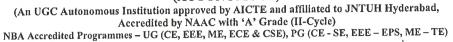


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Department of Computer Science and Engineering (Cyber Security)

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





Maisammaguda, Dhulapally (Post Via Kompally),
Secunderabad-500100
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JNTU Code:J4



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 (Cyber Security) 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 Specializ ation	Position	Category
Cha	irman (Head of the De	partment concerned).				
1	Dr. N Lakshmipathi Anantha	Professor	8500982222, anlakshmipathi@gmail.com	CSE	Chairman	Chairman
One	expert to be nominated	by the Vice-Chancellor of th	e 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 o	utside the Parent University to	be nominated by the Academic C	Council		
3	Dr. M. Swami Das	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, eswarcsejntua@gmail.com	CSE	Member	Subject Expert
One	representative from inc	lustry/corporate sector/allied a	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 f	aculty of specialization	1.				
6	Dr. Gummadi Jose Moses	Associate Professor	9701329977, mosesj@mrec.ac.in	CSE	Member	Teaching staff
7	Ms. Sarlana Sandhya Rani	Associate Professor	9703655191, sarlanasandhya@gmail.com	CSE	Member	Teaching staff
8	Ms. Sreevani Kodipaka	Assistant Professor	9010576188, sreevani.kodipaka@gmail.com	CSE	Member	Teaching staff
9	Mr. Shaik Kareemulla	Assistant Professor	9908456052, kareem.shaik@mrec.ac.in	CSE	Member	Teaching staff
10	Nagaraju	Assistant Professor	9985535135, nagarajua@mrec.ac.in	CSE.	Member	Teaching staff
One p	ostgraduate meritoriou	s 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)

Malla Reddy Engineering College



(Autonomous)
Department of CSE (Cyber Security)

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 (Cyber Security) 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 (Cyber Security) MR21 Regulations I and II Year course Schema and Syllabus.

Dr. N. Lakshmipathi Anantha Chairman,

UG-B.Tech.-CSE (Cyber Security) - BOS

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Maisammaguda, Dhullapally(post via Kompally) Secunderabad-500100

Department of CSE (Cyber Security)

BOS – Attendance Sheet

August 11, 2021

The 3rdUG-B.Tech. CSE(Cyber Security)Board of Studies meeting for the Academic Year 2021-22 was conducted on 11-08-2021 at 11:00 AMthrough online mode. The following BOS Members have attended the BOS Meeting to finalize MR21 regulations CSE(Cyber Security)1st and 2ndyears B.Tech. Course Structure, Syllabus and other points of agenda:

S. No	Name of the Member	Designation & Official Address	Category	Signature
1	Dr. N LakshmipathiAnantha	Professor & Head of Department	Chairman	(Commons
2	Dr. K. SanthiSree	Professor, CSE, School of Information Technology, JNTUH, Hyderabad.	University Nominee	BLOOM
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. Gummadi Jose Moses	Professor	Teaching staff	An.4
7	Ms. Sarlana Sandhya Rani	Associate Professor	Teaching staff	&
8	MS. SreevaniKodipaka	Assistant Professor	Teaching staff	(K)
9	Mr. Shaik Kareemulla	Assistant Professor	Teaching staff	Kapean.
10	Mr. ArumallaNagaraju	Assistant Professor	Teaching staff	Am
11	Ms. G. Sruthi	MTS II – IT Quality Assurance, Verizon data service Pvt Ltd, Gachibowli, Hyd.	Alumni	Semin

Dr. N Lakshmipathi Anantha Chairman,

UG-B.Tech. CSE(Cyber Security) - BOS

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MALLA REDDY ENGINEERING COLLEGE (Autonomous)

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

Department of CSE (Cyber Security)

Minutes of 3rd BoS meeting UG-B.Tech.- CSE(Cyber Security) held on 11.08.2021 at 11:00 AM

The 3rd Board of Studies meeting for the UG - B.Tech.- CSE (Cyber Security) 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 (Cyber Security)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, CognitiveCare India Labs Pvt. Ltd, Visakhapatnam.	Industry Expert	Online
6	Dr. Gummadi Jose Moses	Professor	Teaching staff	Offline
7	Ms. Sarlana Sandhya Rani	Associate Professor	Teaching staff	Offline
8	MS. Sreevani Kodipaka	Assistant Professor	Teaching staff	Offline
9	Mr. Shaik Kareemulla	Assistant Professor	Teaching staff	Offline
10	Mr. Arumalla Nagaraju	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 (Cyber Security) MR21 Regulations I and II Year course Schema and Syllabus.

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At the outset, Dr. N Lakshmipathi Anantha, Prof. & HOD and Chairman of the UG -B.Tech.- CSE (Cyber Security) 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(Cyber Security) 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 (Cyber Security) - BOS

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

Department of Computer Science and Engineering (Cyber Security)

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 (Cyber Security) - BOS

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MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) COMPUTER SCIENCE AND ENGINEERING (Cyber Security)

Course Structure for B.Tech. Computer Science and Engineering

(Cyber Security)	Programme.
(MR21 Regulations – Effective from	Academic Year 2021-22 onwards)

			MR21 I SEMESTER				
S.		Course	Course Title	Contact hours/week			Credits
No.	Category	Code	Course The	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		44

S.	Category Course Code	Course	Course Title	Contact hours/week			Credits
No		Code	I		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	11
7	ESC	B0202	Basic Electrical and Electronics Engineering Lab	-		2	11
8	ESC	B0506	Python Programming Lab	-	1	2	2
0	LbC	D0500	Total	12	2	8	18
	Total Contact Hours:				22	18	

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			MR21 III SEMESTER				
S.	C	Course Title	Contact hours/week			Credits	
No	Category	Code	Oddisc 1222	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	B0510	Object Oriented Programming through Java	3		10.00	3
5	PCC	B0511	Operating Systems	3	-	-	3
6	PCC	B0512	Data Structures Lab	-	-	3	1.5
7	PCC	B0513	Object Oriented Programming Lab	-	-	3	1.5
8	PCC	B0514	Operating Systems Lab	-	1	2	2
9	MC	B00M1	Gender Sensitization	-	-	2	-
10	AC	B00A2	INTERNSHIP - I	-	-	-	-
11	AC	B00A4	NPTEL-I	-	-	2	-
- 1	1.10		Total	15	1	12	20
			Total Contact Hours:		28	3	

			MR21 IV SEMESTER		onta	act	
S. G	Catagomi	Course	Course Title	hours/week			Credits
No	Category	Code		L	T	P	
1	BSC	B0B23	Number Theory	3	-		3
2	PCC	B6201	Computer Networks	3	-	-	3
3	PCC	B0515	Database Management Systems	3	-		3
4	PCC	B0516	Design and Analysis of Algorithms	3	-	-	3
_	100		Professional Elective –I				
	PEC-I	B0517	Mobile Application Development	_			_
5		B0518	Free and Open-Source Technologies	3	-	-	3
		B6601	Fundamentals of Artificial Intelligence				
6	PCC	B0520	Database Management Systems Lab	-	1	2	2
7	PCC	B1203	Web Technologies Lab	-	-	3	1.5
8	PCC	B6202	Computer Networks Lab	-	-	3	1.5
9	MC	B00M2	Environmental Science	2		-	
10	AC	B00A5	NPTEL-II	-		2	
11	AC	B00A6	Co-curricular Activity - I	-		1	-
TT	1.10	Boorie	Total	17	_	11	20
_			Total Contact Hours:		29		

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