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*Shaping Lives...
Empowering Communities...*

CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT, ODISHA

MSSSoA, Paralakhemundi

Workshop on

CAE/FEA Analyst

Date: 12th to 13th November, 2019

Resource Person: R.C. Mohanty

Ph.D.

Professor

School of Engineering and Technology

Department: Mechanical Engineering

Phone: 9437189430

Email: rcmohanty@cutm.ac.in

Date: 12th Nov. - 13th Nov. 2019, Venue: Seminar Hall 1

No. of Participants: 60

About the resource person:

Dr. R. C. Mohanty, now working as a Professor in the department of Mechanical Engineering, School of Engineering and Technology, Bhubaneswar Campus, Centurion University of Technology and Management, Odisha, India. Completed his bachelor degree from Institution of Engineers (India), M. Tech. from BPUT, Odisha and Ph.D. in mechanical engineering from National Institute of Technology, Rourkela, Odisha. Major research area is on Renewable energy, structural dynamics, vibration control and damping improvement of jointed and sandwiched beams. The other research area of interest is on production of biofuel and biogas. He has published 90 international journal papers, 12 international/national conference papers.

About the workshop

Computer-aided engineering (CAE) is the broad usage of computer software to aid in engineering analysis tasks. It includes finite element analysis (FEA), computational fluid dynamics (CFD), multibody dynamics (MBD), durability and optimization. xFinite Element Analysis (FEA) is a computer-aided engineering (CAE) tool used to analyze how a design reacts under real-world conditions. Useful in structural, vibration, and thermal analysis, FEA has been widely implemented by automotive companies. FEA has been widely implemented by

automotive companies and is used by design engineers as a tool during the product development process. Design engineers analyze their own designs while they are still in the form of easily modifiable CAD models to allow for quick turnaround times and to ensure prompt implementation of analysis results in the design process. While FEA software is readily available, successful use of FEA as a design tool still requires an understanding of FEA basics.

This introduction to FEA will expose you to key concepts in FEA and give an overview of the FEA process, including the steps needed to conduct FEA, finite element types and orders, common assumptions that lead to serious errors in results, and areas you should be concerned with when discretizing a model. This SAE-produced course also includes an introduction to discretization error and convergence analysis and explains how they impact results in FEA projects.

Objectives

By participating in this on-demand course, you'll be able to:

- Identify the purpose of using FEA in the design process
- Explain the differences between using different element orders
- Explain the differences in the number of degrees of freedom between different element types
- Recite commonly made assumptions in FEA projects and summarize effects of each assumption
- Define convergence process and explain why it is used in the FEA process

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impact in the FEA process



The Lecture session by Mr. R.C. Mohanty in the workshop of **CAE/FEA Analyst**



WORKSHOP

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Organised by:

**Centurion University of Technology and
Management**

centurion university of technology and management
Shaping Lives... Empowering Communities...

Brochure of the event **CAE/FEA Analyst**



CENTURION UNIVERSITY OF TECHNOLOGY & MANAGEMENT

Workshop on **CAE/FEA Analyst**

Date: 12th to 13th November, 2019

Attendance Sheet

1	Rocky jena	
2	Rohan kumbhar	
3	S GYANESH PATRO	
4	Sahil Kumar Pandey	
5	Samprash Kumar Jena	
6	Santosh Sahu	
7	Satyabrata Samal	
8	Sawan kumar biswal	
9	Smruti ranjan sahu	
10	Somabrata sahu	
11	Sonu Bishayee	
12	Soumya ranjan mishra	
13	Soumya Ranjan Parida	
14	Srinibas biswal	
15	Subham jyoti ray	
16	Subham patra	
17	Subhangam Choudhury	
18	Sudipta Sundar Roy	

19	Sukanya Mohanty	
20	Suraj Kumar Singh	
21	Suraj sarejendu pal	
22	Swayam subhajeet	
23	U. rakesh	
24	Uma Shankar Raj	
25	Yogeshwar Dash	
26	Abhishek Biswal	
27	Amit kumar pradhan	
28	Aniket Senapati	
29	Ankita Mahato	
30	Ashirbad Sahoo	
31	Ashutosh Mohapatra	
32	Ashutosh Tripathy	
33	Debasish sundaray	
34	E Bhargav	
35	Harikishan Das	
36	K bal Gopal	

37	Kargil Biplab Dhal	
38	Kiran Kumar jayasingh	
39	Kunal Panigrahi	
40	N Dibesh Choudhury	
41	Rahul Samantaray	
42	Rajveer Chhotray	
43	Rakesh Kumar Das	
44	RANJIT SINGH	
45	Reeteswar Pradhan	
46	Rhythm Paul	
47	Rinki Gauda	
48	Rohan pravas	
49	Sagnik Katari	
50	Sambit Behera	
51	Satya ranjan baral	
52	Shireen	
53	Soumya Sourav Barik	
54	Sourav sambit	

55	Subasish Tripathy	
56	Subham panigrahi	
57	Sunita Rani Panda	
58	Suvam Mishra	
59	Swahil Suvam	
60	Vidhi shankara	



Dr. Prasanta Ku. Mohanty
Dean Academic