

PRARAMBH – THE GCET PROJECT CLUB G. H. PATEL COLLEGE OF ENGINEERING AND TECHNOLOGY VALLABH VIDYANAGAR



**REPORT ON** 

## "INTRODUCTION TO MATLAB AND CODING TECHNIQUES" (28<sup>th</sup> July, 2018)

MATLAB is used for more precise and accurate control of various parameters. Most often these are used for the regulation of temperature, pressure, speed, flow and other process variables. Due to robust performance and functional simplicity, these have been accepted by enormous industrial applications where a more precise control is the foremost requirement.

MATLAB is a software that is making smart devices programmed and controlled in a user language making it more easily accessible and worked out by allowing prototyping and experimentation by designers, programmers and casual users alike.

Addressing these mini but quite fundamental and integral needs to the GCET Student community, the Day of 28<sup>th</sup> July, 2018. Tuesday witnessed a workshop and enlightening session on "INTRODUCTION TO MATLAB and CODING TECHNIQUES" that focussed on usage of MATLAB in

- Basic Operations and Interpolation and Decimation
- Noise Insertion and Removal
- Conceptual Image processing

So that an amateur student can generate interest to learn to code on Arduino platform and generate controlled mechanism, as in case P-I-D Controllers.

The Workshop Commenced at 1:30 PM with motivating words of Prof. Saurin Seth, Faculty In charge of Prarambh Club, GCET. Thereafter Speaker of the workshop Prof. Falgun Thakkar, EC Dept. Faculty Coordinator, GCET provided fresh insights to events that were yet to unroll in front of 20 multi – disciplinary participants from ME, MC, EC and EE departments who had participated with keen interest to learn and zeal to attempt a project on these lines.

The Workshop was managed by team of students namely, Gajera Karan, Ashish Ahuja, Mohit Panjabi, Rishit Panchal, and Chintan Prajapati

The First session involved the basic introduction and application to MATLAB in various fields and industries bringing students towards the interest of learning the matlab software. Gradually, the workshop was finally started with the contents like vectors and array operations that are inevitable in formulating the programmes that are needed to design the applications using software.

After the short break the second session included the core topics such as signal identification and processing, different waveforms and their link with image processing

The Workshop ended on High note of getting motivated to attempt projects and learn from mistakes that will come. The feedback which demanded and encouraged similar workshops on many other fields of automation and control, programming and Raspberry pie programming and image processing, AI using python proved the success of the current one.

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