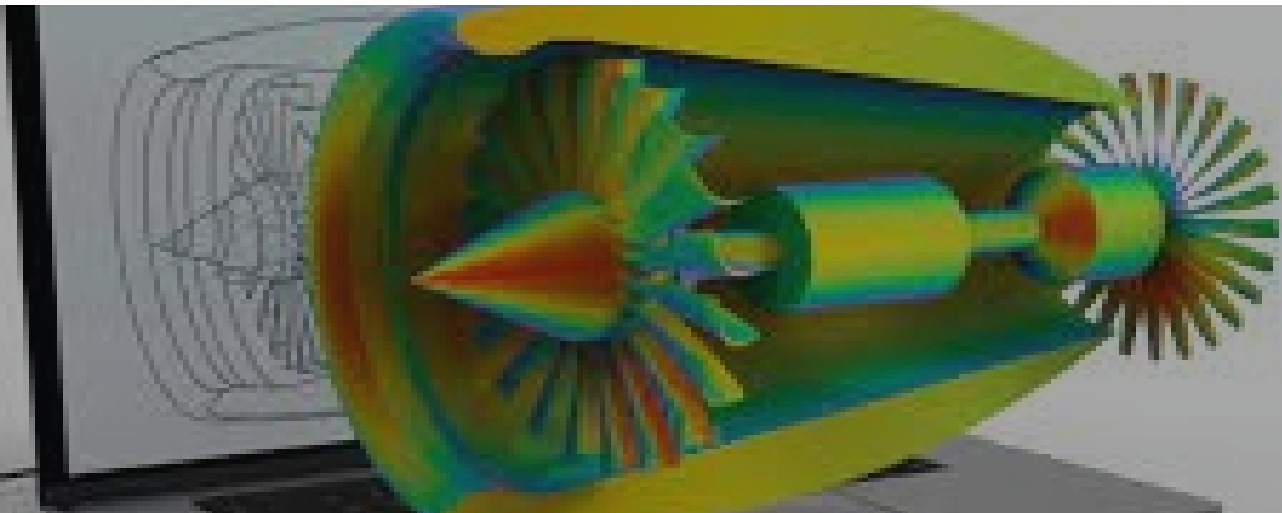**RAMAIAH UNIVERSITY OF APPLIED SCIENCES**

FACULTY OF ENGINEERING AND TECHNOLOGY

Department of Mechanical Engineering
Department of Civil Engineering
Department of Automotive and Aeronautical Engineering

3 - Day Short Course

on

LINEAR FINITE ELEMENTS

Date and Venue

2nd - 4th January 2023
Ramaiah University of Applied Sciences
Ramaiah Technology Campus, Peenya,
Bengaluru - 560058

Contact Details

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ABOUT RUAS

Ramaiah University of Applied Sciences (RUAS), a state Private University aims to focus its programs on student centric higher education. Students can expect to experience an integrated approach to academic, research, training, real life problem solving and entrepreneurship. The University, at present, offers undergraduate, postgraduate and doctoral programs in Engineering and Technology, Art and Design, Management and Commerce, Hospitality Management and Catering Technology, Pharmacy, Dental Sciences, Mathematical and Physical Sciences and Life and Allied Health Sciences.

ABOUT THE COURSE

The Finite Element Method (FEM) is a numerical and computer-based technique for solving a wide range of practical engineering problems in a variety of fields. The course is intended to prepare students for the theory and applications of linear Finite Element Analysis (FEA) to solid and structural mechanics, heat transfer, fluid mechanics, and other fields. The fundamental idea and features, as well as the fundamental steps of FEA, will be introduced. The mathematical foundations of element formulation, boundary conditions, equation solution, and post processing are all covered.

COURSE CONTENT

1. Background: Introduction to Numerical Simulations and FEM
2. Basic Concepts in FEM
3. Elements Formulations & Stiffness Matrix
4. One - Dimensional and Two - Dimensional Problems

ABOUT THE SPEAKER

Prof. J. N. Reddy is a Distinguished Professor and the inaugural holder of the Oscar S. Wyatt Endowed Chair in the Department of Mechanical Engineering at Texas A&M University, College Station, Texas. Prior to his current position, he worked as a postdoctoral fellow at the University of Texas at Austin, as a research scientist for Lockheed Missiles and Space Company, and taught at the University of Oklahoma and Virginia Polytechnic Institute and State University, where he was the inaugural holder of the Clifton C. Garvin Endowed Professorship. Professor Reddy is the author of over 320 journal papers and 14 text books on theoretical formulations and finite element analysis of problems in solid and structural mechanics (plates and shells), composite materials, computational fluid dynamics and heat transfer, and applied mathematics.

Account Details for Registration

Transfer Details: Through RTGS or NEFT
Account Name: M. S. Ramaiah University of Applied Sciences,
Account Type: Savings Account
Account Number: 914010033410657
IFSC: UTIB0000559
Bank & Branch: Axis Bank, Rajajinagar, Bengaluru
GST No: 29AADAM2496AIZN

Rs. 2000/-

Registration charges includes Certificate of Participation and a copy of FEM Book by Prof. J. N. Reddy

Payment details to be sent to
Registration Co-ordinator
Mr Balappa U.
balu.me.et@msruas.ac.in