

DEPARTMENT OF MECHANICAL ENGINEERING,  
M. M. M. UNIVERSITY OF TECHNOLOGY GORAKHPUR-273010

## Short Term course on "Computational & Manufacturing Challenges in Mechanical Engineering"

Coordinator: Dr. Jeeoot Singh Dy. Coordinator: Dr. Sanjay Mishra  
ASSOC. PROF., MED, MMMUT GKP

Date/Duration: 19<sup>th</sup> to 25<sup>th</sup> March 2018

ASSOC. PROF., MED, MMMUT GKP

SCHEDULE					
S. No.	Speaker Details	Presentation Title	Date	Time	# of Participants Attended
1.	Dr. B.N. Singh, Professor, IIT Kharagpur	Mathematical modelling of composite materials	19/03/18	10-11 am	40
2.	Dr. S.C. Panja, Professor, Jadavpur University, Kolkata	Reliability Analysis	19/03/18	12-01 pm	40
3.	Dr. Vivek Kumar Patel, Assistant Professor, MNNIT Allahabad	i) Tackling Turbulence in Computational Fluid Dynamics (ii) Computational Analysis of Swirl flow in Gas Turbine Combustor	20/03/18	10-11 am	40
4.	Prof. D. K. Singh, Professor, MMMUT Gorakhpur	Advanced Fine Finishing Processes	20/03/18	12-01 pm	40
5.	Dr. Achche Lal, Assistant Prof. SVNIT, Surat	Modelling and analysis of engineering structures	21/03/18	10-11 am	40
6.	Mohd. Zaheer Khan Yusufzai, Department of Mechanical Engineering, IIT (BHU) Varanasi	Welding Challenges in FRP material	21/03/18	12-01 pm	40
7.	Dr. S.K. Srivastava, Professor, MMMUT Gorakhpur	Synthetic curves form and application	22/03/18	10-11 am	40
8.	Dr. Jeeoot Singh, Associate Professor, MMMUT Gorakhpur	Mathematical modelling of differential equation Meshfree approach to differential solution	22/03/18	12-01 pm	40
9.	Dr. Sanjay Mishra Associate Professor, MMMUT Gorakhpur	Laser Beam Micromachining. Finite Element Modelling of Laser Drilling	23/03/18	2-3 pm	40

  
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10.	Dr. Rajesh Kumar Verma, Associate Professor, MMMUT Gorakhpur	Preliminaries for Taguchi based Multi objective optimization techniques and machining of FRP composites.	24/03/18	10-11 am	40
11.	Dr. Laxmikant Yadav Associate Professor, MMMUT Gorakhpur	Analysis of Desiccant Dehumidification Technology	25/03/18	2-3 pm	40

Mode Off-line

**VENUE: SEMINAR HALL, MECHANICAL ENGINEERING DEPARTMENT**

1. Chief Guest: Hon'ble VC, MMMUT Gorakhpur-273010

#### **SUMMARY**

The Short term course on Computational & Manufacturing Challenges in Mechanical Engineering being organized by Mechanical Engineering Department of Madan Mohan Malaviya University of Technology, Gorakhpur during 4<sup>th</sup> -10<sup>th</sup> July 2016. The course consists of various topics by the experts on recent areas of development i.e. from design, manufacturing, optimization techniques, modeling and simulation, composite materials, bio materials, fracture analysis, CAD/CAM, rapid prototyping, industrial engineering etc. The content of the course well impacted on the academicians from teaching institution, practicing engineers from industries and scientists from R & D organizations who have participated during the course. We acknowledge with gratitude the contribution of participants, distinguished speakers, guests, faculty members and staff of the department. Thanks are due to Hon'ble Vice Chancellor Prof. S.N. Singh and Dr. S. C. Jayswal, Head Mechanical Engineering Department for continuous encouragement and support. Sincere thanks are due to members of various organizing committees for providing help in the organization of this STC. We also thanked to several persons, who contributed in different ways to success of the short-term course. Finally, we acknowledge the financial support received from TEQIP-III for holding the short-term course.

  
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## ORGANISING COMMITTEE

### Patron

Prof. Sri Niwas Singh  
Hon'ble Vice Chancellor

### Convener

Dr.S.C.Jayswal  
Professor & Head, MED

### Coordinator(s)

Dr. Jeeoot Singh  
Associate Professor, MED

Dr.Sanjay Mishra  
Associate Professor, MED

### Advisor(s)

Prof. D.K.Singh  
Professor, MED

Prof. S.K. Srivastava  
Professor, MED

### Organizing Committee

Dr. Rajesh Kumar Verma, Associate Professor  
Mr. Devesh Kumar, Assistant Professor  
Dr. Swati Gangwar, Assistant Professor  
Mr. R.B.Prasad, Assistant Professor  
Mr. Sunil Kumar Yadav, Assistant Professor  
Mr. Prashant Saini, Assistant Professor  
Mr. Dheerendra Singh, Assistant Professor  
Dr. Laxmikant Yadav, Assistant Professor

## ABOUT THE UNIVERSITY

Madan Mohan Malaviya University of Technology, Gorakhpur has been established in year 2013 by Govt. of Uttar Pradesh as a non-affiliating teaching and research University after reconstituting erstwhile Madan Mohan Malaviya Engineering College Gorakhpur, which was established in 1962.

The University provides the pollution free environment immensely suited for holistic growth and the development of the students. The University is located on Deoria road about 9 Km away from Gorakhpur Railway Station. The University offers UG in Civil Engineering, Mechanical Engineering, Electrical Engineering, Computer Science & Engineering, Electronics & Communication Engineering and Chemical Engineering and PG in MCA, MBA and M. Tech in Civil, Mechanical, Electrical and Electronics & Communication Engineering. It is also a QIP center for the Ph.D. program in Civil, Electrical, Mechanical, Electronics and Communication Engineering departments.

## ABOUT THE DEPARTMENT

The Department of Mechanical Engineering is one of the oldest departments from the start of institute (1962). The department is undertaking a UG program in Mechanical Engineering, two PG programs (Computer Integrated Manufacturing, Energy Technology and Management) and a research program leading to Ph.D degree in related specialization. The research facilities in Mechanical Engineering Department are developing with addition of new equipments and laboratories, and modernization of old laboratories.

## One Week Short Term Training Programme on

## Computational & Manufacturing Challenges in Mechanical Engineering (CMCME-2018)

*Sponsored by TEQIP III*

March 19-25, 2018



### Organized by

### Department of Mechanical Engineering

Madan Mohan Malaviya University of  
Technology, Gorakhpur, Uttar Pradesh (India)

(Established by U.P. Government Act No-22 of 2013)

(Formerly, Madan Mohan Malaviya Engineering College)

**Website: [www.mmmut.ac.in](http://www.mmmut.ac.in)**

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## ABOUT THE PROGRAMME

Computational methods are widely used for solving variety of engineering problems. Researchers across the world are using these techniques to explore the new research dimensions. The manufacturing industries have witnessed remarkable improvements due to continuous development of new materials and increased demand of cost effective product with high functional efficiency. The modern industries are facing various challenges in the way of manufacturing. There is a large scope for researchers to solve various existing problems with the aid of various advanced techniques like computational method. In this regard, the present program intends to discuss widely on some existing and advanced techniques related to computing and manufacturing. This would help mainly the researchers, PG students and people from industry to accelerate their research activities.

## WHO SHOULD ATTEND

- ❖ Faculties from Engineering Institutions
- ❖ Researcher from Research Organizations
- ❖ Students of PG / PhD Program
- ❖ Professionals from Industries

***Selection of participants will be on first- come-first basis.***

## RESOURCE PERSONS

The resource person for the STTP will be eminent speakers from IIT's, NIT's, other reputed institute, institute itself along with persons from the Industries.

## REGISTRATION PROCESS

Participants can register for CMCME2018 by filling the registration form. **There is no registration fee.** Please send the scanned copy of duly filled registration form to **cmcme2018@gmail.com** along with the hard copy to the address mentioned in the registration form.

### Important Dates:

Last date for application: **March 14, 2018**

Intimation of selection: **March 16, 2018**

## IMPORTANT INSTRUCTIONS

- ❖ Participation confirmation will be send through email only.
- ❖ Boarding, Lodging, travel and food expenses shall be borne by the participants only.
- ❖ Students of all categories also have to submit completely filled registration form signed by Head of the institute/Head of the Department.
- ❖ Accommodation may be provided based on the availability in the University Hostel on payment basis.

## VENUE

All the lectures are scheduled in the Seminar Hall of the Mechanical Engineering Department, MMMUT Gorakhpur.

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Name:

Designation:

Organization:

Highest Qualification:

Date of Birth:

Sex:

Contact Number:

E-mail:

Mailing Address:

**Signature of the Participant**

**Head of Institute/Department**  
(Signature and Seal)

**Kindly send the registration form to:**

**Dr. Jeeoot Singh/ Dr. Sanjay Mishra**

Coordinator (CMCME 2018)

Department of Mechanical Engineering

Madan Mohan Malaviya University of Technology,  
Gorakhpur, Uttar Pradesh. PIN -273010

**Contact: Dr. Jeeoot Singh (9235500565)**

**Dr. Sanjay Mishra (9650178116)**

**E-mail: cmcme2018@gmail.com**

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**TEQIP III Sponsored**  
**Short Term Training Programme on**  
**Computational & Manufacturing Challenges in Mechanical Engineering (CMCME2018)**  
**March 19-25, 2018**

**Department of Mechanical Engineering**  
**Madan Mohan Malaviya University of Technology, Gorakhpur**

**Programme Details**

Date	10 .00-11.30 A.M	11.30 -11.45 A.M	11.45 A.M -1.15 P.M	1.15 - 2.15 P.M	2.15 -3.45 P.M	3.45 -4.00 P.M	4.00 -5.30 P.M
19.03.2018 (Monday)					Registration, Inauguration #		Dr. D. K. Singh MMMUT Gorakhpur [Key note session]
20.03.2018 (Tuesday)	Dr. L.K. Yadav MMMUT Gorakhpur	Tea	Dr. Vivek Patel MNNIT Allahabad	Lunch	Dr. S. C. Panja Jadavpur Univ. Kolkata	Tea	Dr. M. Z. Khan I.I.T BHU
21.03.2018 (Wednesday)	Dr. M. Z. Khan I.I.T BHU		Dr. Vivek Patel MNNIT Allahabad		Dr. Jeeoot Singh MMMUT Gorakhpur		Application of Meshfree Methods
22.03.2018 (Thursday)	Dr. Sanjay Mishra MMMUT Gorakhpur		Dr. Sanjay Mishra MMMUT Gorakhpur		Dr. Achchhe Lal SVNIT Surat		Application of Meshfree Methods
23.03.2018 (Friday)	Dr. Achchhe Lal SVNIT Surat		Dr. S.K. Srivastava MMMUT Gorakhpur		Dr. Jeeoot Singh MMMUT Gorakhpur		Application of Meshfree Methods
24.03.2018 (Saturday)	Dr. B.N.Singh IIT Kharagpur		Dr. R. K. Verma MMMUT Gorakhpur		Dr. R. K. Verma MMMUT Gorakhpur		Application of Meshfree Methods
25.03.2018 (Sunday)	Dr. B.N.Singh IIT Kharagpur		Valedictory Function				

\* The inauguration Function will be held in Aryabhata Hall, ITRC, MMMUT Gorakhpur.

All the lecture session will be held in the Seminar Hall of Mechanical Engineering Department, MMMUT Gorakhpur.


*Dr. M. Z. Khan*  
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Sponsored by TEQIP III  
March 19-25, 2018  
Department of Mechanical Engineering  
Madan Mohan Malaviya University of Technology, Gorakhpur (U.P)**

S.No	Name	Designation	Affiliation	Email	Topic of Lecture
1	Dr. B.N.Singh	Professor	IIT Kharagpur	bnsingh@aero.iitkgp.ernet.in	Mathematical modelling of composite materials
2	Dr. S.C.Panja	Professor	Jadavpur University, Kolkata	spanja@mech.jdvu.ac.in	Reliability Analysis
3	Dr. Mohd. Zaheer Khan Yusufzai	Associate Professor	IIT BHU Varansi	mzkhan.mec@iitbhu.ac.in	Challenges in Welding
4	Dr. Vivek Kumar Patel	Assistant Professor	MNNIT Allahabad	vivek@mnnit.ac.in	(i) Tackling Turbulence in Computational Fluid Dynamics (ii) Computational Analysis of Swirl flow in Gas Turbine Combustor
5	Dr. Achche Lal	Assistant Professor	SVNIT Surat	achchhelal@med.svnit.ac.in	Modelling and analysis of engineering structures
6	Dr. D. K. Singh	Professor	MMMUT Gorakhpur	dhirenks@gmail.com	Advanced Fine Finishing Processes
7	Dr. S.K. Srivastava	Professor	MMMUT Gorakhpur	drsksm@gmail.com	Synthetic curves form and application
8	Dr. Jeeoot Singh	Associate Professor	MMMUT Gorakhpur	jsme@mmmut.ac.in	Mathematical modelling of differential equation Meshfree approach to differential solution
9	Dr. Sanjay Mishra	Associate Professor	MMMUT Gorakhpur	smme@mmmut.ac.in	Laser Beam Micromachining. Finite Element Modelling of Laser Drilling
10	Dr. Rajesh Kumar Verma	Associate Professor	MMMUT Gorakhpur	rkvme@mmmut.ac.in	Preliminaries for Taguchi based Multi objective optimization techniques and machining of FRP composites.
11	Dr. Laxmikant Yadav	Assistant Professor	MMMUT Gorakhpur	laxmikantme@mmmut.ac.in	Analysis of Desiccant Dehumidification Technology

  
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Madan Mohan Malaviya University of Technology, Gorakhpur (U.P)**

**Attendance of Participants**

S. No	Name	Designation	Affiliation	21.3.2018		22.3.2018		23.3.2018		24.3.2018		25.3.2018
				Morning	Evening	Morning	Evening	Morning	Evening	Morning	Evening	
1	Rahul Kumar	Research Scholar	SVNIT, Surat	Rahul	Rahul	Rahul	Rahul	Rahul	Rahul	Rahul	Rahul	Rahul
2	Shekhar Srivastava	Research Scholar	NIT, Jalandhar	Shekhar	Shekhar	Shekhar	Shekhar			Shekhar	Shekhar	Shekhar
3	Vishal Kumar Jaiswal	PG Scholar	RKDF University, Bhopal									
4	Vivekanand Singh	Assistant Professor	REC Ambedkar Nagar	Vivekanand	Vivekanand	Vivekanand	Vivekanand	Vivekanand	Vivekanand	Vivekanand	Vivekanand	Vivekanand
5	Shweta Mishra	Guest Lecturer	IET, Dr. RML Awadh University, Faizabad	Shweta	Shweta	Shweta	Shweta			Shweta	Shweta	Shweta
6	Kriti Srivastava	Guest Lecturer	IET, Dr. RML Awadh University, Faizabad	Kriti	Kriti	Kriti	Kriti			Kriti	Kriti	Kriti

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21	Dheerendra Singh	Assistant Professor	MMMUT, Gorakhpur	Dheer	Dheer								
22	Devesh Kumar	Assistant Professor	MMMUT, Gorakhpur	Devesh Kumar	Devesh Kumar	Devesh Kumar	Devesh Kumar						
23	Anjani Kumar Singh	Workshop Suptd.	MMMUT, Gorakhpur	A	A	A	A	A	A				
24	Mohd. Zahid Rayaz Khan	Research Scholar	MMMUT, Gorakhpur	Khan	Khan	Khan	Khan	Khan	Khan	Khan	Khan	Khan	Khan
25	Prakhar Kumar Kharwar	Research Scholar	MMMUT, Gorakhpur	Prakhar	Prakhar	Prakhar	Prakhar	Prakhar	Prakhar	Prakhar	Prakhar	Prakhar	Prakhar
26	Sukriti Yadav	Research Scholar	MMMUT, Gorakhpur	Sukriti Yadav	Sukriti Yadav	Sukriti Yadav	Sukriti Yadav	Sukriti Yadav	Sukriti Yadav	Sukriti Yadav	Sukriti Yadav	Sukriti Yadav	Sukriti Yadav V.
27	Vivekanand Shukla	Research Scholar	MMMUT, Gorakhpur	Vivekanand	Vivekanand	Vivekanand	Vivekanand	Vivekanand	Vivekanand	Vivekanand	Vivekanand	Vivekanand	Vivekanand
28	Shivani Singh	Guest Faculty	MMMUT, Gorakhpur	Shivani	Shivani	Shivani	Shivani	Shivani	Shivani	Shivani	Shivani	Shivani	Shivani
29	Anil Kumar	Guest Faculty	MMMUT, Gorakhpur	Anil	Anil	Anil	Anil	Anil	Anil	Anil	Anil	Anil	Anil
30	Hari Krishna	Guest Faculty	MMMUT, Gorakhpur	Hari	Hari	Hari	Hari	Hari	Hari	Hari	Hari	Hari	Hari
31	Maneesh Singh	Guest Faculty	MMMUT, Gorakhpur	Maneesh	Maneesh	Maneesh	Maneesh	Maneesh	Maneesh	Maneesh	Maneesh	Maneesh	Maneesh
32	Shivam Kumar Singh	PG Scholar	MMMUT, Gorakhpur	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam	Shivam
33	Rahul Vishwakarma	PG Scholar	MMMUT, Gorakhpur	Rahul	Rahul	Rahul	Rahul	Rahul	Rahul	Rahul	Rahul	Rahul	Rahul
34	Vishesh Shukla	PG Scholar	MMMUT, Gorakhpur	Vishesh Shukla	Vishesh Shukla	Vishesh Shukla	Vishesh Shukla	Vishesh Shukla	Vishesh Shukla	Vishesh Shukla	Vishesh Shukla	Vishesh Shukla	Vishesh Shukla
35	Anubhav Vishwakarma	PG Scholar	MMMUT, Gorakhpur	Anubhav	Anubhav	Anubhav	Anubhav	Anubhav	Anubhav	Anubhav	Anubhav	Anubhav	Anubhav


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36	Akhilendra Kumar	PG Scholar	MMMUT, Gorakhpur	<u>Akhil</u>	<u>Akhil</u>	<u>Akhilendra</u>	<u>Akhil</u>	<u>Akhil</u>	<u>Akhil</u>	<u>Akhil</u>		
37	Manvendra Nath Tripathi	PG Scholar	MMMUT, Gorakhpur	<u>Manendra</u>	<u>Manendra</u>							
38	Pawan Kumar Yadav	Phd Scholar	MMMUT, Gorakhpur	<u>Pawan</u>	<u>Pawan</u>	<u>Pawan</u>	<u>Pawan</u>	<u>Pawan</u>	<u>Pawan</u>	<u>Pawan</u>	<u>Pawan</u>	<u>Pawan</u>
39	Anupma Yadav	Phd Scholar	MMMUT, Gorakhpur	<u>Anupma</u>	<u>Anupma</u>	<u>Anupma</u>	<u>Anupma</u>	<u>Anupma</u>	<u>Anupma</u>	<u>Anupma</u>	<u>Anupma</u>	<u>Anupma</u>
40.	Amit Kumar	PG Scholar	MMMUT, Gorakhpur	<u>Amit</u>	<u>Amit</u>	<u>Amit</u>	<u>Amit</u>	<u>Amit</u>	<u>Amit</u>	<u>Amit</u>	<u>Amit</u>	<u>Amit</u>
41.	Rajneesh Kumar	PG Scholar	MMMUT, Gorakhpur	<u>Rajneesh</u>	<u>Rajneesh</u>							
42.	Awanish Kumar	PG Scholar	MMMUT, Gorakhpur	<u>Awanish</u>	<u>Awanish</u>	<u>Awanish</u>	<u>Awanish</u>	<u>Awanish</u>	<u>Awanish</u>	<u>Awanish</u>	<u>Awanish</u>	<u>Awanish</u>
43.	Peeyush Chandra Viswakarma	PG Scholar	MMMUT, Gorakhpur	<u>Peeyush</u>	<u>Peeyush</u>	<u>Peeyush</u>	<u>Peeyush</u>	<u>Peeyush</u>	<u>Peeyush</u>	<u>Peeyush</u>	<u>Peeyush</u>	<u>Peeyush</u>
44.	Durga Prasad	Phd Scholar	MMMUT, Gorakhpur	<u>Durga</u>	<u>Durga</u>	<u>Durga</u>	<u>Durga</u>	<u>Durga</u>	<u>Durga</u>	<u>Durga</u>	<u>Durga</u>	<u>Durga</u>

45. Bidhreshwar Kumar Upadhyay PG Scholar MMMUT GKP
46. Rahul Kumar Yadav PG Scholar MMMUT GKP
47. AKASH CHAND PG Scholar MMMUT GKP
48. Anant Kumar Gupta PG Scholar MMMUT GKP
49. Nand Kishore Yadav PG Scholar GGP MMMUT

Bidh

Rahul

Rahul

Anant

Nishore

Nishore

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