

Department of ELECTRONICS AND COMMUNICATION ENGINEERING

A Report on 5 Days Workshop on "MATLAB Master Class for Beginners" (14th August 2023 to 19th August 2023)

The Department of ECE successfully conducted five days workshop on "MATLAB Master class for Beginners" for II B.Tech students on 14th August 2023 to 19th August 2023. The aim of this workshop is to provide an insight on importance of MATLAB in the field of communication, signal processing, audio and speech processing, so on. The workshop comprises of theoretical lectures delivered by department faculties and also live demonstration of the software and various toolboxes.

The students got an exposure to Matlab coding, Simulink, signal processing and communication toolboxes. As an outcome of the workshop, the students are able to **implement a programming code, design a block using simulink, process audio and speech signals and utilize communication tools.**

Total 31 students were registered for the workshop and participation certificate for all 31 were issued by the college.

Dr.S.REKHA and **Mrs.K.MADHAVI**, worked as Faculty Coordinators for the five day workshop.

Day-1:

The workshop was inaugurated by Dean, School of Engineering and Head of the Department, ECE in the ECE seminar hall at 9:45 am.



DR.G. Janardhana Raju,
DEAN-NNRG addressed the
gathering



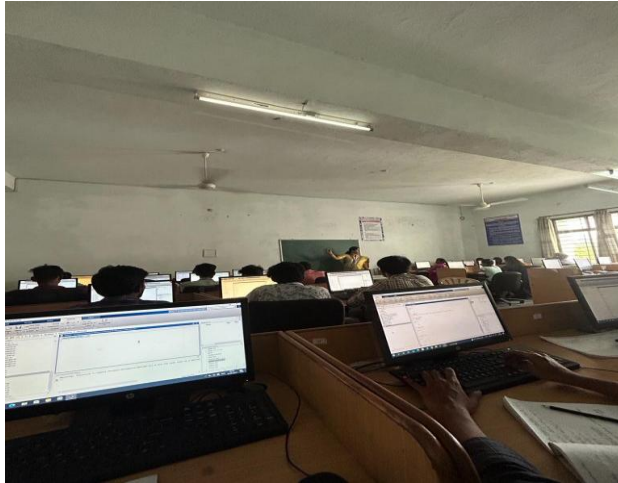
Dr S Ravi Chand, HoD-ECE
Addressed the gathering



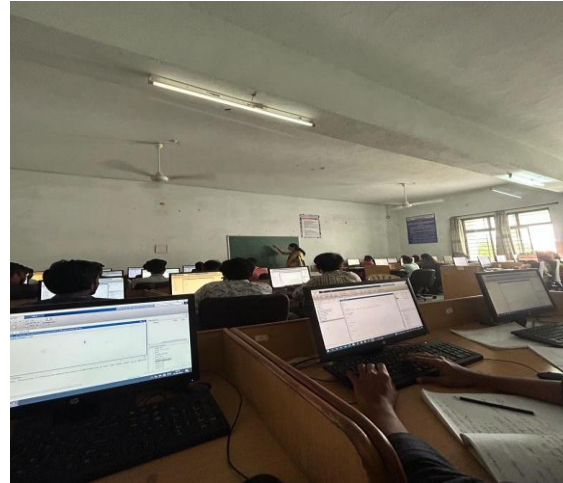
Dr. S. Rekha, Convener of
workshop addressed the
gathering

Day-1:

In the morning session, Mrs.K Madhavi as resource person delivered the “Basic concepts of MATLAB”. The afternoon session is followed by hands-on training on the MATLAB coding.



Mrs. K.Madhavi, Asst. Prof. as resource person delivered the concepts of “Basics of MATLAB”



Hands-on by students about Basics of MATLAB

Day-2:

In morning session, resource person Mr. Prashanth Kulkarni delivered the theoretical session on "Communication and MATLAB Simulink".

Afternoon session, “Hand’s on Implementation of MATLAB simulink and communication toolboxes”.



Students Practising “MATLAB Simulink” in the Laboratory

Day-3:

In morning session, resource person Dr S Karthick delivered lecture on "Signal Processing".

In the afternoon session, implementation of coding on "Signal Processing" with hands-on.

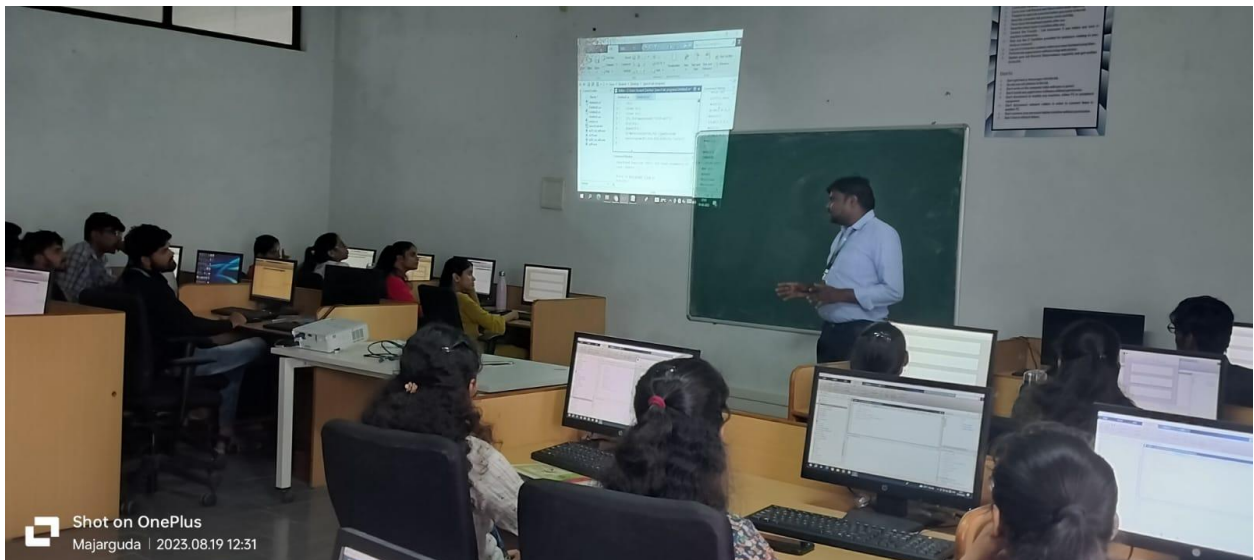


Dr S Karthick, Associate Professor of ECE, as resource person

Day-4:

In morning session, resource person Mr. B.Ravi delivered a lecture on "Speech and audio Processing using MATLAB tool".

In the afternoon session, practical implementation session is handled on "speech and audio processing".



Mr. B. Ravi delivered a lecture on "speech and audio signal processing"

Day-5:

In morning session, resource person Dr S Karthick delivered a lecture on “Signal processing toolboxes” followed by hands-on during afternoon session.



Dr.S.Karthick assisting students on “practice of signal processing toolboxes”

Finally, the workshop ended with a valedictory session, in the presence of Dean Dr. G Janardhana Raju and Head of Department Dr. S.Ravi Chand. Student participants received their certificates from the Dean.



Dr S Rekha, Convenor of the workshop,
appreciated by Dean and HoD



Mrs. K Madhavi, Coordinator, appreciated by
Dean and HoD



Mrs. K.Madhavi, resource person, appreciated by Dean and HoD



Dr S Karthick, resource person, appreciated by Dean and HoD



Mr. B. Ravi, resource person, appreciated by Dean and HoD



Mr. Prashanth Kulakarni, resource person, appreciated by Dean and HoD



A student receiving participation certificate from Dean and HoD



Participants of the Workshop



Workshop Participants with Dean, HOD, Convener and Faculties.

Outcomes of the Workshop:

After the completion of workshop, the students are able to

- Code a program in the MATLAB, compile, debug and visualize the output
- Model a block using MATLAB Simulink.
- Utilize communication toolboxes effectively
- Process speech and audio signals and analyze the output.

Place: Hyderabad

Date: 22/08/2023

S. Reddy

Convener

R. Reddy

HOD-ECE