

**NAAC**  
Accreditation  
Cycle - 3

**SSR**  
Documents



# THUNCHAN MEMORIAL GOVT. COLLEGE, TIRUR

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Email: [tmgctirur@gmail.com](mailto:tmgctirur@gmail.com), Web: [www.tmgctirur.ac.in](http://www.tmgctirur.ac.in)

Criterion 1  
Curricular Aspects

## 1.2.1



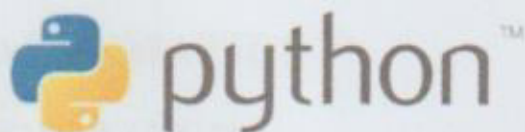
Add on Courses  
Department of Mathematics  
2021-22

# Department of Mathematics

T.M.G. College, Tirur

## ADD ON COURSES 2021-22

- Type Setting Using LATEX
- Data Analysis Using SPSS
- Python For Beginners
- Basics Of C Programmings



LATEX

*Registration Started...*



For details, contact: [hodmaths@tmgctirur.ac.in](mailto:hodmaths@tmgctirur.ac.in)



**DEPARTMENT OF MATHEMATICS**  
**T M GOVT COLLEGE, TIRUR**

**(ADD ON COURSE 2021-22)**

## **NAME OF THE COURSE: DATA ANALYSIS USING SPSS**

COURSE CODE :TMGCMAT 02

DURATION: 30 Hrs.

TARGET LEARNERS: 40 STUDENTS FROM DEPARTMENT OF MATHEMATICS

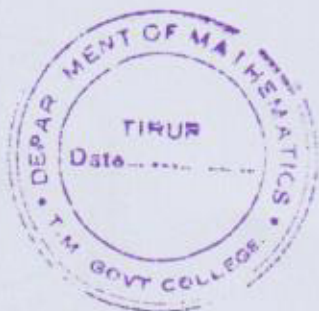
ELIGIBILITY: 10+2+ADMISSION ON B Sc MATHEMATICS

### **OBJECTIVES:**

1. The objective of the course is to provide participants with a basic knowledge of the program in order to be able to use it in a socio-economic context and in the exploration of corporate data.
2. The Course will be focus on how to analyse survey questionnaire using SPSS software.

### **OUTCOME OF THIS COURSE :**

1. After successfully qualifying practical examination, students will be awarded certificate .
2. Upon successful completion of this course, the student should be able to:
  - Understand the main features of SPSS
  - Perform descriptive analyses with SPSS



**Dr. RAJISH KUMAR. P.**  
ASSOCIATE PROFESSOR (PEN 60483)  
P.G. DEPARTMENT OF MATHEMATICS  
T.M. GOVERNMENT COLLEGE  
P.O. VAKKAD, TIRUR- 676 502

## PREAMBLE OF THE ADD ON COURSE

SPSS, standing for Statistical Package for the Social Sciences, is a powerful, user-friendly software package for the manipulation and statistical analysis of data. SPSS can produce basic descriptive statistics, such as averages and frequencies, as well as advanced tests such as time-series analysis and multivariate analysis. The program also is capable of producing high-quality graphs and tables. Knowing how to make the program work for you now will make future work in independent research projects and beyond much easier and more sophisticated.



**Dr. RAJISH KUMAR. P.**  
ASSOCIATE PROFESSOR (PEN 604910)  
RG. DEPARTMENT OF MATHEMATICS  
T.M. GOVT. COLLEGE  
TIRUR



## SYLLABUS

Text: Vijay Gupta, SPSS for Beginners, Published by VJ Books Inc, 1999.

**Module 1:** (10 hrs)

**Introduction to SPSS and Exploratory Data Analysis-** SPSS as a statistical software for data analysis, method of data input, data accessing or indexing, data frames.

**Module 2:** (10 hrs)

**Descriptive statistics using SPSS** – diagrammatic and graphical representation of data – bar diagram, histogram, pie diagram.

**Module 3:** (10 hrs)

**Summary Statistics and correlation using SPSS** - Measures of central tendency, measures of dispersion, measures of skewness and Kurtosis, Correlation coefficient.

### REFERENCES:

- 1) Dan Flynn: Student Guide to SPSS, Barnard College | Department of Biological Sciences
- 2) Sabine Landau and Brian S. Everitt: A Handbook of Statistical Analyses using SPSS, Chapman & Hall/CRC, 2004



A handwritten signature in green ink, appearing to read 'D. Rajish Kumar P.'.

DR. RAJISH KUMAR. P.  
ASSOCIATE PROFESSOR (PEN 604910)  
PG. DEPARTMENT

**T M GOVT COLLEGE, TIRUR**  
**DEPARTMENT OF MATHEMATICS**  
**ADD-ON PROGRAMME**

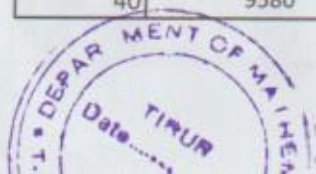
**TMGCMAT 02 : DATA ANALYSIS USING SPSS**

Academic Year : 2021-22

Periods of study: 30 Hours

**LIST OF SELECTED STUDENTS**

Sl no.	Admission number	Name	Signature
1	9472	AGNA M	
2	9681	AMAL P	
3	9383	ANJALI M V	
4	9517	ANJALI P	
5	9744	ANSIYA P	
6	9748	ARYA K P	
7	9394	ARYA M	
8	9424	ASWIN V	
9	9705	BHAVYA K	
10	9565	DILSHIDA P V	
11	9584	FINIYA P	
12	9574	JAMSHEER M	
13	9725	JILSHA K	
14	9411	JITHIN RAJ M P	
15	9452	MOHAMMED NASIM K K	
16	9721	MUHAMED SINAN	
17	9696	MUHAMMED ASHIQUE T	
18	9413	NIBA	
19	9598	NIHALA BINSI P	
20	9792	NOONA SHAHADHA E	
21	9741	NOOPURA T	
22	9796	RABIYATHUL BASHARIYA	
23	9582	RANJUN N	
24	9699	RASHMI M P	
25	9715	RIFNA P K	
26	9475	RITHUSREE MP	
27	9578	SADIYA ILLIKKAL	
28	9745	SAHANA	
29	9708	SARATH E	
30	9693	SERJILA K	
31	9740	SHAMNA NAFRIN P K	
32	9704	SHEHNA SHARIN	
33	9430	SHIBIN ASHIQ T K	
34	9605	SIBILA P	
35	9600	SNEHA VIJAYAN	
36	9695	SNIJA K	
37	9381	SREESHMA M V	
38	9400	SREESHMA P	
39	9709	SRUTHI T V	
40	9580	TAZKIYAH THASNEEM T	



Dr. PAJISH KUMAR. P.  
 ASSOCIATE PROFESSOR (PEN 604910)

**ATTENDANCE LIST OF ADD ON COURSE (2021-22)  
ADD ON COURSE ON DATA ANALYSIS USING SPSS**

**ATTENDANCE SHEET**

SI No.	Name	Date			Signature
		time	date	hour	
1	AGNA M	X	9-10 am	08/01/22	
2	AMAL P	X	10-11 am	01/01/22	
3	ANJALI M V	X	11-12 pm	01/01/22	
4	ANJALI P	X	12-1 pm	01/01/22	
5	ANSIYA P	X	2-3 pm	01/01/22	
6	ARYA K P	X	9-10 am	10/01/22	
7	ARYA M	X	10-11 am	22/01/22	
8	ASWIN V	X	11-12 pm	22/01/22	
9	BHAVYA K	X	12-1 pm	22/01/22	
10	DILSHIDA P V	X	2-3 pm	22/01/22	
11	FINIYA P	X	9-10 am	27/01/22	
12	JAMSHHEER M	X	10-11 am	29/01/22	
13	JILSHA K	X	11-12 pm	29/01/22	
14	JITHIN RAJ M P	X	12-1 pm	29/01/22	
15	MOHAMMED NASIM K K	X	2-3 pm	29/01/22	
16	MUHAMMED SINAN	X	9-10 am	04/02/22	
17	MUHAMMED ASHIQUE T	X	10-11 am	05/02/22	
18	NIBA	X	11-12 pm	05/02/22	
19	NIHALA BINSI P	X	12-1 pm	05/02/22	
20	SHAHADHA E	X	2-3 pm	05/02/22	
		X	9-10 am	08/02/22	
		X	10-11 am	19/2/22	
		X	11-12 pm	19/2/22	
		X	12-1 pm	19/2/22	
		X	2-3 pm	19/2/22	
		X	9-10 am	22/02/22	
		X	10-11 am	26/2/22	
		X	11-12 pm	26/2/22	
		X	12-1 pm	26/2/22	
		X	2-3 pm	26/2/22	







# THUNCHAN MEMORAIL GOVERNMENT COLLEGE TIRUR

P.G. DEPARTMENT OF MALAYALAM

ADD ON COURSE MARKLIST 2021-22

COURSE: Data Analysis Using SPSS

CLASS: II B Sc Mathematics

SL. NO	REG NO	NAME OF STUDENT	MARK OUT OF 100	P% OF MARKS	GRADE	REMARKS
1	TMMATB21001	SREESHMA M V	100	100	A+	
2	TMMATB21002	ANJALI M V	100	100	A+	
3	TMMATB21003	ARYA M	93	93	A+	
4	TMMATB21004	SREESHMA P	95	95	A+	
5	TMMATB21005	JITHIN RAJ M P	94	94	A+	
6	TMMATB21006	NIBA	100	100	A+	
7	TMMATB21007	ASWIN V	98	98	A+	
8	TMMATB21008	SHIBIN ASHIQ T K	100	100	A+	
9	TMMATB21009	MOHAMMED NASIM K K	100	100	A+	
10	TMMATB21010	AGNA M	100	100	A+	
11	TMMATB21011	RITHUSREE MP	98	98	A+	
12	TMMATB21012	ANJALI P	100	100	A+	
13	TMMATB21013	DILSHIDA P V	98	98	A+	
14	TMMATB21014	JAMSHEER M	100	100	A+	
15	TMMATB21015	SADIYA ILLIKKAL	100	100	A+	
16	TMMATB21016	TAZKIYAH THASNEEM T	90	90	A+	
17	TMMATB21017	RANJUN N	100	100	A+	
18	TMMATB21018	FINIYA P	96	96	A+	
19	TMMATB21019	NIHALA BINSI P	100	100	A+	
20	TMMATB21020	SNEHA VIJAYAN	96	96	A+	
21	TMMATB21021	SIBILA P	98	98	A+	
22	TMMATB21022	AMAL P	100	100	A+	
23	TMMATB21023	SERJILA K	100	100	A+	
24	TMMATB21024	SNIJA K	100	100	A+	
25	TMMATB21025	MUHAMMED ASHIQUE T	98	98	A+	
26	TMMATB21026	RASHMI M P	100	100	A+	
27	TMMATB21027	SHEHNA SHARIN	96	96	A+	
28	TMMATB21028	BHAVYA K	100	100	A+	
29	TMMATB21029	SARATH E	100	100	A+	
30	TMMATB21030	SRUTHI T V	98	98	A+	
31	TMMATB21031	RIFNA P K	94	94	A+	
32	TMMATB21032	MUHAMED SINAN	100	100	A+	
33	TMMATB21033	JILSHA K	92	92	A+	
34	TMMATB21034	SHAMNA NAFRIN P K	100	100	A+	
35	TMMATB21035	NOOPURA T	90	90	A+	
36	TMMATB21036	ANSIYA P	95	95	A+	
37	TMMATB21037	SAHANA	100	100	A+	
38	TMMATB21038	ARYA K P	94	94	A+	

39	TMMATB21039	NOONA SHAHADHA E	100	100	A+	
40	TMMATB21040	RABIYATHUL BASHARIYA	100	100	A+	



**Dr. RAJISH KUMAR. P.**  
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PG. DEPARTMENT OF MATHEMATICS  
T.M. GOVERNMENT COLLEGE  
P.O. VAKKAD, TIRUR- 676 502

No: TMMATA21001



# THUNCHAN MEMORIAL GOVERNMENT COLLEGE, TIRUR

VAKKAD PO, MALAPPURAM DT, KERALA, INDIA. PIN: 676 502

Email:tmgttirur@gmail.com, Website:www.tmgctirur.ac.in

## Certificate

*It is certified by duly appointed examiners that*

*Sri/Smt. AMRITHA.K*

*I B Sc Mathematics Class (Admission No.9858 )*

*has qualified the Add on course on*

***Basics Of C Programmings***

*offered by the*

***DEPARTMENT OF MATHEMATICS.***

*He / She has scored 96 % Marks*

*and has been placed in A+ Grade*

*for the examination held in*

***MARCH 2022***

**Given under the Seal of the College.**

Head of the Department

Tirur

Date: 31/03/2022

Principal



THUNCHAN MEMORIAL GOVT. COLLEGE , TIRUR  
DEPARTMENT OF MATHEMATICS

Course Summary Report

The Add on course on " Data Analysis Using SPSS " was offered to the second B Sc Mathematics students by the PG Department of Mathematics, TMG College, Tirur. Ms Jeena M P was appointed as Course Coordinator. The Registration Process of the course was started on 17.11.2021. 40 students of second B Sc Mathematics were enrolled and attended the course. The course classes started on 01 January 2022. The classes were closed on 26.02.2022. The examination was conducted for 40 students on 05.03.2022 and all these students were attended the exam. The result of the course exam was published on 07.03.2022 and was with a pass percentage of 100.



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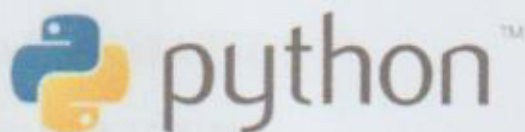


# Department of Mathematics

T.M.G. College, Tirur

**ADD ON COURSES 2021-22**

- Type Setting Using LATEX
- Data Analysis Using SPSS
- Python For Beginners
- Basics Of C Programmings



LATEX

*Registration Started...*



For details, contact: [hodmaths@tmgctirur.ac.in](mailto:hodmaths@tmgctirur.ac.in)



**DEPARTMENT OF MATHEMATICS**  
**T M GOVT COLLEGE, TIRUR**

**(ADD ON COURSE 2021-22)**

## **NAME OF THE COURSE: TYPE SETTING USING LATEX**

COURSE CODE :TMGCMAT 01

DURATION: 30 Hrs.

TARGET LEARNERS: 40 STUDENTS FROM DEPARTMENT OF MATHEMATICS

ELIGIBILITY: 10+2+ADMISSION ON B Sc MATHEMATICS

### **OBJECTIVES:**

1. The objective of the course is to develop competency in technical writing in students.
2. This course has been designed to provide a clear understanding of the basics of technical writing which will enable the participants to communicate their ideas effectively in the form of technical reports, journal papers etc., by using the technical writing tool LaTeX.

### **OUTCOME OF THIS COURSE :**

1. After successfully qualifying practical examination, students will be awarded certificate .
2. Students can typeset their own journal articles, technical reports, books, and slide presentations in all science subjects.



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# SYLLABUS

## PREAMBLE OF THE ADD ON COURSE

LaTeX is a document typesetting system that is used to produce high quality scientific documents, like articles, books, dissertations, technical reports, etc. Expertise in drafting technical documents is an indispensable skill for all professionals for it helps them to share their knowledge of technical subjects effectively in all domains of society and thus makes them competent in their professional careers.



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T.M. GOVERNMENT COLLEGE  
P.O. VAKKAD, TIRUR- 676 502



## SYLLABUS

**Text:** Lamport, Leslie. **LaTeX: A Document Preparation System( 2/e)** Pearson Education India, 1994.

### **Module 1:** (15 hrs)

Type setting using LATEX: Document classes, Modifying Text, Dividing the document, Environments, Typesetting Equations, Arrays and matrices, Floating bodies, Inserting Images, Example, Application (sec. 5.1 to 5.8 )

### **Module 11:** (15 hrs)


#### **Practical**

- 1) Type setting journal articles, technical reports, books, and slide presentations.
- 2) Automatic generation of bibliographies and indexes
- 3) Formatting documents containing sectioning, cross references, tables, equations and figures.
- 4) Beamer, Overleaf and other drawing tools

#### **REFERENCES:**

- 1) Hahn, Jane: LATEX for Everyone. Prentice Hall PTR, 1993
- 2) Grätzer, George: Math into LATEX. Springer Science & Business Media, 2013
- 3) Python for Education - Learning Maths and Physics using Python: Ajith Kumar B.P Inter University Accelerator Centre 2010



  
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PG. DEPARTMENT OF MATHEMATICS

**T M GOVT COLLEGE, TIRUR**  
**DEPARTMENT OF MATHEMATICS**  
**ADD-ON PROGRAMME**

**TMGCMAT 01 : TYPE SETTING USING LATEX**

Academic Year : 2021-22

Periods of study: 30 Hours

**LIST OF SELECTED STUDENTS**

Sl no.	Admission number	Name	Signature
1	9108	FATHIMA SHIFANA M K	<i>[Signature]</i>
2	9291	HIBA P P	<i>[Signature]</i>
3	9268	HUSNA FARHANA	<i>[Signature]</i>
4	9143	MUFEEDA I V	<i>[Signature]</i>
5	9098	SHAHANA SHARIN M	<i>[Signature]</i>
6	9123	SHIFNA SHERIN K P	<i>[Signature]</i>
7	9281	MUHAMMED HASHIM M	<i>[Signature]</i>
8	9000	ANJANA C	<i>[Signature]</i>
9	9030	ANJANA T	<i>[Signature]</i>
10	9033	DILNA T	<i>[Signature]</i>
11	9317	SOFIYA U P	<i>[Signature]</i>
12	9054	SURYA K P	<i>[Signature]</i>
13	9365	ABDUL HAKEEM P	<i>[Signature]</i>
14	9099	JITHIN BABU T	<i>[Signature]</i>
15	9136	ANAGHA K	<i>[Signature]</i>
16	9366	ANAGHA P	<i>[Signature]</i>
17	9309	ANEESHA K P	<i>[Signature]</i>
18	9051	ANJALI PRAKASH	<i>[Signature]</i>
19	9170	ANJANA T P	<i>[Signature]</i>
20	9372	ASWATHI T P	<i>[Signature]</i>
21	9310	LAKSHMI CHANDRA P	<i>[Signature]</i>
22	9314	MANNYA M	<i>[Signature]</i>
23	9106	MINI T	<i>[Signature]</i>
24	9053	RESHMA P P	<i>[Signature]</i>
25	9116	SREEDIVYA P P	<i>[Signature]</i>
26	9315	SREELAKSHMI P	<i>[Signature]</i>
27	9023	SREESHA T	<i>[Signature]</i>
28	9356	ATHUL K	<i>[Signature]</i>
29	9102	DEEPAK CHANDRAN N K	<i>[Signature]</i>
30	9209	HARSHAD K	<i>[Signature]</i>
31	9206	JASIL C K	<i>[Signature]</i>
32	9028	JYOTHISH MOHAN A	<i>[Signature]</i>
33	9320	SAKEEB ALI P K	<i>[Signature]</i>
34	9284	SRIDHIN CHANDRAN P	<i>[Signature]</i>
35	9322	SUBIN V P	<i>[Signature]</i>
36	9032	VISHNU V K	<i>[Signature]</i>
37	9195	FATHIMA FARISA N V	<i>[Signature]</i>
38	9377	MUHAMMED RASHID M	<i>[Signature]</i>
39	9378	MUHAMMED NISHAD M	<i>[Signature]</i>
40	9379	AJANYA M	<i>[Signature]</i>

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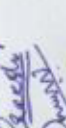




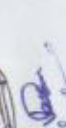
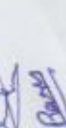
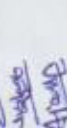


*[Handwritten signature]*

Dr. RAJISH KUMAR. P.



Sl No.	Name	time	date	hour
24	RESHMA P P			
25	SREEDIVYA P P			
26	SREELAKSHMI P			
27	SREESHA T			
28	ATHUL K			
29	DEEPAK CHANDRAN N K			
30	HARSHAD K			
31	JASIL C K			
32	JYOTHISH MOHAN A			
33	SAKEEB ALI P K			
34	SRIDHIN CHANDRAN P			
35	SUBIN V P			
36	VISHNU V K			
37	FATHIMA FARISA N V			
38	MUHAMMED RASHID M			
39	MUHAMMED NISHAD M			
40	AJANYA M			





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 P.O. VAKKAD, TIRUR-676 502

## THUNCHAN MEMORAIL GOVERNMENT COLLEGE TIRUR

P.G. DEPARTMENT OF MALAYALAM  
ADD ON COURSE MARKLIST 2021-22

COURSE: Type Setting Using LATEX

CLASS: III B Sc Mathematics

SL. NO	REG NO	NAME OF STUDENT	MARK OUT OF 100	P% OF MARKS	GRADE	REMARKS
1	TMMATC21001	IBRAHIM NADIRSHA	92	92	A+	
2	TMMATC21002	MUBASHIRA.M	100	100	A+	
3	TMMATC21003	ANJANA C	100	100	A+	
4	TMMATC21004	SREESHA T	94	94	A+	
5	TMMATC21005	JYOTHISH MOHAN A	94	94	A+	
6	TMMATC21006	ANJANA T	100	100	A+	
7	TMMATC21007	VISHNU V K	96	96	A+	
8	TMMATC21008	DILNA T	90	90	A+	
9	TMMATC21009	ANJALI PRAKASH	100	100	A+	
10	TMMATC21010	RESHMA P P	100	100	A+	
11	TMMATC21011	SURYA K P	88	88	A	
12	TMMATC21012	SHAHANA SHARIN M	99	99	A+	
13	TMMATC21013	JITHIN BABU T	100	100	A+	
14	TMMATC21014	DEEPAK CHANDRAN N K	86	86	A	
15	TMMATC21015	MINI T	100	100	A+	
16	TMMATC21016	FATHIMA SHIFANA M K	100	100	A+	
17	TMMATC21017	SREEDIVYA P P	87	87	A	
18	TMMATC21018	SHIFNA SHERIN K P	88	88	A	
19	TMMATC21019	ANAGHA K	100	100	A+	
20	TMMATC21020	MUFEEDA I V	100	100	A+	
21	TMMATC21021	ANJANA T P	100	100	A+	
22	TMMATC21022	JASIL C K	98	98	A+	
23	TMMATC21023	HARSHAD K	94	94	A+	
24	TMMATC21024	HUSNA FARHANA	100	100	A+	
25	TMMATC21025	MUHAMMED HASHIM M	94	94	A+	
26	TMMATC21026	SRIDHIN CHANDRAN P	100	100	A+	
27	TMMATC21027	HIBA P P	92	92	A+	
28	TMMATC21028	ANEESHA K P	100	100	A+	
29	TMMATC21029	LAKSHMI CHANDRA P	100	100	A+	
30	TMMATC21030	MANNYA M	96	96	A+	
31	TMMATC21031	SREELAKSHMI P	100	100	A+	
32	TMMATC21032	SOFIYA U P	100	100	A+	
33	TMMATC21033	SAKEEB ALI P K	82	82	A	
34	TMMATC21034	SUBIN V P	96	96	A+	
35	TMMATC21035	ABDUL HAKEEM P	100	100	A+	
36	TMMATC21036	ANAGHA P	100	100	A+	
37	TMMATC21037	ASWATHI T P	100	100	A+	
38	TMMATC21038	MUHAMMED RASHID.N.V	94	94	A+	

39	TMMATC21039	MUHAMMED NISHAD.M	100	100	A+	
40	TMMATC21040	AJANYA.M	100	100	A+	



A handwritten signature in green ink, consisting of several loops and a long horizontal stroke at the end.

**Dr. RAJISH KUMAR. R**  
ASSOCIATE PROFESSOR (PEN 604910)  
PG. DEPARTMENT OF MATHEMATICS  
T.M. GOVERNMENT COLLEGE  
PO, VAKKAD, TIRUR- 676 502

No: TMMATC21034



# THUNCHAN MEMORIAL GOVERNMENT COLLEGE, TIRUR

VAKKAD PO, MALAPPURAM DT, KERALA, INDIA. PIN: 676 502

Email:tmgtirur@gmail.com, Website:www.tmgctirur.ac.in

## Certificate

*It is certified by duly appointed examiners that*

*Sri/Smt. SUBIN V P*

*III B Sc Mathematics Class (Admission No.9322 )*

*has qualified the Add on course on*

***Type Setting Using LATEX***

*offered by the*

***DEPARTMENT OF MATHEMATICS.***

*He / She has scored **96** % Marks*

*and has been placed in **A+** Grade*

*for the examination held in*

***MARCH 2022***

**Given under the Seal of the College.**

Head of the Department

Tirur

Date: 31/03/2022

Principal






THUNCHAN MEMORIAL GOVT. COLLEGE , TIRUR  
DEPARTMENT OF MATHEMATICS

Course Summary Report

The Add on course on " TMGCMAT 01: TYPE SETTING USING LATEX " was offered to the third B Sc Mathematics students by the PG Department of Mathematics, TMG College, Tirur. Dr. Jalsiya M P was appointed as Course Coordinator. The Registration Process of the course was started on 17.11.2021. 40 students of third B Sc Mathematics were enrolled and attended the course. The course classes started on 3<sup>rd</sup> january 2022. The classes were closed on 26.02.2022. The examination was conducted for 40 students on 28.02.2022 and all these students were attended the exam. The result of the course exam was published on 02.03.2022 and was with a pass percentage of 100.



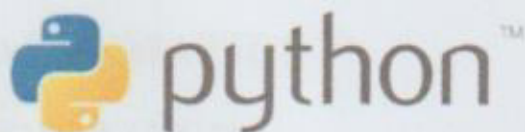
  
Dr. RAJISH KUMAR. P.  
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P.G. DEPARTMENT OF MATHEMATICS  
T.M. GOVERNMENT COLLEGE  
P.O. VAKKAD, TIRUR- 676 502

# Department of Mathematics

## T.M.G. College, Tirur

### ADD ON COURSES 2021-22

- Type Setting Using LATEX
- Data Analysis Using SPSS
- Python For Beginners
- Basics Of C Programmings



LATEX

*Registration Started...*



For details, contact: [hodmaths@tmgctirur.ac.in](mailto:hodmaths@tmgctirur.ac.in)

# PYTHON FOR BEGINNERS

## COURSE OUTLINE

Course Code: TMGCMAT03

Overview

### Course Introduction

This course is an introduction to fundamental programming concepts by way of the Python programming language. Python is a high-level interpreted language that has many benefits, including easy-to-read and easy-to-write syntax and powerful libraries that provide additional functionality. Even though Python is a great programming language for beginners, it is also used extensively for practical applications in engineering and data science. This course is intended for people with no or very little prior programming experience. It covers a range of topics, such as data types, control flow, functions, file operations, and object-oriented programming. When you finish this course, you will be able to create Python programs for a variety of applications.

### Prerequisite

This course has no prerequisites and avoids all but the simplest mathematics. Anyone with moderate computer experience should be able to master the materials in this course.

### Targeted Group

M.Sc. Mathematics

### Duration

The course will be of 60 hours which are divided into 40 contact hours and 20 lab work hours. The class timings will be fixed based the convenience of the participants and the faculty, either on weekends or working days.

### Learning Outcome

When students' complete *PYTHON FOR BEGINNER*, they will be able to:

- Build basic programs using fundamental programming constructs like variables, conditional logic, looping, and functions
- The core data structures for creating useful programs: strings, lists, dictionaries, and file manipulation
- Work with user input to create fun and interactive programs

## Course Outline

Modules	Contact Hours	Lab Hours
<b>Unit 1. Fundamentals of Python</b> <ul style="list-style-type: none"> <li>▪ Introduction to Python</li> <li>▪ Running Python Programs</li> <li>▪ Writing Python code</li> </ul>	2 hours	-
<b>Unit 2. Operators</b> <ul style="list-style-type: none"> <li>▪ Arithmetic Operators</li> <li>▪ Comparison (Relational) Operators</li> <li>▪ Assignment Operators</li> <li>▪ Logical Operators</li> <li>▪ Bitwise Operators</li> <li>▪ Membership Operators</li> <li>▪ Identity Operators</li> </ul>	4 hours	2 hours
<b>Unit 3. Input and Flow Control Statements</b> <ul style="list-style-type: none"> <li>▪ Conditional Statements (if, if-else, if-else-if &amp; nested if-else)</li> <li>▪ Transfer Statements (Break, Continue &amp; Pass)</li> <li>▪ Iterative Statements (for &amp; while loops)</li> </ul>	4 hours	2 hours
<b>Unit 4. Data Structures I</b> <ul style="list-style-type: none"> <li>▪ Arrays</li> <li>▪ Lists &amp; Strings</li> </ul>	6 hours	3 hours
<b>Unit 5. Functions</b> <ul style="list-style-type: none"> <li>▪ Built-in Functions</li> <li>▪ User-Defined Functions</li> <li>▪ Types of arguments</li> <li>▪ Recursive Functions</li> </ul>	4 hours	2 hours
<b>Unit 6. Basic Data Structures II</b> <ul style="list-style-type: none"> <li>▪ Tuples</li> <li>▪ Sets</li> <li>▪ Dictionaries</li> </ul>	3 hours	2 hours
<b>Unit 7. File Handling</b> <ul style="list-style-type: none"> <li>▪ Create / Read / Write files</li> <li>▪ List / Copy / Rename / Delete files from Directory</li> </ul>	2 hours	1 hour
<b>Unit 8. Regular Expressions</b> <ul style="list-style-type: none"> <li>▪ RegEx Functions</li> <li>▪ Python RegEx- Metacharacters</li> <li>▪ Python RegEx- Special sequences</li> <li>▪ Python RegEx- Sets</li> </ul>	3 hours	2 hours
<b>Unit 9. Exception Handling</b> <ul style="list-style-type: none"> <li>▪ Built-in Exceptions</li> <li>▪ Common Exceptions</li> </ul>	4 hours	2 hours

<ul style="list-style-type: none"> <li>▪ User-Defined Exceptions</li> <li>▪ Exception handling with Try Except Clause</li> <li>▪ How to raise an Exception</li> </ul>		
<b>Unit 10. Object-Oriented Programming</b> <ul style="list-style-type: none"> <li>▪ Class</li> <li>▪ Objects</li> <li>▪ Polymorphism</li> <li>▪ Encapsulation</li> <li>▪ Inheritance</li> <li>▪ Data Abstraction</li> </ul>	8 hours	4 hours


## Texts

Head-First Python: A Brain-Friendly Guide (2nd Edition)

Python Programming: An Introduction to Computer Science (3rd Edition)

Programming Python: Powerful Object-Oriented Programming (4th Edition)



  
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 ASSOCIATE PROFESSOR (PEN 604910)  
 PG. DEPARTMENT OF MATHEMATICS  
 T.M. GOVERNMENT COLLEGE  
 P.O. VAKKAD, TIRUR- 676 502

**T M GOVT COLLEGE, TIRUR**  
**DEPARTMENT OF MATHEMATICS**  
**ADD-ON PROGRAMME**

TMGCMAT 03: Python For Beginners

Academic Year : 2021-22

Periods of study: 60 Hours

**LIST OF SELECTED STUDENTS**

Sl no.	Admission number	Name	Signature
1	10154	AISWARYA.K.V	<i>Aishu</i>
2	10155	AKSHAYA.C	<i>Ashu</i>
3	10158	SHAFNA.I.P	<i>Shafna</i>
4	10168	SHAHANA.C.T	<i>Shahana</i>
5	10172	DIVYA THARA	<i>Divya</i>
6	10176	ANJANA KRISHNA.P.T	<i>Anjana</i>
7	10177	SANIKA K SHIBU	<i>Sanika</i>
8	10178	SHIDHA.K	<i>Shidha</i>
9	10241	AHANNA.C	<i>Ahanna</i>
10	10246	SRUTHI.P	<i>Sruthi</i>
11	10247	HABEEBA.N.P	<i>Habeeba</i>
12	10250	SAHEER ANAS.A.K	<i>Saheer</i>
13	10266	SREELAKSHMI SUKUMAR.D.K	<i>Sreelakshmi</i>
14	10270	AMRUTHA.K	<i>Amrutha</i>
15	10276	AJISHA.M	<i>Ajisha</i>
16	10277	JISHNA.K.T	<i>Jishna</i>
17	9575	MEGHA U M	<i>Megha</i>
18	9587	HARITHA KRISHNAN	<i>Haritha</i>
19	9591	ANILA P V	<i>Anila</i>
20	9593	CHAITHANYA P K	<i>Chaithanya</i>
21	9607	RINCY P	<i>Rincy</i>
22	9614	JOSE THOMAS	<i>Jose</i>
23	9649	ATHUL POOZHAMMAL	<i>Athul</i>
24	9652	SNEHA T	<i>Sneha</i>
25	9657	DRISYA K K	<i>Drisya</i>
26	9673	ANJANA A	<i>Anjana</i>
27	9681	SISIRA C	<i>Sisira</i>
28	9749	ASHNA V	<i>Ashna</i>
29	9752	ANUPA K J	<i>Anupa</i>
30	9756	ATHULYA SREE K	<i>Athulya</i>
31	9812	MUHSINA SHERIN CC	<i>Muhsina</i>
32	9813	AMRUTHA K	<i>Amrutha</i>
33	9814	AKSHAYA POOZHAMMAL	<i>Akshaya</i>
34	9842	RISHANA P P	<i>Rishana</i>
35	9844	VANDANA I K	<i>Vandana</i>



*[Signature]*  
**Dr. RAJISH KUMAR. P.**  
 ASSOCIATE PROFESSOR (PEN 604910)  
 P.G. DEPARTMENT OF MATHEMATICS  
 T.M. GOVERNMENT COLLEGE  
 P.O. VAKKAD, TIRUR- 676 502







# THUNCHAN MEMORAIL GOVERNMENT COLLEGE TIRUR


P.G. DEPARTMENT OF MALAYALAM  
ADD ON COURSE MARKLIST 2021-22

COURSE: Python For Beginners

CLASS: I MSc Mathematics

SL. NO	REG NO	NAME OF STUDENT	MARK OUT OF 100	P% OF MARKS	GRADE	REMARKS
1	TMMATD21001	AISWARYA.K.V	98	98	A+	
2	TMMATD21002	AKSHAYA.C	88	88	A	
3	TMMATD21003	SHAFNA.I.P	88	88	A	
4	TMMATD21004	SHAHANA.C.T	89	89	A	
5	TMMATD21005	DIVYA THARA	84	84	A	
6	TMMATD21006	ANJANA KRISHNA.P.T	100	100	A+	
7	TMMATD21007	SANIKA K SHIBU	100	100	A+	
8	TMMATD21008	SHIDHA.K	98	98	A+	
9	TMMATD21009	AHANNA.C	100	100	A+	
10	TMMATD21010	SRUTHI.P	100	100	A+	
11	TMMATD21011	HABEEBA.N.P	100	100	A+	
12	TMMATD21012	SAHEER ANAS.A.K	87	87	A	
13	TMMATD21013	SREELAKSHMI SUKUMAR.D.K	94	94	A+	
14	TMMATD21014	AMRUTHA.K	100	100	A+	
15	TMMATD21015	AJISHA.M	100	100	A+	
16	TMMATD21016	JISHNA.K.T	98	98	A+	



  
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PO. VAKKAD, TIRUR- 676 502

# THUNCHAN MEMORAIL GOVERNMENT COLLEGE TIRUR


P.G. DEPARTMENT OF MALAYALAM  
ADD ON COURSE MARKLIST 2021-22

COURSE: Python For Beginners

CLASS: II M Sc Mathematics

SL. NO	REG NO	NAME OF STUDENT	MARK OUT OF 100	P% OF MARKS	GRADE	REMARKS
1	TMMATD21017	MEGHA U M	94	94	A+	
2	TMMATD21018	HARITHA KRISHNAN	98	98	A+	
3	TMMATD21019	ANILA P V	100	100	A+	
4	TMMATD21020	CHAITHANYA P K	100	100	A+	
5	TMMATD21021	RINCY P	96	96	A+	
6	TMMATD21022	JOSE THOMAS	88	88	A	
7	TMMATD21023	ATHUL POOZHAMMAL	100	100	A+	
8	TMMATD21024	SNEHA T	96	96	A+	
9	TMMATD21025	DRISYA K K	100	100	A+	
10	TMMATD21026	ANJANA A	98	98	A+	
11	TMMATD21027	SISIRA C	100	100	A+	
12	TMMATD21028	ASHNA V	98	98	A+	
13	TMMATD21029	ANUPA K J	100	100	A+	
14	TMMATD21030	ATHULYA SREE K	100	100	A+	
15	TMMATD21031	MUHSINA SHERIN CC	86	86	A	
16	TMMATD21032	AMRUTHA K	90	90	A+	
17	TMMATD21033	AKSHAYA POOZHAMMAL	100	100	A+	
18	TMMATD21034	RISHANA P P	100	100	A+	
19	TMMATD21035	VANDANA I K	88	88	A	



  
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PG. DEPARTMENT OF MATHEMATICS  
T.M. GOVERNMENT COLLEGE  
RO. VAKKAD, TIRUR- 676 502

No: TMMATD21031



# THUNCHAN MEMORIAL GOVERNMENT COLLEGE, TIRUR

VAKKAD PO, MALAPPURAM DT, KERALA, INDIA. PIN: 676 502

Email:tmgtirur@gmail.com, Website:www.tmgctirur.ac.in

## Certificate

*It is certified by duly appointed examiners that*

*Sri/Smt. MUHSINA SHERIN CC*

*II M Sc Mathematics Class (Admission No.9812 )*

*has qualified the Add on course on*

***Phython For Beginners***

*offered by the*

***DEPARTMENT OF MATHEMATICS.***

*He / She has scored **86** % Marks*

*and has been placed in **A** Grade*

*for the examination held in*

***MARCH 2022***

**Given under the Seal of the College.**

Head of the Department  
Tirur  
Date: 31/03/2022


Principal



## Course Summary Report

The Add on course on "Python for beginners" was offered to the M.Sc. students by the PG Department of Mathematics, TMG College, Tirur. The Registration Process of the course was started on 03.01.2022 and closed on 12.01.2022. The registration was done online mode. 35 students of M.Sc I year and II year were enrolled and attended the course. The course classes started on 15th January 2022. The classes were engaged as 3 days in a month and classes were closed on 01.04.2022. The examination was conducted for 35 students on 06.04.2022 and all these students were attended the exam. The result of the course exam was published on 08.04.2022 and was with a pass percentage of 100.



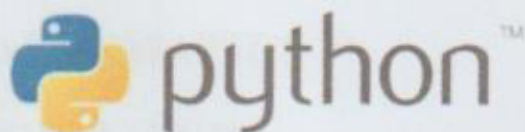
  
Dr. RAJISH KUMAR. P.  
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T.M. GOVERNMENT COLLEGE  
P.O. VAKKAD, TIRUR- 676 502

# Department of Mathematics

T.M.G. College, Tirur

**ADD ON COURSES 2021-22**

- Type Setting Using LATEX
- Data Analysis Using SPSS
- Python For Beginners
- Basics Of C Programmings



LATEX

*Registration Started...*



For details, contact: [hodmaths@tmgctirur.ac.in](mailto:hodmaths@tmgctirur.ac.in)

# POST GRADUATE DEPARTMENT OF MATHEMATICS

T. M. GOVT. COLLEGE, TIRUR

CERTIFICATE COURSE IN BASICS OF C PROGRAMMING

Course code:TMGCMAT04

## Introduction

C is a high level computer programming language. It was created by Dennis Ritchie in the 1970s, and remains widely used and influential because it allows direct access to memory and many "low level" computer operations. By design, C's features cleanly reflect the capabilities of the targeted CPUs.

## Title and Course Code:

**TMGCMAT04: BASICS OF C PROGRAMMING**

Duration of course: 36 hours (20 Hours for Theory + 16 Hours for Practical)

## Scope:

This is the course on Basics of C Programming capable of writing readable C programs to solve computational problems that they may have to solve in their professional life. The course content is decided to cover the essential programming fundamentals which can be taught within the given slots in the curriculum. This course has 2 Hours per week for practicing programming in C. The instructor is supposed to give homework/assignments to write the listed programs in the rough record as and when the required theory part is covered in the class. The students are expected to come with the required program written in the rough record for the lab classes.

## Course outcome

On the successful completion of the course, students will be able to

CO1	Understand basics of Programming and Analyze a computational problem
CO2	Develop readable C programs with branching statements
CO3	Develop an algorithm/flowchart to find its solution
CO4	Develop C programs which use Arithmetic, Logical, Relational or Bitwise operators.
CO5	Develop readable C programs with looping statements

### Programme structure:

Candidates for admission to the course should be post graduate student of Department of Mathematics, St.Peter's College Kolenchery. Certificates will be issued to the candidates on successful completion of the course.

SI. No.	Paper	MAXIMUM Marks	MINIMUM REQUIREMENT OF MARKS
1	Paper-I- Theory	30	40%
2	Paper-II- Practical	40	40%
3	Internal Assessment	30	40%
<b>TOTAL</b>		100	40%

### Components of Internal Evaluation:

Attendance	Assignment	Viva	Total
10	10	10	30

### Scheme of distribution of instructional hours:

Theory	Practical	Total
20 hours	1 hours	35 hours

## SYLLABUS

### Module 1 (Basics of Computer Hardware)

Basics of Computer Architecture: processor, Memory, Input & Output devices, Application Software & System software: Compilers, interpreters, High level and low level languages.

### Module 2 (Basics of Software)

Introduction to structured approach to programming, Flowchart Algorithms, Pseudo code (bubble sort, linear search - algorithms and pseudocode)

### Module 3 (Program Basics)

Basic structure of C program: Character set, Tokens, Identifiers in C, Variables and Data Types, Constants, Console IO Operations, printf and scanf. Operators and Expressions: Expressions and Arithmetic Operators, Relational and Logical Operators, Conditional operator, size of operator, Assignment operators and Bitwise Operators. Operators Precedence.

## Module 4 (Control Flow Statements)

If Statement, Switch Statement, Unconditional Branching using goto statement, While Loop, Do While Loop, For Loop, Break and Continue statements. (Simple programs covering control flow)

## Module 5 (Arrays and strings)

Arrays Declaration and Initialization, 1-Dimensional Array, 2-Dimensional Array. String processing: In built String handling functions (strlen, strcpy, strcat and strcmp, puts, gets) Linear search program, bubble sort program, simple programs covering arrays and strings

### Software Lab Program List

1. Display "Hello World"
2. Read two numbers, add them and display their sum
3. Read the radius of a circle, calculate its area and display it
4. Evaluate the arithmetic expression  $((a - b / c * d + e) * (f + g))$  and display its solution. Read the values of the variables from the user through the console.
5. Read 3 integer values and find the largest among them.
6. Read a Natural Number and check whether the number is prime or not
7. Read a Natural Number and check whether the number is Armstrong or not
8. Read n integers, store them in an array and find their sum and average
9. Read n integers, store them in an array and search for an element in the array using an algorithm for Linear Search
10. Read n integers, store them in an array and sort the elements in the array using Bubble Sort algorithm
11. Read a string (word), store it in an array and check whether it is a palindrome word or not.
12. Read two strings (each one ending with a \$ symbol), store them in arrays and concatenate them without using library functions.
13. Read a string (ending with a \$ symbol), store it in an array and count the number of vowels, consonants and spaces in it.
14. Read two inputs each representing the distances between two points in the Euclidean space, store these in structure variables and add the two distance values.

### REFERENCES

1. Schaum Series, Gottfried B.S., Tata McGraw Hill, Programming with C
2. E. Balagurusamy, McGraw Hill, Programming in ANSI C
3. Asok N Kamthane, Pearson, Programming in C
4. Anita Goel, Pearson, Computer Fundamentals

Prepared by  
Dr. Anilkumar M. P  
Assistant Professor



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**T M GOVT COLLEGE, TIRUR**  
**DEPARTMENT OF MATHEMATICS**  
**ADD-ON PROGRAMME**

TMGCMAT 04: Basics Of C Programmings


Academic Year : 2021-22

Periods of study: 36 Hours

**LIST OF SELECTED STUDENTS**

Sl no.	Admission number	Name	Signature
1	9858	AMRITHA.K	
2	9865	VEENA.N.P	
3	9896	ARATHI.M	
4	9900	GAYATHRI.K	
5	9907	GOPIKA.M.P	
6	9910	SOORAJ KRISHNA.J	
7	9911	DIYA.T	
8	9913	ASWIN.K.P	
9	9919	RIYA GANESH	
10	9921	APARNA ANANDH.C	
11	9929	ABHAY.M.P	
12	10019	FAHID HUSSAIN.K	
13	10020	MOHAMMED BADUSHA.O	
14	10023	SAYANA.V.P	
15	10025	MUHAMMED SAMEEHAM	
16	10026	SUFAILATH AFNA.C	
17	10032	SAINABA THASNI.E.P	
18	10045	MURSSIDA.V	
19	10049	MEGHNA.K	
20	10065	SOORAJ.K	
21	10066	ADHARSH.M.K	
22	10084	SHAMILA.M.P	
23	10088	AFNASHERI.T.P	
24	10091	GAYATHRI.K	
25	10092	MEGHA.P.T	
26	10093	NIMYA.T	
27	10121	ADHITHYA.P	
28	10134	RENA SULTHANA.S.P	
29	10223	ARUN.P.K	
30	10230	PRAVEEN KUMAR.K	
31	10236	FATHIMA SANA.K.M	
32	10239	ATHIRA.P	



  
**Dr. RAJISH KUMAR. P.**  
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No: TMMATD21015



# THUNCHAN MEMORIAL GOVERNMENT COLLEGE, TIRUR

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Email:tmgtirur@gmail.com, Website:www.tmgctirur.ac.in

## Certificate

*It is certified by duly appointed examiners that*

*Sri/Smt. AJISHA.M*

*I MSc Mathematics Class (Admission No.10276 )*

*has qualified the Add on course on*

***Phython For Beginners***

*offered by the*

***DEPARTMENT OF MATHEMATICS.***

*He / She has scored **100** % Marks*

*and has been placed in **A+** Grade*

*for the examination held in*

***MARCH 2022***

**Given under the Seal of the College.**

Head of the Department

Tirur

Date: 31/03/2022


Principal



## Course Summary Report

The Add on course on " **CERTIFICATE COURSE IN BASICS OF C PROGRAMMING** " was offered to the First semester B.Sc mathematics students by the PG Department of Mathematics, TMG College, Tirur. The Registration Process of the course was started on 22.11.2021 and closed on 01.12.2021. The registration was done online mode. students BSc Mathematics I year were enrolled and attended the course. The course classes started on 4th December 2021. The classes were engaged on Saturday in a week and classes were closed on 04. 02.2022. The examination was conducted for 32 students on 06.04.2022 and all these students were attended the exam. The result of the course exam was published on 08,04.2022 and was with a pass percentage of 100.



  
**Dr. RAJISH KUMAR. P.**  
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