MALLA REDDY ENGINEERING COLLEGE

(Autonomous)

Department of CSE (Internet of Things)

7th Board of Studies meeting on 16.12.2023 at 11:00 AM

AGENDA

The 7th Board of Studies meeting for the Departments of CSE (Internet of Things) is convened on 16.12.2023 at 11:00 AM in hybrid (online/offline) mode.

The Agenda of the meeting is as follows.

1. Action Taken Report (ATR) on previous BoS Meeting in A.Y 2022-23 on 07.08.2023.
2. Approval of Course Structure for MR22
3. Approval of **MOOCS** courses for other department
4. Approval of **RUBRICS** for **SKIIL DEVELOPMENT LAB**
5. Discussed and approval of B.Tech Readmitted students course with substitute and additional subjects.
6. Any other point with the permission of BoS Chairman.

Dr. K.Vasanth Kumar
Chairman,
UG-B.Tech.-CSE (Internet of Things) - BOS

Head of the Department
Dept.of CSE (Internet of things)
Malla Reddy Engineering College (Autonomous)
Secunderabad, Telangana,State -500100

MALLA REDDY ENGINEERING COLLEGE

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Maisammaguda, Dhullapally(post via Kompally) Secunderabad-500100

Department of CSE (Internet of Things)

BOS – Attendance Sheet

December 16, 2023

The 7th UG-B.Tech. CSE (Internet of Things) Board of Studies meeting for the Academic Year 2023-24 was conducted on 16-12-2023 at 11:00 AM through Hybrid mode (online/offline). The following BOS Members have attended the BOS Meeting to finalize MR22 regulations CSE (Internet of Things) 3rd and 4th years B.Tech. Course Structure and other points of agenda:

S. No	Name of the Member	Designation & Official Address	Category	Signature
1	Dr. K.Vasanth Kumar	Professor & Head of Department	Chairman	
2	Dr. K. Santhi Sree	Professor & HOD, IT, JNTUH, Hyderabad.	University Nominee	
3	Dr. B. Eswara Reddy	Director, Software Development Center, JNTUA.	Subject Expert (Outside the Parent University)	ONLINE
4	Dr. CH.V.Rami Reddy	Assistant Professor, Vellore Institute of Technology,Vijayawada.	Subject Expert (Outside the Parent University)	
5	Mr. Aravind Varanasi	Data Scientist , Tata Consultancy Services, Hyderabad	Industry Expert	
6	Dr. P.Srinivas	Professor	Faculty Member	
7	Mr.L.Ramu	Assistant Professor	Faculty Member	
8	Mrs.K.Sowjanya Naidu	Assistant Professor	Faculty Member	
9	Mrs.V.Anuja	Assistant Professor	Faculty Member	
10	Mrs.A.Laxmi Prasanna	Assistant Professor	Faculty Member	
11	Ms. G. Sruthi	MTS II – IT Quality Assurance, Verizon data service Pvt Ltd, Gachibowli, Hyderabad	Alumni	

Dr. K.Vasanth Kumar
Chairman,
UG-B.Tech. CSE(Internet of Things) - BOS

Head of the Department
Dept.of CSE (Internet of Things)
Malla Reddy Engineering College (Autonomous)
Secunderabad, Telangana, State -500100.

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Department of CSE (Internet of Things)

Minutes of the 7th BoSmeetingUG- B.Tech.-CSE(Internet of Things) held on 16-12-2023 at 11:00 AM

The 7th Board of Studies meeting for the **UG - B.Tech.- CSE(Internet of Things)** is conducted on on 16-12-2023 at 11:00 AM in the Hybrid mode. The following members attended the BoS meeting to finalize MR22 regulations CSE (Internet of Things) 3rd and 4th years B.Tech. Course Structure and other points of agenda:

S. No	Name of the Member	Designation & Official Address	Category	Signature
1	Dr. K.Vasanth Kumar	Professor & Head of Department	Chairman	
2	Dr. K. Santhi Sree	Professor & HOD, IT, JNTUH, Hyderabad.	University Nominee	
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5	Mr. Aravind Varanasi	Data Scientist , Tata Consultancy Services, Hyderabad	Industry Expert	
6	Dr. P.Srinivas	Professor	Faculty Member	
7	Mr.L.Ramu	Assistant Professor	Faculty Member	
8	Mrs.K.Sowjanya Naidu	Assistant Professor	Faculty Member	
9	Mrs.V.Anuja	Assistant Professor	Faculty Member	
10	Mrs.A.Laxmi Prasanna	Assistant Professor	Faculty Member	
11	Ms. G. Sruthi	MTS II – IT Quality Assurance, Verizon data service Pvt Ltd, Gachibowli, Hyderabad	Alumni	

The following is the agenda for the meeting.

1. Action Taken Report (ATR) on previous BoS Meeting in A.Y 2022-23 on 07.08.2023.
2. Approval of Course Structure for MR22
3. Approval of **MOOCS** courses for other department
4. Approval of **RUBRICS** for **SKIIL DEVELOPMENT LAB**
5. Any other point with the permission of BoS Chairman.

At the outset, **Dr. K.Vasanth Kumar**, Professor & HOD and Chairman of the **UG - B.Tech.- CSE(Internet of Things)** Board of Studies, welcomed the members to the BoS meeting and informed the purpose of the meeting. Later BoS Members reviewed and discussed items in the agenda and finally the following items have been resolved unanimously by all the members of BoS to implement from the academic year 2023-24 onwards.

The following resolutions are approved after careful discussion and observations.

The BoS Members have thoroughly reviewed and approved the MR22 regulations CSE(Internet of Things) 3rd and 4th year course structure on 16-12-2023 at 11:00 AM as per the guide lines of the AICTE, UGC and JNTUH, Hyderabad.

Action Taken Report (ATR) on previous BoS Meeting (6th) in AY 2022-23.The previous Board of studies meeting (6th) in AY 2022-23 was held on dt: 07-08-2023.

The following are the resolutions made in the meeting and corresponding actions taken are as follows.

Resolution1: Expressed to maintain the sequence of offered programming courses to the students like C, OOPs concepts.

Action Taken: sequence of offered programming courses are maintained

Resolution2: Object Oriented Programming course to be titles as Object Oriented Programming through Java.

Action Taken: Object Oriented Programming course title is renamed as Object Oriented Programming through Java.

The BOS members have thoroughly discussed and approved B.Tech. Readmitted students course structure and additional subjects for the academic year 2022-23.

Finally, Dr. K.Vasanth Kumar, Chairman – BoS has expressed his sincere thanks to all the Members of the BoS for their active participation and contribution. The meeting concluded at 12:00 Noon.

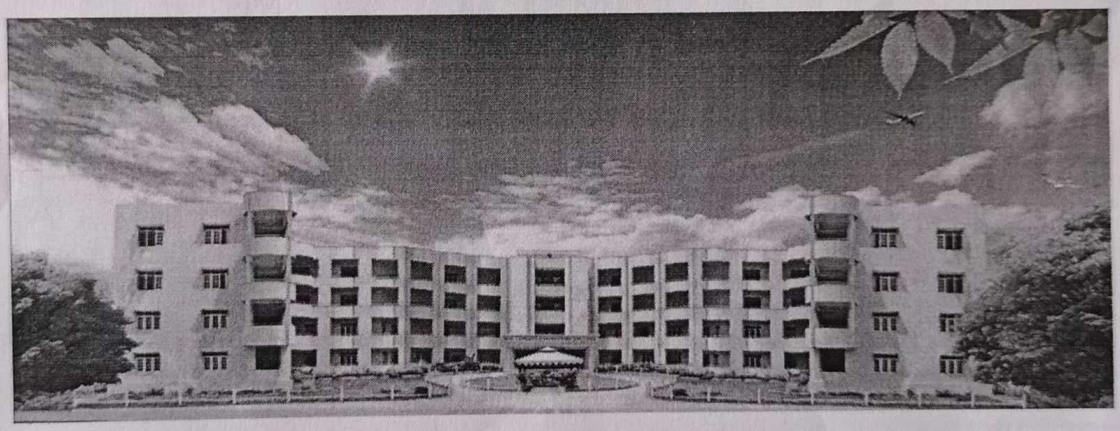
Dr.K.Vasanth Kumar
Chairman,
UG-B.Tech.-CSE (Internet of Things) - BOS

Head Of the Department
Dept.of CSE (Internet of things)
Malla Reddy Engineering College (Autonomous)
Secunderabad, Telangana,State -500100.

ACADEMIC REGULATIONS, COURSE STRUCTURE AND DETAILED SYLLABUS

Effective from the Academic Year 2022-23 onwards

Course Structure and II Year Syllabus
for
B.Tech. CSE (Internet of Things) Programme.
(MR22 Regulations – Effective from Academic Year 2022-23 onwards)



For

B.Tech. - Four Year Degree Programme

MALLA REDDY ENGINEERING COLLEGE

(An UGC Autonomous Institution, Approved by AICTE and Affiliated to JNTUH, Hyderabad)
Recognized under section 2(f) &12 (B) of UGC Act 1956, Accredited III Cycle by NAAC with 'A++' Grade, NIRF Rank Band 201-250,
ARIIA Band Performer, NBA Tier-I Accredited (B.Tech.- CE, EEE, ME, ECE &CSE, M.Tech. - SE, EPS, TE)
Maisammaguda (H), Dhulapally (Post Via Kompally), Medchal - Malkajgiri District, Secunderabad– 500100.
Telangana State. e-mail: principal@mrec.ac.in, Website: www.mrec.ac.in

MALLA REDDY ENGINEERING COLLEGE (Autonomous)

COURSE STRUCTURE – B.Tech. CSE (Internet of Things) Programme.

(MR22 Regulations - Effective from Academic Year 2022 – 23 onwards)

MR22 SEMESTER – I							
S. No	Category	Course Code	Name of the Subject	Contact hours/week			Credits
				L	T	P	
1.	BSC	C0B01	Linear Algebra and Numerical Methods	3	1	-	4
2.	BSC	C0B17	Engineering Chemistry	3	1	-	4
3.	ESC	C0501	Programming for Problem Solving	3	-	-	3
4.	ESC	C0305	Engineering Drawing	2	-	2	3
5.	BSC	C0B09	Semiconductor Physics	3	1	-	4
6.	ESC	C0502	Programming for Problem Solving Lab	-	-	2	1
7.	BSC	C0B11	Applied Physics Lab	-	-	2	1
8.	BSC	C0B18	Engineering Chemistry Lab	-	-	2	1
			Total	**14**	**3**	**8**	**21**
			Total Contact Hours	**25**			

MR22 SEMESTER – II							
S. No	Category	Course Code	Name of the Subject	Contact hours/week			Credits
				L	T	P	
1.	HSMC	C0H01	English	3	-	-	3
2.	ESC	C0201	Basic Electrical and Electronics Engineering	3	-	-	3
3.	BSC	C0B02	Probability and Statistics	3	-	-	3
4.	ESC	C0504	Python Programming	3	1	-	4
5.	ESC	C0506	Python Programming Lab	-	-	2	2
6.	HSMC	C0H02	English Language and Communication Skills Lab	-	-	2	1
7.	ESC	C0202	Basic Electrical and Electronics Engineering Lab	-	-	2	1
8.	ESC	C1201	Engineering and IT Workshop	-	-	2	2
			Total	**12**	**1**	**8**	**19**
			Total Contact Hours	**21**			

MR22 III SEMESTER

S. No	Category	Course Code	Course Title	L	T	P	Credits
1	PCC	C0507	Discrete Mathematics	3	-	-	3
2	PCC	C0509	Computer Organization and Architecture	3	-	-	3
3	PCC	C0510	Data Structures	3	-	-	3
4	PCC	C0409	Sensors & Devices	3	-	-	3
5	PCC	C0511	Object Oriented Programming through Java	3	-	-	3
6	PCC	C0512	Data Structures Lab	-	-	3	1.5
7	PCC	C6914	Sensors & Devices Lab	-	1	2	2
8	PCC	C0513	Object Oriented Programming through Java Lab	-	-	3	1.5
9	MC	C00M1	Gender Sensitization	-	-	2	-
			Total	**15**	**1**	**10**	**20**
			Total Contact Hours		**26**		

MR22 IV SEMESTER

S. No	Category	Course Code	Course Title	L	T	P	Credits
1	BSC	C0B23	Number Theory	3	-	-	3
2	PCC	C0515	Database Management Systems	3	-	-	3
3	PCC	C0517	Design and Analysis of Algorithms	3	-	-	3
4	PCC	C6901	Internet of Things Fundamentals	3	-	-	3
5	**Professional Elective –I**						
	PEC-I	C6601	Fundamentals of Artificial Intelligence	3	-	-	3
		C0518	Free and Open Source Technologies				
		C6902	Object Oriented Analysis and Design				
6	PCC	C0519	Database Management Systems Lab	-	-	2	1
7	PCC	C1204	Design and Analysis of Algorithms Lab	-	-	3	1
8	PCC	C6903	Internet of Things Fundamentals Lab	-	-	3	1
9	PCC	C6921	Real-time Research Project/ Societal Related Project	-	-	2	1
10	PCC	C1206	Node JS/ React JS/ Django Lab	-	-	2	1
11	MC	C00M2	Environmental Science	2	-	-	-
			Total	**17**	**-**	**12**	**20**
			Total Contact Hours		**29**		

MR22 V SEMESTER

S. No	Category	Course Code	Course Title	L	T	P	Credits
1	PCC	C1213	Automata Theory and Compiler Design	3	-	-	3
2	PCC	C0410	Microprocessors & Microcontrollers	3	-	-	3
3	PCC	C0516	Operating Systems	3	-	-	3
4	HSMC	C0H08	Business Economics and Financial Analysis	3	-	-	3
5	**Professional Elective –II**						
	PEC-II	C6904	Architecting Smart IoT Devices	3	-	-	3
		C6905	Data Analytics for IoT				
		C6906	IoT System Architectures				
		C6907	Operating Systems for IoT				
		C0517	Design and Analysis of Algorithms				
6	PCC	C0520	Operating Systems Lab	-	-	2	1
7	PCC	C6922	Microprocessors & Microcontrollers Lab	-	-	2	2
8	HSMC	C0H03	Advanced English Communication Skills Lab	-	-	2	1
9	PCC	C0530	Skill Development Course (UI design-Flutter)	-	-	2	1
10	MC	C00M3	Intellectual Property Rights	3	-	-	0
11	MC	C00M4	Quantitative Aptitude and Verbal Reasoning – I	2	-	-	0
			Total	**20**	**-**	**8**	**20**
			Total Contact Hours	**28**			

MR22 VI SEMESTER

S. No	Category	Course Code	Course Title	L	T	P	Credits
1	PCC	C6908	Applications of IoT	3	-	-	3
2	PCC	C6909	Programming Languages for IoT	3	-	-	3
3	PCC	C6625	Machine Learning	3	-	-	3
4	**Professional Elective –III**						
	PEC-III	C6612	Computer Vision and Robotics	3	-	-	3
		C1215	Real Time Systems				
		C6923	Embedded Hardware Design				
		C0363	Renewable Energy Source				
		C0518	**Software Engineering & Modelling**				
5	OEC-I		**Open Elective-I**	3	-	-	3
6	PCC	C6910	Applications of IoT Lab	-	-	2	2
7	PCC	C6626	Machine Learning Lab	-	-	2	1
8	PRJ	C00P1	Industrial Oriented Mini Project/ Internship/ Skill Development Course (Big data-Spark)	-	-	4	2
9	MC	C00M5	Constitution of India	3	-	-	0
10	MC	C00M6	Quantitative Aptitude and Verbal Reasoning – II	3	-	-	0
			Total	**21**	**-**	**8**	**20**
			Total Contact Hours	**29**			

MR22 VII SEMESTER

S. No	Category	Course Code	Course Title	L	T	P	Credits
1	PCC	C6911	IoT Cloud and Data Analytics	3	-	-	3
2	PCC	C1215	Data Mining	3	-	-	3
3	PEC-IV	C6912	Mobile Application Development for IoT	3	-	-	3
		C0536	Software Testing Methodologies				
		C0546	**Cloud Computing**				
		C6618	Artificial Intelligence				
		C6203	Cryptography and Network Security				
4	PEC-V	C0523	Quantum Computing	3	-	-	3
		C6924	Wireless Networks				
		C1220	Augmented Reality & Virtual Reality				
		C6913	IoT Automation				
		C0560	**Human Computer Interaction**				
5	OEC-II		Open Elective-II	3	-	-	3
6	PCC	C6915	IoT Cloud and Data Analytics Lab	-	-	3	1
7	PCC	C0562	Cloud Computing Lab	-	-	2	1
8	PRJ	C00P2	Project Stage - I	-	-	6	3
			Total	**15**	**-**	**11**	**20**
			Total Contact Hours	**26**			

MR22 VIII SEMESTER

S. No	Category	Course Code	Course Title	L	T	P	Credits
1	PEC-VI	C6925	Embedded Software Design	3	-	-	3
		C6916	5G & IoT Technologies				
		C7328	Cognitive Computing				
		C0559	Distributed Systems				
		C6919	**Edge Analytics**				
2	PEC-VII	C6920	Industrial IoT	3	-	-	3
		C6926	Fog Computing				
		C6927	Smart Sensor Technologies				
		C6215	Digital Forensics				
		C0550	**Blockchain Technology**				
3	OEC-III		Open Elective-III	3	-	-	3
4	PRJ	COOP3	Project Stage – II including Seminar	-	-	22	11
			Total	**9**	**-**	**22**	**20**
			Total Contact Hours	**31**			