St. JOSEPH'S COLLEGE OF ENGINEERING DEPARTMENT OF ECE

Facilities in R and D Lab

Facility Name	Details	Application Areas	
Communication Domain			
Matlab 2016a	Licensed Communication Tool Box		
EDFA setup	Pump laser 980 nm/100 mV Signal source 1550 nm/1Mv	Optical Signal Analysis	
SDR	CommLAB-T Communication Systems Trainer	Digital communication based work	
NS2	NS2 2.42 (Open Source)	Network Simulation	
OPNET	OPNET 9.1 (Open Source)	Networking	
Signal/ Image Processing			
Workstation- 1 No	INTEL CORE i9, 11900 Processor, Seagate 2TB, 32GB DDR4 3200 MHz, Zotac, 3090 TRINITY OC Graphic card and HP Color Laser Jet Pro Printer	Satellite Image Processing	
LAPTOP-1 No	HP -14'' – EC 1019 AU Ryzen – 5625U upto 4.35GHz, 16 GB RAM (2x8 GB), 512 GB SSD, Windows 11 MS office, 14 inch display	Data Pre- processing	
Desktop-5 Nos	HP 280G4 MT DESKTOP Intel Core i7/8700/3.2GHZ/8 GB DDR 4 RAM 1 TB HDD/NO ODD/DOS / Keyboard / Mouse	Signal & Image Analysis	
Matlab 2016a	Licensed Image Processing Tool Box		

Facility Name	Details	Application Areas	
Matlab 2016a	Licensed Signal Processing Tool Box		
NI Lab view	NI Lab view software		
Python	(Open Source)		
VLSI Domain			
Xilinx VIVADO	Xilinx VIVADO System Suite – HLx Editions perpetual License -(25 user)	Synthesis and simulation of HDL program	
Mentor graphics Higher Education Program (HEP1): IC Nano Meter Design Tools	Pyxis –Schematic Design Entry , Layout Editor Caliber –Physical Verification (DRC , LVS, PEX) AMS – Mixed mode VLSI Design Module 50 User Floating /Network(License for 3 year)	Simulation for analog mixed- signal design	
ADSP	ADSP 2181		
Embedded Systems Domain			
Nuvoton ARM Processor MSP430 trainer kit	MP051 MSP430 Development Board	Embedded based system development	