

MATLAB

20-21

Sree Narayana College, Kollam
Department of Mathematics
Certificate Course Syllabus 2020-21

Title of the Course: MATLAB Programming

Contact Hours: 30 hr [15(T) + 15(P)]

Module 1:(10 hours)

The MATLAB Environment MATLAB Basics – Variables, Numbers, Operators, Expressions, Input and output. Vectors, Arrays – Matrices

Module 2 (5 hours)

Built-in Functions

User defined Functions

Module 3 (5 hours)

Files and File Management – Import/Export Basic 2D, 3D plots

Graphic handling

Module 4 (10 hours)

Conditional Statements, Loops MATLAB Programs – Programming and Debugging.

Algebraic equations Basic Symbolic Calculus and Differential equations

Numerical Techniques and Transforms

Applications of MATLAB Programming.

Sree Narayana
Principal
Sree Narayana College
Kollam



Reference.

1. "A Guide to MATLAB - for Beginners and Experienced Users", 2nd Ed., Brian R. Hunt, Ronald L. Lipsman, Jonathan M. Rosenberg, Cambridge University Press, (2006).
2. "Essentials of MATLAB Programming", 2nd Ed., Stephen J. Chapman, Cengage Learning, (2009).
3. "MATLAB Demystified", David McMahon, The McGraw-Hill Companies, (2007).
4. "MATLAB® for Engineers", 3rd Ed., Holly Moore, Pearson Education, Inc., (2012).
5. "Engineering computation with MATLAB", 2nd Ed., David M. Smith, Pearson Education, Inc., (2010).

Sree Narayana College, Kollam

Department of Mathematics

20120-21

Certificate Course Syllabus

Title of the Course : MATLAB Programming

Relevance of the Course

MATLAB is a high-level programming language with data structures, control flow statements, functions, output/input, and object-oriented programming. It permits both, rapidly creating speedy throw-away programs, and creating complete, complex and large application programs. It provides an interactive environment that allows iterative exploration, design, and problem-solving. It is a bunch of tools that a programmer can use. It includes abilities for handling the variables in the workspace & importing/exporting data. It also contains tools for development, handling, debugging, and profiling MATLAB files and offers built-in graphics useful for data visualization, and tools for generating custom plots. It offers a huge library of mathematical functions needed for computing statistics, linear algebra, numerical integration, filtering, Fourier analysis, optimization and solving regular differential equations.

Objective of the course

1. To learn features of MATLAB as a programming tool.
2. To promote a new teaching model that will help to develop programming skills and techniques to solve mathematical problems.
3. To understand MATLAB graphic features and its applications.
4. To use MATLAB as a simulation tool.

Outcome of the course

1. Students learned features of MATLAB as a programming tool. They are fully familiar with all the features of MATLAB software and easily handle the software.
2. New teaching model which includes theory & practical running simultaneously is introduced to our students. This method is very effective and helps to develop programming skills and techniques to solve mathematical problems.
3. Students learned graphic features of MATLAB and they are able to use this feature effectively in the various applications.
4. Students are able to use MATLAB as a simulation tool. 5. Major outcome is students are able to work as a 'MATLAB programmer' in the industry because of the hands-on practical sessions. This job oriented course will help students to get jobs in the future.

SREE NARAYANA COLLEGE, KOLLAM
(Affiliated to the university of kerala, Reaccredited by
NAAC with 'A' grade, Atal ranking : A Band)



College - level certificate course on

"Introduction to Matlab"

Department of Mathematics (2020-2021)

we are the sharpeners of great minds and honourable values.

Contact : Ravivarma B

Contact no : 9496107224

Department of Mathematics SN College Kollam**Certificate course :-INTRODUCTION TO MATLAB
2020-2021****BOARD OF STUDIES**

Name	Designation	Position held
Ravivarma B	Assistant Professor, S.N. College, Kollam	Chairman
Kuleena Das	Assistant Professor, S.N. College, Kollam	Member
Mithun AT	Assistant Professor, S.N. College, Kollam	Member
Aswathy S	Assistant Professor, S.N. College, Kollam	Member
Adersh VK	Assistant Professor, T.K.M. College, Kollam	Member
Dr. Aswathy MR	Assistant Professor, T.K.M. College, Kollam	Member

NOTICE

A meeting of the certificate course Board of studies members will be held on 28/01/2021 at 1.30pm in the computer lab, Department of Mathematics. All the members are requested to attend the meeting without fail.

Agenda:

1. Commencement of certificate course

Copy to all members

S.N .College, Kollam

27/01/2021


Chairman

NOTICE

A meeting of the certificate course Board of studies members will be held on 26/03/2021 at 1.30pm in the computer lab, Department of Mathematics. All the members are requested to attend the meeting without fail.

Agenda:

1. Publishing results of certificate course

Copy to all members

S.N .College,Kollam

25/03/2021



Chairman

**List of Students Applied for Certificate Course
:INTRODUCTION TO MATHLAB (2020-2021)**

SI No	Name	Candidate Code	Department
1	22019132002	Ajesh.A	Mathematics
11	22019132028	AkhilRaj A R	Mathematics
12	22019132029	Amrutha J.	Mathematics
13	22019132030	ANANDAN.A	Mathematics
14	22019132031	Ananthu S	Mathematics
15	22019132032	Anjana L	Mathematics
16	22019132033	Aparna Raj	Mathematics
17	22019132034	Arjun Krishna M	Mathematics
2	22019132008	AROMAL K B	Mathematics
3	22019132009	Arsha A.S	Mathematics
18	22019132035	ARUN JACOB	Mathematics
19	22019132036	Arunima Ignatius	Mathematics
4	22019132010	Aswathy A	Mathematics
5	22019132011	Athira A	Mathematics
20	22019132037	ATHIRA AM	Mathematics
21	22019132038	Athul S	Mathematics
22	22019132039	Athulya G R	Mathematics
6	22019132012	Bilal.j	Mathematics
23	22019132040	Bushra S	Mathematics
24	22019132041	Dakshina C. R.	Mathematics
7	22019132013	Darshana.D.S	Mathematics
8	22019132014	Mayukha	Mathematics
9	22019132015	Meenakshi.s	Mathematics
10	22019132016	Nandu kuttan R	Mathematics
25	22019132048	NITHIN S	Mathematics

Ajesh
 Akhilraj
 Amrutha
 Anandan A
 Ananthu S
 Anjana L
 Aparna Raj
 Arjun
 Arjun
 Arsham
 Arun
 Arunima
 Aswathy A
 Athira A
 Athira
 Athul
 Athulya G R
 Bilal J
 Bushra
 Dakshina
 Darshana D S
 Mayukha
 Meenakshi
 Nandukuttan R
 Nithin

Certificate Course.-INTRODUCTION TO MATLAB (2020-2021)

Bio data of students

SL Number	Register Number	Student's Name	Gender	ADDRESS	STUDENT MOBILE NUMBER	EMAIL ID
1	22019132002	Ajesh.A	Male	Nedumpurathu veedu , punthalathazham , kilikolloor PO, Kollam	7306282520	ajeshanilkumar0@gmail.com
2	22019132008	AROMAL K B	MALE	9074963909	7994512168	archanarajeev7034@gmail.com
3	22019132009	Arsha A.S	Female	Pulimootil Veedu Edakkidom (PO) Edakkidom 691505	7902384928	aromalcv20@gmail.com
4	22019132010	Aswathy A	Female	Arathy Bhavan Edavattom	7012868255	aswathysureshkumar04@gmail.com
5	22019132011	Athira A	Female	Arathy Bhavan Edavattom Chirakkara po Kollam	8075020059	athirasureshkumar04@gmail.com
6	22019132012	Bilal.j	Male	Vilayil veedu kulppadam nedumapana po kollam	8111943031	bilaljaaleel786@gmail.com
7	22019132013	Darshana.D.S	Female	Saralalayam,clappana south,clappana.p.o,karunagap ally	7356763283	darshanadayananandan2019@gmail.com
8	22019132014	Mayukha	Female	Vrindaram Edavanaserry Mynagappally P.O Kollam 690519	8547750452	mayukhamayu1@gmail.com
9	22019132015	Meenakshi.s	Female	Kochuveetil padinjattathil, Eravipuram p.o kollam	7994512168	sobhaudayan1234@gmail.com
10	22019132016	Nandu kuttan R	Male	Thottumkara Veedu Uliyanadu Karamcode PO	9747496331	nandukuttan180@gmail.com
11	22019132028	AkhilRaj A R	Male	Akhil nivas,pochamkonam, ezhukone po kollam	9074759162	akhilrajzhekone@gmail.com
12	22019132029	Amrutha J.	female	Sheeja mandiram ,kudavattoor PO,Odanavattom	9544699536	amruthaj2812@gmail.com
13	22019132030	ANANDAN.A	Male	Meena Bhavan, Mundakkal, Kollam - 1	9633726219	gandharvajit2000@gmail.com
14	22019132031	Ananthu S	Male	Vyshnavi Venpalakkara Kootikkada P.O kollam	8921333701	syamananthus@gmail.com

15	22019132032	Anjana L	Female	Santhi bhavanam karuvellil (P O) ezhukone Kollam	9947607127	anjanaammuzz007@gmail.com
16	22019132033	Apama Raj	Female	Sreenilayam vadakkumthala Po karunagappally	7902218251	araj33317@gmail.com
17	22019132034	Arjun Krishna M	Male	Pottimadam, Chavara Bridge P O Kollam	9447117249	arjun15032001@gmail.com
18	22019132035	ARUN JACOB	MALE	OLICKARA MELATHIL CHERUMOODU VELLIMON P O KOLLAM	7994909091	arunjacob01.aj@gmail.com
19	22019132036	Arunima Ignatius	Female	Sunitha Bhavan, Vakkeelazhikom, Cutchery P.O.Vaddy, Kollam.	9562660058	arunima2042000@gmail.com
20	22019132037	ATHIRA AM	FEMALE	ARUNODHAYAM PUNUKKANNOOR PERUMPUZHA PO KOLLAM	8078413381	athiachu2001@gmail.com
21	22019132038	Athul S	Male	Kadamanathekathil kiikallor Priyadarshini nagar 89 p o kollam	9747083794	athulkunju987@gmail.com
22	22019132039	Athulya G R	Female	Prabha Mandiram Punukannoor Perumpuzha (PO)	9946954544	athulyagr808@gmail.com
23	22019132040	Bushra S	Female	Mathamvila Thekkathil Mynagappally South	7510390909	bushrashamsudeen3@gmail.com
24	22019132041	Dakshina C. R.	Female	Kuzhivila Veedu Darshana Nagar 90 Pattathanam P O Kollam 691021	9188505549	dakshinasajitha2000@gmail.com
25	22019132048	NITHIN S	MALE	SREE NIVAS , EDAVATTAM , VELLIMON P.O.	8848163898	nr035756@gmail.com

**Certificate Course LATEX :- INTRODUCTION TO
MATHLAB 2020-2021**

Selection list of students

SI No	Name	Candidate Code	Department
1	22019132002	Ajesh.A	Mathematics
11	22019132028	AkhilRaj A R	Mathematics
12	22019132029	Amrulha J.	Mathematics
13	22019132030	ANANDAN.A	Mathematics
14	22019132031	Ananthu S	Mathematics
15	22019132032	Anjana L	Mathematics
16	22019132033	Aparna Raj	Mathematics
17	22019132034	Arjun Krishna M	Mathematics
2	22019132008	AROMAL K B	Mathematics
3	22019132009	Arsha A.S	Mathematics
58	22019132035	ARUN JACOB	Mathematics
19	22019132036	Arunima Ignatius	Mathematics
4	22019132010	Aswathy A	Mathematics
5	22019132011	Athira A	Mathematics
20	22019132037	ATHIRA AM	Mathematics
21	22019132038	Athul S	Mathematics
22	22019132039	Athulya G R	Mathematics
6	22019132012	Bilal.j	Mathematics
23	22019132040	Bushra S	Mathematics
24	22019132041	Dakshina C. R.	Mathematics
7	22019132013	Darshana.D.S	Mathematics
8	22019132014	Mayukha	Mathematics
9	22019132015	Meenakshi.s	Mathematics
10	22019132016	Nandu kuttan R	Mathematics
25	22019132048	NITHIN S	Mathematics

**Certificate Course INTRODUCTION TO
MATHLAB...2020-2021**

list of students passed

Sl No	Name	Candidate Code	Department
1	22019132002	Ajesh.A	Mathematics
11	22019132028	AkhilRaj A R	Mathematics
12	22019132029	Amrutha J.	Mathematics
13	22019132030	ANANDAN.A	Mathematics
14	22019132031	Ananthu S	Mathematics
15	22019132032	Anjana L	Mathematics
16	22019132033	Aparna Raj	Mathematics
17	22019132034	Arjun Krishna M	Mathematics
2	22019132008	AROMAL K B	Mathematics
3	22019132009	Arsha A.S	Mathematics
3	22019132035	ARUN JACOB	Mathematics
19	22019132036	Arunima Ignatius	Mathematics
4	22019132010	Aswathy A	Mathematics
5	22019132011	Athira A	Mathematics
20	22019132037	ATHIRA AM	Mathematics
21	22019132038	Athul S	Mathematics
22	22019132039	Athulya G R	Mathematics
6	22019132012	Bilal.j	Mathematics
23	22019132040	Bushra S	Mathematics
24	22019132041	Dakshina C. R.	Mathematics
7	22019132013	Darshana.D.S	Mathematics
8	22019132014	Mayukha	Mathematics
9	22019132015	Meenakshi.s	Mathematics
10	22019132016	Nandu kuttan R	Mathematics
25	22019132048	NITHIN S	Mathematics

SREE NARAYANA COLLEGE

KOLLAM

DEPARTMENT OF MATHEMATICS

CERTIFICATE COURSE (2020-2021)

INTRODUCTION TO MATLAB

LIST OF TEACHERS HANDLING THE COURSE

1. MITHUN AT (Assistant Professor , Department of Mathematics)

SREE NARAYANA COLLEGE KOLLAM			
DEPARTMENT OF MATHEMATICS			
CERTIFICATE COURSE 2021-2022			
INTRODUCTION TO MATLAB			

TIME TABLE

	DAY	TIME	THEORY/LAB
	MONDAY	8.30 to 9.30	THEORY
		3.15 4.15	Lab
	TUESDAY	8.30 to 9.30	THEORY
		3.15 4.15	THEORY
	WEDNESDAY	8.30 to 9.30	THEORY
		3.15 4.15	THEORY
	THURSDAY	8.30 to 9.30	Lab
		3.15 4.15	THEORY
	FRIDAY	8.30 to 9.30	THEORY
		3.15 4.15	THEORY
	SATURDAY	10 am to 1pm	Lab

		SREE NARAYANA COLLEGE KOLLAM	
		DEPARTMENT OF MATHEMATICS	
		CERTIFICATE COURSE 2020-2021	
		INTRODUCTION TO MATLAB	
		PRACTICAL EXAM TIME TABLE	
	DATE	DAY	TIME
	24/03/2021	wednesday	1.30pm to 3.30pm

CERTIFIED COURSE STUDENTS LIST & ATTENDANCE STATEMENT 2020-2021 (PRACTICAL)

Sl no	Name	Class	15/5/21	22/5/21	12/6/21
1	Ajesh.A	Mathematics	p	P	P
2	AkhilRaj A R	Mathematics	p	P	P
3	Amrutha J.	Mathematics	p	P	P
4	ANANDAN.A	Mathematics	p	P	P
5	Ananthu S	Mathematics	p	P	P
6	Anjana L	Mathematics	p	P	P
7	Apama Raj	Mathematics	p	P	P
8	Arjun Krishna M	Mathematics	p	P	P
9	AROMAL K B	Mathematics	p	P	P
10	Arsha A.S	Mathematics	p	P	P
11	ARUN JACOB	Mathematics	p	P	P
12	Arunima Ignatius	Mathematics	p	P	P
13	Aswathy A	Mathematics	p	P	P
14	Athira A	Mathematics	p	P	P
15	ATHIRA AM	Mathematics	p	P	P
16	Athul S	Mathematics	p	P	P
17	Athulya G R	Mathematics	p	P	P
18	Bilal.j	Mathematics	p	P	P
19	Bushra S	Mathematics	p	P	P
20	Dakshina C. R.	Mathematics	p	P	P
21	Darshana.D.S	Mathematics	p	P	P
22	Mayukha	Mathematics	p	P	P
23	Meenakshi.s	Mathematics	p	P	P
24	Nandu kuttan R	Mathematics	p	P	P
25	NITHIN S	Mathematics	p	P	P

CERTIFIED COURSE STUDENTS MARK LIST 2020-2021					
Sl no	Name	Class	TOTAL MARKS	MARKS OBTAINED	Passed/Failed
1	Ajesh.V	Mathematics	50	49	Passed
2	Ajesh.A	Mathematics	50	50	Passed
3	AkhilRaj A R	Mathematics	50	50	Passed
4	Amrutha J.	Mathematics	50	48	Passed
5	ANANDAN.A	Mathematics	50	47	Passed
6	Ananthu S	Mathematics	50	48	Passed
7	Anjana L	Mathematics	50	49	Passed
8	Aparna Raj	Mathematics	50	50	Passed
9	Arjun Krishna M	Mathematics	50	50	Passed
10	AROMAL K B	Mathematics	50	45	Passed
11	Arsha A.S	Mathematics	50	50	Passed
12	ARUN JACOB	Mathematics	50	50	Passed
13	Arunima Ignati	Mathematics	50	50	Passed
14	Aswathy A	Mathematics	50	50	Passed
15	Athira A	Mathematics	50	40	Passed
16	ATHIRA AM	Mathematics	50	50	Passed
17	Athul S	Mathematics	50	50	Passed
18	Athulya G R	Mathematics	50	49	Passed
19	Bilal.j	Mathematics	50	48	Passed
20	Bushra S	Mathematics	50	49	Passed
21	Dakshina C. R.	Mathematics	50	48	Passed
22	Darshana.D.S	Mathematics	50	50	Passed
23	Mayukha	Mathematics	50	48	Passed
24	Meenakshi.s	Mathematics	50	48	Passed
25	Nandu kuttan F	Mathematics	50	50	Passed
26	NITHIN S	Mathematics	50	50	Passed

CERTIFICATE COURSE 2020-21



Sree Narayana College, Kollam

Department of Mathematics

2020-2021

Certificate Course Report

Title of the Course: INTRODUCTION TO MATLAB

A meeting was held on 28/01/2021 at 1.30 pm in the computer lab, Department of Mathematics to discuss about the commencement of certificate course on INTRODUCTION TO MATLAB.

The members of the board of studies for certificate course were present in the meeting. Chairman :-Ravivarma B. presided the meeting. All together 25 students applied for the course. The classes were handled by MITHUN A T. Assistant professor, Department of mathematics S.N.C. Kollam. The class commenced on 01/02/2021 . Both theory and practical classes were conducted for this students.

After successfully completing the classes practical exam was conducted on 24/03/2021 from 1.30 pm to 3.30 pm. All this students attended the exam and the pass percentage was 100%.

Thus the certificate course helped students to gain practical knowledge in this field, also this was an added advantage for the students to enhance their skill development as well as their curriculum vitae.

SREE NARAYANA COLLEGE, KOLLAM
Department of Mathematics
2020-21

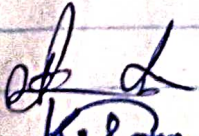
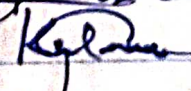


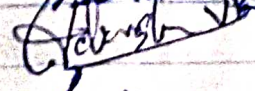
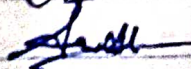
Title of course : MATLAB PROGRAMMING,
LATEX : A mathematical software
Meeting held on : 28/1/2021 at computer lab
Department of Mathematics

Minutes Report

Department has decided to commence classes
on 1/2/2021

The Board of studies has approved the syllabus.
The course coordinator has scheduled the programme
details and timetable of the classes.
The Board of studies has decided to conduct
external examination at the end of the year.

Attendance statement of the meeting

Sl.No.	Name of faculty	Signature
1	Ravivarma B	
2	Kuleena Das	
3	Mithun A T	
4.	Aswathy S	
5.	Aderesh V K	
6.	Dr. Aswathy M R	

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SREE NARAYANA COLLEGE, KOLLAM

Department of Mathematics

2020-21

Title of Course : MATLAB PROGRAMMING,

Lafex: A mathematical software


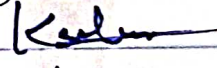
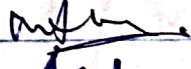



Meeting held on: 26/3/2021 at computer lab

Department of Mathematics

Minutes Report

The Board of studies has decided to publish the result on 31/3/2021

Attendance Statement of the meeting

Sl.No	Name of faculty	Signature
1.	Ravivarma B	
2.	Kuleena Das	
3.	Mithun A T	
4.	Aswathy S	
5.	Adersh V K	
6.	Dr. Aswathy MR	

Aruna Theerayil
Principal
Sree Narayana College
Kollam

