AITD conducted Six Days AICTE-ISTE SPONSORED Online Induction/Refresher Programme on ELECTRONIC CIRCUITS SIMULATION & PCB DESIGN

Department of Electronics and Communications Engineering, Agnel Institute of Technology and Design, Assagao, conducted Six Days AICTE-ISTE SPONSORED Online Induction/Refresher Programme on ELECTRONIC CIRCUITS SIMULATION & PCB DESIGN from 14<sup>th</sup> January to 20<sup>th</sup> January 2022 in online mode. This programme was designed to give participants basic academic knowledge, hands on skills in the schematic capture and design levels, simulation of electronic circuits, PCB design methods and its documentation.

The programme was organized by ECE dept. AITD. Co-ordinator of the programme were Dr. J. William, Principal, AITD, Co-Coordinators were Mr. Laxmikant Bordekar Registrar, Asst. Professor, Department of ECE and Mrs. Vrushali Prabhudessai Asst. Professor, Department of ECE. Executive Members were Mr. Mrunal Sawant Asst. Professor, Ms. Pramila Volvoikar, Asst. Professor, ,Ms. Vijaya Hadfadkar Asst. Professor, Ms. Gauri Gaunekar Asst. Professor, Department of ECE.

On 14<sup>th</sup> January 2022, programme commenced with inaugural function. The chief guest for the function was Dr Abdul Rahim Sadiq Batcha, Associate Professor from MAHSA University, Malaysia. He delivered the keynote address on importance of electronic circuits simulation and learning simulation tools. Dr.Pratapsinh Desai, ISTE president was the guest of honour. Dr. Desai in his highly inspiring and motivational speech pointed out the significance of conducting FDPs, the spirit of teaching, and emphasized on the importance of role of teachers and the use of ICT for online teaching. This was followed by the presidential address given by Rev. Fr. Agnelo Gomes, Director, Agnel Technical Education Complex, Goa. Dr. V. Mariappan, Advisor, AITD and Dr. J. William, Coordinator and Principal, AITD were present for the inaugural function and addressed the online gathering.

First technical session was on "Circuit simulation using Tinker cad" conducted by Mr. Ajay Kumar Godara, Enovation Lab, Chandigarh. He conducted hands-on session on simulation with Tinker Cad software. Next session was on "Project Design Flow" conducted by Mrs. Nikita Aroskar, Seimens Verna Goa. The expert provided insight into hardware developers role in product design cycle, power system protection devices, project design flow etc.

Second day began with a session on "Signal integrity in high speed design" delivered by Mr. Malcolm D'Souza, Co founder of Spintly Solutions, Goa. He threw light on how the issues like rise time fall time, crosstalk impedance matching to be considered while designing PCBs. This was followed by a session on "Latest trends in VLSI circuit design and verification" conducted by Mr. Salman Sayed, Sankalp Semiconductors, Hubli. He enlighted us with Moores law, planar transistors and FINFET transistors and also advancements in IC packaging. Next session was on "Application of neural network model for high frequency circuits" conducted by Dr Abdul Sadiq Batsha, MAHSA University Malaysia. Dr. Batsha explained the concepts of machine learning and artificial intelligence for modelling of transmission lines.

Day 3 commenced with a session on 'Power Supply design for high speed PCBs" by Dr Naveen kadiyinti, IIT Dharwad, Karnataka. Dr Naveen explained the complete design, various probable issues and their solutions in high speed power supply circuits. Next session was on "Trends in Electronic Product Design" by Mr. Anil Raikar, Seirra circuits, Goa. He spoke about his wide experience is embedded systems design and challenges in product design including hardware and software perspectives. Last session of day 3 was on "Flexible sensors, its fabrication and challenges" conducted by Dr. Shanmuga Sundar, RMIT University Melbourne.

Day 4 began with a session on Schematic design, Entry rules for schematic entry and component layout methods by Mr. N Srikanth, Enthu Technology solutions, Bangalore. Followed by a session on "Radiation effects in memory circuits" by Dr V N Ramakrishnan, VIT University Vellore. He gave insights into space radiation environment, soft errors, circuits schematic of SRAM and simulation. 3<sup>rd</sup> session on day 4 was on "Hardware software co design for high performance embedded systems" by Mr. Amalin Prince, BITS Pilani Goa campus.

First session on Day 5 was on "Different aspects of printed circuit board design and fabrication" conducted by Mr Srikanth from Enthu technology solutions Bangalore. Second session also was taken up by Mr Srikanth on "Placement rules and routing techniques for single side board". Third session was on stress management conducted by art of living speaker Dr Venkatesh Hegde who explained the psychology of human mind and different ways we can avoid stress and ways to tackle it.

On the final day the first session was on "Insights into NEP for higher education" by Dr. S. Robinson, MZCET Tamilnadu followed by a session was on "PCB design flow in mentor graphics tool" by Mr. Aniket Udekar, Seimens Goa.

The Valediction session began with keynote address by Dr Jayalxmi Devte, Professor and Head, ETC Department, PCCE Verna, Goa. Chief Guest for the Valediction function was Dr Vivek Kamat, Director, Directorate of Technical Education, Goa. As a whole all the sessions were very well appreciated by the participants. Lot of interaction was also seen during the question answer time.





