MALLA REDDY ENGINEERING COLLEGE FOR WOMEN

(Autonomous Institution-UGC, Govt. of India)

Accredited by NAAC with 'A+' Grade | Programmes Accredited by NBA

NIRF Institutional Ranking 2025 – Rank Band (201-300), MHRD, GOvt. of India

Approved by AICTE, Affiliated to JNTUH, ISO 9001:2015 Certified Institution

Maisammaguda, Dhulapally, Secunderabad 500100

Department of Electronics and Communication Engineering

M.Tech (ES) Course Structure and Syllabus (R26 Regulations)

Applicable for AY 2026-27 Batch

I Year I Semester

Course Code	Course Title	L	T	P	Credits
Professional Core-I	Digital System Design with FPGA	3	0	0	3
Professional Core-II	Embedded System Design	3	0	0	3
Professional Elective-I	VLSI Technology and Design Wireless Sensor Networks Automotive Embedded Systems	3	0	0	3
Professional Elective-II	Test and Testability Advanced RISC Architectures Pattern Recognition and Machine Learning	3	0	0	3
Laboratory-I	Digital System Design with FPGA Laboratory	0	0	4	2
Laboratory-II	Embedded System Design Laboratory	0	0	4	2
	Research Methodology & IPR	2	0	0	2
Audit Course-I	Audit Course–I	2	0	0	0
	Total	**16**	**0**	**8**	**18**

I Year II Semester

Course Code	Course Title	L	T	P	Credits
Professional Core-III	Embedded Real Time Operating Systems	3	0	0	3
Professional Core-IV	IoT System Design	3	0	0	3
Professional Elective-III	Hardware and Software Co-Design Fault Tolerant Systems GPU Architectures	3	0	0	3
Professional Elective-IV	Embedded Networks Hardware Accelerators for Machine Learning Models Image and Video Processing	3	0	0	3
Laboratory-III	Embedded Real Time Operating Systems Laboratory	0	0	4	2
Laboratory-IV	IoT System Design Laboratory	0	0	4	2
Mini Project	Mini Project with Seminar	0	0	4	2
Audit Course- II	Audit Course-II	2	0	0	0
	Total	**14**	**0**	**12**	**18**

II Year I Semester

Course Code	Course Title	L	T	P	Credits
Professional Elective-V	Sensors and Actuators Network Security and Cryptography Edge Computing	3	0	0	3
Open Elective	Open Elective	3	0	0	3
Dissertation	Dissertation Work Review–II	0	0	12	6
	Total	**6**	**0**	**12**	**12**

II Year II Semester

Course Code	Course Title	L	T	P	Credits
Dissertation	Dissertation Work Review-III	0	0	12	06
Dissertation	Dissertation Viva-Voce	0	0	28	14
	Total	**0**	**0**	**40**	**20**

For Dissertation Work Review - I please refer R25 Academic Regulations

Open Electives:

1. Business Analytics
2. Industrial Safety
3. Operations Research
4. Cost Management of Engineering Projects
5. Composite Materials
6. Digital Electronics for Engineers
7. Verilog Programming

Audit Course I & II:

1. English for Research Paper Writing
2. Disaster Management
3. Sanskrit for Technical Knowledge
4. Value Education
5. Constitution of India
6. Pedagogy Studies
7. Stress Management by Yoga
8. Personality Development Through Life Enlightenment Skills