JSS MAHAVIDYAPEETHA

JSS ACADEMY OF TECHNICAL EDUCATION, BENGALURU

DEPARTMENT OF ELECTRONICS & INSTRUMENTATION ENGG.

Innovations by Faculty in Teaching and Learining

Academic Year: 2021-22

Sl. No.	Course	Innovative/Novel Approach Practiced	Learning Style
1.	Analog Electronic Circuits	Circuit simulation using Multisim and electronic workbench	Experiential Learning
2.	Smart Sensors	Circuit simulation using Labview & Case studies and presentation	Experiential Learning & Activity based self-learning
3.	Process control system	Circuit simulation using Labview & Problem solving	Experiential Learning & Collaborative Learning
4.	Mechatronics	Implement a mini project for designing and fabrication of a mechatronic system	Conceive-Design-Implement- Operate (CDIO) methodology Experiential Learning & Collaborative Learning
5.	Aeronautical Instrumentation	Flight simulation using the Turboprop flight simulator	Experiential Learning & Activity Based Learning
6.	Digital Design and Hardware Description Language	Practical Implementation to realize the operations using IC 7495 Shift Register	Experiential Learning & Activity Based Learning
7.	Process Instrumentation	Design and Simulation of Water Tank Level Control Using LabVIEW.	Usage of modern tool

Academic Year: 2020-21

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1.	Analog Electronic Circuits	Circuit simulation using Multisim and electronic workbench	Experiential Learning

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2.	Network Analysis	Circuit simulation and Problem solving	Experiential Learning and Collaborative Learning
3.	Digital Image Processing	Mini projects using Matlab	Experiential Learning
4.	Control Systems	Collaborative assignments	Activity based learning
5.	Digital Design & Hardware Description Language	Circuit simulation	Experiential Learning
6.	Laser and optical Instrumentation	Case studies and presentation	Activity based self-learning (E-learning)
7.	Optical Instrumentation	Case studies and presentation	Activity based self-learning (E-learning)
8.	Signal Conditioning and data acquisition circuits	Circuit simulation and Problem solving	Experiential Learning and Collaborative Learning
9.	Process control system	Water level management & Temperature control Simulation using Matlab	Experiential Learning
10.	Power & Industrial electronics	Problem solving	Collaborative Learning
11.	VLSI	Circuit simulation	Experiential Learning
12.	Aeronautical Instrumentation	Case studies & presentation Flight simulation using Mobile Application	Activity based self-learning (E-learning)
13.	Electronics Instrumentation & Measurement	Circuit simulation	Experiential Learning
14.	Bio-medical Instrumentation	videos	Experiential Learning
15.	Robotics & Automation	Case studies and presentation	Activity based self-learning (E-learning)
16.	Automation in Process Control	Case studies and presentation	Activity based self-learning (E-learning)
17.	Smart Sensors and Intelligent Instrumentation	Case studies and presentation	Activity based self-learning

Sl. No.	Course	Innovative/Novel Approach Practiced	Learning Style
18.	Laser & Optical Instrumentation	Case studies and presentation	Activity based self-learning