

A Report on **Virtual Guest Lecture on** "Software Development Life Cycle: An Application to Basic Science" **Organized by Department of Physics** on 12.09.2024 MADANAPALLE INSTITUTE O ECHNOLOGY & SCIEN (UGC-AUTONOMOUS INSTITUTION) NSTITUTION'S **Online Guest Lecture** NNOVATION COUNCIL on "Software Development Lifecycle: Application to Basic Science" Organized by **Department of Physics** Time : 10:10 AM to 11:10 AM Date : 12/09/2024 Venue: Seminar Hall -A Resource Person **Dr. Nupur Prasad** Associate Professor and Head, Thermal Analysis Laboratory, Central Instrumental Facility, Lovely Professional University, Punjab. Dr. M. CI

Report Submitted by: Dr. Agnibha Das Majumdar, Asst. Professor, Department of Physics Resource Person: Dr. Nupur Prasad, Associate Professor and Head, Thermal Analysis Laboratory, Central Instrumental Facility, Lovely Professional University, Punjab, India Attendance: 120 participants (Internal students and Faculty) Mode of Conduct: Online Report Received on 19.09.2024

The event started at 10:10 AM, Dr. P. Ramanathan, Vice Principal (Academics), along with Dr. B Jagadeesh Babu, Assistant Professor, Department of Physics & Ist year Additional B. Tech Coordinator (Physics Stream), presided over the Guest Lecture conducted by Department of Physics, followed which programme was organized by the Convener Dr. Agnibha Das Majumdar, Assistant Professor, and welcome address was delivered to the gatherings by him, The resource person of the event Dr. Nupur Prasad, was introduced by Dr. Agnibha Das Majumdar, Assistant Professor, Department of Physics. The resource person of the event Dr. Nupur Prasad, Associate Professor and Head, Thermal Analysis Laboratory, Central Instrumental Facility, Lovely Professional University, Punjab, India joined through online (Microsoft Team).



The resource person started the session by extending her hearty thanks to the participants, organizing members, HOD, Principal and Management for giving him opportunity to share her knowledge and experience in **the correlation of basic science and software technology**.

Programme Objectives:

The objective of this guest lecture was to motivate the students towards the basic knowledge of science and its application to the field of software engineering and simulations. Also, the purpose was to explore the opportunity for the students to attend any workshop, seminar or training programme conduct by Central Instrumental Facility, Lovely Professional University.

Programme Outcomes:

She has introduced about the various branches of the physics and chemistry and material science and introduced Physics for Engineering Students, which is a foundational course that aims to provide engineering students with a solid understanding of fundamental physical principles and their applications in engineering contexts. It typically covers topics such as Simulations, Advantages and application of simulations in basic science and brief introduction about waterfall model. She briefly explained about the followed topics,

- Understanding of correlation with basic science and software development.
- Exploring the opportunities of the software engineers to the basic science field.
- Unravelling the knowledge of waterfall model.
- Exploring about Software Development Lifecycle.
- Simulations: An artificial environment for coding.
- Advantages and application of simulations

After briefly discussing all those points she has concluded with the opportunities for the engineers with the knowledge of basic science and discussed where actually the software development lifecycle works.



Finally, he concluded the session by giving the information to the students about the scope for engineers to attend various conferences, workshops and webinars that is conducted by Central Instrumental Facilities, Lovely Professional University and also, she invited our faculty to do collaborative research with them.



The lecture was then followed by a question & answer session. Students have been interacting with the speaker. They have cleared their doubts about their knowledge and actual need of basic science in their engineering branch.

The session was concluded at 11:10 AM followed by a vote of thanks, given by Dr. K Chandrakanta, Assistant Professor, Department of Physics, MITS, Andhra Pradesh.