MALLA REDDY ENGINEERING COLLEGE

(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 & CSE), PG (CE - SE, EEE – EPS, ME – TE)

EAMCET CODE: MREC

Department of Computer Science and Engineering (AI and ML)

**Proposed Course Structure and
Syllabus for I and II Years
B.Tech. Computer Science and Engineering (AI and ML) Programme.
(MR21 Regulations – Effective from Academic Year 2021-22 onwards)**

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.).

Date: 03.08.2021

ORDER

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 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(Artificial Intelligence and Machine Learning) course 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
Chairman (Head of the Department concerned).
1	Dr. N Lakshmipathi Anantha	Professor	8500982222, anlakshmipathi@gmail.com	CSE	Chairman	Chairman
One expert to be nominated by the Vice-Chancellor of the Affiliating University.
2	Dr. K. Santhi Sree	Professor, CSE, School of Information Technology, JNTUH, Hyderabad.	9866375330, kakara_2006@jntuh.ac.in	CSE	Member	University Nominee
Two subject experts from outside the Parent University to be nominated by the Academic Council.
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, JNTUIIA.	9866937766, eswarcsejntua@gmail.com	CSE	Member	Subject Expert
One representative from industry/corporate sector/allied area relating to placement.
5	Mr. Naresh N	Data Scientist, Cognitive Care India Labs Pvt. Ltd, Visakhapatnam.	9000534551, naresh855@gmail.com	CSE	Member	Industry Expert
The faculty of specialization.
6	Dr. Chittanuru GVN Prasad	Professor	9849992945, prasadch@yahoo.com	CSE	Member	Teaching staff
7	Dr. Shaik Jakeer Hussain	Associate Professor	9912721786, dr.skjakeerhussain@mrec.ac.in	CSE	Member	Teaching staff
8	Mrs. K. Geetha	Assistant Professor	8499865557, K.geethamca@gmail.com	CSE	Member	Teaching staff
9	Ms. Himabindu Kaleru	Assistant Professor	9059508890, bindu.kaleru@gmail.com	CSE	Member	Teaching staff
10	Mr. V. Raja Sekhar	Assistant Professor	9704625345, rajasekhar@mrec.ac.in	CSE'	Member	Teaching staff
One postgraduate meritorious alumnus to be nominated by the principal.
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)

PRINCIPAL
Malla Reddy Engineering College
Maisammaguda, Dhulapally,
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MALLA REDDY ENGINEERING COLLEGE

(Autonomous)

Department of CSE (Artificial Intelligence and Machine Learning)

3rd Board of Studies meeting on 11.08.2021 at 11:00 AM

AGENDA

The 3rd Board of Studies meeting for the Departments of CSE (AI and ML) 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 (AI and ML) MR21 Regulations I and II Year course Schema and Syllabus.

Dr. N. Lakshmipathi Anantha
Chairman,
UG-B.Tech.-CSE (AI and ML) - BOS

MALLA REDDY ENGINEERING COLLEGE

(Autonomous)

Maisammaguda, Dhullapally (post via Kompally) Secunderabad-500100

Department of CSE (AI and ML)

BOS – Attendance Sheet

August 11, 2021

The 3rd UG-B.Tech. CSE (AI and ML) 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 (AI and ML) 1st and 2nd 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. Chittanuru GVN Prasad	Professor	Teaching staff	
7	Dr. Shaik Jakeer Hussain	Associate Professor	Teaching staff	
8	Mrs. K. Geetha	Assistant Professor	Teaching staff	
9	Ms. Himabindu Kaleru	Assistant Professor	Teaching staff	
10	Mr. V. Raja Sekhar	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 (AI and ML) - BOS

(V RAJASEKHAR)

K. Himabindu

MALLA REDDY ENGINEERING COLLEGE (Autonomous)

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

Department of CSE (Artificial Intelligence and Machine Learning)

Minutes of the 3rd BoS meeting UG- B.Tech.-CSE (AI and ML) held on 11.08.2021 at 11:00 AM

The 3rd Board of Studies meeting for the **UG - B.Tech.- CSE(AI and ML)** is conducted on 11th August, 2021 at 11:00AM 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 (AI and ML) 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. SanthiSree	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, CognitiveCare India Labs Pvt. Ltd, Visakhapatnam.	Industry Expert	Online
6	Dr Chittanuru GVN Prasad	Professor	Teaching staff	Offline
7	Dr. Shaik Jakeer Hussain	Associate Professor	Teaching staff	Offline
8	Mrs. K. Geetha	Assistant Professor	Teaching staff	Offline
9	Ms. HimabinduKaleru	Assistant Professor	Teaching staff	Offline
10	Mr. V. Raja sekhar	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 (AI and ML) 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(AI and ML)** Board of Studies, welcomed the members to the BoS meeting and informed the purpose of the meeting. Later BoS Members reviewed and discussed itemsin 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.

The following resolutions are approved after careful discussion and observations.

1. The BoS Members have thoroughly reviewed and approved the MR21I and IIYearsCourse Schema and Syllabus of the **UG - B.Tech.–CSE(AI and ML)** 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 through 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.
- Suggested to rename Machine Learning Foundations course as Machine Learning Fundamentals and Machine Learning Foundations lab course as Machine Learning Fundamentals lab.

Finally, Dr. N. Lakshmipathi Anantha, Chairman – BoShas 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 (AI and ML) - BOS

Action Taken Report on previous 2nd Common Board of Studies meeting for the Departments of CSE (Cyber Security), CSE (AI and ML), CSE (DS) and CSE (IoT) held on 05.02.2021 in AY 2020-21

The previous 2nd 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: 5th February, 2021. The following are the resolutions made in the meeting and corresponding actions taken are as follows

Resolution 1:	The members suggested to implement the Data Structures in C++, OOPs in Java and OS using C in the laboratories.
Action Taken:	The above laboratories are implementing as per suggested languages.
Resolution 2:	Cloud Computing course should be offered as Core Course
Action Taken:	Cloud Computing course is offering as Core Course
Resolution 3:	Free and Open Source Technologies course is to be offered as Professional Elective – I
Action Taken:	Free and Open Source Technologies course is offered as Professional Elective–I
Resolution 4:	Number Theory & Quantum Computing course to be included
Action Taken:	Number Theory included in Cyber Security Course.
Resolution 5:	Topics related to Security Tools need to be included in Computer Networks theory and laboratory courses
Action Taken:	Security Tools Topics included in Computer Networks theory and laboratory courses.

Dr. N. Lakshmipathi Anantha
Chairman,
UG-B.Tech.- CSE (AI and ML) - BOS

(V RAJASEKHAR)

K. Himabindu

MALLA REDDY ENGINEERING COLLEGE(AUTONOMOUS)
COMPUTER SCIENCE AND ENGINEERING (Ai and ML)

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

MR21 I SEMESTER

S. No.	Category	Course Code	Course Title	L	T	P	Credits
				Contact hours/week			
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	L	T	P	Credits
				Contact hours/week			
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		

(V RAJASEKHAR)

K. Hinabindu

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MR21 III SEMESTER

S. No	Category	Course Code	Course Title	L	T	P	Credits
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	B6601	Fundamentals of Artificial Intelligence	3	-	-	3
5	PCC	B0510	Object Oriented Programming through Java	3	-	-	3
6	PCC	B0512	Data Structures Lab	-	-	3	1.5
7	PCC	B6602	Applications of Artificial Intelligence Lab	-	-	3	1.5
8	PCC	B0513	Object Oriented Programming Lab	-	1	2	2
9	MC	B00M1	Gender Sensitization	-	-	2	-
10	AC	B00A2	INTERNSHIP – I	-	-	-	-
11	AC	B00A4	NPTEL-I	-	-	2	-
			Total	15	1	12	20
			Total Contact Hours:		28		

MR21 IV SEMESTER

S. No	Category	Course Code	Course Title	L	T	P	Credits
1	BSC	B0B07	Applied Statistics and Optimization Techniques	3	-	-	3
2	PCC	B0516	Design and Analysis of Algorithms	3	-	-	3
3	PCC	B6603	Machine Learning Fundamentals.	3	-	-	3
4	PCC	B0511	Operating Systems	3	-	-	3
5	PEC-I		**Professional Elective –I**				
		B6604	Image Processing				
		B1203	Computer Graphics	3	-	-	3
		B0517	Mobile Application Development				
6	PCC	B0521	Design and Analysis of Algorithms Lab	-	1	2	2
7	PCC	B6606	Machine Learning Fundamentals.Lab	-	-	3	1.5
8	PCC	B0514	Operating Systems Lab	-	-	3	1.5
9	MC	B00M2	Environmental Science	2	-	-	-
10	AC	B00A5	NPTEL-II	-	-	2	-
11	AC	B00A6	Co-curricular Activity - I	-	-	1	-
			Total	17	1	11	20
			Total Contact Hours:		29		

(V RAJASEKHAR)

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