# **ABOUT DEPARTMENT OF MATHEMATICS**

Mathematics is the fundamental discipline which is essential in every branch of knowledge, especially in economic, science and engineering. Department of Mathematics, KUET started its journey from the very beginning of this educational institution as engineering college in 1974. As Mathematics is the fundamental and core subject for engineering education, the department of Mathematics started its academic curriculum along with all engineering departments to teach Mathematics to the all undergraduate students in the various departments. With the enhanced responsibilities, this department has expanded and has been performing the vested responsibilities. As this department is a part of application oriented institution, so its syllabuses are a bit different from other universities and are application oriented. This department offer several Post Graduate programs namely MSc, MPhil and PhD. Moreover, this department organizes Seminar, Workshop, Olympiad etc in collaboration with other institutes/organizations. Know more at http://www.kuet.ac.bd/department/MATH

#### **ABOUT BMS**

The prime goal of Bangladesh Mathematical Society (BMS) is to promote mathematics education in Bangladesh at all levels from school to university. Another goal of BMS is to enhance research work in pure and applied mathematics as well as other mathematical sciences. BMS organizes International Conferences in every two years at different universities of Bangladesh on different areas of mathematics. They also support to organize National Conference, Workshops, and Seminars etc. Know more at http://www.bdmathsociety.org/

#### **ADDRESS FOR COMMUNICATION**

Prof. Dr. A R M Jalal Uddin Jamali Dept. of Mathematics, KUET & Member, Workshop committee, BMS.

Phone: 01714087243

Email: jamali@math.kuet.ac.bd; armjamali@yahoo.com

Website: www.kuet.ac.bd/math/jamali/

#### PROGRAM COORDINATOR

Prof. Dr. Mohammad Arif Hossain Department of Mathematics, KUET.

Phone: 01714087385; Email: arifhkhan63@math.kuet.ac.bd; arifkhan63@ya-

hoo.com

Website: www.kuet.ac.bd/math/arif/

# **REGISTRATION**

Interested participants will have to register. The form of registration is available in web portal http://www.kuet.ac.bd/department/MATH/Workshop-2019/ . Hospitalities will be provided to the registered participants only.

# National Workshop on

# "APPLICATION OF MATHEMATICS IN DIFFERENT FIELDS"

Date: November 22, 2019

Venue: Khulna University of Engineering & Technology (KUET)



Department of Mathematics
1st Floor, Block-A, New Academic Building,
KUET, Khulna-9203
Web: http://kuet.ac.bd/department/MATH
Email: headmath@kuet.ac.bd

In collaboration with



Bangladesh Mathematical Society
Department of Mathematics, Dhaka University, Dhaka-1000.
Web: http://bdmathsociety.org

# **INTRODUCTION**

Mathematics is grossly divided into two branches namely Pure and Applied. Pure mathematics built up the theoretical aspects of the subject, whereas applied mathematics deals with application side of the subject. The students of both the branches are required to know some fundamental courses which has its application in general, that is independent of sub-branches. Unfortunately in the syllabuses of the universities, the applications of such most common topics are not explicitly mentioned and as a result students are not taught in that light. After obtaining the regular degree some of these students become teachers where they need to teach those topics that were not taught to them. It is thus necessary to address those applications of these type topics to the new generation. The Department of Mathematics of Khulna University of Engineering & Technology (KUET) handles a different type of syllabus where applications are to be taught. Similarly the syllabuses of some other universities contain topics that are applicable to financial sector. Bangladesh Mathematical Society (BMS) is the Organization of all Mathematical Educators. One of their major goal is to promote mathematical education in the country and has sub-committee to organize workshops. When requested, they have responded positively and thus the workshop is going to be held.

# **OBJECTIVE OF THE WORKSHOP:**

- To provide some ideas of some common mathematical topics those have their applications.
- ii) To provide some applications of specific topics related to different branches.

#### AREAS TO BE COVERED

- i) Calculus, Differential equation and Fourier series.
- ii) Matrices
- iii) Mathematics in Finance.
- iv) Fluid Dynamics.
- v) Biological Mathematics

#### RESOURCE PERSONS

- 1. Prof. Dr. Mohammad Arif Hossain, Dept. of Mathematics, KUET.
- 2. Prof. Dr. A R M. Jalal Uddin Jamali, Dept. of Mathematics, KUET.
- 3. Prof. Dr. Md Ashraf Uddn, Department of Mathematics, SUST.
- 4. Prof. Dr. Mahmud Alam, Mathematics Discipline, KU.
- Dr. A B M Shahadat Hossain, Assoc. Prof., Department of Applied Mathematics, DU.
- 6. Dr. Ali Akbar, Assoc. Prof., Department of Applied Mathematics, RU

# WHO MAY ATTEND:

Teachers of Universities, Teachers of Honors Teaching Colleges and Post-graduate students of Mathematics are eligible to participate in this workshop.

### **TENTATIVE SCHEDULE:**

8:00 AM – 9:00 AM: Kit distribution

9:00 AM – 9:30 AM: Opening Ceremony

9:30 AM - 10:00 AM: Tea Break

10:00 AM – 10:40 AM: Application of Calculus, Differential equation and Fourier

series.

10:40 AM – 11:20 AM: Mathematics in Finance

11:20 AM – 12:00 PM: Mathematics in Biological Modeling

12:00 PM – 02:40 PM: Computational Fluid Dynamics

12:40 PM – 02:20 PM: Prayer and Lunch Break 02:30 PM – 03:15 PM: Application of Matrices

03:15 PM - 04:00 PM: Fluid Dynamics

04:00 AM - 04:30 PM: Certificate giving and closing ceremony

# HOW TO APPLY

- (i) Download the registration form from the website http://www.kuet.ac.bd/department/MATH/Workshop-2019
- (ii) Fill up the form accordingly and sent to: jamali@math.kuet.ac.bd; or armjamali@yahoo.com by 15 November 2019.
- N.B. Participants are requested to conform after getting invitation letter.

#### **IMPORTANT DATES**

- (i) Deadline of registration: November 15, 2019
- (ii) Notification/Invitation: November 17, 2019
- (iii) Workshop: November 22, 2019

# HOW TO REACH

- a) If you are at Khulna, you may take any CNG or auto rickshaw and you should arrive at Fhulbarigate, then get a riskhaw to arrive KUET.
- b) If you are coming via Joshore get down at Fhulbarigate and get a Riskhaw to arrive KUET.
- c) If you coming via Bagarhate or Satkhira get down Khulna Town and then take any CNG or auto rickshaw and you should arrive at Fhul barigate, then get a Riskhaw to arrive KUET.

#### query

NB. For any quarry, please don't hesitate to contact with the communicator or Program Coordinator

<sup>\*</sup> Kit, Tea and Lunch will be provided to the registered participants only.