

MATLAB
18-19

Sree Narayana College, Kollam

Department of Mathematics

Certificate Course Syllabus 2018-19

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.

A. S. Mathurayil
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

2018-19

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, reaccrdicted by NAAC

with 'A' grade)



College Level Certificate Course

on

Introduction to Matlab

Department of Mathematics (2018-19)

We are the shapers of great mind and honourable values.

Contact : Vivek P V

Contact no : 9496112930

Department of Mathematics SN College Kollam

**Certificate course :-INTRODUCTION TO MATLAB
2018-2019**

BOARD OF STUDIES

Name	Designation	Position held
Vivek P.V.	Assistant Professor, S.N. College, Kollam	Chairman
Kuleena Das	Assistant Professor, S.N. College, Kollam	Member
Dr.Ambili B	Associate 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 19/10/2018 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

18/10/2018



Chairman

NOTICE

A meeting of the certificate course Board of studies members will be held on 04 /06/2019 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

03/06/2019



Chairman

**List of Students Applied for Certificate Course
INTRODUCTION TO MATLAB (2018-2019)**

Sl No	Name	Candidate Code	Department
1	16132025	Abhijith K	Mathematics
2	16132026	Aiswarya Surendran	Mathematics
3	16132027	Ajaylal A	Mathematics
4	16132028	Anandhu A L	Mathematics
5	16132052	Anandhu S Sivan	Mathematics
6	16132029	Apsara Sugunan	Mathematics
7	16132053	Athulya S Unni	Mathematics
8	16132011	Durgadas U S	Mathematics
9	16132054	Gayathri S	Mathematics
10	16132012	Gourikrishna	Mathematics
11	16132013	Hareeshma G S	Mathematics
12	16132014	Indhu Suresh	Mathematics
13	16132040	Muhammed Noufal	Mathematics
14	16132041	Nidheesh Babu C	Mathematics
15	16132043	Parvathy B	Mathematics
16	16132042	Parvathy Jayan S	Mathematics
17	16132044	Renjitha Remanan	Mathematics
18	16132045	Sajana S	Mathematics
19	16132046	Sajitha S	Mathematics
20	16132047	Sarath Kumar S	Mathematics
21	16132048	Sarath S L	Mathematics
22	16132049	Sreeraj R	Mathematics
23	16132050	Sruthi S Nair	Mathematics
24	16132021	Supriya PS	Mathematics
25	16132022	Swathy Biju	Mathematics
26	16132023	Varsha P	Mathematics
27	16132051	Vigneeesh P	Mathematics
28	16132024	Vipin Chandran R	Mathematics

Handwritten signatures and initials corresponding to the student names in the table above, including names like Abhijith, Aiswarya, Ajaylal, Anandhu, Apsara, Athulya, Durgadas, Gayathri, Gourikrishna, Hareeshma, Indhu, Muhammed, Nidheesh, Parvathy, Parvathy Jayan, Renjitha, Sajana, Sajitha, Sarath, Sarath Kumar, Sarath S L, Sreeraj, Sruthi, Supriya, Swathy, Varsha, Vigneeesh, and Vipin.

Certificate Course.-INTRODUCTION TO MATLAB (2018-2019)

Bio data of students

SL Number	Register Number	Student's Name	Gender	ADDRESS	STUDENT MOBILE NUMBER	EMAIL ID
1	16132025	Abhijith K	Male	Reghuvilasam Vaiyodu PO Ambalamkunnu	7558052302	anjanasanthosh1903@gmail.com
2	16132026	Aiswarya Surendran	Female	Cheruthalakkal Puthen Veedu, Kandachira Perinadu P O Kollam	7012489586	archapamlu@gmail.com
3	16132027	Aiyal A	Male	Rahul nivas kuzhiyam south chandananthope po kollam	7736859793	aromalmani77@gmail.com
4	16132028	Anandhu A L	Male	Charuvila Puthen veeadu, Chandranasa Vilasam, Vilackadu, Madavoor Pallickal (P.O)	8086391638	aswinb18102002@gmail.com
5	16132052	Anandhu S Sivan	Male	Thiruvananthapuram 695602 Kalluvila Peedkayil, Alummoodu P.O , Mukhathala, Kollam. 691577	6282408934	sbminnuvgr@gmail.com
6	16132029	Apsara Sugunan	Female		7994550121	danielsamsonlawrence@gmail.com
7	16132053	Athulya S Unni	Female	Krishnagatha, Nallila. P O Santhosh bhavan chittayam	7561866312	sreelm02@gmail.com
8	16132011	Durgadas U S	Female	inchavila p.o. kollam	8086667369	durgadasus09@gmail.com
9	16132054	Gayathri S	Female	Charuvila veeadu ,punthalathazham ,pallavi nagar 34, kilikollur po kollam	8301919707	sreeleekshmi@gmail.com
10	16132012	Gourikrishna	Female	Kalluvila Melathil, Kottathala (PO) Kottarakara	8086813164	aiswaryam9182@gmail.com
11	16132013	Hareeshma G S	Female	Gourimandhiram Edayam P.O Edayam	8281480212	www.neerajaprasad2001@gmail.com
12	16132014	Indhu Suresh	Female	Iswarya Bhavan S.V Nagar-196 A Ayathil, Kollam	9605757811	nithyaminnu2020@gmail.com

13	16132040	Muhammed Noufal	Male	Shiji Bhavan Palavila, Kuzhinthadam, Ooyor (PO) Kollam-691510	9633086937	devikaprisuresh@gmail.com
14	16132041	Nidheesh Babu C	Male	Sreechithira Venganoor Venganoor P O Mavannoor	7561082524	gourigour1202@gmail.com
15	16132043	Parvathy B	Female	Kuthyrappanthy p o Thazhava 690523	7736052315	devanarayanan037@gmail.com
16	16132042	Parvathy Jayan S	Female	Aluvilayil House Angadical South (PO) Kodumon PTA	7558078361	iswariyasuresh220@gmail.com
17	16132044	Renjitha Remanan	Female	KARTHIKEYAM KUMMALLOOR P.O KATHAKUZHY KOLLAM	6282961478	dersana19@gmail.com
18	16132045	Sajana S	Female	Sreemangalam Edatharapana Elamadu P O Ayoor kollam	8943145701	kayathampi02@gmail.com
19	16132046	Sajitha S	Female	Charuvila veeedu Charuvila veeedu ,punthalathazham ,pallavi nagar 34 ,kilkollur ,po kollam	9778336949	mslekshmishbu@gmail.com
20	16132047	Sarath Kumar S	Male	Chittazhnikathu veeedu thevalapuram po putthoor kottarakkara	6382815637	meghasnadh@gmail.com
21	16132048	Sarath S L	Male	kavuvila veeedu chalacode punalur po punalur	8078026878	panchamysr@gmail.com
22	16132049	Sreeraj R	Female	Ajithbavan Maru north alumkadam P O Karunagappally	6238568984	ro4235301@gmail.com
23	16132050	Sruthi S Nair	Female	Sivakripa Karamcode PO Varinjam	7736989568	tyacroy2001@gmail.com
24	16132021	Supriya PS	Female	Murali Bhavanam Sree Bhadra Nagar-212, uliyakovil,kollam,691019	9072102239	rohit1942001@gmail.com
25	16132022	Swathy Biju	Female	KOCHUMADATHIL VEEDU PUTHOORMUKKU KULAKKADA P.O. KOTTARAKKARA KOLLAM Pin : 691521	8590713234	saeedanizam7@gmail.com

26	16132023	Varsha P	Female	KavyaSree Kanjaveli P.O. Kollam Pin:-691602	9633086937	Snehaanil1996007@gmail.com
27	16132051	Vigneeesh P	Male	Jayalekshmi, Karngannoor, Raj Bhavan Murunthal Perinad (PO) Kollam, 691601	9072949313	shijiej2018@gmail.com
28	16132024	Vipin Chandran R	Male		9778068538	msswathy2002@gmail.com

Certificate Course LATEX :- INTRODUCTION TO MATLAB.....2018-2019

Selection list of students

Sl No	Name	Candidate Code	Department
1	16132025	Abhijith K	Mathematics
2	16132026	Aiswarya Surendr	Mathematics
3	16132027	Aiyalal A	Mathematics
4	16132028	Anandhu A L	Mathematics
5	16132052	Anandhu S Sivan	Mathematics
6	16132029	Apsara Sugunan	Mathematics
7	16132053	Athulya S Urni	Mathematics
8	16132011	Durgadas U S	Mathematics
9	16132054	Gayathri S	Mathematics
10	16132012	Gourikrishna	Mathematics
11	16132013	Hareesha G S	Mathematics
12	16132014	Indhu Suresh	Mathematics
13	16132040	Muhammed Noufa	Mathematics
14	16132041	Nidheesh Babu C	Mathematics
15	16132043	Parvathy B	Mathematics
16	16132042	Parvathy Jayan S	Mathematics
17	16132044	Renjitha Remanan	Mathematics
18	16132045	Sajana S	Mathematics
19	16132046	Sajitha S	Mathematics
20	16132047	Sarath Kumar S	Mathematics
21	16132048	Sarath S L	Mathematics
22	16132049	Sreeraj R	Mathematics
23	16132050	Sruthi S Nair	Mathematics
24	16132021	Supriya PS	Mathematics
25	16132022	Swathy Biju	Mathematics
26	16132023	Varsha P	Mathematics
27	16132051	Vigneesh P	Mathematics
28	16132024	Vipin Chandran R	Mathematics

**Certificate Course LATEX :- INTRODUCTION TO
MATLAB.....2018-2019**

list of students passed

Sl No	Name	Candidate Code	Department
1	16132025	Abhijith K	Mathematics
2	16132026	Aiswarya Surendran	Mathematics
3	16132027	Ajayal A	Mathematics
4	16132028	Anandhu A L	Mathematics
5	16132052	Anandhu S Sivan	Mathematics
6	16132029	Apsara Sugunan	Mathematics
7	16132053	Athulya S Unni	Mathematics
8	16132011	Durgadas US	Mathematics
9	16132054	Gayathri S	Mathematics
10	16132012	Gourikrishna	Mathematics
11	16132013	Hareeshma G S	Mathematics
12	16132014	Indhu Suresh	Mathematics
13	16132040	Muhammed Noufal	Mathematics
14	16132041	Nidheesh Babu C	Mathematics
15	16132043	Parvathy B	Mathematics
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20	16132047	Sarath Kumar S	Mathematics
21	16132048	Sarath S L	Mathematics
22	16132049	Sreeraj R	Mathematics
23	16132050	Sruthi S Nair	Mathematics
24	16132021	Supriya PS	Mathematics
25	16132022	Swathy Biju	Mathematics
26	16132023	Varsha P	Mathematics
27	16132051	Vignesh P	Mathematics
28	16132024	Vipin Chandran R	Mathematics

SREE NARAYANA COLLEGE

KOLLAM

DEPARTMENT OF MATHEMATICS

CERTIFICATE COURSE (2018-2019)

INTRODUCTION TO MATLAB

LIST OF TEACHERS HANDLING THE COURSE

1. Prameela S Bhanu (Assistant Professor on contract ,
Department of Mathematics)

SREE NARAYANA COLLEGE KOLLAM

DEPARTMENT OF MATHEMATICS

CERTIFICATE COURSE 2018-2019

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 2018-2019		
INTRODUCTION TO MATLAB		
PRACTICAL EXAM TIME TABLE		
DATE	DAY	TIME
27/05/19	Monday	1.30pm to 3.30pm

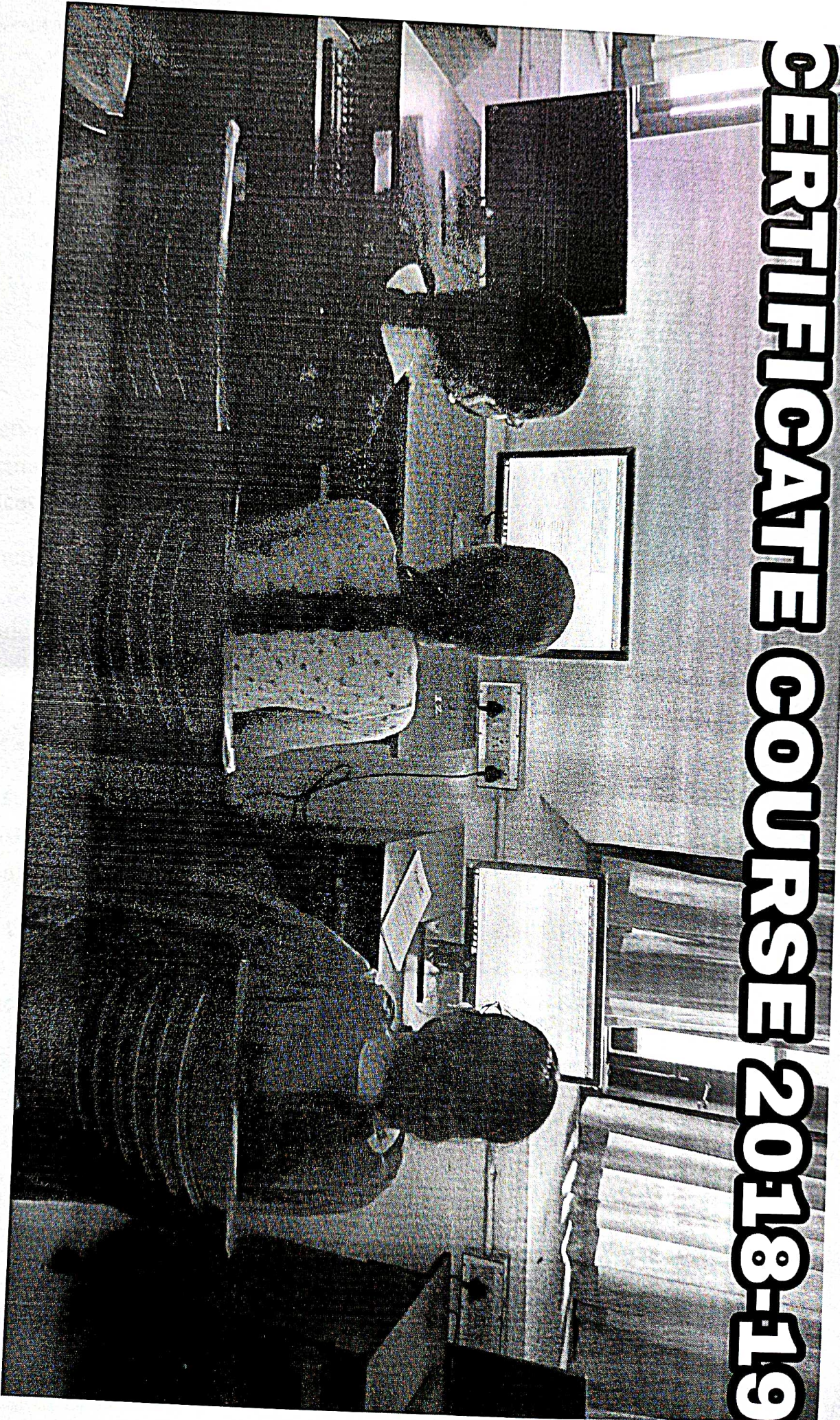
CERTIFIED COURSE STUDENTS LIST & ATTENDANCE STATEMENT 2018-2019 (PRACTICAL)

Sl no	Name	Class	30/3/19	20/4/19	27/4/19
1	Abhijith K	Mathematics	p	P	P
2	Aiswarya Surendran	Mathematics	p	P	P
3	Ajaylal A	Mathematics	p	P	P
4	Anandhu A L	Mathematics	p	P	P
5	Anandhu S Sivan	Mathematics	p	P	P
6	Apsara Sugunan	Mathematics	p	P	P
7	Athulya S Unni	Mathematics	p	P	P
8	Durgadas U S	Mathematics	p	P	P
9	Gayathri S	Mathematics	p	P	P
10	GouriKrishna	Mathematics	p	P	P
11	Hareeshma G S	Mathematics	p	P	P
12	Indhu Suresh	Mathematics	p	P	P
13	Muhammed Noufal	Mathematics	p	P	P
14	Nidheesh Babu C	Mathematics	p	P	P
15	Parvathy B	Mathematics	p	P	P
16	Parvathy Jayan S	Mathematics	p	P	P
17	Renjitha Remanan	Mathematics	p	P	P
18	Sajana S	Mathematics	p	P	P
19	Sajitha S	Mathematics	p	P	P
20	Sarath Kumar S	Mathematics	p	P	P
21	Sarath S L	Mathematics	p	P	P
22	Sreeraj R	Mathematics	p	P	P
23	Sruthi S Nair	Mathematics	p	P	P
24	Supriya PS	Mathematics	p	P	P
25	Swathy Biju	Mathematics	p	P	P
26	Varsha P	Mathematics	p	P	P
27	Vigneesh P	Mathematics	p	P	P
28	Vipin Chandran R	Mathematics	p	P	P

CERTIFIED COURSE STUDENTS MARK LIST 2018-2019

Sl no	Name	Class	TOTAL MARKS	MARKS OBTAINED	Passed/ Failed
1	Abhijith K	III B.Sc. Mathematics	50	48	Passed
2	Aiswarya Surendran	III B.Sc. Mathematics	50	50	Passed
3	Ajaylal A	III B.Sc. Mathematics	50	50	Passed
4	Anandhu A L	III B.Sc. Mathematics	50	48	Passed
5	Anandhu S Sivan	III B.Sc. Mathematics	50	50	Passed
6	Apsara Sugunan	III B.Sc. Mathematics	50	47	Passed
7	Athulya S Unni	III B.Sc. Mathematics	50	49	Passed
8	Durgadas U S	III B.Sc. Mathematics	50	49	Passed
9	Gayathri S	III B.Sc. Mathematics	50	44	Passed
10	GouriKrishna	III B.Sc. Mathematics	50	45	Passed
11	Hareeshma G S	III B.Sc. Mathematics	50	50	Passed
12	Indhu Suresh	III B.Sc. Mathematics	50	50	Passed
13	Muhammed Noufal	III B.Sc. Mathematics	50	50	Passed
14	Nidheesh Babu C	III B.Sc. Mathematics	50	48	Passed
15	Parvathy B	III B.Sc. Mathematics	50	49	Passed
16	Parvathy Jayan S	III B.Sc. Mathematics	50	50	Passed
17	Renjitha Remanan	III B.Sc. Mathematics	50	50	Passed
18	Sajana S	III B.Sc. Mathematics	50	50	Passed
19	Sajitha S	III B.Sc. Mathematics	50	50	Passed
20	Sarath Kumar S	III B.Sc. Mathematics	50	50	Passed
21	Sarath S L	III B.Sc. Mathematics	50	49	Passed
22	Sreeraj R	III B.Sc. Mathematics	50	49	Passed
23	Sruthi S Nair	III B.Sc. Mathematics	50	48	Passed
24	Supriya PS	III B.Sc. Mathematics	50	40	Passed
25	Swathy Biju	III B.Sc. Mathematics	50	48	Passed
26	Varsha P	III B.Sc. Mathematics	50	50	Passed
27	Vigneesh P	III B.Sc. Mathematics	50	50	Passed
28	Vipin Chandran R	III B.Sc. Mathematics	50	48	Passed

CERTIFICATE COURSE 2018-19



Sree Narayana College, Kollam

Department of Mathematics

2018-2019

Certificate Course Report

Title of the Course: INTRODUCTION TO MATLAB

A meeting was held on 19/10/2018 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 :-Vivek P.V. presided the meeting. All together 28 students applied for the course. The classes were handled by smt. Prameela S Bhanu, Assistant professor, Department of mathematics S.N.C. Kollam. The class commenced on 04/11/2018 . Both theory and practical classes were conducted for this students.

After successfully completing the classes practical exam was conducted on 27/05/2019 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
2018-19

Title of Course : MATLAB Programming
Latex: A Mathematical software
Meeting held on: 19/10/2018 at computer lab,
Department of Mathematics

Minutes Report

Department has decided to commence
the classes on 4/11/2018

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

Attendance statement of the Meeting

Sl.No	Name of faculty	Signature
1.	Vivek P.V	<u>Vivek</u>
2	Kulcesa Das	<u>Kulcesa</u>
3	Dr Ambili B	<u>Ambili</u>
4	Aswathy S	<u>Aswathy</u>
5	Adeesh V K	<u>Adeesh</u>
6	Dr Aswathy MR	<u>Aswathy</u>

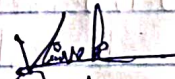
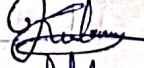
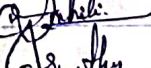



SREE NARAYANA COLLEGE, KOLLAM
 Department of Mathematics
 2018-19


Title of Course : MATLAB programming,
 Latex : A Mathematical Software
 Meeting held on: 4/6/2019 at computer lab
 Department of Mathematics

Minutes Report

The Board of studies has decided to
 publish the result on 16/7/2019

Attendee statement of the meeting

Sl.No	Name of faculty	Signature
1	Vivek P.V	
2	Kaleesa Das	
3	Dr Anbilis	
4	Aswathy S	
5	Adarsh VK	
6	Dr Aswathy MR	


 Principal
 Sree Narayana College
 Kollam

