



# Malla Reddy Engineering College

(An UGC Autonomous Institution approved by AICTE and affiliated to JNTU Hyderabad, Accredited by NAAC with 'A' Grade (II - cycle)  
NBA Accredited Programmes - UG (CE, EEE, ME, ECE & CSE) PG (CE - Structural Engg., EEE-Electrical Power Systems, ME - Thermal Engg.).

Lr.No:MREC(A)/BOS-CSE(IOT)/ UG/2021-22/02/Invitation/01

Dt:10-05-2022

To

Mr.K.Girish,  
Senior Principal Consultant,  
ORACLE Financial Services Software Limited,  
Bangalore.

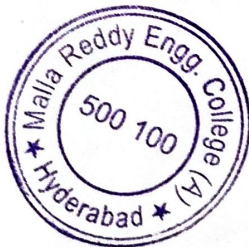
Dear Sir,


Sub: Invitation for 4<sup>th</sup> CSE (IOT) Board of Studies meeting of Malla Reddy Engineering College (Autonomous) convene for the Academic Year 2021-22: Reg.

The 4<sup>th</sup> CSE (IOT) Board of Studies meeting of Malla Reddy Engineering College (Autonomous) for the Academic Year 2021-22 is convened on 12-05-2022 at 12:30 PM in online mode. You are kindly requested to make it convenient to attend the meeting.

**The Agenda of the meeting is as follows:**

1. Discussion and approval of B.Tech. CSE(IOT) course - III Year Schema and Syllabus (MR20 Regulations).
2. Discussion and approval of B.Tech. CSE(IOT) course - II Year Schema and Syllabus (MR21 Regulations).



  
**BOS Chairman**  
CSE(IOT)



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Lr.No:MREC(A)/BOS-CSE(IOT)/ UG/2021-22/02/Invitation/01

Dt:10-05-2022

To

Dr.M. Murali,  
Dean R&D, Professor of ECE,  
School of Engineering,  
Centurion University-AP.

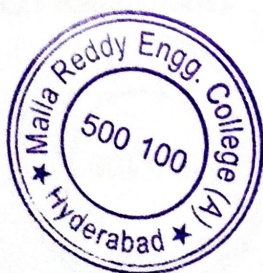
Dear Sir,

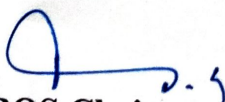
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**BOS Chairman**  
CSE(IOT)





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NBA Accredited Programmes - UG (CE, EEE, ME, ECE & CSE) PG (CE - Structural Engg., EEE-Electrical Power Systems, ME - Thermal Engg.).

Lr.No:MREC(A)/BOS-CSE(IOT)/ UG/2021-22/02/Invitation/01

Dt:10-05-2022

To

Dr. S. Ramakrishna,  
Professor & HOD,  
Dept of CS,  
SV University,  
Tirupati.

Dear Sir,

Sub: Invitation for 4<sup>th</sup> CSE (IOT) Board of Studies meeting of Malla Reddy Engineering College (Autonomous) convene for the Academic Year 2021-22: Reg.

The 4<sup>th</sup> CSE (IOT) Board of Studies meeting of Malla Reddy Engineering College (Autonomous) for the Academic Year 2021-22 is convened on 12-05-2022 at 12:30 PM in online mode. You are kindly requested to make it convenient to attend the meeting.



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**BOS Chairman**  
CSE(IOT)





	<p align="center"><b>MALLA REDDY ENGINEERING COLLEGE</b> (AUTONOMOUS) (An UGC Autonomous Institution approved by AICTE and affiliated to JNTUH Hyderabad, Accredited by NAAC with 'A' Grade (II-Cycle) NBA Accredited Programmes – UG (CE, EEE, ME, ECE &amp; CSE), PG (CE - SE, EEE – EPS, ME – TE)</p>	 <b>EAMCET CODE: MREC</b>
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## Department of Computer Science and Engineering (IoT)

### Proposed Course Structure and Syllabus for I and II Years

**B.Tech. Computer Science and Engineering (IoT) Programme.**  
**(MR21 Regulations – Effective from Academic Year 2021-22 onwards)**



 <b>Estd.: 2002</b>	<p align="center">Maisammaguda, Dhulapally (Post Via Kompally), Secunderabad-500100 Ph. No. 040-65864982, 09348161125, e-mail: <a href="mailto:principal@mrec.ac.in">principal@mrec.ac.in</a>, Website: <a href="http://www.mrec.ac.in">www.mrec.ac.in</a></p>	 <b>JNTU Code:J4</b>
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# Malla Reddy Engineering College

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## ORDER

Date: 03.08.2021

Malla Reddy Engineering College is a self-financed UGC-Autonomous Institution, Approved by AICTE and affiliated to Jawaharlal Nehru Technological University, Hyderabad, recognized under 2(f) & 12 (B) of UGC Act 1956, Accredited by NAAC with 'A' Grade (II Cycle) and NBA (UG-CE, EEE, ME, ECE, CSE & PG-SE, TE and EPS). The departments academic activities are governed through Board of Studies which is responsible for its overall framing of the schema and syllabus for various courses in the keeping the objectives of the department and college, interest of the stakeholders and national requirement for consideration and forwards to Academic Council for approval.

The Board of Studies for the UG B.Tech. – CSE (IoT) courses for the Academic Years 2021-22 to 2023-24 have been reconstituted as per the UGC guidelines with the following members.

S. No.	Name of the Member	Qualification	Phone no. & e-mail id	Subject Specialization	Position	Category
<b>Chairman (Head of the Department concerned).</b>						
1	Dr. N Lakshmi pathi Anantha	Professor	8500982222, anlakshmipathi@gmail.com	CSE	Chairman	Chairman
<b>One expert to be nominated by the Vice-Chancellor of the Affiliating University.</b>						
2	Dr. K. Santhi Sree	Professor, CSE, School of Information Technology, JNTUH, Hyderabad.	9866375330, kakara_2006@jntuh.ac.in	CSE	Member	University Nominee
<b>Two subject experts from outside the Parent University to be nominated by the Academic Council.</b>						
3	Dr. M. Swami Das	Professor, Dept of CSE, CBIT, Hyd.	9490475959, msdas@cbit.ac.in	CSE	Member	Subject Expert
4	Dr. B. Eswara Reddy	Director, Software Development Center, JNTUHA.	9866937766, eswaracsejntua@gmail.com	CSE	Member	Subject Expert
<b>One representative from industry/corporate sector/allied area relating to placement.</b>						
5	Mr. Naresh N	Data Scientist, Cognitive Care India Labs Pvt. Ltd, Visakhapatnam.	9000534551, naresh855@gmail.com	CSE	Member	Industry Expert
<b>The faculty of specialization.</b>						
6	Dr. R. P. Ram Kumar	Professor & HOD	9842611828, rprkvishnu@gmail.com	CSE	Member	Teaching staff
7	Dr. J. Anitha	Professor	9298303067, anithanv28@gmail.com	CSE	Member	Teaching staff
8	Mr. G. Jagan Naik	Associate Professor	9908522386, gjnaik1106@gmail.com	CSE	Member	Teaching staff
9	Mr. Banavathu Raja Rao	Assistant Professor	9989952582, rajarao.b@mrec.ac.in	CSE	Member	Teaching staff
10	Ms. Aenugu Rasagnya	Assistant Professor	9490630200, rasagnyareddyraenugu@mrec.ac.in	CSE	Member	Teaching staff
<b>One postgraduate meritorious alumnus to be nominated by the principal.</b>						
11	Ms. G. Sruthi	MTS II – IT Quality Assurance, Verizon data service Pvt Ltd, Gachibowli, Hyderabad	8897349445, sruthigandhi@gmail.com	CSE	Member	Alumni (MR11 Batch)



*Reenu*  
**PRINCIPAL**  
Principal

Malla Reddy Engineering College





# MALLA REDDY ENGINEERING COLLEGE

(Autonomous)

Department of CSE (IoT)

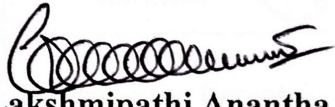
3<sup>rd</sup> Board of Studies meeting on 11.08.2021 at 11:00 AM


## AGENDA

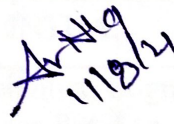
The 3<sup>rd</sup> Board of Studies meeting for the Departments of CSE (IoT) is convened on 11.08.2021 at 11:00 AM in online mode.

The Agenda of the meeting is as follows.

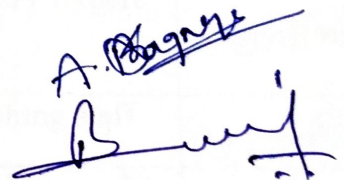
1. Action Taken Report (ATR) on previous BoS Meeting in A.Y 2020-21 on 11-08-2021.
2. Discussion and approval of B.Tech. CSE (IoT)) MR21 Regulations I and II Year course Schema and Syllabus.

  
Dr. N. Lakshmipathi Anantha  
Chairman,  
UG-B.Tech.-CSE (IoT) - BOS

  
Senthil

  
Dr. Ram



  
A. R. R.





# MALLA REDDY ENGINEERING COLLEGE

(Autonomous)

Maisammaguda, Dhullapally(post via Kompally) Secunderabad-500100

## Department of CSE (IoT)

### BOS – Attendance Sheet

August 11, 2021

The 3<sup>rd</sup> UG-B.Tech. CSE (IoT) Board of Studies meeting for the Academic Year 2021-22 was conducted on 11-08-2021 at 11:00 AM through online mode. The following BOS Members have attended the BOS Meeting to finalize MR21 regulations CSE (IoT) 1<sup>st</sup> and 2<sup>nd</sup> years B.Tech. Course Structure, Syllabus and other points of agenda:

S. No	Name of the Member	Designation & Official Address	Category	Signature
1	Dr. N Lakshmipathi Anantha	Professor & Head of Department	Chairman	
2	Dr. K. Santhi Sree	Professor, CSE, School of Information Technology, JNTUH, Hyderabad.	University Nominee	
3	Dr. M. Swami Das	Professor, Dept of CSE, CBIT, Hyd.	Subject Expert (Outside the Parent University)	online
4	Dr. B. Eswara Reddy	Director, Software Development Center, JNTUA.	Subject Expert (Outside the Parent University)	online
5	Mr. Naresh N	Data Scientist, Cognitive Care India Labs Pvt. Ltd, Visakhapatnam.	Industry Expert	online
6	Dr. R. P. Ram Kumar	Professor	Teaching staff	
7	Dr. J. Anitha	Professor	Teaching staff	
8	Mr. G.Jagan Naik	Associate Professor	Teaching staff	
9	Mr. Banavathu Raja Rao	Assistant Professor	Teaching staff	
10	Ms. Aenugu Rasagnya	Assistant Professor	Teaching staff	
11	Ms. G. Sruthi	MTS II – IT Quality Assurance, Verizon data service Pvt Ltd, Gachibowli, Hyd.	Alumni	

**Dr. N Lakshmipathi Anantha**  
 Chairman,  
 UG-B.Tech. CSE (IoT) - BOS



# MALLA REDDY ENGINEERING COLLEGE (Autonomous)

Maisammaguda, Dhulapally (Post via Kompally), Secunderabad-500 100.

## Department of CSE (IoT)

### Minutes of 3<sup>rd</sup> BoS meeting UG-B.Tech.-CSE(IoT) held on 11.08.2021 at 11:00 AM

The 3<sup>rd</sup> Board of Studies meeting for the UG - B.Tech.- CSE (IoT) is conducted on 11<sup>th</sup> August, 2021 at 11:00 AM in the online mode. The following members attended the BoS meeting to finalize I and II Years schema and syllabus of MR21 regulations for the B.Tech.- CSE (IoT) course.

S. No	Name of the Member	Designation	Position in BoS	Mode of attendance
1	Dr. N Lakshmipathi Anantha	Professor & Head of Department	Chairman	Offline
2	Dr. K. Santhi Sree	Professor, CSE, School of Information Technology, JNTUH, Hyderabad.	University Nominee	Online
3	Dr. M. Swami Das	Professor, Dept of CSE, CBIT, Hyd.	Subject Expert	Online
4	Dr. B. Eswara Reddy	Director, Software Development Center, JNTUHA.	Subject Expert	Online
5	Mr. Naresh N	Data Scientist, Cognitive Care India Labs Pvt. Ltd, Visakhapatnam.	Industry Expert	Online
6	Dr. R. P. Ram Kumar	Professor	Teaching staff	Offline
7	Dr. J. Anitha	Professor	Teaching staff	Offline
8	Mr. G. Jagan Naik	Associate Professor	Teaching staff	Offline
9	Mr. Banavathu Raja Rao	Assistant Professor	Teaching staff	Offline
10	Ms. Aenugu Rasagnya	Assistant Professor	Teaching staff	Offline
11	Ms. G. Sruthi	MTS II – IT Quality Assurance, Verizon data service Pvt Ltd, Gachibowli, Hyderabad	Alumni	Offline

#### The following is the agenda for the meeting.

1. Action Taken Report (ATR) on previous BoS Meeting in A.Y 2020-21 on 11-08-2021.
2. Discussion and approval of B.Tech. CSE (Data Science) MR21 Regulations I and II Year course Schema and Syllabus.

At the outset, Dr. N Lakshmipathi Anantha, Prof. & HOD and Chairman of the UG - B.Tech.- CSE (IoT) 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 2021-22 onwards.

*(Handwritten signatures and initials)*

Dr. N Lakshmipathi Anantha  
Dr. K. Santhi Sree  
Dr. M. Swami Das  
Dr. B. Eswara Reddy  
Mr. Naresh N  
Dr. R. P. Ram Kumar  
Dr. J. Anitha  
Mr. G. Jagan Naik  
Mr. Banavathu Raja Rao  
Ms. Aenugu Rasagnya  
Ms. G. Sruthi  
A. B. Sanyal




**The following resolutions are approved after careful discussion and observations.**


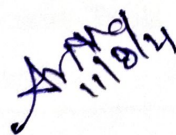
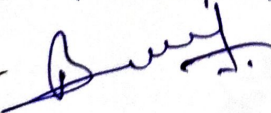
1. The BoS Members have thoroughly reviewed and approved the MR21 I and II Years Course Schema and Syllabus of the **UG - B.Tech. -CSE (IoT)** Course as per the guide lines of the AICTE, UGC and JNTUH, Hyderabad.

The following are the suggestions were made by the members of the BoS and to be implemented in MR21 Academic Regulations.

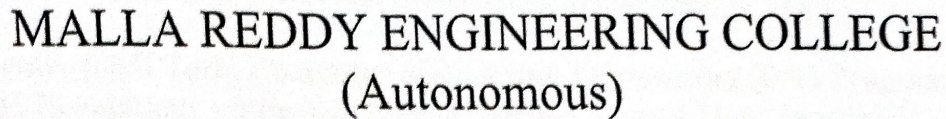
- The members suggested to implement the Data Structures in C, OOPs in Java and OS using C in the laboratories.
- Expressed to maintain the sequence of offered programming course to the students like C, OOPs concepts.
- Object Oriented Programming course to be titles as Object Oriented Programming through Java.

Finally, Dr. N. Lakshmipathi Anantha, 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. N. Lakshmipathi Anantha  
Chairman,  
UG-B.Tech.-CSE (IoT) - BOS

  
  
Srinivas  
RPRam  
  
A. Bagnye






Department of Computer Science and Engineering (IoT)

The previous 2<sup>nd</sup> Common Board of Studies meeting for the Departments of CSE (Cyber Security), CSE (AI and ML), CSE (DS) and CSE (IoT) was held on dt: 5<sup>th</sup> February, 2021. The following are the resolutions made in the meeting and corresponding actions taken are as follows

<b>Resolution 1:</b>	The members suggested to implement the Data Structures in C++, OOPs in Java and OS using C in the laboratories.
<b>Action Taken:</b>	The above laboratories are implementing as per suggested languages.
<b>Resolution 2:</b>	Cloud Computing course should be offered as Core Course
<b>Action Taken:</b>	Cloud Computing course is offering as Core Course
<b>Resolution 3:</b>	Free and Open Source Technologies course is to be offered as Professional Elective – I
<b>Action Taken:</b>	Free and Open Source Technologies course is offered as Professional Elective– I
<b>Resolution 4:</b>	Topics related to Security Tools need to be included in Computer Networks theory and laboratory courses.
<b>Action Taken:</b>	Security Tools Topics included in Computer Networks theory and laboratory courses.

Handwritten signatures and notes:

- ~~Handwritten signature~~
- RP Rom (Cousin) ~~Handwritten signature~~ 11/10/14
- Scritin
- Ch
- A. Bagay ~~Handwritten signature~~

  
Dr. N. Lakshmi Anantha  
Chairman, UG-B.Tech.- CSE (IoT) - BOS

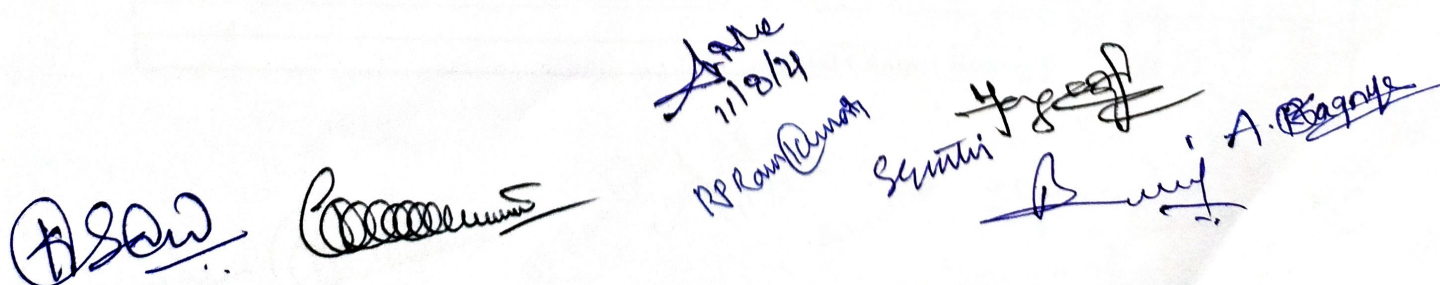


**MALLA REDDY ENGINEERING COLLEGE<sub>(AUTONOMOUS)</sub>**  
**COMPUTER SCIENCE AND ENGINEERING (IoT)**

Course Structure for B.Tech. Computer Science and Engineering (IoT) Programme.  
(MR21 Regulations – Effective from Academic Year 2021-22 onwards)

MR21 I SEMESTER							
S. No.	Category	Course Code	Course Title	Contact hours/week			Credits
				L	T	P	
1	BSC	B0B01	Linear Algebra and Numerical Methods	3	1	-	4
2	BSC	B0B17	Engineering Chemistry	3	1	-	4
3	BSC	B0B09	Semiconductor Physics	3	1	-	4
4	ESC	B0501	Programming for Problem Solving	3	-	-	3
5	BSC	B0B18	Engineering Chemistry Lab	-	-	2	1
6	BSC	B0B11	Applied Physics Lab	-	-	2	1
7	ESC	B0502	Programming for Problem Solving Lab	-	1	2	2
8	ESC	B0305	Engineering Drawing	2	-	2	3
9	AC	B00A1	NSS/SPORTS/YOGA	-	-	3	-
Total				14	4	8	22
Total Contact Hours:				26			

MR21 II SEMESTER							
S. No	Category	Course Code	Course Title	Contact hours/week			Credits
				L	T	P	
1	HSMC	B0H01	English	3	-	-	3
2	BSC	B0B02	Probability and Statistics	3	-	-	3
3	ESC	B0201	Basic Electrical and Electronics Engineering	3	-	-	3
4	ESC	B0504	Python Programming	3	1	-	4
5	ESC	B0601	Engineering and IT Workshop	-	-	2	1
6	HSMC	B0H02	English Language Lab	-	-	2	1
7	ESC	B0202	Basic Electrical and Electronics Engineering Lab	-	-	2	1
8	ESC	B0506	Python Programming Lab	-	1	2	2
Total				12	2	8	18
Total Contact Hours:				22			





### MR21 III SEMESTER

S. No	Category	Course Code	Course Title	Contact hours/week			Credits
				L	T	P	
1	PCC	B0507	Discrete Mathematics	3	-	-	3
2	PCC	B0508	Computer Organization and Architecture	3	-	-	3
3	PCC	B0509	Data Structures	3	-	-	3
4	PCC	B0450	Microprocessors and Microcontrollers Foundations	3	-	-	3
5	PCC	B0510	Object Oriented Programming through Java	3	-	-	3
6	PCC	B0512	Data Structures Lab	-	-	3	1.5
7	PCC	B0451	Microprocessors and Microcontrollers Foundations Lab	-	1	2	2
8	PCC	B0513	Object Oriented Programming Lab	-	-	3	1.5
9	MC	B00M1	Gender Sensitization	-	-	2	-
10	AC	B00A2	INTERNSHIP – I	-	-	-	-
11	AC	B00A4	NPTEL-I	-	-	2	-
<b>Total</b>				15	1	12	20
<b>Total Contact Hours:</b>				<b>28</b>			

### MR21 IV SEMESTER

S. No	Category	Course Code	Course Title	Contact hours/week			Credits
				L	T	P	
1	BSC	B0B07	Applied Statistics and Optimization Techniques	3	-	-	3
2	PCC	B0515	Database Management Systems	3	-	-	3
3	PCC	B0516	Design and Analysis of Algorithms	3	-	-	3
4	PCC	B6901	Internet of Things Fundamentals	3	-	-	3
<b>Professional Elective – I</b>							
5	PEC-I	B6601	Fundamentals of Artificial Intelligence	3	-	-	3
		B0518	Free and Open Source Technologies				
		B6902	Object Oriented Analysis and Design				
6	PCC	B0520	Database Management Systems Lab	-	1	2	2
7	PCC	B0521	Design and Analysis of Algorithms Lab	-	-	3	1.5
8	PCC	B6903	Internet of Things Fundamentals Lab	-	-	3	1.5
9	MC	B00M2	Environmental Science	2	-	-	-
10	AC	B00A5	NPTEL-II	-	-	2	-
11	AC	B00A6	Co-curricular Activity - I	-	-	1	-
<b>Total</b>				17	1	11	20
<b>Total Contact Hours:</b>				<b>29</b>			