



**Sponsored by QIP (Quality Improvement Program)
AICTE, Govt. of India**



**ONE WEEK
ONLINE SHORT TERM COURSE (e-STC)**

On

Advanced Manufacturing Technology & Applications (AMTA 2020)

(23 -28 November 2020)

Chairman

Prof. Rajesh Kumar

Coordinators

Dr. Shankar Singh

Dr. Indraj Singh

Organized by

Department of Mechanical Engineering

Sant Longowal Institute of Engineering & Technology

(Deemed to be University under Ministry of Education (MoE) India)

Longowal -148106, Sangrur (Punjab)

Registration Link

<https://forms.gle/vaAicgenaq4D7cuo9>



Prof. Shailendra Jain
Director, SLIET, Longowal
Chief Patron



Prof. A S Arora
Dean (Academics)
Patron



Prof. Rajesh Kumar
HOD (Mechanical)
Chairman



Prof. Shankar Singh
Coordinator



Dr. Indraj Singh
Coordinator

Last Date for registration is 15 November 2020

ABOUT THE INSTITUTE

Sant Longowal Institute of Engineering and Technology (SLIET) is a centrally funded Deemed to be university set up by Ministry of Education (MoE), Govt. of India with an aim to achieve technological excellence through innovation. It caters to the technical manpower requirement at various levels by adopting a new concept of multi-entry, multi-exit modular pattern based technical education with emphasis on skill development and practical training. It offers Integrated Certificate Diploma (ICD), Diploma, Degree, PG (M. Tech, M.Sc., M.B.A) and Ph.D. programs in various disciplines of Engineering, Science and Technology.

ABOUT THE DEPARTMENT

Department of Mechanical Engineering is the largest department of the Institute. The department offers number of programs at different levels ICD, Diploma, Degree and PG programs. A number of Ph.D. scholars are pursuing Ph. D. in diversified areas.

In addition to regular teaching, the faculty is engaged in active research work in their respective fields of interest covering different areas such as Non-conventional Machining, Hybrid Machining, Composite materials, Bioenergy & Alternative fuels, Automotive Engg., Precision metrology, Optimization, Modeling and Simulation, CAD, FEA, Welding Technology, etc. and have undertaken many sponsored projects. The department is regularly organizing conferences/symposia and MoE/AICTE/ISTE sponsored training programs.

LOCATION OF THE INSTITUTE

The Institute is connected by road with Sangrur (20 km), Patiala (80 km), Sunam (17 km), Ludhiana (100 km), Chandigarh/Ambala (150 km), Delhi (320 km). Dhuri, Sangrur and Ambala, are well connected to important places in India by rail. The nearest airport is Chandigarh.

ELIGIBILITY OF CANDIDATES

The e-STC is open to Faculty and Research scholars of AICTE recognized degree level Engineering Colleges/Institutions and Technical Universities/Deemed to be University. Industry personnel and Researchers from Industries and R&D institutions can also attend this training programme .

ABOUT SHORT TERM COURSE

Manufacturing technology is an ever-evolving field, constantly mixing in new iterations and innovations to create exciting new opportunities for today's manufacturers and open the door for progress. Manufacturing industries are facing challenges in machining of advanced materials requiring high precision, dimensional accuracy, complex geometries, and better surface finish, leading to significant transformation of the manufacturing sector. The demand of micro components with micro features are also increasing day by day in the industries.

To meet these industrial challenges, especially in the era of “self reliant India”, the engineering students need to know the various advanced manufacturing technology and their specific applications from the researchers themselves. The “Make in India” campaign by Government of India is to project the country as a global manufacturing hub.

The objective of the proposed online short term course is to share with the participants the cutting edge research and developments, carried out/observed, by the speakers in advanced manufacturing domain, for products having immediate industrial applications, for “Atma Nirbhar Bharat”. The speakers are distinguished research faculties from Foreign Universities, IIT's, NIT's, CFTI's & other well reputed institutions.

COURSE CONTENT

- 3D Printing for Biomedical Applications
- Laser Micro Machining for Advanced Manufacturing Applications
- Wire Electro Chemical Machining
- Electrochemical Spark Micro Machining
- Smart Manufacturing
- Wire Electro Discharge machining of Shape Memory Alloys
- Nano Finishing of Prosthetic Implants Using Magnetorheological Finishing Process
- Orbital Electro Discharge Machining Process
- Advanced Manufacturing In Biomedical Applications
- Hot Machining of High Strength Material
- 5 Axis Machining
- Use of DOE in Product and Process Optimization of AMT,
- Miniature Gear Manufacturing
- Polymer composites for sustainable automotive industry, and other trending topics.

ORGANIZING COMMITTEE

CHIEF PATRON

Prof. (Dr.) Shailendra Jain
Director

PATRON

Prof. (Dr.) Ajat Shatru Arora
Dean (Academics)

CHAIRMAN

Dr. Rajesh Kumar
Professor & HOD

COORDINATORS

Dr. Shankar Singh, Professor
Dr. Indraj Singh, Associate Professor

REGISTRATION

Participants are requested to register online using following link

<https://forms.gle/vaAicgenaq4D7cuo9>

Duly filled and scanned registration form shall also be send by mail to the Coordinator. Confirmation of eligible candidates will be on first come first serve basis

COURSE FEE/REGISTRATION FEE

- ♦ Registration Fee for Faculty: NIL
- ♦ Registration Fee for Research Scholar: NIL
- ♦ Course & Registration Fee for Delegates from Industry: NIL

IMPORTANT DATES

Last date for receiving application form:

November 15th 2020

Intimation to selected participants:

November 17th 2020

**Participation stands cancelled if confirmation email is not received from participants by the specified date. Vacant seats will be offered to other eligible applicants. E– certificates will be given to the participants.*

ADDRESS FOR CORRESPONDENCE

COORDINATOR– eSTC (AMTA 2020)
DEPARTMENT OF MECHANICAL ENGINEERING
Sant Longowal Institute of Engineering and Technology
Longowal -148106, Sangrur (Punjab)
Mobile: +91-7814653808, +91-9417466741
E-mail: 2020.amta@gmail.com



Sponsored by QIP (Quality Improvement Program)

AICTE, Govt. of India

ONE WEEK

ONLINE SHORT TERM COURSE (e-STC)

on

Advanced Manufacturing Technology & Applications (AMTA 2020)

(23 -28 November 2020)

Organized by

Department of Mechanical Engineering

Sant Longowal Institute of Engineering & Technology

(Deemed to be University under Ministry of Education (MoE) India)

Longowal -148106, Sangrur (Punjab)

DAY 1	 23 Nov 2020 (09:30 AM-11:00 AM) Prof. J Ramkumar IIT, Kanpur Wire Electro Chemical Machining (Wire ECM)	 23 Nov 2020 (11:15 AM-12:45 PM) Prof. Biswanath Doloi Jadavpur University, Kolkata Laser Micromachining for Advanced Manufacturing Applications	 23 Nov 2020 (03:00 PM-04:30 PM) Prof. Partha Saha IIT, Kharagpur Laser-based Additive Manufacturing of Metallic Components
DAY 2	 24 Nov 2020 (09:30 AM-11:00 AM) Prof. Hari Singh NIT, Kurukshetra Use of DOE in Product and Process Optimization of AMT	 24 Nov 2020 (11:15 AM-12:45 PM) Prof. Rupinder Singh NITTTR, Chandigarh 3D printing for Biomedical Applications	 24 Nov 2020 (03:00 PM-04:30 PM) Dr. Harshit K. Dave SVNIT, Surat Orbital Electro Discharge Machining Process
DAY 3	 25 Nov 2020 (09:30 AM-11:00 AM) Prof. Narendranath S NITK, Surathkal Wire-Electro Discharge Machining of Shape Memory Alloys	 25 Nov 2020 (11:15 AM-12:45 PM) Prof. Kalipada Maity NIT, Rourkela Hot-machining of High-strength Material	 25 Nov 2020 (03:00 PM-04:30 PM) Dr. Ravi Pratap Singh NIT, Jalandhar Advanced Processing Methods for Hard-to-Machine Engineering Materials
DAY 4	 26 Nov 2020 (09:30 AM-11:00 AM) Dr Anjali Kulkarni IIT, Kanpur Electrochemical Spark Micro Machining	 26 Nov 2020 (11:15 AM-12:45 PM) Dr. Manas Das IIT, Guwahati Nano finishing of Prosthetic Implants using Magneto-rheological Finishing Process	 26 Nov 2020 (03:00 PM-04:30 PM) Dr. Tej Singh Eötvös Loránd University, Hungary Natural and Waste Resources-based Polymer Composite for Sustainable Automotive Industry Products
DAY 5	 27 Nov 2020 (09:30 AM-11:00 AM) Prof. KS Sangwan BITS, Pilani Smart Manufacturing	 27 Nov 2020 (11:15 AM-12:45 PM) Prof. Erik L.J. Bohez AIT, Bangkok 5-axis Machining	 27 Nov 2020 (03:00 PM-04:30 PM) Dr. Chander Prakash LPU, Jalandhar Advanced Manufacturing and Surface Engineering of Biomaterials
DAY 6	 28 Nov 2020 (09:30 AM-11:00 AM) Prof. Pradeep Kumar IIT, Roorkee Abrasive Flow Machining and its Variants	 28 Nov 2020 (11:15 AM-12:45 PM) Prof. Kapil Gupta University of Johannesburg, RSA Advanced Manufacturing of Miniature Gears	



Chief Patron

Prof. Shailendra Jain
Director, SLIET, Longowal

Patron

Prof. A S Arora
Dean (Academics)

Chairman

Prof. Rajesh Kumar
HOD (ME)

Coordinators

Prof. Shankar Singh
Dr Indraj Singh

For Registration

<https://forms.gle/vaAicgenag4D7cuo9>

or

