

**Certificate Course**  
**On**  
**Programming For Computations-**  
**MATLAB**

Faculty Coordinator: Sri.Y.V.RAJU

Miss.P.Swetha

Duration:- 25/11/2020 to 10/12/2020



# K.S.R.M. COLLEGE OF ENGINEERING

(UGC - AUTONOMOUS)

Kadapa, Andhra Pradesh, India - 516003

Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.

An ISO 14001:2004 & 9001: 2015 Certified Institution

Lr./KSRMCE/ (Department of ECE)/2020-21

Date: 20/11/2020

To  
The Principal  
KSRM College of Engineering  
Kadapa, AP.

Sub: KSRMCE - (Department of ECE) – Permission to conduct certification course on Programming for Computations-MATLAB: Request-Reg

---\*\*\*---

Respected Sir,

With reference to the cited, the Department of ECE is planning to conduct a certification course on Programming for Computations-MATLAB for B.Tech VII SEM ECE students from 25.11.2020 to 10.12.2020 in online mode. In this regard, we kindly request you to grant permission to conduct certificate course. This is submitted for your kind perusal.

Thanking you sir,

Yours Faithfully

*[Signature]*  
Coordinators

Sri Y.V.RAJU


Miss P. Swetha

Cc:

To The Director for Information

To All Deans/HODs

*Permitted*  
*V. S. S. Murthy*  
PRINCIPAL  
K.S.R.M. COLLEGE OF ENGINEERING  
KADAPA - 516 003. (A.P.)

 /ksrmce.ac.in

Follow Us:



/ksrmceofficial



**K.S.R.M. COLLEGE OF ENGINEERING**  
(UGC - AUTONOMOUS)  
Kadapa, Andhra Pradesh, India - 516003

Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.

An ISO 14001:2004 & 9001: 2015 Certified Institution

Dated: 20/11/2020

**Circular**

All the B.Tech VII sem ECE students are here by informed that department of ECE is going to conduct 34 hours certification course on Programming for Computations-MATLAB from 25/11/2020 to 10/12/2020. Interested students may register their names with following link on or before 23/11/2020.

**Registration Link:** <https://forms.gle/TVmRhnPbKtsRknUt89>

For any queries contact,

Coordinators

Sri Y.V.RAJU, Assistant Professor, ECE Dept.

Miss P. Swetha, Assistant Professor, ECE Dept.

V. S. S. M. M. H.

Principal

**PRINCIPAL**

**K.S.R.M. COLLEGE OF ENGINEERING**  
**KADAPA - 516 003. (A.P.)**

Cc to:

The Management /Director / All Deans / All HODS/Staff / Students for information

The IQAC Cell for Documentation



/ksrmce.ac.in

Follow Us:



/ksrmceofficial



# K.S.R.M. COLLEGE OF ENGINEERING

(UGC - AUTONOMOUS)

Kadapa, Andhra Pradesh, India - 516003

Approved by AICTE, New Delhi & Affiliated to JNTUA,

Ananthapuramu.

An ISO 14001:2004 & 9001: 2015 Certified Institution

Department of Electronics and Communication Engineering

Certificate Course on Programming for Computations-MATLAB

### Registered Student List

S.No.	Roll Number	Name of the Student	Year & Branch	Eail id
1	179Y1A0401	ADURI VISHNU VARDHAN REDDY	B.Tech VIIsem, ECE	<a href="mailto:179Y1A0401@ksrmce.ac.in">179Y1A0401@ksrmce.ac.in</a>
2	179Y1A0402	ALA LAKSHMI SAI GOWRI (W)	B.Tech VIIsem, ECE	<a href="mailto:179Y1A0402@ksrmce.ac.in">179Y1A0402@ksrmce.ac.in</a>
3	179Y1A0403	AMBATI GURUSIVA	B.Tech VII sem, ECE	<a href="mailto:179Y1A0403@ksrmce.ac.in">179Y1A0403@ksrmce.ac.in</a>
4	179Y1A0404	AMBATI LAKSHUMAI AH	B.Tech VII sem, ECE	<a href="mailto:179Y1A0404@ksrmce.ac.in">179Y1A0404@ksrmce.ac.in</a>
5	179Y1A0405	ANDELA MATAM VINAY KUMAR	B.Tech VII sem, ECE	<a href="mailto:179Y1A0405@ksrmce.ac.in">179Y1A0405@ksrmce.ac.in</a>
6	179Y1A0406	ANKANA SUNITHA (W)	B.Tech VII sem, ECE	<a href="mailto:179Y1A0406@ksrmce.ac.in">179Y1A0406@ksrmce.ac.in</a>
7	179Y1A0407	ANNAREDDY VENKATA MEGHANA(W)	B.Tech VIIsem, ECE	<a href="mailto:179Y1A0407@ksrmce.ac.in">179Y1A0407@ksrmce.ac.in</a>
8	179Y1A0408	ANUGURU VINEELA (W)	B.Tech VII sem, ECE	<a href="mailto:179Y1A0408@ksrmce.ac.in">179Y1A0408@ksrmce.ac.in</a>
9	179Y1A0409	ATHIKARI PRATHYUSHA (W)	B.Tech VII sem, ECE	<a href="mailto:179Y1A0409@ksrmce.ac.in">179Y1A0409@ksrmce.ac.in</a>
10	179Y1A0410	AVINASH, B	B.Tech VII sem, ECE	<a href="mailto:179Y1A0410@ksrmce.ac.in">179Y1A0410@ksrmce.ac.in</a>
11	179Y1A0411	AVULA VAMSIKRISHNA	B.Tech VII sem, ECE	<a href="mailto:179Y1A0411@ksrmce.ac.in">179Y1A0411@ksrmce.ac.in</a>
12	179Y1A0412	B BABU PRASAD	B.Tech VII sem, ECE	<a href="mailto:179Y1A0412@ksrmce.ac.in">179Y1A0412@ksrmce.ac.in</a>
13	179Y1A0413	BALAM SAINATH	B.Tech VII sem, ECE	<a href="mailto:179Y1A0413@ksrmce.ac.in">179Y1A0413@ksrmce.ac.in</a>
14	179Y1A0414	BALARAMIREDDYGARI BHARATH KALYAN REDDY	B.Tech VII sem, ECE	<a href="mailto:179Y1A0414@ksrmce.ac.in">179Y1A0414@ksrmce.ac.in</a>
15	179Y1A0416	BANDI NAVEEN KUMAR	B.Tech VII sem, ECE	<a href="mailto:179Y1A0416@ksrmce.ac.in">179Y1A0416@ksrmce.ac.in</a>
16	179Y1A0417	BANDI NIKHIL KUMAR	B.Tech VII sem, ECE	<a href="mailto:179Y1A0417@ksrmce.ac.in">179Y1A0417@ksrmce.ac.in</a>
17	179Y1A0418	BANDI PRANEETH	B.Tech VII sem, ECE	<a href="mailto:179Y1A0418@ksrmce.ac.in">179Y1A0418@ksrmce.ac.in</a>
18	179Y1A0419	BANTHULLA ANIL KUMAR RAJU	B.Tech VII sem, ECE	<a href="mailto:179Y1A0419@ksrmce.ac.in">179Y1A0419@ksrmce.ac.in</a>
19	179Y1A0420	BASIREDDY MAHESH KUMAR REDDY	B.Tech VII sem, ECE	<a href="mailto:179Y1A0420@ksrmce.ac.in">179Y1A0420@ksrmce.ac.in</a>
20	179Y1A0421	BATHALA MANOJ	B.Tech VII sem, ECE	<a href="mailto:179Y1A0421@ksrmce.ac.in">179Y1A0421@ksrmce.ac.in</a>
21	179Y1A0422	BAYYARAPU SURESH	B.Tech VII sem, ECE	<a href="mailto:179Y1A0422@ksrmce.ac.in">179Y1A0422@ksrmce.ac.in</a>
22	179Y1A0423	BHEEMAVARAPU VARA LAKSHMI (W)	B.Tech VII sem, ECE	<a href="mailto:179Y1A0423@ksrmce.ac.in">179Y1A0423@ksrmce.ac.in</a>
23	179Y1A0424	BHUMIREDDY KUNTOLLA SURESH	B.Tech VII sem, ECE	<a href="mailto:179Y1A0424@ksrmce.ac.in">179Y1A0424@ksrmce.ac.in</a>
24	179Y1A0425	BOYA GUNASEKHAR	B.Tech VII sem, ECE	<a href="mailto:179Y1A0425@ksrmce.ac.in">179Y1A0425@ksrmce.ac.in</a>
25	179Y1A0426	BUKKEY RAKESH NAIK	B.Tech VII sem, ECE	<a href="mailto:179Y1A0426@ksrmce.ac.in">179Y1A0426@ksrmce.ac.in</a>
26	179Y1A0427	CHAGALETI SURYA NARAYANA REDDY	B.TechVII sem, ECE	<a href="mailto:179Y1A0427@ksrmce.ac.in">179Y1A0427@ksrmce.ac.in</a>
27	179Y1A0428	CHAMARTHI SANJEEVARAJU	B.Tech VII sem, ECE	<a href="mailto:179Y1A0428@ksrmce.ac.in">179Y1A0428@ksrmce.ac.in</a>
28	179Y1A0429	CHAVVA JASWITHA (W)	B.Tech VII sem, ECE	<a href="mailto:179Y1A0429@ksrmce.ac.in">179Y1A0429@ksrmce.ac.in</a>
29	179Y1A0431	CHILLA VENKATESWARA REDDY	B.Tech VII sem, ECE	<a href="mailto:179Y1A0431@ksrmce.ac.in">179Y1A0431@ksrmce.ac.in</a>
30	179Y1A0432	CHILLATHOTI KEERTHI (W)	B.Tech VII sem, ECE	<a href="mailto:179Y1A0432@ksrmce.ac.in">179Y1A0432@ksrmce.ac.in</a>
31	179Y1A0433	DADIBOYINA LOHITHA (W)	B.Tech VII sem, ECE	<a href="mailto:179Y1A0433@ksrmce.ac.in">179Y1A0433@ksrmce.ac.in</a>
32	179Y1A0434	DANDEBOYINA NAVYA SREE (W)	B.Tech VII sem, ECE	<a href="mailto:179Y1A0434@ksrmce.ac.in">179Y1A0434@ksrmce.ac.in</a>
33	179Y1A0435	DARA SEKHAR	B.Tech VII sem, ECE	<a href="mailto:179Y1A0435@ksrmce.ac.in">179Y1A0435@ksrmce.ac.in</a>
34	179Y1A0436	DEVAGUDI VENKATA SUBBAIAH	B.Tech VII sem, ECE	<a href="mailto:179Y1A0436@ksrmce.ac.in">179Y1A0436@ksrmce.ac.in</a>
35	179Y1A0437	DOKKUPALLI RAJESH KUMAR REDDY	B.Tech VII sem, ECE	<a href="mailto:179Y1A0437@ksrmce.ac.in">179Y1A0437@ksrmce.ac.in</a>
36	179Y1A0438	DOMMARAJU RAM MOHAN RAJU	B.Tech VII sem, ECE	<a href="mailto:179Y1A0438@ksrmce.ac.in">179Y1A0438@ksrmce.ac.in</a>

37	179Y1A0439	DUGGIREDDY VENKATA THARUN KUMAR REDDY	B.Tech VII sem, ECE	179Y1A0439@ksrmce.ac.in
38	179Y1A0440	ERIGELA MOUNIKA (W)	B.Tech VII sem, ECE	179Y1A0440@ksrmce.ac.in
39	179Y1A0441	ETHAKOTI RAJESH	B.Tech VII sem, ECE	179Y1A0441@ksrmce.ac.in
40	179Y1A0442	G B SIDDA UMA MAHESWARA REDDY	B.Tech VII sem, ECE	179Y1A0442@ksrmce.ac.in
41	179Y1A0446	GAJULAPALLI VENKATAPRASANNA (W)	B.Tech VII sem, ECE	179Y1A0446@ksrmce.ac.in
42	179Y1A0447	GALIGUTTA VIDYA (W)	B.Tech VII sem, ECE	179Y1A0447@ksrmce.ac.in
43	179Y1A0448	GANDHAM ARAVINDA SAI	B.Tech VII sem, ECE	179Y1A0448@ksrmce.ac.in
44	179Y1A0450	GANGAVARAM DHEERAJ	B.Tech VII sem, ECE	179Y1A0450@ksrmce.ac.in
45	179Y1A0451	GOPAJI SUBRAMANYAM	B.Tech VII sem, ECE	179Y1A0451@ksrmce.ac.in
46	179Y1A0452	GOPARAJULU RENUKA HARSHITHA (W)	B.Tech VII sem, ECE	179Y1A0452@ksrmce.ac.in
47	179Y1A0454	GORLA SUSHMITHA REDDY (W)	B.Tech VII sem, ECE	179Y1A0454@ksrmce.ac.in
48	179Y1A0455	GUDURU HARIKRISHNA	B.Tech VII sem, ECE	179Y1A0455@ksrmce.ac.in
49	179Y1A0456	GUNDLADURTHI BALAYALLA REDDY	B.Tech VII sem, ECE	179Y1A0456@ksrmce.ac.in
50	179Y1A0457	IDAGOTTU VENKATA SAI CHARAN	B.Tech VII sem, ECE	179Y1A0457@ksrmce.ac.in
51	179Y1A0458	JULAKALVA NIRANJANAREDDY	B.Tech VII sem, ECE	179Y1A0458@ksrmce.ac.in
52	179Y1A0459	KALLURU SUNANDHANA (W)	B.Tech VII sem, ECE	179Y1A0459@ksrmce.ac.in
53	179Y1A0460	KAMBAM VASU KALYAN REDDY	B.Tech VII sem, ECE	179Y1A0460@ksrmce.ac.in
54	179Y1A0461	KAMBELLA SAMBA	B.Tech VII sem, ECE	179Y1A0461@ksrmce.ac.in
55	179Y1A0480	MANNETI SRIKANTH REDDY	B.Tech VII sem, ECE	179Y1A0480@ksrmce.ac.in
56	179Y1A0481	MESHA DIVYA SREE (W)	B.Tech VII sem, ECE	179Y1A0481@ksrmce.ac.in
57	179Y1A0482	MOILOKALAVA VENKATA SWAROOP	B.Tech VII sem, ECE	179Y1A0482@ksrmce.ac.in
58	179Y1A0483	MOYELLACHERUVU RAGHAVA	B.Tech VII sem, ECE	179Y1A0483@ksrmce.ac.in
59	179Y1A0485	MUNAGAPATI CHANDANA SAI (W)	B.Tech VII sem, ECE	179Y1A0485@ksrmce.ac.in
60	179Y1A04D0	THOVI PAVAN KUMAR	B.Tech VII sem, ECE	179Y1A04D0@ksrmce.ac.in
61	179Y1A04D1	TIRUVEEDHI PRASHANTHI SHARON (W)	B.Tech VII sem, ECE	179Y1A04D1@ksrmce.ac.in
62	179Y1A04D2	UDATHA GANGA KIRAN	B.Tech VII sem, ECE	179Y1A04D2@ksrmce.ac.in
63	179Y1A04D3	UTTI BHAVYASREE (W)	B.Tech VII sem, ECE	179Y1A04D3@ksrmce.ac.in
64	179Y1A04D4	V NAGA RAJU	B.Tech VII sem, ECE	179Y1A04D4@ksrmce.ac.in
65	189Y5A0401	ADAPALA VANI PRASANNA (W)	B.Tech VII sem, ECE	189Y5A0401@ksrmce.ac.in
66	189Y5A0402	C SURESH	B.Tech VII sem, ECE	189Y5A0402@ksrmce.ac.in
67	189Y5A0403	GOLLA PRUTHVI YADAV	B.Tech VII sem, ECE	189Y5A0403@ksrmce.ac.in
68	189Y5A0404	KAKARLA MAHESH	B.Tech VII sem, ECE	189Y5A0404@ksrmce.ac.in

*P. S.*  
Coordinator  
*yanan*

*G. H.*  
Prof. HOD & H.O.D.  
Department of E.C.E.  
K.S.R.M. College of Engineering  
KADAPA - 516 003

*V. S. S. M. W. K.*  
Principal  
PRINCIPAL  
K.S.R.M. COLLEGE OF ENGINEERING  
KADAPA - 516 003. (A.P.)

# Programming for Computations-MATLAB

30hrs

## Course Objectives:

- Learn matlab programming.
- Understand the power of matlab.
- Gain knowledge to verify working of various tools.

## Course Outcomes:

The students will be able to:

- Learn the matlab programming
- apply inbuilt functions available in matlab software
- Analyze and visualize any real time data for interpretation.

**Module 1 :** Brief Introduction, Installation of MATLAB, History, Use of MATLAB, Key features, Introduction to MATLAB Software-MATLAB window, command window, workspace, command history, setting directory, working with the MATLAB user interface, basic commands, assigning variables, operations with variables.

**Module 2 :** Data files and Data types - character and string, arrays and vectors, column vectors and row vectors, Basic Mathematics-arithmetic operations, operators and special operators, mathematical and logical operators, solving arithmetic equations. Operations on Matrix-creating rows and columns, matrix operations, finding transpose, determinant and inverse operations and solving matrices.

**Module 3 :** M files-working with script tools, writing script file, executing script files, the MATLAB Editor, saving m files, Plots-plotting vector and matrix data, plot labelling, curve labelling and editing, 2D plots-basic plotting functions, creating a plot, plotting multiple data sets in one graph, specifying line styles and colors, graphing imaginary and complex data. figure windows, displaying multiple plots in one figure, controlling the axes.

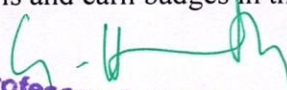
**Module 4 :** control statements programming, conditional statement programming examples. MATLAB Programming- automating commands with scripts, writing programs with logic and flow control, writing functions.

**Module 5 :** symbolic math in MATLAB- types of functions, global variables, calculus: Numerical integration, linear algebra, roots of polynomial equations, algebraic equations, differential equations, transforms (Fourier, Laplace, etc), ordinary differential equations, examples of few ODE's

## Text book:

1. MATLAB: A Practical Introduction to Programming and Problem Solving, 3rd edition, Stormy Attaway, Elsevier, 2013

**Resource:** Cody: A program developed by MathWorks that allows students to progressively develop MATLAB® programming skills and earn badges in the process.

  
Professor & H.O.D.  
Department of E.C.E.  
K.S.R.M. College of Engineering  
KADAPA - 516 003.



# K.S.R.M. COLLEGE OF ENGINEERING (UGC - AUTONOMOUS)

Kadapa, Andhra Pradesh, India - 516003

Approved by AICTE, New Delhi & Affiliated to JNTUA,  
Ananthapuramu.

An ISO 14001:2004 & 9001: 2015 Certified Institution

Department of Electronics & Communication Engineering

Certificate Course on Programming for Computations-MATLAB

### Schedule

S.No	Date	Time	Faculty	Topic
1	25/11/2020	3 PM to 5PM	Dr. D. Arun Kumar Sri. Y. V. Raju Miss P. Swetha	Inauguration
2	26/11/2020	3PM to 5PM	Sri. Y. V. Raju	Brief Introduction, Installation of MATLAB, History, Use of MATLAB, Key features, Introduction to MATLAB Software-MATLAB window, command window.
3	27/11/2020	3PM to 5PM	Dr. D. Arun Kumar	Setting directory, working with the MATLAB user interface, basic commands, assigning variables, operations with variables.
4	28/11/2020	3PM to 5PM	Dr. D. Arun Kumar	Data files and Data types - character and string, arrays and vectors, column vectors and row vectors.
5	29/11/2020	3PM to 5PM	Sri. Y. V. Raju	Basic Mathematics-arithmetic operations, operators and special operators, mathematical and logical operators.
6	30/11/2020	3PM to 5PM	Sri. Y. V. Raju	Solving arithmetic equations. Operations on Matrix-creating rows and columns, matrix operations, finding transpose, determinant and inverse operations and solving matrices.
7	1/12/2020	3PM to 5PM	Sri. Y. V. Raju	M files-working with script tools, writing script file,

				executing script files.
8	02/12/2020	3PM to 5PM	Sri. Y. V. Raju	MATLAB Editor, saving m files, Plots-plotting vector and matrix data, plot labelling, curve labelling and editing.
9	03/12/2020	3PM to 5PM	Sri. Y. V. Raju	2D plots-basic plotting functions, creating a plot, plotting multiple data sets in one graph, specifying line styles and colors, graphing imaginary and complex data.
10	04/12/2020	3PM to 5PM	Sri. Y. V. Raju	MATLAB Programming-automating commands with scripts, writing programs with logic and flow control, writing functions.
11	05/12/2020	3PM to 5PM	Sri. Y. V. Raju	Automating commands with scripts, writing programs with logic and flow control, writing functions.
12	06/12/2020	3PM to 5PM	Miss P. Swetha	Symbolic math in MATLAB-types of functions, global variables.
13	07/12/2020	3PM to 5PM	Miss P. Swetha	Calculus: Numerical integration, linear algebra.
14	08/12/2020	3PM to 5PM	Dr. D. Arun Kumar	Roots of polynomial equations, algebraic equations, differential equations, transforms (Fourier, Laplace, etc).
15	09/12/2020	3PM to 6PM	Dr. D. Arun Kumar	Ordinary differential equations, examples of few ODE's.
16	10/12/2020	3 PM to 6PM	Sri. Y. V. Raju Miss P. Swetha	Exam and certificate distribution

*P.S.*  
Coordinators  
*June*

*G.H.*  
HOD  
Professor & H.O.D.  
Department of E.C.E.  
K.S.R.M. College of Engineering  
KADAPA - 516 003.

*V.S.S. mm/15*  
Principal  
PRINCIPAL  
K.S.R.M. COLLEGE OF ENGINEERING  
KADAPA - 516 003. (A.P.)





# K.S.R.M. COLLEGE OF ENGINEERING

(UGC-AUTONOMOUS)

Kadapa, Andhra Pradesh, India- 516 003

Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.

An ISO 14001:2004 & 9001: 2015 Certified Institution

## ACTIVITY REPORT

Certification Course

On

## “PROGRAMMING FOR COMPUTATIONS -MATLAB”

25<sup>th</sup> NOV, 2020 to 10<sup>th</sup> DEC, 2020

<b>Target Group</b>	:	Students
<b>Details of Participants</b>	:	68 Students
<b>Coordinators</b>	:	Sri Y. V. Raju, Asst. Prof, Dept. of ECE Miss P. Swetha, Asst. Prof, Dept. of ECE
<b>Organizing Department</b>	:	Department of Electronics and Communication Engineering
<b>Venue</b>	:	Online mode (Google meet)

### **Description:**

Certification course on “Programming for Computations -MATLAB” was organized by Dept. of ECE from 25-11-2020 to 10-12-2020 in online mode. Dr. D. Arun Kumar, Sri Y.V. Raju and Miss P. Swetha acted as Course instructors. Basics of MATLAB: MATLAB window, basic commands, use of variables with values, arrays, basic trigonometric functions, etc. Function in MATLAB: defined, declared and used of the user defined functions. Plot the graphs for given variable and check given system performance. Live Script editor: It is used for series of MATLAB commands in a single interactive environment etc. was explained.

Photo :



Sri Y. V. Raju,

A handwritten signature in black ink, appearing to read 'yud'.

Miss P. Swetha.

Coordinators

V. S. S. Mully

Principal

PRINCIPAL  
K.S.R.M. COLLEGE OF ENGINEERING  
KADAPA - 516 003. (A.P.)



# **K.S.R.M. COLLEGE OF ENGINEERING**

**UGC - Autonomous**

Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.  
Kadapa, Andhra Pradesh, India- 516 003

## **Certificate Course on Programming for Computations MATLAB**

**25/11/2020 to 10/12/2020**

Organized by

**DEPARTMENT OF  
ELECTRONICS AND COMMUNICATION ENGINEERING**





46	179Y1A0452	GOPARAJULU RENUKA HARSHITHA (W)	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
47	179Y1A0454	GORLA SUSHMITHA REDDY (W)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
48	179Y1A0455	GUDURU HARIKRISHNA	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
49	179Y1A0456	GUNDLADURTHI BALAYALLA REDDY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
50	179Y1A0457	IDAGOTTU VENKATA SAI CHARAN	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
51	179Y1A0458	JULAKALVA NIRANJANAREDDY	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
52	179Y1A0459	KALLURU SUNANDHANA (W)	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
53	179Y1A0460	KAMBAM VASU KALYAN REDDY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
54	179Y1A0461	KAMBELLA SAMBA	✓	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓
55	179Y1A0480	MANNETI SRIKANTH REDDY	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
56	179Y1A0481	MESHA DIVYA SREE (W)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
57	179Y1A0482	MOILOKALAVA VENKATA SWAROOP	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
58	179Y1A0483	MOYELLACHERUVU RAGHAVA	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓
59	179Y1A0485	MUNAGAPATI CHANDANA SAI (W)	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
60	179Y1A04D0	THOVI PAVAN KUMAR	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
61	179Y1A04D1	TIRUVEEDHI PRASHANTHI SHARON (W)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
62	179Y1A04D2	UDATHA GANGA KIRAN	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
63	179Y1A04D3	UTTI BHAVYASREE (W)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
64	179Y1A04D4	V NAGA RAJU	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
65	189Y5A0401	ADAPALA VANI PRASANNA (W)	✓	✓	✓	✓	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	✓
66	189Y5A0402	C SURESH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
67	189Y5A0403	GOLLA PRUTHVI YADAV	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
68	189Y5A0404	KAKARLA MAHESH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	X	✓

PC  
Coordinator  
youn

G. A. K.  
HOD  
Professor & H.O.D.  
Department of E.C.E.  
K.S.R.M. College of Engineering  
KADAPA - 516 003.

V. S. S. M. W. L. Y.  
Principal  
PRINCIPAL  
K.S.R.M. COLLEGE OF ENGINEERING  
KADAPA - 516 003. (A.P.)

# MATLAB

- When you first open MATLAB, notice:
  1. The `Command Window` is where you'll give MATLAB its input and view its output.
  2. The `Workspace` shows you all of your current working variables and other objects.
  3. The `Command History` shows you all commands you used in CW.
  4. The `Editor` for MATLAB scripts (M-files) . To save & run the m-file type 'F5'. To open the editor with a new or old m-file use the command **open** *file\_name*

# MATLAB

- MATLAB is a program for doing numerical computation. It was originally designed for solving linear algebra type problems using matrices. It's name is derived from **MATrix LABoratory.**
- MATLAB has since been expanded and now has built-in functions for solving problems requiring data analysis, signal processing, optimization, and several other types of scientific computations. It also contains functions for 2-D and 3-D graphics and animation.



# MATLAB help

- For help, command description etc use F1 or following commands:
  - `help command_name`
  - `helpwin command_name`
  - `doc command_name`
  - `helpdesk command_name`
  - `demo command_name`
  - `lookfor keyword` (search unknown command)
- <http://www.mathworks.com/support/>
- For example when running “`help sin`” one get
  - `SIN` Sine of argument in radians.
  - `SIN(X)` is the sine of the elements of X.
  - See also `ASIN`, `SIND`.
  - Overloaded functions
  - Reference page in Help browser `doc sin`

# Some Useful commands

- **what** List all m-files in current directory  
List all files in current directory  
Display test.m in command window  
Delete test.m  
Change directory  
Show current directory  
Display directory path to 'closest' test.m
- List known variables
- List known variables plus their size
- Clear variables from workspace
- Clear the command window

# MATLAB & Matrices

- MATLAB treats all variables as matrices. For our purposes a matrix can be thought of as an array, in fact, that is how it is stored.
- Vectors are special forms of matrices and contain only one row OR one column.
- Scalars are matrices with only one row AND one column

# Variable Names

- Variable names **ARE** case sensitive
- Variable names can contain up to 63 characters (as of MATLAB 6.5 and newer). One can use **namelengthmax** command to verify it.
- Variable names must start with a letter followed by letters, digits, and underscores.
- MATLAB variables are defined by assignment. There is no need to declare in advance the variables that we want to use or their type.

- Example

```
x=1;          % Define the scalar variable x
```

```
y=[1 2 3]    % row vector
```

```
z=[1;2;3]    % column vector
```

```
A=[1 2 3;4 5 6;7 8 9] % 3x3 matrix
```

```
whos         % List of the variables defined
```

- Note: terminate statement with semicolon (;) to suppress output.

# Special Variables

Default variable name for results

Value of  $\pi$

Smallest incremental number

Infinity

Not a number e.g. 0/0

imaginary unit  $i$ , i.e. square root of -1

**realmin** The smallest usable positive real number

**realmax** The largest usable positive real number

[SpecialVars.m](#)

# Other symbols

prompt

continue statement on next line

separate statements and data

start comment which ends at end of line

(1) suppress output

(2) used as a row separator in a matrix

: specify range

# Relational Operators

- MATLAB supports six relational operators.

Less Than <

Less Than or Equal <=

Greater Than >

Greater Than or Equal >=

Equal To ==

Not Equal To ~=

# Math & Assignment Operators

Power  $\wedge$  or  $\cdot\wedge$   $a\wedge b$  or  $a.\wedge b$

Multiplication  $*$  or  $\cdot*$   $a*b$  or  $a.*b$

Division  $/$  or  $\cdot/$   $a/b$  or  $a./b$

or  $\backslash$  or  $\cdot\backslash$   $b\backslash a$  or  $b.\backslash a$

NOTE:  $56/8 = 8\backslash 56$

$-$  (unary)  $+$  (unary)

Addition  $+$   $a + b$

Subtraction  $-$   $a - b$

Assignment  $=$   $a = b$  (assign  $b$  to  $a$ )

Operators.m



# MATLAB Logical Operators

- MATLAB supports five logical operators.

element wise/scalar logical NOT

element wise logical AND

element wise logical OR

logical (short-circuit) AND

logical (short-circuit) AND

# Logical Functions

- MATLAB also supports some logical functions.
  - **xor** (a, b) exclusive or
  - **any**(x) returns 1 if any element of x is nonzero
  - **all**(x) returns 1 if all elements of x are nonzero
  - **isnan**(x) returns 1 at each NaN in x
  - **isinf**(x) returns 1 at each infinity in x
  - **finite**(x) returns 1 at each finite value in x
  - **find**(x) find indices and values of non zero elements

# Some Matrix functions

- ***zeros(rows, cols)*** – create zero matrix
- ***rand(rows, cols)*** – generate random matrix
- ***ones(rows, cols)*** – matrix with 1 in all entries
- ***eye (rows, cols)*** – identity matrix
- ***sub2ind, ind2sub*** indices manipulation

# Extracting a Sub-Matrix

- A portion of a matrix can be extracted and stored in a smaller matrix by specifying the names of both matrices and the rows and columns to extract. The syntax is:

```
sub_matrix = matrix ( r1 : rn , c1 : cn ) ;
```

```
sub_matrix = matrix ( r1 : rn , : ) ;
```

```
sub_matrix = matrix ( : , c1 : cn ) ;
```

```
sub_matrix = matrix ( r1 : dr : rn , c1 : dc : cn ) ;
```

where r1 and rn specify the beginning and ending rows and c1 and cn specify the beginning and ending columns to be extracted to make the new matrix.

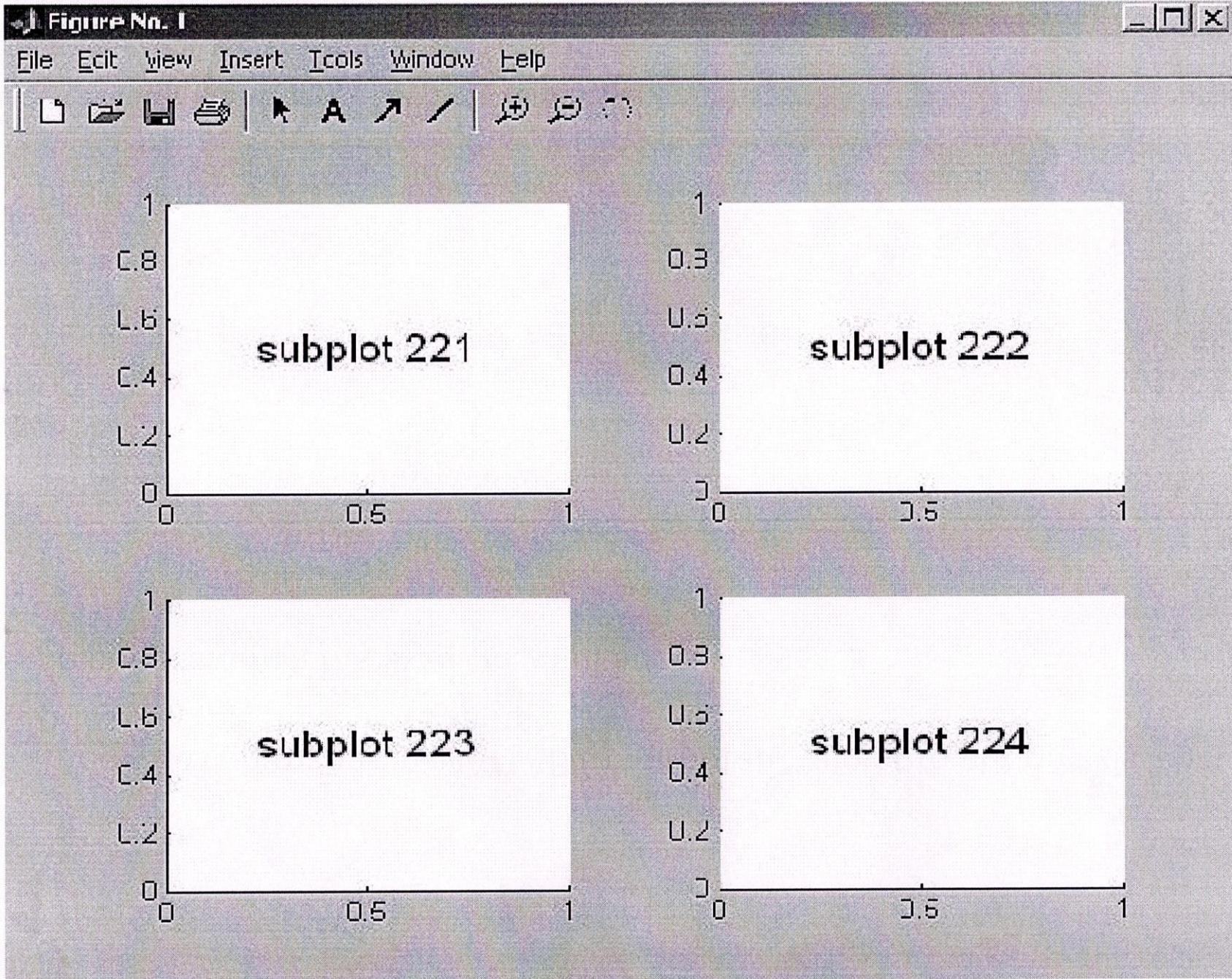
The terms dr and dc define spacing different than one.

- [matrix.m](#)

# “Continuous” functions

- Numerically, we cannot represent a general continuous function  $(x, f(x))$  because it requires handling infinite data (for each point in the range, we need to keep  $f(x)$ ). Instead, we represent a function by its values at a finite number of data points  $(x_i, f(x_i))$ , where the series of points  $\{x_i\}$  is typically referred to as the sampling points or the grid points. Accordingly, the "continuous" functions in Matlab accepts a vector of point  $\{x_i\}$  and return a vector of values  $\{f(x_i)\}$ .
- Some functions
  - sqrt
  - log
  - cos/acos/sin/asin etc
  - exp - exponential
  - abs
  - sign
  - norm
  - sum
  - prod - product





# Plotting

- There are commands in MATLAB to "annotate" a plot to put on axis labels, titles, and legends. For example:
- To put a label on the axes we would use:
- To put a title on the plot, we would use:
- To distinct between function in the graph use:
- plotting.m





# K.S.R.M. COLLEGE OF ENGINEERING

UGC - AUTONOMOUS  
KADAPA, AP - 516 005

## *Certificate of Completion*

*This is to certify that*

*Mr/Ms.* Ambati. Gurusiva

*Bearing the Roll No* 17941A0403

*has Successfully completed certification course on*

Programming for Computations - MATLAB

*From* 25/11/2020 *to* 10/12/2020 , *Organized by Department of*

ECE

P. S. yund  
Coordinator

G. D. D.  
Head Of Department

V. S. S. Murthy  
Principal



# K.S.R.M. COLLEGE OF ENGINEERING

UGC - AUTONOMOUS  
KADAPA, AP - 516 005

## Certificate of Completion

*This is to certify that*

Mr/Ms. D. Ram Mohana Raju

Bearing the Roll No 179Y1A0438

has Successfully completed certification course on

Programming for Computations - MATLAB  
From 25/11/2020 to 10/12/2020, Organized by Department of

ECE

P. S. Jyoti  
Coordinator

G. H. S.  
Head Of Department

V. S. S. Murthy  
Principal



# K.S.R.M. COLLEGE OF ENGINEERING

UGC - AUTONOMOUS  
KADAPA, AP - 516 005

## Certificate of Completion

*This is to certify that*

Mr/Ms. T. Pawan Kumar

Bearing the Roll No 179Y1A04100

has Successfully completed certification course on

Programming for Computations - MATLAB  
From 25/11/2020 to 10/12/2020, Organized by Department of

ECE

P. S. Jyoti  
Coordinator

G. H. Reddy  
Head Of Department

V. S. S. Murthy  
Principal



# K.S.R.M. COLLEGE OF ENGINEERING

**(UGC - AUTONOMOUS)**

Kadapa, Andhra Pradesh, India - 516003

Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.

Department of Electronics and Communication Engineering

## Feedback Form

S.No.	Email address	Name of the student	Year & Semester	Branch	Roll Num	Is the course content met your expectation	Is the lecture sequence well planned	The contents of the course is explained with examples	Is the level of course high	Is the course exposed you to the new knowledge and practices	Is the lecturer clear and easy to understand	Rate the value of course in increasing your skills	Any issues
1	<a href="mailto:179Y1A0401@ksrmce.ac.in">179Y1A0401@ksrmce.ac.in</a>	ADURI VISHNU VARDHAN REDDY	B.Tech VIIsem	ECE	179Y1A0401	Yes	Yes	Agree	Agree	Strongly agree	4	5	Nothing
2	<a href="mailto:179Y1A0402@ksrmce.ac.in">179Y1A0402@ksrmce.ac.in</a>	ALA LAKSHMI SAI GOWRI (W)	B.Tech VIIsem	ECE	179Y1A0402	Yes	Yes	Agree	Agree	Strongly agree	5	5	Nothing
3	<a href="mailto:179Y1A0403@ksrmce.ac.in">179Y1A0403@ksrmce.ac.in</a>	AMBATI GURUSIVA	B.Tech VIIsem	ECE	179Y1A0403	Yes	Yes	Agree	Agree	Strongly agree	4	5	Good
4	<a href="mailto:179Y1A0404@ksrmce.ac.in">179Y1A0404@ksrmce.ac.in</a>	AMBATI LAKSHUMALAH	B.Tech VIIsem	ECE	179Y1A0404	Yes	Yes	Agree	Agree	Strongly agree	5	5	nothing
5	<a href="mailto:179Y1A0405@ksrmce.ac.in">179Y1A0405@ksrmce.ac.in</a>	ANDELA MATAM VINAY KUMAR	B.Tech VIIsem	ECE	179Y1A0405	Yes	Yes	Agree	Agree	Strongly agree	5	5	Good
6	<a href="mailto:179Y1A0406@ksrmce.ac.in">179Y1A0406@ksrmce.ac.in</a>	ANKANA SUNITHA (W)	B.Tech VIIsem	ECE	179Y1A0406	Yes	Yes	Agree	Agree	Strongly agree	4	5	very good
7	<a href="mailto:179Y1A0407@ksrmce.ac.in">179Y1A0407@ksrmce.ac.in</a>	ANNAREDDY VENKATA MEGHANA(W)	B.Tech VIIsem	ECE	179Y1A0407	Yes	Yes	Strongly agree	Agree	Strongly agree	4	3	Nothing
8	<a href="mailto:179Y1A0408@ksrmce.ac.in">179Y1A0408@ksrmce.ac.in</a>	ANUGURU VINEELA (W)	B.Tech VIIsem	ECE	179Y1A0408	Yes	Yes	agree	Agree	Strongly agree	4	4	no

9	<a href="mailto:179Y1A0409@ksrmce.ac.in">179Y1A0409@ksrmce.ac.in</a>	ATHIKARI PRATHYUSHA (W)	B.Tech VIIsem	ECE	179Y1A0409	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Nothing
10	<a href="mailto:179Y1A0410@ksrmce.ac.in">179Y1A0410@ksrmce.ac.in</a>	AVINASH, B	B.Tech VIIsem	ECE	179Y1A0410	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Good
11	<a href="mailto:179Y1A0411@ksrmce.ac.in">179Y1A0411@ksrmce.ac.in</a>	AVULA VAMSIKRISHNA	B.Tech VIIsem	ECE	179Y1A0411	Yes	Yes	Agree	Agree	Strongly agree	5	4	Good
12	<a href="mailto:179Y1A0412@ksrmce.ac.in">179Y1A0412@ksrmce.ac.in</a>	B BABU PRASAD	B.Tech VIIsem	ECE	179Y1A0412	Yes	Yes	agree	Agree	Strongly agree	5	5	Good
13	<a href="mailto:179Y1A0413@ksrmce.ac.in">179Y1A0413@ksrmce.ac.in</a>	BALAM SAINATH	B.Tech VIIsem	ECE	179Y1A0413	Yes	Yes	agree	Agree	Strongly agree	3	5	Good
14	<a href="mailto:179Y1A0414@ksrmce.ac.in">179Y1A0414@ksrmce.ac.in</a>	BALARAMIREDDYGARI BHARATH KALYAN REDDY	B.Tech VIIsem	ECE	179Y1A0414	Yes	Yes	agree	Agree	Strongly agree	5	4	very good
15	<a href="mailto:179Y1A0416@ksrmce.ac.in">179Y1A0416@ksrmce.ac.in</a>	BANDI NAVEEN KUMAR	B.Tech VIIsem	ECE	179Y1A0416	Yes	Yes	agree	Agree	Strongly agree	4	4	very good
16	<a href="mailto:179Y1A0417@ksrmce.ac.in">179Y1A0417@ksrmce.ac.in</a>	BANDI NIKHIL KUMAR	B.Tech VIIsem	ECE	179Y1A0417	Yes	Yes	agree	Agree	Strongly agree	5	4	very good
17	<a href="mailto:179Y1A0418@ksrmce.ac.in">179Y1A0418@ksrmce.ac.in</a>	BANDI PRANEETH	B.Tech VIIsem	ECE	179Y1A0418	Yes	Yes	agree	Agree	Strongly agree	3	5	no
18	<a href="mailto:179Y1A0419@ksrmce.ac.in">179Y1A0419@ksrmce.ac.in</a>	BANTHULLA ANIL KUMAR RAJU	B.Tech VIIsem	ECE	179Y1A0419	Yes	Yes	agree	Agree	Strongly agree	4	5	nithing
19	<a href="mailto:179Y1A0420@ksrmce.ac.in">179Y1A0420@ksrmce.ac.in</a>	BASIREDDY MAHESH KUMAR REDDY	B.Tech VIIsem	ECE	179Y1A0420	Yes	Yes	Strongly agree	Agree	Strongly agree	4	5	Good
20	<a href="mailto:179Y1A0421@ksrmce.ac.in">179Y1A0421@ksrmce.ac.in</a>	BATHALA MANOJ	B.Tech VIIsem	ECE	179Y1A0421	Yes	Yes	Strongly agree	Agree	Strongly agree	4	4	Good
21	<a href="mailto:179Y1A0422@ksrmce.ac.in">179Y1A0422@ksrmce.ac.in</a>	BAYYARAPU SURESH	B.Tech VIIsem	ECE	179Y1A0422	Yes	Yes	Strongly agree	Agree	Strongly agree	4	3	Good
22	<a href="mailto:179Y1A0423@ksrmce.ac.in">179Y1A0423@ksrmce.ac.in</a>	BHEEMAVARAPU VARA LAKSHMI (W)	B.Tech VIIsem	ECE	179Y1A0423	Yes	Yes	agree	Agree	Strongly agree	4	4	Good
23	<a href="mailto:179Y1A0424@ksrmce.ac.in">179Y1A0424@ksrmce.ac.in</a>	BHUMIREDDY KUNTOLLA SURESH	B.Tech VIIsem	ECE	179Y1A0424	Yes	Yes	agree	Agree	Strongly agree	5	4	Good

24	<a href="mailto:179Y1A0425@ksrmce.ac.in">179Y1A0425@ksrmce.ac.in</a>	BOYA GUNASEKHAR	B.Tech VIIsem	ECE	179Y1A0425	Yes	Yes	Strongly agree	Agree	Strongly agree	5	4	Good
25	<a href="mailto:179Y1A0426@ksrmce.ac.in">179Y1A0426@ksrmce.ac.in</a>	BUKKEY RAKESH NAIK	B.Tech VIIsem	ECE	179Y1A0426	Yes	Yes	agree	Agree	Strongly agree	5	5	Good
26	<a href="mailto:179Y1A0427@ksrmce.ac.in">179Y1A0427@ksrmce.ac.in</a>	CHAGALETI SURYA NARAYANA REDDY	B.Tech VIIsem	ECE	179Y1A0427	Yes	Yes	agree	Agree	Strongly agree	5	5	Nothing
27	<a href="mailto:179Y1A0428@ksrmce.ac.in">179Y1A0428@ksrmce.ac.in</a>	CHAMARTHI SANJEEVARAJU	B.Tech VIIsem	ECE	179Y1A0428	Yes	Yes	agree	Agree	Strongly agree	5	5	no
28	<a href="mailto:179Y1A0429@ksrmce.ac.in">179Y1A0429@ksrmce.ac.in</a>	CHAVVA JASWITHA (W)	B.Tech VIIsem	ECE	179Y1A0429	Yes	Yes	agree	Agree	Strongly agree	3	4	no
29	<a href="mailto:179Y1A0431@ksrmce.ac.in">179Y1A0431@ksrmce.ac.in</a>	CHILLA VENKATESWARA REDDY	B.Tech VIIsem	ECE	179Y1A0431	Yes	Yes	Strongly agree	Agree	Strongly agree	3	4	no
30	<a href="mailto:179Y1A0432@ksrmce.ac.in">179Y1A0432@ksrmce.ac.in</a>	CHILLATHOTI KEERTHI (W)	B.Tech VIIsem	ECE	179Y1A0432	Yes	Yes	Strongly agree	Agree	Strongly agree		5	no
31	<a href="mailto:179Y1A0433@ksrmce.ac.in">179Y1A0433@ksrmce.ac.in</a>	DADIBOYINA LOHITHA (W)	B.Tech VIIsem	ECE	179Y1A0433	Yes	Yes	Strongly agree	Agree	Strongly agree	5	4	nothing
32	<a href="mailto:179Y1A0434@ksrmce.ac.in">179Y1A0434@ksrmce.ac.in</a>	DANDEBOYINA NAVYA SREE (W)	B.Tech VIIsem	ECE	179Y1A0434	Yes	Yes	agree	Agree	Strongly agree	5	5	Nothing
33	<a href="mailto:179Y1A0435@ksrmce.ac.in">179Y1A0435@ksrmce.ac.in</a>	DARA SEKHAR	B.Tech VIIsem	ECE	179Y1A0435	Yes	Yes	agree	Agree	Strongly agree	5	4	no
34	<a href="mailto:179Y1A0436@ksrmce.ac.in">179Y1A0436@ksrmce.ac.in</a>	DEVAGUDI VENKATA SUBBAIAH	B.Tech VIIsem	ECE	179Y1A0436	Yes	Yes	agree	Agree	Strongly agree	5	4	Nothing
35	<a href="mailto:179Y1A0437@ksrmce.ac.in">179Y1A0437@ksrmce.ac.in</a>	DOKKUPALLI RAJESH KUMAR REDDY	B.Tech VIIsem	ECE	179Y1A0437	Yes	Yes	agree	Agree	Strongly agree	5	4	Good
36	<a href="mailto:179Y1A0438@ksrmce.ac.in">179Y1A0438@ksrmce.ac.in</a>	DOMMARAJU RAM MOHAN RAJU	B.Tech VIIsem	ECE	179Y1A0438	Yes	Yes	agree	Agree	Strongly agree	5	5	Good
37	<a href="mailto:179Y1A0439@ksrmce.ac.in">179Y1A0439@ksrmce.ac.in</a>	DUGGIREDDY VENKATA THARUN KUMAR REDDY	B.Tech VIIsem	ECE	179Y1A0439	Yes	Yes	agree	Agree	Strongly agree	5	5	Good

38	<a href="mailto:179Y1A0440@ksrmce.ac.in">179Y1A0440@ksrmce.ac.in</a>	ERIGELA MOUNIKA (W)	B.Tech VIIsem	ECE	179Y1A0440	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Good
39	<a href="mailto:179Y1A0441@ksrmce.ac.in">179Y1A0441@ksrmce.ac.in</a>	ETHAKOTI RAJESH	B.Tech VIIsem	ECE	179Y1A0441	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Good
40	<a href="mailto:179Y1A0442@ksrmce.ac.in">179Y1A0442@ksrmce.ac.in</a>	G B SIDDA UMA MAHESWARA REDDY	B.Tech VIIsem	ECE	179Y1A0442	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	Good
41	<a href="mailto:179Y1A0446@ksrmce.ac.in">179Y1A0446@ksrmce.ac.in</a>	GAJULAPALLI VENKATAPRASANNA (W)	B.Tech VIIsem	ECE	179Y1A0446	Yes	Yes	agree	Agree	Strongly agree	4	4	Good
42	<a href="mailto:179Y1A0447@ksrmce.ac.in">179Y1A0447@ksrmce.ac.in</a>	GALIGUTTA VIDYA (W)	B.Tech VIIsem	ECE	179Y1A0447	Yes	Yes	agree	Agree	Strongly agree	4	5	Good
43	<a href="mailto:179Y1A0448@ksrmce.ac.in">179Y1A0448@ksrmce.ac.in</a>	GANDHAM ARAVINDA SAI	B.Tech VIIsem	ECE	179Y1A0448	Yes	Yes	agree	Agree	Strongly agree	4	5	Good
44	<a href="mailto:179Y1A0450@ksrmce.ac.in">179Y1A0450@ksrmce.ac.in</a>	GANGAVARAM DHEERAJ	B.Tech VIIsem	ECE	179Y1A0450	Yes	Yes	agree	Agree	Strongly agree	3	5	Good
45	<a href="mailto:179Y1A0451@ksrmce.ac.in">179Y1A0451@ksrmce.ac.in</a>	GOPAJI SUBRAMANYAM	B.Tech VIIsem	ECE	179Y1A0451	Yes	Yes	agree	Agree	Strongly agree	3	5	Nothing
46	<a href="mailto:179Y1A0452@ksrmce.ac.in">179Y1A0452@ksrmce.ac.in</a>	GOPARAJULU RENUKA HARSHITHA (W)	B.Tech VIIsem	ECE	179Y1A0452	Yes	Yes	Strongly agree	Agree	Strongly agree	2	5	Nothing
47	<a href="mailto:179Y1A0454@ksrmce.ac.in">179Y1A0454@ksrmce.ac.in</a>	GORLA SUSHMITHA REDDY (W)	B.Tech VIIsem	ECE	179Y1A0454	Yes	Yes	agree	Agree	Strongly agree	2	5	very good
48	<a href="mailto:179Y1A0455@ksrmce.ac.in">179Y1A0455@ksrmce.ac.in</a>	GUDURU HARIKRISHNA	B.Tech VIIsem	ECE	179Y1A0455	Yes	Yes	agree	Agree	Strongly agree	4	5	very good
49	<a href="mailto:179Y1A0456@ksrmce.ac.in">179Y1A0456@ksrmce.ac.in</a>	GUNDLADURTHI BALAYALLA REDDY	B.Tech VIIsem	ECE	179Y1A0456	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	very good
50	<a href="mailto:179Y1A0457@ksrmce.ac.in">179Y1A0457@ksrmce.ac.in</a>	IDAGOTTU VENKATA SAI CHARAN	B.Tech VIIsem	ECE	179Y1A0457	Yes	Yes	Strongly agree	Agree	Strongly agree	4	5	nothing
51	<a href="mailto:179Y1A0458@ksrmce.ac.in">179Y1A0458@ksrmce.ac.in</a>	JULAKALVA NIRANJANAREDDY	B.Tech VIIsem	ECE	179Y1A0458	Yes	Yes	agree	Agree	Strongly agree	4	5	Good
52	<a href="mailto:179Y1A0459@ksrmce.ac.in">179Y1A0459@ksrmce.ac.in</a>	KALLURU SUNANDHANA (W)	B.Tech VIIsem	ECE	179Y1A0459	Yes	Yes	agree	Agree	Strongly agree	4	5	Good

53	<a href="mailto:179Y1A0460@ksrmce.ac.in">179Y1A0460@ksrmce.ac.in</a>	KAMBAM VASU KALYAN REDDY	B.Tech VIIsem	ECE	179Y1A0460	Yes	Yes	agree	Agree	Strongly agree	4	5	nothing
54	<a href="mailto:179Y1A0461@ksrmce.ac.in">179Y1A0461@ksrmce.ac.in</a>	KAMBELLA SAMBA	B.Tech VIIsem	ECE	179Y1A0461	Yes	Yes	agree	Agree	Strongly agree	4	5	nothing
55	<a href="mailto:179Y1A0480@ksrmce.ac.in">179Y1A0480@ksrmce.ac.in</a>	MANNETI SRIKANTH REDDY	B.Tech VIIsem	ECE	179Y1A0480	Yes	Yes	agree	Agree	Strongly agree	4	5	nothing
56	<a href="mailto:179Y1A0481@ksrmce.ac.in">179Y1A0481@ksrmce.ac.in</a>	MESHA DIVYA SREE (W)	B.Tech VIIsem	ECE	179Y1A0481	Yes	Yes	agree	Agree	Strongly agree	4	5	Good
57	<a href="mailto:179Y1A0482@ksrmce.ac.in">179Y1A0482@ksrmce.ac.in</a>	MOILOKALAVA VENKATA SWAROOP	B.Tech VIIsem	ECE	179Y1A0482	Yes	Yes	agree	Agree	Strongly agree	5	5	Good
58	<a href="mailto:179Y1A0483@ksrmce.ac.in">179Y1A0483@ksrmce.ac.in</a>	MOYELLACHERUV U RAGHAVA	B.Tech VIIsem	ECE	179Y1A0483	Yes	Yes	agree	Agree	Strongly agree	5	5	very good
59	<a href="mailto:179Y1A0485@ksrmce.ac.in">179Y1A0485@ksrmce.ac.in</a>	MUNAGAPATI CHANDANA SAI (W)	B.Tech VIIsem	ECE	179Y1A0485	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	very good
60	<a href="mailto:179Y1A04D0@ksrmce.ac.in">179Y1A04D0@ksrmce.ac.in</a>	THOVI PAVAN KUMAR	B.Tech VIIsem	ECE	179Y1A04D0	Yes	Yes	Strongly agree	Agree	Strongly agree	5	5	nothing
61	<a href="mailto:179Y1A04D1@ksrmce.ac.in">179Y1A04D1@ksrmce.ac.in</a>	TIRUVEEDHI PRASHANTHI SHARON (W)	B.Tech VIIsem	ECE	179Y1A04D1	Yes	Yes	agree	Agree	Strongly agree	5	5	no
62	<a href="mailto:179Y1A04D2@ksrmce.ac.in">179Y1A04D2@ksrmce.ac.in</a>	UDATHA GANGA KIRAN	B.Tech VIIsem	ECE	179Y1A04D2	Yes	Yes	agree	Agree	Strongly agree	5	5	Nothing
63	<a href="mailto:179Y1A04D3@ksrmce.ac.in">179Y1A04D3@ksrmce.ac.in</a>	UTTI BHAVYASREE (W)	B.Tech VIIsem	ECE	179Y1A04D3	Yes	Yes	agree	Agree	Strongly agree	3	4	no
64	<a href="mailto:179Y1A04D4@ksrmce.ac.in">179Y1A04D4@ksrmce.ac.in</a>	V NAGA RAJU	B.Tech VIIsem	ECE	179Y1A04D4	Yes	Yes	agree	Agree	Strongly agree	5	5	nothing
65	<a href="mailto:189Y5A0401@ksrmce.ac.in">189Y5A0401@ksrmce.ac.in</a>	ADAPALA VANI PRASANNA (W)	B.Tech VIIsem	ECE	189Y5A0401	Yes	Yes	agree	Agree	Strongly agree	5	5	Good
66	<a href="mailto:189Y5A0402@ksrmce.ac.in">189Y5A0402@ksrmce.ac.in</a>	C SURESH	B.Tech VIIsem	ECE	189Y5A0402	Yes	Yes	agree	Agree	Strongly agree	5	4	Good



67	189Y5A0403@ksrm ce.ac.in	GOLLA PRUTHVI YADAV	B.Tech VIIsem	ECE	189Y5A0403	Yes	Yes	agree	Agree	Strongly agree	4	5	Good
68	189Y5A0404@ksrm ce.ac.in	KAKARLA MAHESH	B.Tech VIIsem	ECE	189Y5A0404	Yes	Yes	agree	Agree	Strongly agree	4	4	Good

*P. S. yadav*  
Coordinator

*G. H. d*  
HOD

Professor & H.O.D.  
Department of E.C.E.  
K.S.R.M. College of Engineering  
KADAPA - 516 003.

*V. S. S. mmlh*  
PRINCIPAL

PRINCIPAL  
K.S.R.M. COLLEGE OF ENGINEERING,  
KADAPA - 516 003. (A.P.)