

## STC on “Formal Verification of Cyber-physical Systems: Opportunities and Challenges” September 11 to September 15, 2020.

Department of Information Technology in collaboration with Department of Computer Science & Engineering, Dr. B.R. Ambedkar National Institute of Technology, Jalandhar has conducted a TEQIP-III sponsored Five-day Online Short-Term Course on “Formal Verification of Cyber-physical Systems: Opportunities and Challenges” from September 11 to September 15, 2020.

The STC was graced with the auspicious presence of Chief Guest Prof (Dr) LK Awasthi, Director, NIT Jalandhar and Registrar Dr. S K Mishra, NIT Jalandhar. The main focus of the course was to explore the opportunities and challenges in the formal verification methods to be used to verify a cyber-physical systems. The course witnessed the registration of more than 450 participants and researchers across the country. The resource persons for the course were as follows: Prof. Virendra Singh (IIT Bombay), Prof. Parasara Sridhar Duggirala (University of North Carolina, USA), Prof. Parthasarathi Roop (University of Auckland, NZ), Prof. Sayan Mitra (University of Illinois at Urbana-champaign, USA), Prof. S. Ramesh (General Motors, USA) and Prof. Mahesh Chandra Govil (Director, NIT Sikkim). The basic objectives of this STC were as follows:

- To provide the knowledge about the recent research in formal verification.
- To enable the participants to apply the formal verification in the cyber-physical system.
- This course provides a rigorous introduction to techniques that have evolved in the last two decades towards modeling, verification and synthesis of such systems.
- To provide an exposure to existing software tools that embody these techniques
- To provide students a solid footing in the emerging area of cyber-physical systems through examples drawn from automotive, aerospace and robotics and will build connections to other areas of Electrical Engineering and Computer Science such as Distributed Systems, Real-time Systems and Control Theory.



Prof (Dr) LK Awasthi, Director, Dr B R Ambedkar National Institute of Technology, Jalandhar congratulated STC Convener Prof. A. L. Sangal (HoD CSE), Co-Convener Prof H. K. Verma and coordinators Dr. Lalatendu Behera and Dr. Kunwar Pal to organize such an informative course successfully and extended support to all the participants to achieve their future endeavours.