

INSTITUTE OF MATHEMATICS AND APPLICATIONS,
BHUBANESWAR-29

DETAILS OF NATIONAL WORKSHOP

1. **Title:** WORKSHOP ON MATLAB FOR MATHEMATICAL APPLICATIONS
2. **Date and Venue:** 22-23, January 2017 at Institute of Mathematics & Applications, Andharua, Bhubaneswar-29
3. **Aims/Objectives of Workshop:**

We are pleased to announce that we intend to hold a **National Workshop**. This workshop would see an audience from all over the country, comprising of postgraduates and Teachers of colleges. Guest professors shall conduct the workshop with hands on training.

This will be an intensive workshop devoted for skill development of the participants. About six to seven hours of laboratory work on each day is envisaged.

MATLAB (SHORT FOR MATrix LABoratory) is a special purpose computer program optimized to perform matrix mathematics and scientific calculations. It started life as a program designed to perform matrix mathematics but over years it has grown into a flexible computing system capable of solving any technical problem. MATLAB is a most popular mathematical software package for numerical computation that combines efficient linear algebra operations and powerful graphics with an intuitive, interactive user interface. MATLAB is not only a programming language, but a great programming environment as well. MATLAB can be useful for a wide range of applications from basic matrix and vector manipulation to full colour 2-D AND 3-D Visualization. It is an essential simulation tool in research works where it includes but not limited to analyse, interpret, visualization and simulation. Over one million people around the world, code with MATLAB programming and hence it has become the language of technical computing. In our MATLAB Workshop for students and college teachers, experts in the subject will help students to gain practical experience in MATLAB Simulation Environment.

The main aim of this workshop is to systematically expose various aspects of Matlab for mathematical applications. The selected participants will have common learning interest but with diversified backgrounds and knowledge, thereby bringing in a wider range of expertise.

We believe that an intense workshop will provide wonderful opportunities for communication and further collaborations among participants, as well as transitions of new ideas between sub-fields and into applications. The prime objective of the workshop is to introduce the basic concepts of MATLAB and explore its importance, difficulties and challenges. We expect the workshop to provide an inspiring and productive forum.

4. Target audience/participants with expected number:

The workshop aims at targeting students pursuing undergraduate and post graduate studies in Mathematics and Mathematics teachers of colleges. The expected number of learners is 40 (which includes 10 in house students + 30 teachers). Few numbers of learners shall be chosen from colleges affiliated to Utkal University exclusively. The applicants will be selected based on a short Statement of Purpose that they will be required to send in, along with their CV and permission of their respective colleges in case of teachers. The CV should contain at least the following:

- Full Name:
- E-mail ID:
- Phone number:
- Address for correspondence:
- Name of the College:
- Type of participants : (Student/Teacher)

(For details visit our website: <http://www.iomaorissa.ac.in>. Interested learners may send their application by e-mail: imaworkshop@iomaorissa.ac.in)
List of selected participants shall appear in the institute website.

5.Details of Sessions:

22/1/2017 Sunday and 23.01.2017 Monday

4 Sessions per day. (all sessions are hands on training basis)

Sessions:

Session-I

09:30 a.m. 10:00 a.m- Inauguration

Technical Session 10:30 to 12:00

Technical Session-II 12:30-1:30

Lunch 01:30 p.m. – 2:30 p.m

Technical Session-III-2:30-4:00

Technical Session-IV-4:00-5:30

23/1/2017 Monday

Technical Session-I

10:00 -11:30

Technical Session-II 11:30-1:00 p.m

Lunch 01:00 p.m. – 2:00 p.m

Technical Session-III-2:00-3:30

Technical Session-IV-3:30-5:00

Guest Faculty:

- (1) Professor S. Padhy, Former Director, Institute of Mathematics & Applications, Andharua, Bhubaneswar-29
 - (2) Dr. Rabindra Kishore Mishra, Professor, Department of Electronic Sciences, Berhampur University.
 - (3) Dr. Motahar Reza, Professor, NIST, Berhampur
- Some more teachers have been contacted and are expected to join.

6. Expected outcome:

Student learners shall use the skill for furtherance of higher studies and job opportunities. Learner teachers shall be resource persons in their respective institutions on Matlab.

7. Miscellaneous Details:

There is no registration fee for the event. Lunch shall be provided to all participants on 22 and 23 January.

Due to constraints of funds it is not possible to provide T.A. to participants.

For any details, please contact:

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