39120001 | 19S125001 | AAKASH. S                      |
| 2    | 39120002 | 19S125057 | AARTHI. N                      |
| 3    | 39120003 | 19S125090 | ABHINAV KUMAR                  |
| 4    | 39120004 | 19S125002 | ADHITHYA. V                    |
| 5    | 39120005 | 19S125003 | AISHWARYA LAKSHMI. K           |
| 6    | 39120006 | 19S125004 | AJAY. G                        |
| 7    | 39120007 | 19S125110 | AMAN. Gupta                    |
| 8    | 39120008 | 19S125070 | AMIRNENI KRISHNA TEJA          |
| 9    | 39120009 | 19S125092 | ANGU KAUSHIK. S                |
| 10   | 39120010 | 19S125072 | ANUBAMA. J                     |
| 11   | 39120012 | 19s125007 | ANVESH. N                      |
| 12   | 39120013 | 19S125009 | ARJUN. A                       |
| 13   | 39120014 | 19S125010 | ARUNACHALAM. R                 |
| 14   | 39120015 | 19S125098 | BALAJI. MANCHI                 |
| 15   | 39120016 | 19S125012 | BOOMESH. M                     |
| 16   | 39120017 | 19S121017 | BRUNDAVANAM DURGA SUMANTH MANI |
| 17   | 39120018 | 19S125013 | CHARAN. V                      |
| 18   | 39120019 | 19S125082 | DARSHAN. D S                   |
| 19   | 39120020 | 19S125063 | DARSHAN. ANAND                 |
| 20   | 39120022 | 19S125076 | DHANESHWAR. V                  |
| 21   | 39120023 | 19S125014 | DHINAKARAN. B                  |
| 22   | 39120024 | 19S125071 | DIGANTA PANDA                  |
| 23   | 39120025 | 19s125015 | DINESH KUMAR. S                |
| 24   | 39120026 | 19S121003 | DIYA MARY. D                   |
| 25   | 39120027 | 19S121006 | DURGA PRASAD. K                |
| 26   | 39120028 | 19S125112 | EDUPUGANTI SRIVALLI. E         |
| 27   | 39120029 | 19S121004 | ESTHER. D                      |
| 28   | 39120030 | 19S125122 | EVANGELIN. E                   |
| 29   | 39120031 | 19S125083 | FEROSE MOOSHA. F J             |

|    |          |           |                           |
|----|----------|-----------|---------------------------|
| 30 | 39120032 | 19S125096 | GOBIGA. B                 |
| 31 | 39120033 | 19S125016 | GOKUL KUMAR. S            |
| 32 | 39120034 | 19S125097 | GOKULKRISSHNA. S          |
| 33 | 39120035 | 19S125115 | GOKULNATH. SREE RANGAM    |
| 34 | 39120036 | 19S125089 | HARISH. KATARI            |
| 35 | 39120037 | 19S125119 | HARISH DHARAN. P          |
| 36 | 39120038 | 19S125018 | HEMALATHA. V              |
| 37 | 39120039 | 19S125019 | HEMANTH KUMAR. IRLA       |
| 38 | 39120040 | 19S125109 | INIYADHARSINI. S          |
| 39 | 39120041 | 19S125020 | JACOB RAJA. T             |
| 40 | 39120042 | 19S125021 | JAGADEES. M               |
| 41 | 39120043 | 19S125022 | JAYA PRADEESH. S L        |
| 42 | 39120044 | 19S121002 | JAYADEEP. BOBBA           |
| 43 | 39120045 | 19S125008 | JAYARAM. ARAVA            |
| 44 | 39120046 | 19S121013 | JEBIN EARNEST. A          |
| 45 | 39120047 | 19S125023 | JESTIN JOSE. P            |
| 46 | 39120048 | 19S125074 | JOSHUA. J                 |
| 47 | 39120049 | 19S125069 | JUSHWANTH KUMAR. T        |
| 48 | 39120050 | 19S125024 | KALAIVANI. M              |
| 49 | 39120051 | 19S125087 | KARTHIKREDDY. MALIGIREDDY |
| 50 | 39120052 | 19S125025 | KAVEYHA. G                |
| 51 | 39120053 | 19S125067 | KESHIHAA. M               |
| 52 | 39120054 | 19S125026 | KIRAN. K                  |
| 53 | 39120055 | 19S125027 | KISHORE. D                |
| 54 | 39120056 | 19S121005 | KISHORE KUMAR. A          |
| 55 | 39120057 | 19S121016 | KOMAL. KONTEMUKKULA       |
| 56 | 39120058 | 19S125028 | KUMARAN. B                |
| 57 | 39120059 | 19S125085 | LAKSHMI VIGNESH. BEZAWADA |
| 58 | 39120060 | 19S125093 | LAKSHMINARAYANA. KANTE    |
| 59 | 39120061 | 19S125114 | LIKITHA. KALARI           |
| 60 | 39120062 | 19S125029 | LOKESH. N                 |

|    |          |           |                       |
|----|----------|-----------|-----------------------|
| 61 | 39120072 | 19S129004 | MYTHILI. V            |
| 62 | 39120073 | 19S125111 | NAGA SRI SAI. K       |
| 63 | 39120074 | 19S125033 | NANDANA NAIR. S       |
| 64 | 39120075 | 19S121018 | NIKHIL. KOKONDA       |
| 65 | 39120076 | 19S125073 | NITHESHWER. V S       |
| 66 | 39120077 | 19S125034 | NITHISH KUMAR. C M    |
| 67 | 39120078 | 19S125100 | PALLAVI KUMARI        |
| 68 | 39120079 | 19S125103 | PARTHA PRATIM. HALDER |
| 69 | 39120080 | 19S125035 | PORKODI. S            |
| 70 | 39120081 | 19S125117 | PRABHAT KUMAR. P      |
| 71 | 39120082 | 19s125102 | PRADEESH RAJ. K       |
| 72 | 39120083 | 19S125036 | PRAVEEN. K S          |
| 73 | 39120084 | 19S125056 | PREETHI. S            |
| 74 | 39120085 | 19S125099 | PRITHIVIRAJ . M       |
| 75 | 39120086 | 19S125037 | PRIYADHARSHANI. B     |
| 76 | 39120087 | 19S125078 | RAHUL. AGARALA        |
| 77 | 39120088 | 19S125095 | RAHUL ADESH. M        |
| 78 | 39120089 | 19S125038 | RAHUMAN. M            |
| 79 | 39120090 | 19S125039 | RAJAGANESH. A         |
| 80 | 39120091 | 19S125084 | RAMANAN. B            |
| 81 | 39120092 | 19S125105 | RAUSHAN KUMAR         |
| 82 | 39120093 | 19S121010 | RAVI SHANKAR. M D     |
| 83 | 39120094 | 19S125088 | RAVISHANKAR. D        |
| 84 | 39120095 | 19S121014 | RICHA SHARMA. K M     |
| 85 | 39120096 | 19S125058 | RITHIWIK. E           |
| 86 | 39120097 | 19S125040 | ROJAR BENNY. K        |
| 87 | 39120098 | 19S125106 | SAI HANEESH. SANGARJU |
| 88 | 39120099 | 19S125041 | SAKTHI GANESH. S      |
| 89 | 39120100 | 19S129002 | SAKTHIVEL. R          |
| 90 | 39120101 | 19S121001 | SAMRIHTA. A R         |
| 91 | 39120102 | 19S125079 | SANKARI. K            |

|     |          |           |                              |
|-----|----------|-----------|------------------------------|
| 92  | 39120103 | 19S125118 | SARANYA. M                   |
| 93  | 39120104 | 19S125068 | SARATH. L                    |
| 94  | 39120105 | 19S125059 | SATHISH KUMAR. V S           |
| 95  | 39120106 | 19S125042 | SHAJITH AHAMED. S            |
| 96  | 39120107 | 19S125043 | SHAM VENKAT . S              |
| 97  | 39120108 | 19S125066 | SHARIN. S                    |
| 98  | 39120109 | 19S125044 | SHARON SWETHA. X             |
| 99  | 39120110 | 19S125107 | SHAURYA SAMEER. S S          |
| 100 | 39120111 | 19S125101 | SHESHASENA REDDY. KESHAPALLY |
| 101 | 39120112 | 19S121011 | SHILP. GOHIL                 |
| 102 | 39120113 | 19S125091 | SIRANJEEVI.R                 |
| 103 | 39120114 | 19S125062 | SIVAPRIYA. P                 |
| 104 | 39120115 | 19S121008 | SNEHALATHA REDDY. LAKKU      |
| 105 | 39120117 | 19S129003 | SOWMIYA. S                   |
| 106 | 39120118 | 19S125104 | SOWMYA SREE. T               |
| 107 | 39120119 | 19S125005 | SRAVANTH SATYA RAMKI. AKULA  |
| 108 | 39120120 | 19S125048 | SRI SWETHA. G                |
| 109 | 39120121 | 19S125047 | SRIRANGAPRASATH. V           |
| 110 | 39120122 | 19S125049 | SUJAY. R                     |
| 111 | 39120123 | 19s125121 | SURYA. S                     |
| 112 | 39120124 | 19S125120 | SUSHANT KUMAR                |
| 113 | 39120125 | 19S121007 | SUSHANT KUMAR. L             |
| 114 | 39120126 | 19S125051 | SUSIL KUMAR. R M             |
| 115 | 39120127 | 19S125116 | TANIYA. VERMA                |
| 116 | 39120128 | 19S125075 | THENDRAL. S                  |
| 117 | 39120129 | 19S125113 | TILAK. CHAUHAN               |
| 118 | 39120130 | 19S125086 | VAMSHI. BALAGANI             |
| 119 | 39120131 | 19S121009 | VAMSI. MOGALIPURI            |
| 120 | 39120132 | 19S125065 | VASANTH. P                   |

ARTIFICIAL INTELLIGENCE FOR BEGINNERS

Course Code: VAL1002

Faculty In charge: Ms. Yogitha

Course Duration: 30 Hours

Course Start Date: 24.11.2020

No of Students Registered: 42

No of Students Completed: 40

## **COURSE OBJECTIVES:**

To cite the difference between various sub domains of Artificial Intelligence.

To relate Propositional Logic techniques to real world problem statements.

To classify and correlate data using various Machine Learning techniques.

To design statistical models for speech and text analysis.

To summarize the working of Neural Network architectures.

## **COURSE OUTCOMES:**

Upon successful completion of this course students should be able to:

Classify the data from given dataset using Support Vector Machine and Logistic Regression.

Cluster the input dataset using k-means clustering algorithm.

Construct basic model to convert speech data into text using Speech Recognition techniques.

Perform Text analysis and Sentimental analysis on any given input dataset.

Design a working model of artificial neural network on a basic level.

## **COURSE CONTENT:**

WEEK 1: (3 Hours)

Introduction to Artificial Intelligence:

**AI: Building machines through human eyes**, Definition, Terminologies, Types: Artificial Narrow Intelligence – Artificial General Intelligence – Artificial Super Intelligence.

**Branches of AI:** Symbolic Learning, Machine Learning, Statistical Learning, Deep Learning, Problem Types: Classification and Prediction, Types of Learning: Supervised, Unsupervised and Reinforcement Learning.

**Case Study:** Interactive discussion on impact of Artificial Intelligence in building a user- friendly environment.

WEEK 2: (3 Hours)

Symbolic Learning:

**Symbolic AI:** Good Old-Fashioned AI, Symbol, Relation between symbols,

Logic, Knowledge Base, Significance, Real time application based on Symbolic AI

**Symbolic Logic:** Categorical vs Modern Logic, Propositional Logic, Types of operators, Well Formed Formulas, Constructing Truth Tables for various types of statement.

**Case Study:** Discussion on insightful representation of Propositional Logic for real time applications.

WEEK 3: (3 Hours)

Machine Learning Part 1

**ML: Learn-Predict-Improve** Definition, Need, Types ML Algorithms: Linear Regression, Decision Trees and Support Vector Machine

**Case Study:** Discussion and Hands on Classification problem using Support Vector Machine

WEEK 4: (3 Hours)

Machine Learning Part 2

**Clustering and Logistic Regression:** k-means clustering algorithm – steps involved to construct clusters, Logistic Regression: Definition, Logistic Regression curve and Sigmoid function.

**Case Study:** Discussion and Hands on Clustering problem using k-means clustering (clustering car based on its brand) and Classification problem using Logistic Regression (Classifying cancer tumours)

WEEK 5: (3 Hours)

Statistical Learning Part 1

**Speech Recognition:** Introduction to chatbots, History of Speech Recognition through decades, Signal Processing, Feature extraction techniques from Audio signal, Speech to Text Conversion.

**Case Study:** Discussion and hands on implementation of basic speech to text model in python.

WEEK 6: (3 Hours)

Statistical Learning Part 2

**Natural Language Processing (NLP):** Definition, History, Components of NLP, Applications: from search engines to voice assistants, Examples, Working technique.

**Case Study:** Discussion and hands on implementation of text analysis and sentimental analysis using Natural Language Processing toolkit.

WEEK 7 and 8: (6 Hours)

Deep Learning Part 1

**Neural Networks:** Introduction, Biological insight, Working, Types of Neural Nets, Layers, Architecture, Back propagation algorithm, Activation functions, Performance Metrics, Applications.

**Case Study:** Discussion and hands on implementation of a simple neural network.

WEEK 9 and 10: (6 Hours)

Deep Learning Part 2

**Working with Convolutions:** Magic behind face recognition, Convolution operation, Basics of CNN, Parameters, Convolution layer, Max Pooling layer, fully connected layer, Types, Performance Metrics, Applications.

**Case Study:** Discussion and hands on implementation of a simple convolutional neural network.(h5 and h6)

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Yogitha R

Reading list

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**AI for Beginners**

Participants

Badges

Competencies

Grades

General

Week 1 - Introduction

Week 2 - Symbolic Learning

Week 3 - Machine Learning Part 1

Week 4 - Machine Learning Part 2

Week 5 - Statistical Learning Part 1

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ENGLISH (EN)

## VAL1002 - Artificial Intelligence for Beginners

Dashboard / My courses / AI for Beginners

TURN EDITING ON

### General

**COURSE OBJECTIVES:**

- To cite the difference between various sub domains of Artificial Intelligence.
- To relate Propositional Logic techniques to real world problem statements.
- To classify and correlate data using various Machine Learning techniques.
- To design statistical models for speech and text analysis.
- To summarize the working of Neural Network architectures.

**COURSE OUTCOMES:**

- Classify the data from given dataset using Support Vector Machine and Logistic Regression.
- Cluster the input dataset using k-means clustering algorithm.
- Construct basic model to convert speech data into text using Speech Recognition techniques.

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Yogitha R

Reading list

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**AI for Beginners**

Participants

Badges

Competencies

Grades

General

Week 1 - Introduction

Week 2 - Symbolic Learning

Week 3 - Machine Learning Part 1

Week 4 - Machine Learning Part 2

Week 5 - Statistical Learning Part 1

**Announcements**

**Time Table** ☒

**Syllabus** ☒

VAL1002 - AI for Beginners - Final Exam (Theory) - Upload Link ☒

**Hidden from students**

**Click the above link to get the question paper.**

You must attend: 3 ten mark questions and 4 five mark questions.

All the best.

VAL1002 - AI for Beginners - Final Exam (Practical) - Question Link ☒

**Hidden from students**

**Click the above link to get the question.**

Note down the question alone and then do the corresponding question in google colab/jupyter notebook and take the screenshot of the same to attach it in the answer sheet.

All the best.

VAL1002 - AI for Beginners - Final Exam (Practical) - Upload Link ☒

**Hidden from students**

**Click the above link to get the question.**

Note down the question alone and then do the corresponding question in google colab/jupyter notebook and take the screenshot of the same to attach it in the answer sheet.

All the best.

Final.xls

VAL1002 - AI for b...pdf

VAL1002 - AI for b...pdf

VAL1002 - AI for B...xlsx

VAL1002-Theory Q...pdf

WhatsApp Image...jpeg

Show all



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✕ Yogitha R

**AI for Beginners**

- Participants
- Badges
- Competencies
- Grades
- General
- Week 1 - Introduction
- Week 2 - Symbolic Learning
- Week 3 - Machine Learning Part 1
- Week 4 - Machine Learning Part 2
- Week 5 - Statistical Learning Part 1

### Week 3 - Machine Learning Part 1

**ML: Learn-Predict-Improve** Definition, Need, Types ML Algorithms: Linear Regression, Decision Trees and Support Vector Machine. (h1)

**Case Study:** Discussion and Hands on Classification problem using Support Vector Machine (h2 & h3)

- Week 3 - Zoom link (h1)** ☒  
Click on the link to access the week 2 h3 class recording.  
Video starts at 38:00. Skip first few minutes.  
Passcode: jniHax9J
- Week 3 - Linear Regression Python Code Drive Link** ☒
- Week 3 - Linear Regression Dataset** ☒
- Week 3 - Zoom Link (h2)** ☒  
Click on the link to access the week 3 hour 2 class recording.  
Video starts at 18:00. Skip first few minutes.  
Passcode: s\*Si6pHM
- Week 3 - Decision Tree Python Code Drive Link** ☒

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✕ Yogitha R

**AI for Beginners**

- Participants
- Badges
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- General
- Week 1 - Introduction
- Week 2 - Symbolic Learning
- Week 3 - Machine Learning Part 1
- Week 4 - Machine Learning Part 2
- Week 5 - Statistical Learning Part 1

Click on the link to access the week 3 hour 2 class recording.  
Video starts at 11:00. Skip first few minutes.  
Passcode: 69S?W^aT

- Week 3 - Support Vector Machine Python Code Drive Link** ☒
- Week 3 - Machine Learning Part 1 (LR, DT, SVM) PPT** ☒
- Week 3 - Assignment on Linear Regression and Decision Tree** ☒

You'll have to upload two screenshots.

**Screenshot1:**

- Download any .csv (excel) dataset from google.
- Use machine learning toolkit and apply linear regression on the corresponding data.
- Take a screenshot of the output (screenshot must contain both code and output) and upload the image file (only one image file which has the output).

**Note:** The dataset which you download should have only two attributes (two columns).

**Screenshot2:**

- Take the code from drive link.
- With reference to the code, apply ML function to implement decision tree to the given data in the code (You can use the same data given in the code).
- Take a screenshot of the output (screenshot must contain both code and output) and upload the image file (only one image file which has the output).

**Note:** Upload two images only, kindly do not upload the whole code.



# SATHYABAMA

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Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

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## List of Students Enrolled

| S.No | Reg.No   | Roll.No  | Name                  |
|------|----------|----------|-----------------------|
| 1    | 37120001 | 17SIT535 | AAGASH T              |
| 2    | 37120002 | 17SIT818 | ABHINASH KUMAR        |
| 3    | 37120003 | 17SIT536 | ABISHEK S             |
| 4    | 37120004 | 17SIT009 | AKASH R N             |
| 5    | 37120005 | 17SIT501 | AKASSH P              |
| 6    | 37120006 | 17SIT502 | AKSHAY ADITH R        |
| 7    | 37120007 | 17SIT018 | AKSHAYA V             |
| 8    | 37120008 | 17SIT503 | ANAND KUMAR RANJAN    |
| 9    | 37120009 | 17SIT504 | ANIRUDH SRINIVAS G N  |
| 10   | 37120010 | 17SIT901 | APARNA G              |
| 11   | 37120011 | 17SIT533 | ASWIN J RICHARDS      |
| 12   | 37120012 | 17SIT505 | BALAJI S              |
| 13   | 37120013 | 17SIT001 | BATHULA SOWMYA REDDY  |
| 14   | 37120014 | 17SIT802 | BENSON JOEL B         |
| 15   | 37120015 | 17SIT902 | BHARATHI R            |
| 16   | 37120016 | 17SIT002 | BURRIJANAKI RAM REDDY |
| 17   | 37120017 | 17SIT803 | CHRISTINA STEFFI F    |
| 18   | 37120018 | 17SIT921 | DANIEL N              |
| 19   | 37120019 | 17SIT813 | DEEBIKA S             |
| 20   | 37120020 | 17SIT817 | DEEPIKA M             |
| 21   | 37120021 | 17SIT903 | DEWASHISH KUMAR       |
| 22   | 37120022 | 17SIT816 | DHINESH KUMAR Y       |
| 23   | 37120023 | 17SIT506 | DINESHMANJU R         |
| 24   | 37120024 | 17SIT507 | DIVYA BARATHI T       |
| 25   | 37120025 | 17SIT904 | DIVYA S               |
| 26   | 37120026 | 17SIT003 | EMMANUEL CHARLES S    |



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|    |          |          |                                   |
|----|----------|----------|-----------------------------------|
| 27 | 37120027 | 17SIT905 | GAYATHRI K S                      |
| 28 | 37120028 | 17SIT508 | HARISH M                          |
| 29 | 37120029 | 17SIT819 | HARSH GUPTA                       |
| 30 | 37120030 | 17SIT814 | HIMANGSHU RANJAN CHANGMAI         |
| 31 | 37120031 | 17SIT509 | IMMANUEL STANLEY S                |
| 32 | 37120032 | 17SIT510 | IYER PRIYA ESWAR<br>PADALEESWARAN |
| 33 | 37120033 | 17sIT534 | JAGANNATHAN S                     |
| 34 | 37120034 | 17SIT532 | JAYA RASIKA J                     |
| 35 | 37120035 | 17SIT812 | JENILA J                          |
| 36 | 37120036 | 17SIT531 | JITHIN ABHISHEK FERNANDO J        |
| 37 | 37120037 | 17SIT811 | JONNALAGADDA GOUTHAM<br>KUMAR     |
| 38 | 37120038 | 17SIT511 | KARTHICK S                        |
| 39 | 37120039 | 17SIT512 | KAVIYA V                          |
| 40 | 37120040 | 17SIT906 | KEERTHIVASAN E                    |
| 41 | 37120041 | 17SIT513 | KISHORE M M                       |
| 42 | 37120042 | 17SIT907 | LOGESWARAN R                      |



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Course Name: PYTHON PROGRAMMING

Course Code: VAL1003

Faculty In charge: Dr. Asha

Course Duration: 30 Hours

Course Start Date: 24.11.2020

No of Students Registered: 140

No of Students Completed: 135



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## COURSE OBJECTIVES:

- To learn the basic concepts of Python and be familiar with python coding structures such as operators, loops and data types.
- To implement python functions, regular expressions and be competent enough to handle exceptions and file operations.
- To learn python GUI libraries, layout manager and work with various GUI widgets
- To build database applications using python.
- To create an entire Python project.

## COURSE OUTCOMES:

Upon successful completion of this course students should be able to:

- Demonstrate programs using Python operators, loops and data types.
- Construct Functions, regular expressions to build programs for file handling, exception handling.
- Develop Python GUI Applications.
- Deploy Python Database Applications.
- Create Mini Project using Python.

## COURSE CONTENT:

WEEK 1: (3 Hours)

Introduction - Overview - Installation - Basic Syntax – Input & Output - Operators.

WEEK 2: (3 Hours)

Decision Making - Loops – Exit – Break – Continue – Pass- Data types - String, List, Sets, Tuple, Dictionary.

WEEK 3: (3 Hours)

Functions- Default Arguments- Recursion- Modules

WEEK 4: (3 Hours)

Packages -Arrays – Iterators- Regular Expressions.

WEEK 5: (3 Hours)

Python Classes - Class Variables and Methods - Creating and managing objects- Constructors and Destructors – Inheritance – Types.

WEEK 6: (3 Hours)

File Handling – Modes- Read & Write - Exception Handling – Try Except- Built-in & User-defined Exceptions.

WEEK 7: (3 Hours)



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GUI Programming - Tkinter - Widgets - Layout Management - Events and Bindings.

WEEK 8: (3 Hours) Numpy-  
Operations on Arrays – Slicing- Split- Reshaping – Broadcasting – Filter.

WEEK 9: (3 Hours)  
Matplotlib - Machine Learning –Five number Summary – Data Distribution - Preprocessing.

WEEK 10: (3 Hours) Linear  
Regression- Database Programming - Connection - Create Database - Querying.



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## List of Students Enrolled

| S.No | Roll.No   | Name                                    |
|------|-----------|-----------------------------------------|
| 1    | 20S125091 | AARTHI. R                               |
| 2    | 20S125044 | ABDUL AJEES. I                          |
| 3    | 20S125021 | ABEL PRIYAKUMAR. P                      |
| 4    | 20S125015 | ABHISHEIK. R                            |
| 5    | 20S125067 | ABINAYA . R                             |
| 6    | 20S125065 | AGASH. K                                |
| 7    | 20S125060 | AJAY. B                                 |
| 8    | 20S125022 | ALINA MUSHTAQ                           |
| 9    | 20S125055 | ALOYSIUS JOSEPH                         |
| 10   | 20S125066 | AMAAN ALI                               |
| 11   | 20S125025 | AMRITHAA ASHOK                          |
| 12   | 20S125077 | ANISH KUMAR. A.S                        |
| 13   | 20S125031 | ANTON JUBIN . R                         |
| 14   | 20S125010 | AVINASH . K                             |
| 15   | 20S121004 | BANDARU MAHESH SAI                      |
| 16   | 20S125103 | BHARTI SINGH                            |
| 17   | 20S125006 | BHUVANESHWARAN . S                      |
| 18   | 20S125056 | BOOMINATHAN. D.M                        |
| 19   | 20S125099 | CHABATHULA VAZRA HIMA BINDHU            |
| 20   | 20S125012 | CHARULATHA. K                           |
| 21   | 20S121005 | CHERUKU NITHESH REDDY                   |
| 22   | 20S125088 | CHINDULURI REDDY VENKATA<br>MOHITHESWAR |
| 23   | 20S125008 | CLAUDIA PRINCY. V                       |
| 24   | 20S121001 | DANISH HARRISON. J                      |
| 25   | 20S125050 | DEEPAK. S                               |



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|    |           |                                 |
|----|-----------|---------------------------------|
| 26 | 20S125053 | DHANALAKSHMI. S                 |
| 27 | 20S125090 | DHANUSH RAJ. M                  |
| 28 | 20S125033 | DINESH RAJA RADHA               |
| 29 | 20S125092 | DISHABHAVANI. M                 |
| 30 | 20S125086 | DIVYADHARSINI. P.S              |
| 31 | 20S125070 | DON INIGO. S                    |
| 32 | 20S125001 | FELISHIA SELAS . C              |
| 33 | 20S125072 | GUNNAM SMARAN                   |
| 34 | 20S125035 | HARIHARAN. V                    |
| 35 | 20S125082 | HARISH. A                       |
| 36 | 20S125048 | IDRIS AHMED                     |
| 37 | 20S125040 | JABIN RAJA SOLOMON. S           |
| 38 | 20S125064 | JAGADEESH . V                   |
| 39 | 20S125026 | JANANI. N                       |
| 40 | 20S125052 | JASON KEVIN                     |
| 41 | 20S125003 | JAYASRI. R                      |
| 42 | 20S125068 | KALVA POOJITHA                  |
| 43 | 20S125087 | KARRI DUNDY NAGAVEERA SAIPRANAY |
| 44 | 20S129001 | KAVITHA . V.R                   |
| 45 | 20S125029 | KAVIYA. S                       |
| 46 | 20S125038 | KIRTHIGA. V                     |
| 47 | 20S125071 | KISHORE. K                      |
| 48 | 20S125002 | KISHORE KUMAR. K                |
| 49 | 20S125024 | KISHOREKUMAR. K                 |
| 50 | 20S125076 | KOLLIMARLA AKSHAY               |
| 51 | 20S125097 | KRISHNA KUMAR VYAS              |
| 52 | 20S125079 | KRISHNA PRIYA. R.S              |
| 53 | 20S125094 | MANIKKAM. S                     |
| 54 | 20S121002 | MANISH SINGH                    |
| 55 | 20S125102 | MATTA VENKATA RAHUL             |



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|    |           |                          |
|----|-----------|--------------------------|
| 56 | 20S125074 | MOHAMED ABDULLAH. K      |
| 57 | 20S125037 | MONEESH. S               |
| 58 | 20S125005 | MUKESH KUTTAN. C.P       |
| 59 | 20S125054 | MUTHU YASHWANTH. S       |
| 60 | 20S125080 | NALLA UDAY KIRAN         |
| 61 | 20S125030 | NAREN. D                 |
| 62 | 20S125084 | NARISSETTY SRINIVASA RAO |
| 63 | 20S125014 | NIKITA ANGELINE DAVID    |
| 64 | 20S125027 | PAVITHRAA. S             |
| 65 | 20S125004 | PRASANNA KUMAR. S        |
| 66 | 20S125020 | PRASEMA FEMI GRACE. P.W  |
| 67 | 20S125011 | PRAVEEN. N               |
| 68 | 20S125032 | PRAVIN. S                |
| 69 | 20S125009 | PRIYADARSHINI. R         |
| 70 | 20S125085 | RAJA REGAN. A            |
| 71 | 20S125018 | RAJALASHMI . R           |
| 72 | 20S125017 | RAMASAMY. N              |
| 73 | 20S125019 | REEYA B VARGHESE         |
| 74 | 20S125078 | ROHITH. P                |
| 75 | 20S125041 | SAGAR KUMAR              |
| 76 | 20S125062 | SAKTHI VINAYAK           |
| 77 | 20S125007 | SANJAIKANTH. J           |
| 78 | 20S125049 | SANJAY. S                |
| 79 | 20S125036 | SANJAYKUMAR . S.M        |
| 80 | 20S125096 | SANTHOSH. J              |
| 81 | 20S125083 | SARAGADAM LAYA NANDAN    |
| 82 | 20S125039 | SELSYA JENIFER. L        |
| 83 | 20S125073 | SHALOM JABARAJ. J        |
| 84 | 20S125063 | SIMSON. J                |
| 85 | 20S125100 | SOUMYADEEP DAS           |



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|     |           |                                |
|-----|-----------|--------------------------------|
| 86  | 20S125013 | SOWMIYA . R.K                  |
| 87  | 20S121003 | SREERAMOJU SHRADDHA            |
| 88  | 20S125045 | SRIDEVI. S                     |
| 89  | 20S125101 | SRIJITH. B                     |
| 90  | 20S125023 | SRINIVAS. K.N                  |
| 91  | 20S125057 | SRIRAM. J                      |
| 92  | 20S125046 | SRIVARDHAN. C                  |
| 93  | 20S125047 | SUDHARSAN. P                   |
| 94  | 20S125069 | SURAVARAM DHANUSH              |
| 95  | 20S125093 | SURIYA. S                      |
| 96  | 20S125028 | TAMILINIYAN. P                 |
| 97  | 20S125058 | THIRISHA . A                   |
| 98  | 20S125059 | THIRUNAVUKARASAR. N            |
| 99  | 20S125095 | TUFFIN SANDO. J                |
| 100 | 20S125075 | VAIBHAV SINGH                  |
| 101 | 20S125081 | VASANTHA KUMAR. M              |
| 102 | 20S125098 | VELAN. S                       |
| 103 | 20S125043 | VIGHNESH. SU                   |
| 104 | 20S125089 | VIGNESH. K. S                  |
| 105 | 20S125051 | VIJAYSRINIVASAN. M             |
| 106 | 20S125034 | VISHVASHWARRAN . V.B           |
| 107 | 20S125042 | VISHWA. L                      |
| 108 | 20S125061 | VISHWA. B                      |
| 109 | 20S125104 | TULLURI KEERTHINADH            |
| 110 | 20S125105 | KOLLI SRIKANTH                 |
| 111 | 20S125106 | PRANESH PRIYANSHU              |
| 112 | 20S125107 | R.V.NITESH KUMAR               |
| 113 | 20S125108 | NARAMAMIDI SURYA TARUNJEE      |
| 114 | 20S125109 | SRIJITH SAI L                  |
| 115 | 20S125110 | OBINNI VEERA VENKATA DURGA SAI |



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|     |           |                           |
|-----|-----------|---------------------------|
|     |           | SUDHEER                   |
| 116 | 20S125111 | LEVESH KUMAR V            |
| 117 | 20S125112 | ANKIT KUMAR               |
| 118 | 20S125113 | KOMMURI VAMSI             |
| 119 | 20S125114 | KUNAL KUMAR               |
| 120 | 20S125115 | YANAMADALA SATYA PRIYANKA |



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Course Name: Mobile Application Development

Course Code: VAL1004

Faculty Incharge: Ms. Aishwarya

Course Duration: 30 Hours

Course Start Date: 24.11.2020

No of Students Registered: 45

No of Students Completed: 42



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## Course Syllabus:



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|          |                                |         |
|----------|--------------------------------|---------|
| VAL 1004 | MOBILE APPLICATION DEVELOPMENT | Course  |
|          |                                | 8 Weeks |

#### COURSE OBJECTIVES:

- Students can create a LIVE course with in-depth knowledge and practical experience in the field of Mobile Application Development.
- As Mobile App Developers have huge requirement in large and small business areas, by learning it students can support many widely used applications for commercial and business purpose.

#### COURSE OUTCOMES:

Upon successful completion of this course students should be able to:

- Learn and understand the technology and business trends impacting mobile applications.
- Understand the components of Android.
- Design and develop user Interfaces for the Android platform.
- Exploring mobile application using Flutter platform.
- Deploy mobile applications using MIT app.

#### COURSE CONTENT:

**WEEK 1:** (3 Hours)

**Introduction to Android Studio** - Installation of Android Studio, Learn XML for user Interface, developing our first app.

**WEEK 2:** (3 Hours)



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**Android Application Development-** Deploying our App to a phone, Android application Development Environment, User Interface Components -View and layouts.Real time applications of layout

**WEEK 3:** (3 Hours)

**Hands on Basics of App Development (PART 1)**–Hello world app, creating virtual device, running app on emulator, Exploring Android manifest and gradle file, running app on device.

**WEEK 4:** (3 Hours)

**Hands on Basics of App Development (PART 2)**–Hello toast project, adding and editing views in layout editor, adding buttons, creating and changing layout variants, working with textview elements

**WEEK 5:** (3 Hours)

**Exploring Flutter Framework** – Introduction, Setting up environment – Building first flutter app – Flutter Reactive framework and development tools – Wonder thing about widgets - Cut up hello rectangle application – Building own widgets and Layout.

**WEEK 6:** (3 Hours)

**MIT App Inventor** – Introduction and create magic app – Buttons – Bill generator app – Data Picker – Gallery app without coding – List picker and create mini wiki app – Simple app using notifier – Web viewer Component.

**WEEK 7 & 8:** (3 Hours)

**Hands on Interactive App Development (PART 1)** – Beautifying the interface of a food delivery application, Calculator application to compute bills at restaurant along with cost, quantity, service charge and tax, Create voice translator app using MIT app.

**WEEK 9 & 10:** (3 Hours)

**Hands on Interactive App Development (PART 2)** - Interactive registration application that gets data from the user, Android application to send mail without email/gmail interaction, Age Calculator app using MIT app.



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## List of Students Enrolled

| S.No | Reg.No   | Roll.No   | Name                 |
|------|----------|-----------|----------------------|
| 1    | 38120001 | 18SIT9017 | AARTHY. G            |
| 2    | 38120002 | 18SIT9056 | ABHISHEK KUMAR       |
| 3    | 38120003 | 18SIT5030 | ABHISHEK SINGH       |
| 4    | 38120004 | 18SIT5001 | ABINAYA. A           |
| 5    | 38120005 | 18SIT9036 | ABIRAMI. M           |
| 6    | 38120006 | 18SIT9018 | ABIRAMI. R           |
| 7    | 38120007 | 18SIT1001 | AHILA. R R           |
| 8    | 38120008 | 18SIT5002 | AISHWARYA. R         |
| 9    | 38120009 | 18SIT8003 | ANNA GREETA TITUS T  |
| 10   | 38120010 | 18SIT9037 | ARCHANA. B           |
| 11   | 38120011 | 18SIT9051 | ARCHANA. C           |
| 12   | 38120012 | 18SIT9045 | ARTHEESWARI. P       |
| 13   | 38120013 | 18SIT5023 | ARUN KUMAR. S        |
| 14   | 38120014 | 18SIT1002 | ASHMITA SINGH        |
| 15   | 38120015 | 18SIT8004 | ASWIN KUMAR. K       |
| 16   | 38120016 | 18SIT9009 | BAKYA. B             |
| 17   | 38120017 | 18SIT9024 | BALABHARATHI. P      |
| 18   | 38120018 | 18SIT9053 | BALAJI. P            |
| 19   | 38120019 | 18SIT5021 | BALAMURUGAN. R       |
| 20   | 38120020 | 18SIT5037 | BALSUM DIWAN         |
| 21   | 38120021 | 18SIT5005 | BARANIDARAN. G T     |
| 22   | 38120022 | 18SIT8002 | CATHERINE JENIFER    |
| 23   | 38120023 | 18SIT9001 | DIVYA DHARSHINI. V   |
| 24   | 38120024 | 18SIT9012 | GAYATHRI. M          |
| 25   | 38120025 | 18SIT9006 | GNANA SOUNTHARIYA. S |
| 26   | 38120026 | 18SIT5033 | GNANAMANI. CT        |
| 27   | 38120027 | 18SIT5034 | GOWTHAM. S           |



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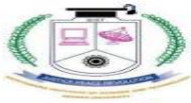
|    |          |           |                              |
|----|----------|-----------|------------------------------|
| 28 | 38120028 | 18SIT9054 | HAMID HUSSAIN                |
| 29 | 38120029 | 18SIT5024 | HARSHAN ANCHELL. S           |
| 30 | 38120030 | 18SIT9052 | HEMANTH REDDY. M             |
| 31 | 38120031 | 18SIT9002 | IMMACULATE MARIA<br>FERNANDO |
| 32 | 38120032 | 18SIT9050 | JAYAROSHINI. M               |
| 33 | 38120033 | 18SIT9043 | JEEVITHA. D                  |
| 34 | 38120034 | 18SIT5026 | JOHNWILIFREDDAVID            |
| 35 | 38120035 | 18SIT5022 | JOTHIKA. K                   |
| 36 | 38120036 | 18SIT9022 | JOTHILAKSHMI. V              |
| 37 | 38120037 | 18SIT9016 | KAMAL SHARMA. R              |
| 38 | 38120038 | 18SIT5006 | KAMEPALLI NITHISH            |
| 39 | 38120039 | 18SIT9044 | KARTHIKEYAN. N               |
| 40 | 38120040 | 18SIT9010 | KARTHIYAYINI. S              |
| 41 | 38120041 | 18SIT9042 | KAVIYA. S                    |
| 42 | 38120042 | 18SIT9040 | KEERTHIGA. N                 |
| 43 | 38120043 | 18SIT5007 | KUSHAL GOYAL. M              |
| 44 | 38120044 | 18SIT9014 | LAKSHMI PRIYA. M             |
| 45 | 38120045 | 18SIT9030 | LEELAVATHI. V                |



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**SCHOOL OF COMPUTING**  
**CERTIFICATE OF COMPLETION**

This is to certify that Mr. **Balamurugan** of **Department of Information Technology** has successfully completed the Value Added Course (30 hours) on **Mobile Application and Development** and has secured 100% in theory and practical examination conducted during June 2020 - December 2020. We wish you all the best towards a bright future.

**Dr. T. Sasikala**  
Dean,  
School of Computing





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Course Name: DATA SCIENCE

Course Code: VAL1008

Faculty In charge: Dr. S.REVATHY

Course Duration: 30 Hours

Course Start Date: 31.03.2021

No of Students Registered: 55

No of Students Completed: 50



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## COURSE CONTENT:

|  |              |          |
|--|--------------|----------|
|  | Data Science | Course   |
|  |              | 10 Weeks |

WEEK 1: (3 Hours)

**Introduction to Data Science-** Why Data Science-Data Science Components-Data Science Process-Data Science Jobs Roles-Tools for Data Science-Applications of Data Science-Challenges of Data Science Technology

WEEK 2: (3 Hours)

**Basics of R Programming** - Introduction to R, Installation of R and R Studio, Install Packages, Basic Computations

WEEK 3: (3 Hours)

**Essentials of R Programming**-Data Types –List, Vector, Matrix, String, Data Frame, Factors

WEEK 4 : (3 Hours)

**Control Structures**-if, for, while, repeat, next, break -,Functions

WEEK 5:

**Statistical Fundamentals**-Measures of Central Tendency in Data, Measures of Dispersion,Understanding Skewness in Data, ,Probability Distributions

WEEK 6: (3 Hours)

**Data Collection and Preparation**- Data Cleaning,Handling Missing Data,  
Normalisation

WEEK 7 : (3 Hours)

**Exploratory Data Analysis** -Basic Graphs,Treating Missing values,Working with Continuous and Categorical Variables

WEEK 8 : (3 Hours)

**Data Manipulation in R**-Filtering,Data Aggregation,Joining,Data Reshaping

WEEK 9 : (3 Hours)

**Data Visualisation** –Visualisation Introduction,gg plot,plotly,leaflet,digraph.



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WEEK 10:

(3 Hours)

**Predictive Modeling using Machine Learning** -Linear Regression,Decision Tree.Random Forest

COURSE OUTCOMES:

Upon successful completion of this course students should be able to:

- Understand the tools & techniques used in Data Science and Machine Learning
- Make data-driven, real-time, day-to-day organizational decisions
- Understand the concepts of statistics required to make strategic and effective business decisions
- Develop the skills required to implement machine learning algorithms
- Develop an in-depth understanding of data structure and data analysis.



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## List of Students Enrolled

| S.No | Reg.No   | Roll.No   | Name               |
|------|----------|-----------|--------------------|
| 1    | 38120046 | 18SIT9005 | LOGANAYAGI. S      |
| 2    | 38120047 | 18SIT5008 | MADHAN. L          |
| 3    | 38120048 | 18SIT5004 | MANISHA. B         |
| 4    | 38120049 | 18SIT9038 | MEERADEVI. L       |
| 5    | 38120050 | 18SIT9003 | MOHAMED ASHIK. N   |
| 6    | 38120051 | 18SIT9041 | MOKITHA. B         |
| 7    | 38120052 | 18SIT5038 | MUSKAN FIRDOUSI    |
| 8    | 38120053 | 18SIT9008 | NANDHINI. V        |
| 9    | 38120054 | 18SIT9007 | NITHYA. B          |
| 10   | 38120055 | 18SIT9027 | NITHYA. M          |
| 11   | 38120056 | 18SIT9039 | PAVITHRAPRIYA. K   |
| 12   | 38120057 | 18SIT9031 | PIYUSH SINHA       |
| 13   | 38120058 | 18SIT5010 | POOJA BALAKRISHNAN |
| 14   | 38120059 | 18SIT9028 | PRADYOTAN RAJU. V  |
| 15   | 38120060 | 18SIT9035 | PRAGADEESWARI. M   |
| 16   | 38120061 | 18SIT9026 | PRAKASH. S         |
| 17   | 38120062 | 18SIT5011 | PRAVIN. I          |
| 18   | 38120063 | 18SIT9020 | PREETHI. S         |
| 19   | 38120064 | 18SIT5012 | PRIYADHARASHINI. P |
| 20   | 38120065 | 18SIT5039 | RAHUL RAJ          |
| 21   | 38120066 | 18SIT1004 | RAMANUJAM. V K     |
| 22   | 38120067 | 18SIT9011 | ROHINI. M          |
| 23   | 38120068 | 18SIT5013 | ROHIT. V           |
| 24   | 38120069 | 18SIT5014 | ROSHAN CHRISTY. R  |
| 25   | 38120070 | 18SIT9021 | SABITHRA. D        |
| 26   | 38120071 | 18SIT9025 | SAKTHIVARSHINI. K  |
| 27   | 38120072 | 18SIT9046 | SANDHIYA. V        |



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|    |          |           |                           |
|----|----------|-----------|---------------------------|
| 28 | 38120073 | 18SIT9015 | SANGEETHA. K K            |
| 29 | 38120074 | 18SIT9049 | SANJUDHA. M               |
| 30 | 38120075 | 18SIT9034 | SANTHOSH KUMAR. M         |
| 31 | 38120076 | 18SIT9032 | SANTOSH KUMAR             |
| 32 | 38120077 | 18SIT5015 | SARAH PHILOMIN. V         |
| 33 | 38120078 | 18SIT9047 | SHIVA. M                  |
| 34 | 38120079 | 18SIT1003 | SMRITHI. R                |
| 35 | 38120080 | 18SIT9055 | SOLAPURI MANMOHAN         |
| 36 | 38120081 | 18SIT9013 | SOUNDHARYA. S             |
| 37 | 38120082 | 18SIT9033 | SWETHA. V                 |
| 38 | 38120083 | 18SIT5029 | T RAGHUL SUDHARSAN        |
| 39 | 38120084 | 18SIT9004 | TEKKI DEEPAK              |
| 40 | 38120085 | 18SIT5016 | THILAK DARSHAN. V         |
| 41 | 38120086 | 18SIT8001 | THOMSON YESHWANTH.<br>J M |
| 42 | 38120087 | 18SIT5025 | VAIBHAV VISHAL            |
| 43 | 38120088 | 18SIT5035 | VAISHNAVY. P              |
| 44 | 38120089 | 18SIT5020 | VASAN. S K                |
| 45 | 38120090 | 18SIT9029 | VIGNESH. G                |
| 46 | 38120091 | 18SIT5018 | VINAYAK SUBODH<br>RANJAN  |
| 47 | 38120092 | 18SIT9019 | VINITHA. S                |
| 48 | 38120093 | 18SIT9048 | VINOTH. V                 |
| 49 | 38120094 | 18SIT5019 | VISHNU. P                 |
| 50 | 38120095 | 18SIT5040 | YAHYA IBRAHIM IMTIAZ      |
| 51 | 38120096 | 18SIT5027 | YASHSWI KAUSHIK           |
| 52 | 38120097 | 18SIT9023 | YUVASRI. J                |
| 53 | 38120098 | 18SIT5041 | SIVAKUMAR. S              |
| 54 | 38120099 | 18SIT5042 | YADAV MANISH UDAY         |
| 55 | 38120100 | 18SIT5043 | MANOJ.A                   |



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Course Name: DATA VISUALIZATION

Course Code: VAL1009

Faculty In charge: Dr. NIRMALRANI

Course Duration: 30 Hours

Course Start Date: 9-4-2021

No of Students Registered: 42

No of Students Completed: 40



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|         |                                          |                             |
|---------|------------------------------------------|-----------------------------|
| VAL1009 | DATA VISUALIZATION USING MICROSOFT EXCEL | 10 Weeks Course<br>30 Hours |
|---------|------------------------------------------|-----------------------------|

## COURSE OBJECTIVES:

- To learn how to use Microsoft Excel tool from basics & Advanced level
- To be a master in Pivot Tables, Formulas, Macros, Data Analysis & More
- To learn the most advanced formulas, functions and types of analysis

## COURSE OUTCOMES:

Upon successful completion of this course students will be able to:

- Demonstrate working with worksheets, workbooks and entering data in Excel.
- Demonstrate formatting cells and data.
- Demonstrate using formulas and calculations in Excel.
- Demonstrate creating and using What-If Analysis tool.
- Demonstrate creating charts and diagrams.
- Demonstrate creating and using Pivot Tables and Charts.
- Describe techniques for sorting and filtering data

## COURSE CONTENT:

WEEK 1: (3 Hours)

Basics of Microsoft Excel –Date Formats.

WEEK 2: (3 Hours)

Creating and formatting charts – Working with Range Names.

WEEK 3: (3 Hours)

Data Analysis – Working with Formulas.

WEEK 4: (3 Hours)

Sort by Text – Sort by Numbers – Sort by Dates or Times – Sort by Cell Color – Sort by Font Color – Sort by Cell Icon – Sort by a Custom List – Sort by Rows – Sort by more than one Column or Row.

WEEK 5: (3 Hours)

Filter by Selected Values – Filter by Text – Filter by Date – Data Analysis with Excel – Filter by Numbers – Filter by Cell Color – Filter by Font Color – Filter by Cell Icon – Clear Filter – Advanced Filtering – Filter Using Slicers.



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WEEK 6: (3 Hours)

Subtotals with Ranges – Subtotals – Nested Subtotals – Quick Analysis – Quick Analysis with TOTALS – Sum – Average – Count – %Total – Running Total – Sum of Columns.

WEEK 7: (3 Hours)

Conditional Formatting (Highlight Cells Rules – Top / Bottom Rules – Data Bars – Color Scales – Icon Sets – New Rule – Clear Rules – Manage Rules.

WEEK 8: (3 Hours)

Using the VLOOKUP Function (with range lookup TRUE, with range lookup FALSE) – Using the HLOOKUP Function (with range lookup TRUE, with range lookup FALSE).

WEEK 9: (3 Hours)

Using the INDEX Function – Using MATCH Function – What-If Analysis.

WEEK 10: (3 Hours)

PivotTables – PivotTable Tools – Using Pictures in Column Charts – Band Chart – Thermometer Chart – Gantt Chart – Waterfall Chart – Sparklines – Pivot Charts (from PivotTable, without a PivotTable) – Working with Multiple Sheets – Creating Formula across Multiple Worksheets – Summarizing Data in Multiple Worksheets.



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## List of Enrolled Students

| S.No | Roll.No  | Reg.No   | Name                             |
|------|----------|----------|----------------------------------|
| 1    | 37120043 | 17SIT514 | MADHUMITHA<br>CHANDRASEKAR       |
| 2    | 37120044 | 17SIT005 | MOHAMED AYMAN<br>LATHEEF M       |
| 3    | 37120045 | 17SIT006 | MOHAMED MUDASSIR<br>SALEEM       |
| 4    | 37120046 | 17SIT019 | MOHAMMAD HABIB<br>MEMON          |
| 5    | 37120047 | 17SIT805 | MOHAMMED SALMAN                  |
| 6    | 37120048 | 17SIT908 | MOHANA PRIYA R                   |
| 7    | 37120049 | 17SIT516 | MURUGADOSS R                     |
| 8    | 37120050 | 17SIT909 | MUTHUMULA<br>SREELATHA           |
| 9    | 37120051 | 17SIT517 | NANDHITHA B                      |
| 10   | 37120052 | 17SIT518 | PADMASHRI R                      |
| 11   | 37120053 | 17SIT007 | PERNI SAI ASHIK                  |
| 12   | 37120054 | 17SIT815 | POLISHETTY UPENDHER<br>RAO       |
| 13   | 37120055 | 17SIT008 | PRASHANTHI NIHARIKA<br>KASIREDDY |
| 14   | 37120056 | 17SIT519 | PUGAZHANTHI R                    |
| 15   | 37120057 | 17SIT911 | RAMYA U                          |
| 16   | 37120058 | 17SIT806 | RAVIKUMAR P                      |
| 17   | 37120059 | 17SIT520 | RENGANATHAN C                    |
| 18   | 37120060 | 17SIT521 | ROHIT KUMAR TIWARI               |
| 19   | 37120061 | 17SIT010 | ROHITH<br>VAMAKANTHAN            |
| 20   | 37120062 | 17SIT912 | SALMAN                           |
| 21   | 37120063 | 17SIT523 | SARANYA SHREE S                  |
| 22   | 37120064 | 17SIT011 | SARAVANAN S                      |
| 23   | 37120065 | 17SIT807 | SAYED SAJID ALI                  |
| 24   | 37120066 | 17SIT913 | SELCIYA NAYAGAM M                |
| 25   | 37120067 | 17SIT914 | SHALINI T                        |
| 26   | 37120068 | 17SIT102 | SHALINI S                        |
| 27   | 37120069 | 17SIT915 | SHANMUGAPRIYAN N                 |
| 28   | 37120070 | 17SIT525 | SIVAKUMAR G                      |



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|    |          |          |                          |
|----|----------|----------|--------------------------|
| 29 | 37120071 | 17SIT013 | SNEHA J                  |
| 30 | 37120072 | 17SIT916 | SOWMIYA K                |
| 31 | 37120073 | 17SIT917 | SOWNDHARYA K             |
| 32 | 37120074 | 17SIT918 | SUBHIKSHA C              |
| 33 | 37120075 | 17SIT527 | SUPRIYA S                |
| 34 | 37120076 | 17SIT528 | SURUTHI M                |
| 35 | 37120077 | 17SIT808 | SYED MUBBASHIR<br>NAJMUL |
| 36 | 37120078 | 17SIT529 | THAMIZHARASI M           |
| 37 | 37120079 | 17SIT015 | VAISHNAVI D              |
| 38 | 37120080 | 17SIT809 | VAJRAPU ULLAS            |
| 39 | 37120081 | 17SIT919 | VARSHA M                 |
| 40 | 37120082 | 17SIT810 | VEDHANAYAKI R            |
| 41 | 37120083 | 17SIT014 | VEMANA AKHILNEERAJ       |
| 42 | 37120084 | 17SIT910 | VIJAY VINAYAK R          |