

### **Online Short Term Training** Programme (STTP)

**Advances in Additive Manufacturing** (AAM-2026) (January 05-09, 2026)



Chairperson Prof. Shankar Singh, HOD (ME)

> **Course Coordinator** Dr. Anil Kumar Singla Dr. Anuj Bansal

> **Course Co-coordinator** Mr. Jonny Singla Mrs. Ankita Omer

> > Organized by

Department of Mechanical Engineering Sant Longowal Institute of Engineering and Technology, (Deemed to be University under MoE, Govt. of India) Longowal, Dist. -Sangrur-148106 (Punjab)

www.sliet.ac.in

#### **About the Institute:**

Sant Longowal Institute of Engineering & Technology and funded by MHRD (now MoE), Government of India in 1991 to provide technical education in emerging areas of Engineering and Technology. Accepting the new challenge of new education policy, the institute has the new concept of flexible, modular and multi-point entry/exit system and aims to provide technical manpower requirements at all levels to the industries. At present the institute offers Integrated Certificate-Diploma, B.E., M.Tech., M.Sc., and Ph.D. in various disciplines of Engineering and Technology, Science and Management. The institute has 79th NIRF ranking in Engineering Category and also accredited by NAAC. The 451 acres campus presents a spectacle of harmony and natural beauty.

### **About the Department:**

The Department of Mechanical Engineering offers B.E. programme, two M.Tech., and Ph.D. programme. Five Integrated Certificate-Diploma (ICD) courses are also being offered covering major areas of mechanical engineering to produce skilled manpower for shop floor in industuries. At present, there are 40 highly qualified and motivated faculty members in the department, who are actively involved in different research projects and contributing in terms of publishing high quality international journals. Financial assistance is also being received to carry out Rural Development Activities. Patents are also to the credit of the faculty of the department. The department regularly organizes conferences and STTP courses.

### **Introduction:**

Additive manufacturing (AM) is a novel method of manufacturing parts directly from digital model by using layer by layer material build-up approach. This tool-less manufacturing method can produce fully dense metallic parts with desired porosity values in small duration and high accuracy. Some of the unique

features of AM like freedom of part design, desired complexity, controlling component weight, and design for (SLIET), Deemed to be University, has been established required functionality make it one of the most suitable options to manufacture components for various industries such as aerospace, oil & gas, marine and automobiles. After the development of any part using AM, its post processing is essential for optimization and understanding of AM parameters. In view of this, STTP has been designed to highlight the various recent developments in this field.

### **Course Contents:**

The programme is aimed at AM processes and characterization of AM components. Few important aspects that will be covered in this programme are -

- History and importance of AM technology.
- ❖ Advances in Pixel driven AM Technology.
- ❖ Digital twining of AM components.
- Mechanical properties of AM components.
- ❖ Defects in AM material.
- ❖ Post processing of AM components.
- ❖ Metallurgy of super alloy AM components.
- Practical sessions on AM.
- Machinability of AM.

#### **Resource Persons:**

Faculty from reputed Academic Institutions/ Industries/ R&D labs across the globe who are broadly working in the field of AM at research and application level will conduct the online sessions in the programme.

### Who can participate?

The faculty members of the engineering institutions, Research scholars, PG Scholars/ UG students, participants from Government, Industry (Bureaucrats/ Technicians/ Participants from Industry etc.)/ School Teachers and staff of host institutions.

### **Important Dates:**

Last date for registration Intimation of selection

31 December 2025 02 January 2026

### **Registration Fee:**

❖ There is **no registration fee** for eligible participants from SLIET Longowal.

• For eligible participants from other organizations the registration fee will be as under:

Faculty/Staff: Rs. 250/-

Research Scholar/Students: Rs. 100/-Persons from Industry: Rs. 1000/-

### How to Apply:

\* The interested candidates are required to register for the FDP through following link on or before the last date of registration.

https://forms.gle/pku4hzQ1ZQ9YreUr8

\* The number of participants is limited to 100 and will be selected based on first come first serve basis. For any clarification, contact the FDP coordinator.

### Certificate:

The certificates shall be issued to the participants who have successfully attended the program with minimum 80% attendance. The participants also have to provide compulsory online Feed-back on the last day of FDP.

### **Expected Outcomes:**

At the end of the program the participants shall be able to understand the following key factors in the field of Additive Manufacturing and material characterization.

- Fundamental design aspects and parameters involved in various type of AM techniques.
- ❖ Mechanical properties of AM components.
- Metallurgical properties like porosity and defects in AM components.
- ❖ Machinability and post processing of AM components.

### **Organizing Committee:**

Patron: Prof. Mani Kant Paswan, Director

**Co-Patron:** Prof. A. S. Shahi, Dean (Acad.)

Prof. Shankar Singh (HOD, ME) **Chairperson:** 

Dr. Anil Kumar Singla **Coordinators:** 

Dr. Anuj Bansal

Co-coordinator: Mr. Jonny Singla

Mrs. Ankita Omer

### Address for Communication:

Dr. Anil Kumar Singla and Dr. Anuj Bansal **Programme Coordinator (AAM-2026)** 

Department of Mechanical Engineering

Sant Longowal Institute of Engineering and Technology,

Longowal, District Sangrur

Punjab-148106

Mobile No. 9781403550, 9463667207

Email: aam2026@sliet.ac.in

### Additive Manufacturing and Characterization Facilities in SLIET:





FE-Scanning Electron Microscope



Single Screw Extruder (Felfil evo)



Polymer/Ceramic FDM/LDM Printer (Delta Wasp 2040)



Polymer-Metal/Composite FDM



X-ray diffractometer

# **Online Mode Short Term Training Programme (STTP)**

On

# **Advances in Additive Manufacturing (AAM-2026)**

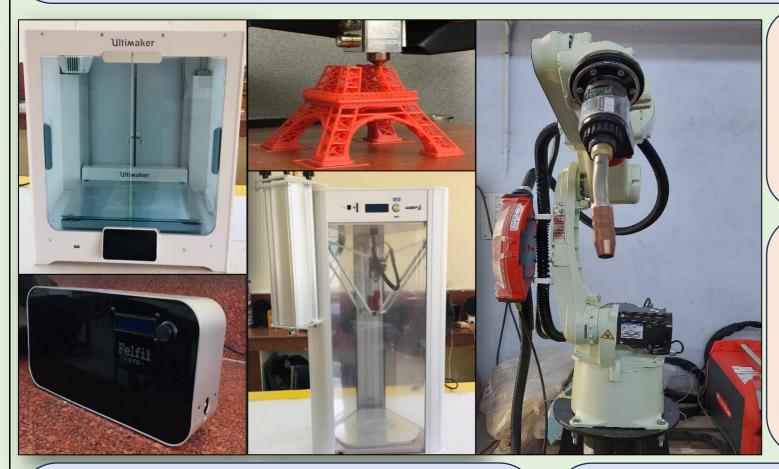
5<sup>th</sup> to 9<sup>th</sup> January 2026

Mechanical Engineering Department Sant Longowal Institute of Engineering and Technology Longowal (Deemed-to-be-University under MoE, Govt. of India)



## **About the FDP**

Additive manufacturing (AM) is a novel method of manufacturing parts directly from digital model by using layer by layer material build-up approach. This tool-less manufacturing method can produce fully dense metallic parts with desired porosity values in small duration and high accuracy. Some of the unique features of AM like freedom of part design, desired complexity, controlling component weight, and design for required functionality make it one of the most suitable options to manufacture components for various industries such as aerospace, oil & gas, marine and automobiles. After the development of any part using AM, its post processing is essential for optimization and understanding of AM parameters. In view of this, STTP has been designed to highlight the various recent developments in this field.



# **Resource Persons**

Faculty from IIT's, NIT's, CFTI's, other institute of repute, industries, and R&D labs across the globe working in the field of 3D printing at research and application-level

# **Registration Link**

https://forms.gle/pku4hzQ1ZQ9YreUr8

### **Registration Fee:**

### Other organizations

- Faculty/Staff: Rs. 250/-,
- Research Scholar/Students: Rs. 100/-
- ❖ Persons from Industry: Rs. 1000/-

### For SLIET

❖ No Registration Fee

### **Course Content**

- History and importance of AM technology.
- ❖ Advances in Pixel driven AM Technology.
- ❖ Digital twining and Mechanical properties of AM components.
- ❖ Defects and Post processing in AM material.
- Metallurgy of super alloy AM components.
- ❖ Practical sessions and machinability of AM.

# **Expected Outcomes**

- ❖ Fundamental design aspects and parameters involved in various type of AM techniques.
- ❖ Mechanical properties of AM components.
- ❖ Metallurgical properties like porosity and defects in AM components.
- ❖ Machinability and post processing of AM components

# **Chief Patron**



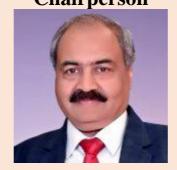
Prof. Mani Kant Paswan, Director

### **Patron**



Prof. A. S. Shahi, Dean (Acad.)

# Organizing Committee Chairperson



Prof. Shankar Singh, HOD (ME)

### **Coordinators**



Dr. Anil Kumar Singla, AsP (ME)



Dr. Anuj Bansal, AP (ME)