Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY

(Autonomous Institution – UGC, Govt. of India)

Sponsored by CMR Educational Society

(Affiliated to JNTUH, Hyderabad, Approved by AICTE - Accredited by NAAC – 'A' Grade - ISO 9001:2015 Certified)

Maisammaguda, Dhulapally, Kompally, Secunderabad – 500100, Telangana State, India.

Contact Number: 7207034237, 9133555162, E-Mail ID: mrcet2004@gmail.com, website: www.mrcet.ac.in

PREAMBLE

PROGRAM OUTCOMES (POs)

Engineering Graduates will be able to:

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

3. Design / development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multi disciplinary environments.

12. Life- long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Mechanism of Communication

Programme Educational Objectives (PEOs) and Programme Outcomes (POs) are prepared for every programme and displayed at various locations as listed below:

- College website
- Academic Calendar
- Classrooms
- Laboratories
- Department building walls
- HOD office

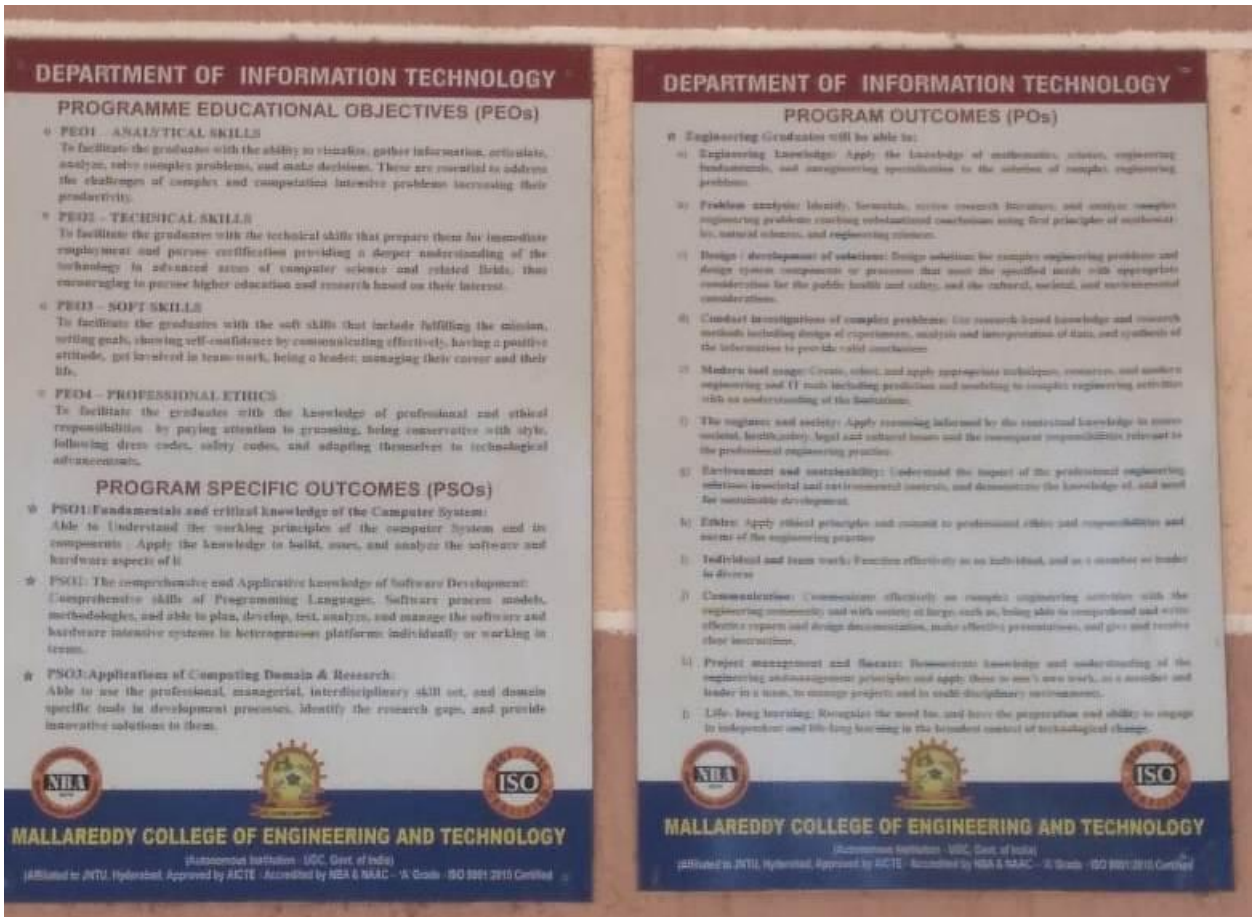
The course outcomes (COs) for all courses are printed in:

- College website
- Academic Regulations book.
- Syllabus Copy
- Laboratory Manuals
- Handouts to Students

Sd/-

PRINCIPAL
Malla Reddy College of Engg. & Tech
UGC AUTONOMOUS INSTITUTION
Maisammaguda, Doolapally, Secunderabad-500 100.

PROGRAMME OUTCOMES



DEPARTMENT OF INFORMATION TECHNOLOGY

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

- PEO1 – ANALYTICAL SKILLS
  To facilitate the graduates with the ability to visualize, gather information, articulate, analyze, solve complex problems, and make decisions. These are essential to address the challenges of complex and computation intensive problems increasing their productivity.
- PEO2 – TECHNICAL SKILLS
  To facilitate the graduates with the technical skills that prepare them for immediate employment and pursue certification providing a deeper understanding of the technology in advanced areas of computer science and related fields, thus encouraging to pursue higher education and research based on their interest.
- PEO3 – SOFT SKILLS
  To facilitate the graduates with the soft skills that include fulfilling the mission, setting goals, showing self-confidence by communicating effectively, having a positive attitude, get involved in team-work, being a leader; managing their career and their life.
- PEO4 – PROFESSIONAL ETHICS
  To facilitate the graduates with the knowledge of professional and ethical responsibilities by paying attention to grooming, being conservative with style, following dress codes, safety codes, and adapting themselves to technological advancements.

PROGRAM SPECIFIC OUTCOMES (PSOs)

- PSO1:Fundamentals and critical knowledge of the Computer System:
  Able to Understand the working principles of the computer System and its components ; Apply the knowledge to build, asses, and analyze the software and hardware aspects of it
- PSO2: The comprehensive and Applicative knowledge of Software Development:
  Comprehensive skills of Programming Languages, Software process models, methodologies, and able to plan, develop, test, analyze, and manage the software and hardware intensive systems in heterogeneous platforms individually or working in teams.
- PSO3:Applications of Computing Domain & Research:
  Able to use the professional, managerial, interdisciplinary skill set, and domain specific tools in development processes, identify the research gaps, and provide innovative solutions to them.

MALLAREDDY COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous Institution - UGC, Govt. of India)

(Affiliated to JNTU, Hyderabad, Approved by AICTE - Accredited by NBA & NAAC - 'A' Grade - ISO 9001:2015 Certified)

DEPARTMENT OF INFORMATION TECHNOLOGY

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g) **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

h) **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

i) **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse

j) **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

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MALLAREDDY COLLEGE OF ENGINEERING AND TECHNOLOGY

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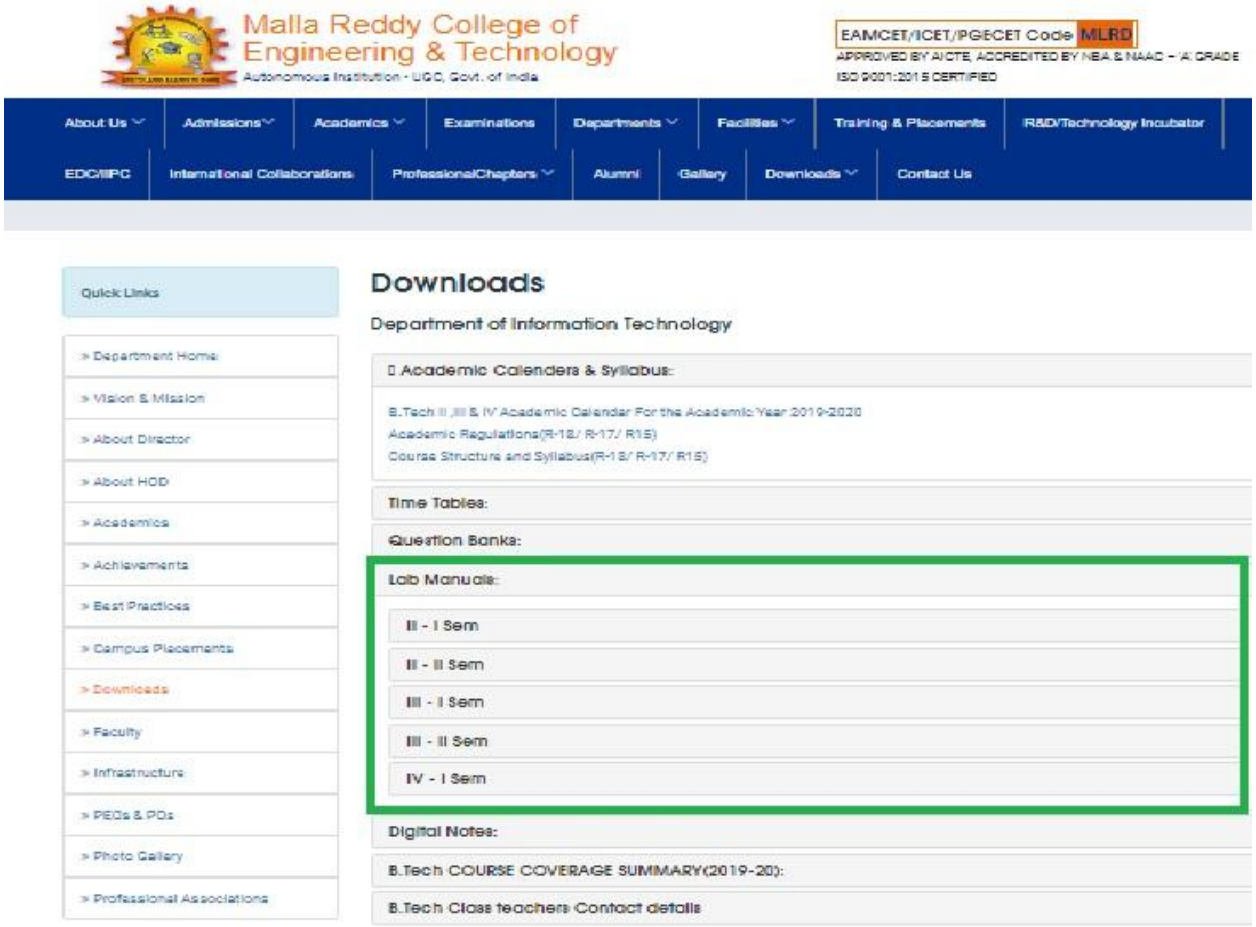
COMPUTER PROGRAMMING LAB
DEPARTMENT OF INFORMATION TECHNOLOGY
FOUNDER - JAVA PROGRAMMING LANGUAGE
ava
JAMES GOSLING
(May 19, 1955)

Lab Manuals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(2019-20)

DEPARTMENT OF INFORMATION TECHNOLOGY

MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous Institution – UGC, Govt. of India)
Recognized under 2(f) and 12 (B) of UGC ACT 1956
(Affiliated to JNTUH, Hyderabad, Approved by AICTE - Accredited by NBA & NAAC – 'A' Grade - ISO 9001:2015 Certified)
Maisammaguda, Dhulapally (Post Via. Hakimpet), Secunderabad – 500100, Telangana State, India

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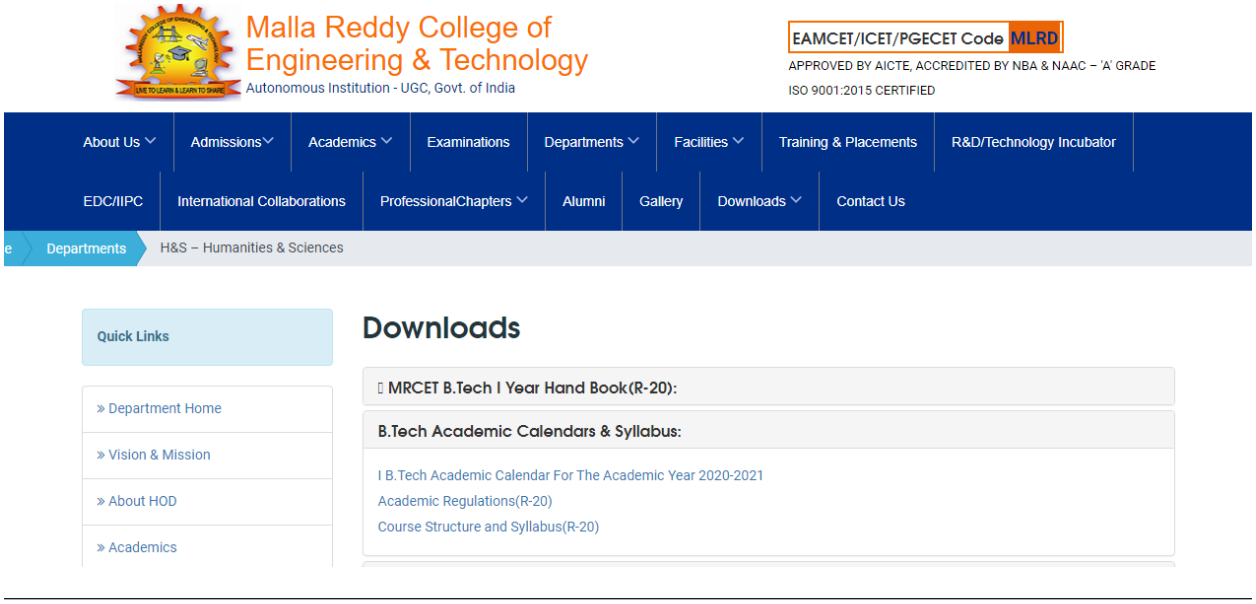
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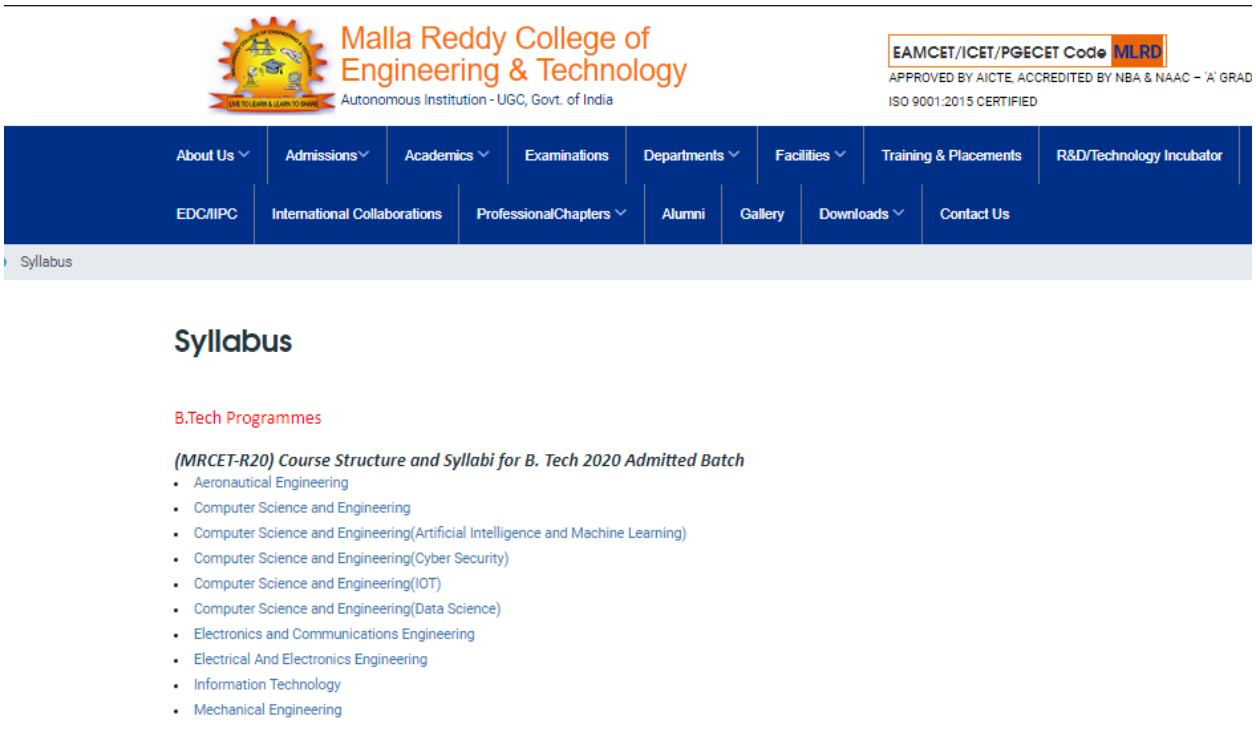
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Computer Science and Engineering(Artificial Intelligence and Machine Learning)
Computer Science and Engineering(Cyber Security)
Computer Science and Engineering(IOT)
Computer Science and Engineering(Data Science)
Electronics and Communications Engineering
Electrical And Electronics Engineering
Information Technology
Mechanical Engineering

MALLA REDDY COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF AERONAUTICAL ENGINEERING

COURSE STRUCTURE

I Year B. Tech – I Semester

S.No	Subject Code	SUBJECT	L	T	P	C	MAX. MARKS	
							INT	EXT
1	R20A0001	English	2	0	0	2	30	70
2	R20A0021	Mathematics – I	3	1	0	4	30	70
3	R20A0012	Engineering Physics	3	0	0	3	30	70
4	R20A0013	Advanced Material Chemistry	3	0	0	3	30	70
5	R20A0501	Programming for Problem Solving	3	0	0	3	30	70
6	R20A0083	Engineering and IT Workshop	-	0	2	1	30	70
7	R20A0082	Engineering Physics Lab	-	0	3	1.5	30	70
8	R20A0581	Programming for Problem Solving Lab	-	0	3	1.5	30	70
9	R20A0014	Financial Institutions, Markets and Services	1	-	-	1	100	-
		Total	**15**	**1**	**8**	**20**	**340**	**560**

I Year B. Tech – II Semester

S.No	Subject Code	SUBJECT	L	T	P	C	MAX. MARKS	
							INT	EXT
1	R20A0002	Professional English	2	0	0	2	30	70
2	R20A0022	Mathematics – II	3	1	0	4	30	70
3	R20A0261	Basic Electrical and Electronics Engineering	3	0	0	3	30	70
4	R20A0301	Engineering Graphics	2	0	2	3	30	70
5	R18A0502	Python Programming	3	0	0	3	30	70
6	R20A0081	English Language Communication Skills Lab	-	0	2	1	30	70
7	R20A0289	Basic Electrical and Electronics Engineering Lab	-	0	3	1.5	30	70
8	R20A0582	Python Programming Lab	-	0	3	1.5	30	70
9	R20A0003	Human Values and Professional Ethics	1	0	0	1	100	-
		Total	**14**	**1**	**10**	**20**	**340**	**560**

MALLA REDDY COLLEGE OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

COURSE STRUCTURE

I Year B. Tech – I Semester

S.No	Subject Code	SUBJECT	L	T	P	C	MAX. MARKS	
							INT	EXT
1	R20A0001	English	2	0	0	2	30	70
2	R20A0021	Mathematics – I	3	1	0	4	30	70
3	R20A0201	Basic Electrical Engineering	3	0	0	3	30	70
4	R20A0302	Computer Aided Engineering Graphics	2	0	2	3	30	70
5	R20A0501	Programming for Problem Solving	3	0	0	3	30	70
6	R20A0081	English Language Communication Skills Lab	-	0	2	1	30	70
7	R20A0281	Basic Electrical Engineering Lab	-	0	3	1.5	30	70
8	R20A0581	Programming for Problem Solving Lab	-	0	3	1.5	30	70
9	R20A0003	Human Values and Professional Ethics	1	0	0	1	100	-
		Total	**14**	**1**	**10**	**20**	**340**	**560**

I Year B. Tech – II Semester

S.No	Subject Code	SUBJECT	L	T	P	C	MAX. MARKS	
							INT	EXT
1	R20A0002	Professional English	2	0	0	2	30	70
2	R20A0022	Mathematics – II	3	1	0	4	30	70
3	R20A0011	Applied Physics	3	0	0	3	30	70
4	R20A0401	Analog and Digital Electronics	3	0	0	3	30	70
5	R20A0502	Python Programming	3	0	0	3	30	70
6	R20A0082	Applied Physics Lab	-	0	3	1.5	30	70
7	R20A0582	Python Programming Lab	-	0	3	1.5	30	70
8	R20A0083	Engineering and IT Workshop	-	0	2	1	30	70
9	R20A0014	Financial Institutions, Markets and Services	1	-	-	1	100	-
		Total	**15**	**1**	**8**	**20**	**340**	**560**