



Gayatri Vidya Parishad College of Engineering

(Autonomous)

Madhurawada, Visakhapatnam - 530048

Approved by AICTE, New Delhi and Affiliated to JNTU - Kakinada

Accredited by NBA & NAAC with "A" Grade with a CGPA of 3.47/4.00

STRENGTHS OF ELECTRONICS & COMMUNICATION ENGINEERING DEPARTMENT

1. RESEARCH FACILITIES AVAILABLE IN THE DEPARTMENT

S. No.	Name of the Equipment / Software	Cost in Rs (Lakhs)	Utilization
1	MATLAB, Simulink Software and MATLAB TOOL BOXES (Signal Processing Toolbox, Image Processing Toolbox, RF Toolbox, DSP System Toolbox, Communication System Toolbox)	29.17	<ul style="list-style-type: none">• Research work for the faculty of ECE in the following areas:<ul style="list-style-type: none">○ Wireless Communications○ Signal Processing• M. Tech. dissertation work
2	Network Analyzer, RF Current probe, Line impedance stabilization network, RF signal generator	10.33	<ul style="list-style-type: none">• Research work for the faculty of ECE in the following area:<ul style="list-style-type: none">○ RF Communications
3	Non-Mydriatic Fundus Camera	3.00	<ul style="list-style-type: none">• Research work for the faculty of ECE in the following area:<ul style="list-style-type: none">○ Medical Image Processing
4	CADENCE Tools	9.69	<ul style="list-style-type: none">• Research work for the faculty of ECE in the following area:<ul style="list-style-type: none">○ VLSI Design (Front end and Back end)
5	FPGA Kits and Xilinx Software	2.36	<ul style="list-style-type: none">• Research work for the faculty of ECE in the following area:<ul style="list-style-type: none">○ VLSI Design (Front end).• M. Tech. and B. Tech. Projects
6	HFSS software	4.85	<ul style="list-style-type: none">• Research work for the faculty of ECE in the following area:<ul style="list-style-type: none">○ RF Communications
7	PCB Prototype Making and Antenna Designing Machine	5.31	<ul style="list-style-type: none">• Research work for the faculty of ECE in the following area:<ul style="list-style-type: none">○ Embedded systems design and verification
8	LABVIEW and MULTISIM	24.00	B. Tech. Project work



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9	Spectrum Analyzer	5.77	Digital Communication lab experiments
10	Digital Storage Oscilloscopes	2.53	Digital Communication lab experiments

2. LIST OF RESEARCH PROJECTS / CONSULTANCY WORK

Research Projects

A. Research Projects completed by the Department funded by DST / AICTE / UGC etc.:

S. No.	Principal Investigators & Co PI Investigators	Title of the Project	Sponsoring Agency	Amount Sanctioned in Rs (Lakhs)
1	PI: Prof. Dr. M. V.S Sairam Co PI: Prof. Dr. N.Bala Subrahmanyam (F.No.9-113/RFID/MODROB/Policy-1/2016-17)	Pre-compliance EMI measurement of Electrical & Electronic products	AICTE (MODROBS)	9.75
2	Prof. Dr. N.Bala Subrahmanyam Co-PI: Sri SMK.Chaitanya (F.No.8024/RID/BOR/MOD-13/2009-10)	Development of Industry Lab for Real Time Applications	AICTE (MODROBS)	15.00
3	Prof. Dr. N.Bala Subrahmanyam (F.No.8023/RID/BOR/MOD-3/2007-08)	Embedded Systems	AICTE (MODROBS)	7.50
4	Prof. Dr. D.S.Murthy Co-PI: Dr V.Leela Rani (F.No.8023/BOR/RPS-49/2006-07)(Revalidated 2007-08)	Power efficiency through Optimization of Gates in VLSI	AICTE (RPS)	10.00



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B. Details of On-going Research Projects funded by DST / AICTE / UGC etc.

S. No.	Principal Investigators & Co PI Investigators	Title of the Project	Sponsoring Agency	Sanctioned date	Amount Sanctioned in Rs (Lakhs)
1	PI: Prof. Dr. Birendra Biswal Co PI: Dr. U.Satyanaryana GVP Institute of Healthcare & Medical Technology (EMR/2017/000885)	Rural Health care Improvement for early detection of NVD & NVE in Diabetic Retinopathy	DST	12.04.2018	21.73

Consultancy Work

S. No.	Title of the project	Sponsoring Agency	Month and Year of Sanction	Amount Sanctioned in Rs (Lakhs)
1	Simulation based Design of 2kW Full Bridge DC-DC power Converter PI: Dr. M.V.S. Sairam Co PI: Dr.U.Aswani (IEPT/2019-2020/829/G200)	IE Power Technologies Private Limited, Bangalore	January, 2020	2.84

3. INDUSTRY/INSTITUTE INTERACTION WITH A SPECIAL FOCUS ON M. TECH DISSERTATION WORKS

A. Department has 3 MoUs

- MoU with BSNL, Visakhapatnam
Objective: Providing Internships to students.
- MoU with Drishti Eye Care Systems, Nepal
Objective: To develop robust modern machine intelligence algorithm for detection of NVD and NVE, a reliable and massive dataset is the need of the hour.
- MoU with Kalpah Innovations Pvt. Ltd.
Objective: To develop algorithms and products for detection of Neovascularization using Deep learning Techniques.

B. Students of M. Tech. are carrying their mini and main Projects in Reputed Core Industries