# Kamla Nehru Institute of Technology (KNIT) Sultanpur

**KNIT Sultanpur** was initially established as the Faculty of Technology in the year 1976 by Kamla Nehru Memorial Trust. Later, in the year 1983 it was registered as a separate society and re-named as the Kamla Nehru Institute of Technology. The Institute is one of the leading technical Institutions of the region and is responsible for producing best engineers with skill sets comparable with the best in the world. This institute is fully aware of its social responsibilities and is addressing the issues of application of technology to the industry. It also renders the testing and consultancy services to the neighbouring industries and various other agencies. The Institute is presently academically autonomous, affiliated to Dr. Abdul Kalam Technical University, (formerly Uttar Pradesh Technical University, Lucknow) Lucknow.

# Department of Applied Sciences and Humanities (APSH)

The APSH department is an allied department which serves as a bedrock for the engineering departments of the institute. The department takes care of core subjects like mathematics, physics, chemistry, management and professional communications. The APSH Department is one of the oldest and flagship departments of the Institute. The department has well-qualified faculty and technical supporting staffs.

# Motilal Nehru National Institute Of Technology (MNNIT), Allahabad

MNNIT, Allahabad (formerly Motilal Nehru Regional Engineering College (MNREC), Allahabad). It is an institute with total commitment to quality and excellence in academic pursuits, and is among one of the leading institutes in India. It was established in the year 1961 as a joint enterprise of Central Govt. of India and State Govt. of Uttar Pradesh in accordance with the scheme of establishment of REC's. However with effect from June 26th of 2002 the institute became deemed university and an Institute of national importance, now known as Motilal Nehru National Institute of Technology Allahabad.

#### NTSC-2019

#### **CHIEF PATRON**

Prof. V. K. Pathak, Hon'ble Vice chancellor, AKTU Lucknow

## PATRON (S)

Prof. J. P. Pandey, Director, KNIT Sultanpur Prof. Rajeev Tripathi, Director, MNNIT Allahabad

#### CHAIRMAN(S)

Prof. R.P Tripathi, Head APSH, KNIT Sultanpur Prof. Manoj Kumar, Head, Department of Mathematics MNNIT Allahabad

|                 | KNIT Sultanpur                               | MNNIT Allahabad                          |
|-----------------|--|--|
| COORDINATOR (S) |  |  |
|                 | Dr. H.K. Mishra                              | Dr. Gorakh Nath                          |
|                 | Dr. Akhilesh K. Singh                        |  |
| CONVENER (S)    |  |  |
|                 | Dr. Sujeet Kumar Agarwal                     | Dr. Sahadeo Padhye                       |
|                 | Dr. Kapil Saxena                             | Dr. Surabhi Tiwari                       |
|                 | Mr. Pradeep Kumar                            | Dr. B. Vasu                              |
| _               | Dr. Sujeet Kumar Agarwal<br>Dr. Kapil Saxena | Dr. Sahadeo Padhye<br>Dr. Surabhi Tiwari |

#### **ORGANIZING COMMITTEE**

Dr. Arvind Tiwari
Ms. Vandana Tiwari
Dr. Vidyakant Shukla
Mr. Amit Kumar
Mr. Amit Kumar
Dr. Y.K.Chauhan
Mr. Rajneesh Singh
Mr. Ambuj Kumar
Mr. Shashank

#### **ADVISORY COMMITTEE**

## **KNIT Sultanpur**

Prof. A. K. Singh, Coordinator TEQIP-III, Prof. R.P.Pyasi, (Dean R), Prof. L.U.B. Pandey, Prof. C.L. Yadav

#### MNNIT Allahabad

Prof. Naresh Kumar Coordinator TEQIP-III, Prof. Shiv Dutt Kumar

# **Registration Process:**

There is no registration fee. Fill the application form and get attested by the Head of Institute/College and please send scanned copy of this form to: <a href="https://hkm1975@yahoo.co.in">hkm1975@yahoo.co.in</a> on or before 10<sup>th</sup> July 2019. Also submit the hard copy of this application form on the first day of STC, failing which your candidature will not be considered.

### **Contact Person:**

**Dr. H. K. Mishra,** Department of Applied Sciences and Humanities, KNIT Sultanpur-228118, U.P. Phone: +91 7987739172 E-mail: hkm1975@vahoo.co.in

One Week Short Term Course on Numerical Techniques for Scientific Computations (NTSC-2019)

July 15-19, 2019

Under the aegis of TEQIP-III Project



# **JOINTLY ORGANIZED**

By

Department of Applied Sciences and Humanities
Kamla Nehru Institute of Technology
Sultanpur, U. P.-228118, India

&

Department of Mathematics

Motilal Nehru National Institute of Technology

Allahabad, U. P.-211004, India

## **Department of Mathematics**

The department of mathematics came into existence w.e.f April 1, 2003, prior to this it was constituted as a section of department of applied mathematics, applied sciences and humanities. The department offers core courses at under graduate level and several advanced courses at post graduate level. The department also enrols candidates for Ph.d program. There is a wide spread interaction between mathematics department and various engineering departments in the field of teaching and research. The department of mathematics started full time M.Sc. in mathematics and scientific computing program since 2008. This two year program offers an exciting opportunity to students who were interested in mathematics and who wish to pursue courses for industry, research and teaching.

#### **About NTSC-2019**

Numerical analysis is the area of mathematics and computer science that creates, analyzes and implements algorithms for obtaining numerical solutions to real life problems. These types of problems generally occur in natural sciences, social sciences, medicine, business and different branches of science and engineering. The discipline combines computations, computer mathematical symbolic graphics, and other areas of computer science and engineering to make it easier to set up, solve and interpret complicated mathematical models of the real world.

The purpose of this course is to equip the participants with the necessary ideas and numerical methods so that when the mathematical terms appear in research they can be tackle with confidence and we can do independent study into specialized areas. The important role of this course is to summarize, crystallize and to give forward orientation to the numerical methods taught in UG and PG curriculum with its application in future researches.

#### **Course Content**

- Curve fitting
- Interpolation
- Spline techniques
- Numerical linear algebra
- Numerical methods for boundary value problems
- Numerical methods for eigen values and eigen vector
- Numerical methods for ODEs and PDEs
- FEM and FDM
- Singularly perturbed problems

# About organizing place

**Sultanpur** is a city and district in the Indian state of Uttar Pradesh. Located on the right banks of the Gomti (a major tributary of the Ganga River), Sultanpur is the administrative headquarters of Sultanpur District and is a part of Ayodhya Division. It is situated 135 kms east of state capital Lucknow. The common language of the people of Sultanpur is Awadhi, a dialect of Hindi. Places of interest in Sultanpur are, Parijaat tree, Sitakund ghat etc. The city has a large number of temples and palaces.

#### Who Can Attend?

The course will be useful for the faculty members / Doctoral & PG students of different Universities/ Institutes/ colleges & Professionals working in the Industries. Limited number of U.G. students may also be selected based on the availability of seats. Selected candidates will be informed through email.

# **Selection Criteria**

Selection will be done based on first -come-first-serve basis to a maximum number of 40 (forty). The list of selected participants will be intimated through e-mail. The certificate will be issued to candidate on successful completion of the course.

Boarding and lodging will be provided to out stationed participants in hostels. No charges for institutional Candidates having TEQIP project.

# Registration form One Week Short Term Course on Numerical Techniques for Scientific Computations (NTSC-2019)

July 15–19, 2019
Sponsored by TEQIP-III
Jointly Organized by

# Department of Applied Sciences and Humanities, KNIT Sultanpur

**Department of Mathematics, MNNIT Allahabad** 

| Full Name(in BLOCK letters, as desired on certificate) |  |  |
|--|--|--|
| Designation & Dept::                                   |  |  |
| Affiliation:   |  |  |
| Highest qualification:                                 |  |  |
| Experience (if any): Teaching: Industry:               |  |  |
| Address for correspondence:                            |  |  |
| Mobile:Email:  |  |  |
| Accommodation required: YES/NO                         |  |  |
| Attending the STC: Manual                              |  |  |
| Signature of the Applicant                             |  |  |
|  |  |  |
|  |  |  |

Sig. & Stamp of Approving Authority