

ABOUT THE COLLEGE

JNTUA College of Engineering, Anantapuramu, is one of the oldest premier colleges in South India, with illustrious alumni. The college has celebrated its Diamond Jubilee in the year 2006 and has an excellent atmosphere for advancement of one's knowledge. In the year 2008 the college has become a constituent college of the newly formed JNTUA, Anantapur. About 194 private Engineering/Pharmacy/MBA colleges in the districts of Anantapuramu, Kadapa, Kurnool, Chittor and Nellore are affiliated to JNTUA Anantapuramu. Anantapuramu is well connected with major cities like Mumbai, Hyderabad, Bangalore and Chennai by rail and road. It is very near to places of tourist interest like Lepakshi, Hampi, Belum caves and Puttaparthi.

ABOUT THE DEPARTMENT

The Department of Chemical Engineering was established in 1989 and has very recently celebrated its Silver Jubilee. The department is accredited with NBA and offers UG, PG, MS and Ph.D programs. The Department has highly qualified faculty with expertise in the areas of Membrane Separations, Pervaporation, Environmental Engineering, Nanotechnology, Interfacial Science, Fluidization, Micro-reactors and Bioprocesses. The department has earlier carried out and currently carrying many research projects sponsored by BRNS, BHEL, UCIL, AICTE, UGC, etc...

ABOUT THE WORKSHOP

Mathematical modeling is the art of translating problems from an application area into tractable mathematical formulations whose theoretical and numerical analysis provides insight, answers, and guidance useful for the originating application. Many times the description of system behavior by experimentation might not be feasible due to inaccessible inputs and outputs or cost of experimentation might be too high or experiment may be dangerous. Therefore, solution of such systems might be possible by framing mathematical models followed by simulation. Complex problems of all engineering and science streams can be solved with much ease using mathematical modeling and simulation. Simple mathematical equations such as algebraic, or linear equations can be solved by user, however, differential equations of higher order or partial differential equations of complex nature can only be solved using a simulation tools.

Objectives of the Program

Learning about mathematical modeling is an important step from a theoretical mathematical training to an application-oriented mathematical expertise, and makes the learner fit for mastering the challenges of our modern technological culture. This workshop is aimed to train the participants in formulating mathematical models from simple to complex problems of nature.

Further, the workshop is designed to give hands on training on MATLAB for simulation of ODEs, PDEs, and Graphics.

Topics to be Covered:

- Principles of Mathematical Modeling
- Computational methods
- Basics of MATLAB
- Linear & Nonlinear regression
- Solving process control problems using MATLAB & Simulink
- Solution of ODE's, PDE's
- Basics of CFD and its applications
- Introduction to ANSYS FLUENT and COMSOL
- Hands-on / practice sessions using the computation tools

RESOURCE PERSONS:

The resource persons will be drawn from IITs, NITs, R&Ds, JNTUACEA, other premier Institutes and Industries. The course includes Lectures and Laboratory classes.

ELIGIBILITY:

Faculty from the departments of Chemical Engineering, Civil Engg, Mechanical Engg, Food Technology, Biotechnology, ECE, EEE and Mathematics are eligible to apply. Interested practicing engineers from industries may also apply. The strength permitted by AICTE is 40, which will vary depending upon response.

The applicants can submit their duly filled-in applications to the coordinator along with the registration fee. Selection will be made by short-listing the applications based upon their relevance to the program.

ACCOMMODATION:

Type of Institution	Travel	Boarding & Lodging	Registration Fee
AICTE approved	To and fro AC 3 Tier fare on production of Tickets	Free at College Premises	Rs 500/-*
Industry/R&D Organizations	To be borne by the Participant		Rs 5,000/-

*The amount is to be paid through a Demand Draft drawn in favor of "AICTE-FDP" payable at SBI, JNTUEC branch, Ananthapuramu. The same will be refunded on completion of the program.

ADDRESS FOR CORRESPONDENCE:

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Cell: +91-9247192692

Note: Hard copies of the Filled in application with sponsorship certificate and DD should reach the above address on or before 15/02/2020

CHIEF PATRON

Prof. S. Srinivas Kumar
Vice-Chancellor, JNTUA, Ananthapuramu

PATRONS

Prof. M. Vijay Kumar, Registrar, JNTUA

CO-PATRONS

Prof. K. Govinda Rajulu, Principal,
JNTUACEA

Prof. T. Bala Narsaiah,
Vice-Principal, JNTUACEA

CHAIRPERSON

Dr. S. Sharada

Assistant Professor & Head (i/c),
Chemical Engineering, JNTUACEA

ORGANIZING COMMITTEE

Coordinator

Prof. T. Bala Narsaiah

Professor, Department of Chemical Engineering
JNTUACE, Ananthapuramu

Co-Coordinator

Dr. B. Dilip Kumar

Assistant Professor, Department of Chemical
Engineering JNTUA CE, Ananthapuramu

Members

Prof. S.V. Satyanarayana, ChE, JNTUACEA

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Ms. Ch. Maneesha, ChE, JNTUACEA

Ms. H. Rehana Anjum, ChE, JNTUACEA

AICTE Two-Week Faculty Development Program

on

Mathematical Modeling and Simulation for Scientists & Engineers

24-02-2020 to 07-03-2020

Sponsored by

AI India Council for Technical Education



Coordinator

Prof. T. Bala Narsaiah &

Co-coordinator

Dr. B. Dilip Kumar

Organized by



Department of Chemical Engineering
JNTUA College of Engineering
(Autonomous)

Ananthapuramu, Andhra Pradesh

<http://www.intuacea.ac.in>

**AICTE Two-Week Faculty Development Program on
Mathematical Modeling and Simulation for Scientists & Engineers**

(24-02-2020 to 07-03-2020)

Department of Chemical Engineering, JNTUA College of Engineering (Autonomous)
Ananthapuramu – 515002, Andhra Pradesh

APPLICATION FORM

Name (in Block Letters):

Date of Birth & Age:

Organization:

Designation :

Experience (in Years):

Address for Communication:

Qualification:

Teaching:

Research:

Industry:

Phone: (O):

Mobile: +91

e-mail ID:

Is your Institution approved by AICTE: Yes/No

Accommodation: Required/Not Required

No. of Summer/Winter schools/STTPs attended:

DD No. :

Date:

Bank:

Amount: Rs.500/-

Declaration by the candidate

The given information is true to the best of my knowledge. I agree to abide by the rules and regulations governing the program. If selected, I shall attend the course for the entire duration, In case I am unable to attend the course, I am prepared to forego the refundable advance paid by me (if applicable).

Place:

Date:

Signature of the Candidate

Sponsorship

Mr./Ms./Dr. _____ is a regular employee of our Institution and is hereby sponsored. He/she will be permitted to attend the program, if selected.

Date:

Office Seal

Signature of the Head of Institution