

TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

Organized by TER Educational Society, Approved by AICTE, Affiliated to JNTUH
As certified by NAAC 'A' Grade, Accredited by NBA

Medbowli, Meerpet, Balapur(M), Hyderabad, Telangana- 500097

Mob: 8498085218. Email: info@tkrec.ac.in, www.tkrec.ac.in



College Code: R9

Minutes of the 4th Academic Council Meeting

Date: 04-08-2023

The Fourth meeting of the Academic Council of Teegala Krishna Reddy Engineering College (UGC Autonomous) was convened on 04th August 2023 at 3.00 PM through virtual mode.

Members present

S. No	Name of The Expert	Designation	Position	Signature
1	Dr. K V Murali Mohan	Principal, TKREC, Hyderabad	Chairman	<i>[Signature]</i>
2	Dr. M Manzoor Hussain	Prof. of ME, Registrar, JNTUH.	Expert nominated by JNTUH	<i>[Signature]</i>
3	Dr. D Srinivasa Rao	Prof. of ECE & Director, AAC, JNTUH	Expert nominated by JNTUH	<i>[Signature]</i>
4	Dr. B.PadmaJa Rani	Prof. of CSE, JNTUH	Expert nominated by JNTUH	<i>[Signature]</i>
4	Dr. D V L N Somayajulu	Prof. of CSE & Director of IIT DM, Kurnool	Academic Expert	<i>[Signature]</i>
5	Dr. A D Sharma	Prof. Of ECE & Director R&D, CBIT, Hyderabad	Academic Expert	<i>[Signature]</i>
6	Mr. K V Chandra Sekhar	Vice President, ICS, Broad Ridge Financial Services, Hyderabad	Industry Expert	<i>[Signature]</i>
7	Mr. A Appa Rao	Advocate, High Court of Telangana, Hyderabad	Legal Expert	<i>[Signature]</i>
8	Dr B Srinivasa Rao	Dean Academics, TKREC, Hyderabad	Member Secretary	<i>[Signature]</i>
9	Dr. K M V Madan Kumar	Vice Principal & COE, TKREC, Hyderabad	Member	<i>[Signature]</i>
10	Mr. Mohd Muneerudding Khan	HOD, Dept. of Civil	Member	<i>[Signature]</i>
11	Mr. Madhubabu Thiruveedula	HOD, Dept. of EEE	Member	<i>[Signature]</i>
12	Dr. Umer Farooq	HOD, Dept. of ECE	Member	<i>[Signature]</i>
13	Dr. Ch V Phani Krishna	HOD, Dept. of CSE	Member	<i>[Signature]</i>
14	Dr. Siddha Reddy	HOD, Dept. of IT	Member	<i>[Signature]</i>
15	Dr. Vadivelan Natarajan	HOD, Dept. of AML	Member	<i>[Signature]</i>
16	Dr. J. Praveen	HOD, Dept. of CSD	Member	<i>[Signature]</i>



[Signature]
PRINCIPAL
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AGENDA

- IV.1. Review of Previous Academic Council Meeting Minutes
- IV.2. Ratification of processed results for B Tech examinations: I Semester, III Semester (Regular/Supply), and V Semester (Regular).
- IV.3. Approval of revised Academic Calendars for I, II B.Tech, II Sem. and I, II M.Tech. & MBA I Sem. for the A.Y. 2022-23.
- IV.4. Approval of Academic Calendars for I, II, III, and IV B.Tech for the A.Y 2023-24
- IV.5. Approval of Academic Calendars of MBA/M.Tech for the A.Y 2023-24
- IV.6. Ratification of Detained Students List for the A.Y 2022-23
- IV.7. Approval of Readmitted Students in the II, III, and IV Year B.Tech Program for the A.Y 2022-23 and 2023-24
- IV.8. Approval for the Introduction of a minor degree in B Tech from the A.Y. 2023-24

Resolutions

IV.1. Review of Previous Academic Council Meeting Minutes

The Chairperson opened the meeting by welcoming all members of the Academic Council. The minutes of the previous Academic Council Meeting were presented by the member secretary and reviewed. Members were requested to provide any corrections or amendments. After thorough review, the minutes of 3rd Council meeting were confirmed without any comments.

IV.2. Ratification of processed results for B Tech examinations: I Semester, III Semester (Regular/Supply), and V Semester (Regular)

The Member Secretary introduced the agenda item and presented the processed results for B Tech examinations, including I Semester, III Semester (Regular/Supply), and V Semester (Regular). The results were discussed, and it was moved and seconded to ratify the results. The motion was carried with no objections.

IV.3. Approval of revised Academic Calendars for I, II B.Tech, II Sem. and I, II M.Tech. & MBA I Sem. for the A.Y. 2022-23

The revised academic calendars for I, II B.Tech, II Sem., I, II M.Tech., and MBA I Sem. for the A.Y. 2022-23 were presented to the council. The changes made to the calendars were highlighted, and after thorough consideration, the academic calendars were approved unanimously.



Dr. Praveen Kumar
B. S. ...
4/12/23
Principal
Principal
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IV.4. Approval of Academic Calendars for I, II, III, and IV B.Tech for the A.Y 2023-24

The proposed academic calendars for I, II, III, and IV B.Tech programs for the academic year 2023-24 were presented. The council reviewed the calendars and discussed any potential conflicts or concerns. After deliberation, the academic calendars were approved without any changes.

IV.5. Approval of Academic Calendars of MBA/M.Tech for the A.Y 2023-24

The academic calendars for MBA/M.Tech. programs for the A.Y. 2023-24 were presented. The council members reviewed the calendars, ensuring alignment with program requirements. Following the discussion, the calendars were approved.

IV.6. Ratification of Detained Students List for the A.Y 2022-23

The member secretary introduced the list of detained students for the A.Y. 2022-23. The list was compiled based on academic performance and attendance records. The council reviewed the criteria and the list of students, and upon motion, the list was ratified unanimously.

IV.7. Approval of Readmitted Students in the II, III, and IV Year B.Tech Program for the A.Y 2022-23 and 2023-24

The member secretary presented the names of students seeking readmission in the II, III, and IV Year B.Tech program for the A.Y. 2022-23 and 2023-24. The reasons for readmission and academic Regulations of the readmitted students were discussed, and after careful consideration, the council approved the readmission of these students.

IV.8. Approval for the Introduction of a minor degree in B.Tech from the A.Y. 2023-24

The proposal to introduce a minor degree in B.Tech from the A.Y. 2023-24 was presented by the member secretary. The benefits and implications of introducing the minor degree were discussed. After an in-depth conversation, the council approved the introduction of the minor degree and advised to finalize the syllabus in BOS Meeting of the respective departments.

Additional Inputs and Recommendations

During the meeting, valuable advice was received from Dr. D.V.L.N Somayajulu, a distinguished Professor at HIT Warangal and Director of IIITDM Kurnool. He recommended presenting department-wise placement details for the academic years 2022-23 and 2023-24. Additionally, he emphasized the significance of sharing the average salary package achieved during campus placements for the academic year 2022-23.



For *Dr. Padmaja D.N. Somayajulu*

Principal

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*W. Srinivas
4/10/23*
*B. Srinivas
4/10/23*

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Furthermore, Dr. D. Srinivasa Rao, Professor at JNTUH inquired about the Industry Institute Interaction Cell's current functioning. He provided guidance on enhancing Industry Institute Interaction to strengthen the quality of placements.

The meeting concluded with a summary of the decisions made and the acknowledgment of the received advice. The Chairperson extended gratitude to all members for their active participation and officially adjourned the meeting.

Meeting Minutes Recorded By:

B. Srinivasa Rao
04/06/23

Dr B Srinivasa Rao

Dean Academics

deanacademics@tkrec.ac.in

Aravind

Ms

Aravind

Aravind



Padmaja Dimpotrapati



Aravind

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Date: 09-02-2024

Minutes of the V Academic Council Meeting

The Fifth meeting of the Academic Council of Teegala Krishna Reddy Engineering College (UGC Autonomous) was convened on 09th August 2024 at 2.30 PM through virtual mode.

Agenda

- V.1. Review of Previous IV Academic Council Minutes
- V.2. Ratification of the Promotion Rules for UG.
- V.3. Ratification of Detained students list for the AY 2023-24
- V.4. Ratification of the detailed syllabus for III and IV Year B Tech (R22)
- V.5. Ratification of the appointment of the New Controller of Examinations (COE) and Result processing Committee of TKREC
- V.6. Ratification of processed results for B Tech, MBA, and M.Tech. Examinations held in August 2023
- V.7. Approval for the Formation of New Board of Studies (BOS) for the Proposed Course(s).
- V.8. Approval for Subject Moderation and Adjustment of Marks (Grafting) and Grace marks for improving the division.
- V.9. Approval for Adding Grace Marks (0.15%)
- V.10. Approval for the Conduct of Advanced Supplementary Examinations
- V.11. Approval for implementation of Nation Academic Depository (NAD) Digi Locker



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Members present

<u>S.No.</u>	<u>NAME</u>	<u>DESIGNATION</u>	<u>POSITION</u>
1	Dr K Venkat Murali Mohan	Principal, TKREC, Hyderabad	Chairman
2	Dr B Balu Naik	Senior professor of ME, JNTUH UCESTH	Expert nominated by JNTUH
3	Dr. C Sarala	Prof. of Centre for Water resources, JNTUH UCESTH	Expert nominated by JNTUH
4	Dr. K Naga Sujatha	Prof of EEE & Head, JNTUH UCESTH	Expert nominated by JNTUH
5	Dr D V L N Somayajulu	Prof. of CSE, NIT Warangal & Director of IIIT DM, Kurnool	Academic Expert
6	Dr. A D Sharma	Prof. of ECE & director R&D, CBIT, Hyderabad	Academic Expert
7	Mr. S Anjaneyulu	Delivery Manager, Capgemini, Hyderabad	Industry Expert
8	Mr. A Appa Rao	Advocate, High Court of Telangana, Hyderabad	Legal Expert
9	Mr. Md Muneeruddin Khan	Professor & HOD, Dept. of CIVIL	Member
10	Mr. Madhubabu T	Professor & HOD, Dept. of EEE	Member
11	Dr.Ch.V.Phani Krishna	Professor & HOD, Dept. of CSE	Member
12	Dr.J.Praveen Kumar	Professor & HOD, Dept. of IT	Member
13	Dr.Vadivelan Natarajan	Professor & HOD, Dept. of AIML	Member
14	Dr.SK.Umar Faruq	Professor & HOD, Dept. of ECE	Member
15	Dr. A.Nagarjuna	Professor & HOD, Dept. of H&S	Member
16	Dr.V.Suryanarayana	Professor & HOD, Dept. of MBA	Member
17	Mr. U. Aswani Kumar	Controller Of Examinations	Member
18	Mr. V Vijay Kumar	Librarian, TKREC	Member
19	Dr.V.Madhavi	Assoc. Prof., Dept. of English	Member
20	Mrs. N Poonam Naidu	TPO, TKREC	Member
21	Dr. K Srinivasa Reddy	Dept. of ECE	Member
22	Dr. B Srinivasa Rao	Dean of Academics, TKREC	Member Secretary



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Resolutions of the V Academic Council Meeting

V.1. Review of Previous IV Academic Council Minutes

The Chairman, Dr K Venkat Murali Mohan, introduced the members to the meeting and initiated the discussion by reviewing the minutes of the IV Academic Council meeting. After thorough examination and discussion, the minutes were accepted with no objections. The actions taken on the previous minutes were also reviewed, and it was noted that all action items had been successfully addressed.

V.2. Ratification of the Promotion Rules for UG.

Resolution

The promotion rules for undergraduate students were thoroughly discussed during the meeting, and the following amendments have been approved.

1. Promotion of B. Tech. Students from III year II semester to IV year I semester without any credit requirement condition for the Academic Year 2023-24 at TKREC.
2. Relaxation of promotion rules for B. Tech. Students from I year II semester to II year I semester and II year II Sem. to III Year I Sem. by securing 25% total credits for the current A.Y. 2023-24 only

V.3. Ratification of Detained students list for the AY 2023-24

Resolution

The Member Secretary has presented the list of students detained in the Academic Year 2023-24 due to attendance or credit shortages. The Council Members have ratified the list.

V.4. Ratification of the detailed syllabus for III and IV Year B Tech (R22)

Resolution:

Ratified the Board of Studies (BOS) approvals of the course structure and the detailed syllabus for the departments of Civil Engineering (CIVIL), Electrical and Electronics Engineering (EEE), Electronics and Communication Engineering (ECE), Computer Science and Engineering (CSE), Information Technology (IT), Artificial Intelligence and Machine Learning



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(AIML), English, and Master of Business Administration (MBA) by their respective department
BOS meetings of TKREC under the R22 Regulations.

Approved Department-wise Classification of Credit Distribution According to AICTE
Guidelines is as follows.

S. NO.	CATEGORY	Suggested breakup of credits As per AICTE (Total 160)	Dept. of Civil	Dept. of EEE	Dept. of ECE	Dept. of CSE	Dept. of IT	Dept. of AIML	Dept. of CSD
1	Humanities and Social sciences including Management	10*	7	9	9	10	10	9	10
2	Basic Sciences	22.5*	22.5	22.5	22.5	22.5	22.5	24.5	22.5
3	Engineering Sciences courses including Workshop, Drawing, basics of Electrical / Mechanical / Computer etc.	18.5*	19.5	22.5	18.5	18.5	18.5	18.5	18.5
4	Professional Core Courses	63*	66	63	65	63	63	62	63
5	Professional Elective	19*	18	18	18	19	19	19	19
6	Open Electives-	9*	9	9	9	9	9	9	9
7	Project work, Seminar, and Internship in Industry	18*	18	16	18	18	18	18	18
8	Mandatory courses (non-credit)		0	0	0	0	0	0	0
	Total	160*	160	160	160	160	160	160	160

V.5. Ratification of the appointment of the New Controller of Examinations (COE) and Result processing Committee of TKREC

Resolution:

The Member Secretary presented Mr. U Aswani Kumar as the newly appointed Controller of Examinations at TKREC. The Academic Council ratified his appointment as the COE and approved the inclusion of his name as COE in the Result Processing Committee of TKREC.



U Aswani Kumar
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Result Processing Committee of TKREC

S. No	Positions	Names
1	Dr P Sammulal, Addl. Controller of Examinations	Nominated By the DE, JNTUH
2	Principal	Dr.K.Venkata Murali Mohan
3	Controller of Examinations	Aswani Kumar Unnam
4	Additional Controller of Examinations	Mr D Narsimaha Reddy
5	Dean Academics	Dr.B.Srinivasa Rao
6	HOD Civil	Mr Muniruddin Khan
7	HOD EEE	Mr.Madhubabu
8	HOD ECE	Dr.Sk Umar Faruq
9	HOD CSE	Dr.CH V Phani Krishna
10	HOD IT & CSG	Dr.J.Praveen Kumar
11	HOD ALML	Dr.Vadivelan
12	HOD HS	Dr.Nagarjuna
13	HOD MBA	V Surya Narayana

V.6. Ratification of processed results for B Tech, MBA, and M.Tech. Examinations held in August 2023

Resolution:

Ratified the Results of B Tech, M.B.A., and M Tech Examinations Results held in the month of August 2023 in TKREC.

B. Tech I YEAR II SEM Regular Exam Results in Aug-2023

Department	Registered	Appeared	Passed	Failed	Pass %
EEE	33	33	9	24	27.27
ECE	249	241	105	136	43.57
CSE	254	250	141	109	57.4
IT	128	126	74	52	58.83
AIML	128	128	61	67	47.66
CSD	65	64	30	34	46.88
Total	857	842	420	422	46.94



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B.Tech II YEAR II SEM Regular Exam Results in Aug-2023

Department	Registered	Appeared	Passed	Failed	Pass %
CIVIL	49	47	37	10	78.72
EEE	67	66	48	18	72.73
ECE	270	257	143	114	55.64
CSE	278	271	170	101	62.73
IT	64	62	37	25	59.68
AIML	69	69	50	19	72.46
CSD	54	54	22	32	40.74
Total	851	826	507	319	63.24

M B A and M.Tech. I YEAR II SEM Regular Exam Results held (Aug-2023)

Department	Registered	Appeared	Passed	Failed	Pass %
MBA	40	37	32	5	86.49
M.Tech	11	11	11	0	100
Total	51	48	43	5	93.25

M B A and M.Tech. II YEAR II SEM Regular Exam Results (Aug-2023)

Department	Registered	Appeared	Passed	Failed	Pass %
MBA	42	42	39	3	92.86
M.Tech	3	3	3	0	100
Total	45	45	42	3	96.43

V.7. Approval for the Formation of New Board of Studies (BOS) for the Proposed Course(s).

Resolution

The Academic Council has approved the proposal for establishing a new Board of Studies (BOS) for undergraduate courses in Computer Science and Engineering (Data Science), and Computer Science and Engineering (Artificial Intelligence & Machine Learning). Additionally, the proposal for a BOS for the postgraduate course in Embedded Systems and VLSI Design has been approved due to the introduction of these new courses from the Academic Year 2023-24. The proposed BOS members for each department are as follows:



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1) CSE (Artificial Intelligence & Machine Learning)

S No	Name of the Expert	Designation	Position
1	Dr. Vadivelan Natarajan	HOD, CSE- AIML	Chairman
2	JNTUH Nominee, Nominated by JNTUH		
3	Dr. E Suresh Babu	Associate professor, NIT Warangal	Member
4	Dr. B Sujatha	Associate professor, Dept. of CSE, Osmania University	Member
5	Dr. B Srinivasa Rao	Dean Academics, TKREC	Member
6	Mr. Madhu Kumar	Associate director, NOVARTIS	Industry Representative
7	Mrs. Sangeeta Jawar	Asst. Professor	Member Secretary
8	All the Faculty members of the Department are the members		

2) CSE (Data Science)

S No	Name of the Expert	Designation	Position
1	Dr. J Praveen Kumar	HOD CSE-Data Science	Chairman
2	JNTUH Nominee, Nominated by JNTUH		
3	Dr. E Suresh Babu	Associate professor, NIT Warangal	Member
4	Dr. B Sujatha	Associate professor, Dept. of CSE, Osmania University	Member
5	Dr. B Srinivasa Rao	Dean Academics, TKREC	Member
6	Mr. Madhu Kumar	Associate director, NOVARTIS	Industry Representative
7	S Sanjeeva Rao	Asst. Professor	Member Secretary
8	All the Faculty members of the Department are the members		



View

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3) Embedded System and VLSI Design

S No	Name of the Expert	Designation	Position
1	Dr SK UMAR FARUK	Prof & HoD, TKREC	Chairman
2	JNTUH Nominee, Nominated by JNTUH		
3	Dr. B. Rajendra Naik	Professor Osmania University	External Member (Academician)
4	Dr .D.Krishna Reddy	Professor, CBIT	External Member (Academician)
5	Mr. P.Sampath Kumar	Scientist-E, RCI,Hyd	Industry Representative
6	Dr. P.Padmaja	Professor of ECE	Member Secretary
7	All the Faculty members of the Department are the members		

V.B. Approval for Subject Moderation and Adjustment of Marks (Grafting) and Grace marks for improving the division

It is proposed to introduce Subject Moderation, Adjustment of Marks, and Grace Marks for improving the division for undergraduate (UG) and postgraduate (PG) programs under the TKREC R20 Regulations. Here are the details:

- Subject Moderation:** Moderation can be given, if the percentage of pass in the external exam of a subject is less than 50% Marks, may be added to all the candidates who appeared for that subject and secured at least one mark, as per the norms given in the following

Maximum marks in external examination	Marks to be added if the pass % in the external examination of a particular subject is	
	30% and less	above 30% below 50%
≤ 60 Marks	3	2
70 to 80 Marks	4	3
80 to 100 marks	5	4
>100 marks	6	5



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2. Adjustment of Marks (Grafting)

Even after applying subject moderation. If a student fails one or more subjects but secures not less than 75% of the required minimum marks in the end examination in those subjects. Moderation will be considered to an extent 1% of marks secured in all passed subjects of that examination subjected to a maximum limit given below

Maximum marks in external examination	Maximum marks to be adjusted and should not exceed
≤ 60	5
70 to 80	6
80 to 100	7
>100	9

3. Grace Marks for Improving the Division

Marks to the extent of 0.15% of Grace Total (all semester marks put together) may be given as grace marks, if a candidate missing the division by .15% or less for all UG and PG courses.

Resolution

The Academic council has anonymously approved the 1) Subject Moderation, 2) Adjustment of Marks (Grafting), and 3) Grace marks for improving the division for the UG and PG Programs

V.9. Approval for Adding Grace Marks (0.15%)

It is proposed to add grace marks up to 0.15% of the total marks, applicable to a maximum of 2 theory subjects, for the B.Tech (R20) Regulations of TKREC. The details are as follows:

Degree	Total of maximum marks in all eight semesters	Grace marks to be added (0.15% of maximum marks)	Rounded marks
B.Tech (R20) Regular admitted	6300	6.45	9
B.Tech (R20) Lateral entry admitted	4900	7.35	7



W. R. R.
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Teegala Krishna Reddy Engineering College
(UGC-AUTONOMOUS)
Medbowli, Meerpet, Hyderabad - 97.

TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

(Sponsored by TKR Educational Society, Approved by AICTE, Affiliated to JNTU(I))

Accredited by NAAC- 'A' Grade. Accredited by NBA

Medbowli, Meerpet, Balapur(M), Hyderabad, Telangana- 500097

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Degree	Total of maximum marks in all eight semesters	Grace marks to be added (0.15% of maximum marks)	Rounded marks
M Tech (R22) Regular admitted	2100	3.15	3
M B A (R22) Regular admitted	2800	4.2	4

These grace marks will be applicable to both the B.Tech. R20 Regulations and the M.Tech. & MBA R22 Regulations who have passed their examinations from June 2024 onward.

- ❖ B.Tech. R20 Regulation students can apply these marks for subjects or to improve their divisions, while M. Tech. and MBA R22 regulations students can only utilize them to improve the division only.

Resolution

The Academic Council has anonymously approved the Grace marks for both the B.Tech. R20 Regulations and the M.Tech. & MBA R22 Regulations of TKREC

V.10. Approval for the Conduct of Advanced Supplementary Examinations

It is proposed to conduct the advanced Supplementary Examinations for the IV B Tech, II Semester students soon after the completion of the Regular IV B Tech, II Semester Examinations, in accordance with the Academic Calendar

Resolution

The Academic Council has approved the conduct of Advanced Supplementary Examinations for the IV B Tech, II Semester after the completion of the Regular IV B Tech, II Semester Examinations.

V11. Approval for Implementation of National Academic Depository (NAD) DigiLocker

It is proposed to upload student results of TKREC to the National Academic Depository (NAD) DigiLocker, a UGC-approved body for storing academic records of students. The college will upload student results in MS Excel format to the NAD DigiLocker, accessible by authorized personnel through the portal to verify student credentials.





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Resolution

The Academic Council has agreed to upload the student results of TKREC to the NAD DigiLocker, a UGC-approved body for storing the academic records of students of TKREC.

Additional Inputs Received from the Members

Dr. K Naga Sujatha and Dr. C Sarala, Professors at the Centre for Water Resources, JNTUH UCESTH: Advised Improvement Measures for I B Tech, II Semester Results

- ❖ Suggested conducting remedial classes for identified students in I B Tech, II Semester to enhance overall results in the first year.

Dr. K Naga Sujatha, Professor of EEE & Head, JNTUH UCESTH: Appreciation for TKREC's Initiative

- ❖ Acknowledged and commended TKREC's initiative to upload student results to the National Academic Depository (NAD) DigiLocker.

Closing Remarks:

The Chairman expressed gratitude to all members for their active participation and insightful contributions throughout the meeting.

Meeting Adjournment:

With no further business to discuss, the meeting stands adjourned at 3:30 PM.

Submitted by:

Dr. B Srinivasa Rao

B. Srinivasa Rao
9/12/24

Member Secretary, Academic Council, TKREC



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Teegala Krishna Reddy Engineering College
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Minutes of the V Academic Council Meeting

S. No.	NAME	DESIGNATION	Signature
1	Dr K Venkat Murali Mohan	Principal, TKREC, Hyderabad	<i>[Signature]</i> 20/2/24
2	Dr B Balu Naik	Senior professor of ME, JNTUH UCESTH	<i>[Signature]</i>
3	Dr. C Sarala	Prof. of Centre for Water resources, JNTUH UCESTH	<i>[Signature]</i> 20/2/24
4	Dr. K Naga Sujatha	Prof of EEE & Head, JNTUH UCESTH	<i>[Signature]</i>
5	Dr D V L N Somayajulu	Prof. of CSE, NIT Warangal & Director of IIIT DM, Kurnool	<i>[Signature]</i> 20/2/24
6	Dr. A D Sharma	Prpf. of ECE & director R&D, CBIT, Hyderabad	<i>[Signature]</i> 9/2/2024
7	Mr. S Anjaneyulu	Delivery Manager, Caggemini, Hyderabad	<i>[Signature]</i>
8	Mr. A Appa Rao	Advocate, High Court of Telangana, Hyderabad	<i>[Signature]</i>
9	Mr. Md Muneeruddin Khan	Professor &HOD, CIVIL	<i>[Signature]</i> 9/2/24
10	Mr. Madhubabu T	Professor & HOD, EEE	<i>[Signature]</i> 9/2/2024
11	Dr.Ch.V.Phani Krishna	Professor & HOD, CSE	<i>[Signature]</i>
12	Dr.J.Praveen Kumar	Professor & HOD, IT	<i>[Signature]</i>
13	Dr.Vadivelan Natarajan	Professor & HOD, AIML	<i>[Signature]</i> 9/2/24
14	Dr.SK.Umar Faruq	Professor & HOD, ECE	<i>[Signature]</i> 9/2/24
15	Dr. A.Nagarjuna	Professor & HOD, H&S	<i>[Signature]</i> 9/2/24
16	Dr.V.Suryanarayana	Professor & HOD, MBA	<i>[Signature]</i>
17	Mr. U. Aswani Kumar	Associate Professor in IT & COE	<i>[Signature]</i> 9/2/24
18	Mr. V Vijay Kumar	Librarian, TKREC	<i>[Signature]</i>
19	Dr.V.Madhavi	Assoc. Prof., Dept. of English	<i>[Signature]</i> 9/2/24



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20	Mrs. N Poonam Naidu	TPO, TKREC	<i>Poonam Naidu</i>
21	Dr. K Srinivasa Reddy	Dept. of ECE	<i>Reddy</i>
22	Dr. B Srinivasa Rao	Dean of Academics, TKREC	<i>B. Srinivasa Rao</i>

W new

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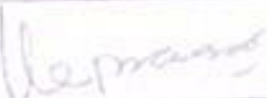
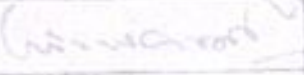
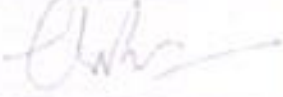
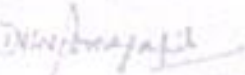
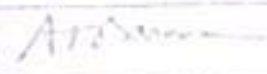
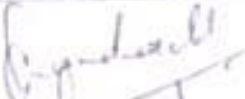
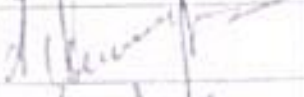

Teegala Krishna Reddy Engineering College (UGC Autonomous)
FIRST ACADEMIC COUNCIL MEETING

Date : 01.07.2021

Time : 9.00 am

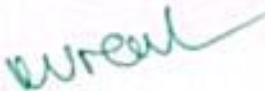
The first Academic Council Meeting of Teegala Krishna Reddy Engineering College (TKREC) was held on 1st July 2021 at 9:00 am in virtual mode.

Members present

SNo	Name of The Expert	Designation	Position	Signature
01	Dr. K V Murali Mohan	Principal, TKREC, Hyderabad	Chairman	
02	Dr. V Kamakshi Prasad	Prof. of CSE, JNTUH	Expert nominated by JNTUH	
03	Dr. G K Viswanath	Prof. of CE & Director, UGC-JRDC, JNTUH	Expert nominated by JNTUH	
04	Dr. Ch Venkata Ramana Reddy	Prof. of Chemistry & Director Admissions, JNTUH	Expert nominated by JNTUH	
04	Dr. D V L N Somayajulu	Prof. of CSE, NIT, Warangal, & Director of IIT DM, Kurnool	Academic Expert	
05	Dr. A D Sharma	Prof. of CE & Director R&D, CBIT, Hyderabad	Academic Expert	
06	Mr. K V Chandra Sekhar	Vice President, ICS, Broad Ridge Financial Services, Hyderabad	Industry Expert	
07	Mr. A Appa Rao	Advocate, High Court of Telangana, Hyderabad	Legal Expert	
08	Dr. K M V Madan Kumar	Dean Academics, TKREC, Hyderabad	Member Secretary	

- Welcome and Introductory remarks by the Chairman
- Introduction of the Members of the Council and the presentation by the Dean (Academics)





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Minutes of First Academic Council Meeting

Agenda items presented, discussed and resolved

Item 1: Academic regulations and confirmation of the minutes of first BOS meeting

- All the regulations concerned to syllabi, attendance criteria, question paper pattern and the scheme of evaluation and overall credits for B.Tech, M.Tech. & MBA programs were discussed and approved.
- Minor modifications in the syllabi of various courses, along with respective BOS minutes were approved.

Item 2: Question paper pattern for internal exams for B-Tech

It is resolved that:

- Comprehensive exam papers without internal choice are to be devised for continuous internal assessment (Midterm examinations). Number of questions should be 4 and each question carries 5 marks (4x5=20 Marks).
- Frame questions according to Bloom's Taxonomy, considering the level of difficulty and the time allotted for the exam.

Item 3: Question paper pattern for external exams for B-Tech

It is resolved that:

- The question paper consists of two parts namely Part- A and Part-B.
- Part-A consists of 10 questions. Each question carries 2.5 marks each and no choice will be given. Two questions are from one unit and all the five units should be covered.
- Part-B consists of five questions (number from 2 to 6) carrying 10 marks each. Each of these questions is from one unit and may contain sub questions. For each question, there will be an "either" "or" choice, which means that there will be two questions from each unit and the student should answer either of the two questions.

Item 4: Question paper setter

It is resolved that:


- Setting of question papers for semester-end exams is done by only external faculty to maintain quality.
- Role of Internal faculty is confined to conducting the internal exams and awarding marks for the same.

Item 5: Evaluation process

It is resolved that:

- Double evaluation of the answer scripts in the external examinations is followed.
- The average of the two evaluations shall be considered as final marks.

Chandra *Govil* *Abh* *Krishna* *Art* *Princip* *MC*



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- If the difference of two valuations is more than or equal to 15 marks, third evaluation shall be recommended.
- If any difference appeared in the marks after the third valuation also, average of two evaluations will be considered whose difference is minimum as final marks.

Item 6: Final year project as an internships for B-Tech

It is resolved that:

- If any student got an opportunity to do the final year project as an internship in any reputed company (Approved by the departmental committee), the student can opt for MOOCs which are equivalent to the courses offered in VIIIth semester.
- The MOOCs should be approved by the concerned BOS.
- The selected MOOCs duration should be minimum of 12 weeks.
- A student is eligible to secure up to 12 credits only through MOOCs.

Item 7: Panel of external examiners for External Lab & Project related works

It is resolved that:

- Selection of panel of examiners should be other than TKR Educational Society.
- Appointment of external examiners is either from JNTUH cluster colleges or from accredited or autonomous colleges.

Item 9: Panel of moderators

It is resolved that:

- Subject experts as the panel of moderators are to be selected in consultation with the HOD.
- The role of moderators is confined to identify any missed out data or spelling mistakes in the question papers.
- Change of questions is permitted in any case.

Item 10: Computer Based Test (CBT) for B-Tech

It is resolved that:

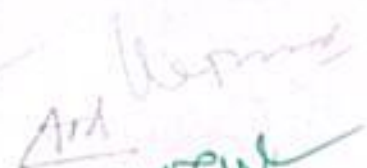
- CBT (Computer Based Test) for improvement of internal marks is to be scheduled before the announcement of the results of semester-end exams.
- The question bank for the CBT should cover entire syllabus of the corresponding course.

Item 11: Choice of new courses/electives

It is resolved that:

- Change courses or electives according to the requirements of the industry within the limitations of the JNTUH guidelines.
- The students are to be given liberty to choose their courses or electives as per their interest subjected to the regulations of the corresponding program.




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Item 12: Inclusion of Quantitative Aptitude, Quantitative Logical and Reasoning courses as mandatory courses

It is resolved that:

- There is a need for training to enhance employability skills of the students.
- Quantitative Aptitude, Quantitative Logical and Reasoning and Soft Skills and Personality Development courses are going to be introduced from R20 regulation to cater the needs of the students.

Item 13: Issues regarding COVID 19 pandemic

It is resolved that:

- Follow "5 out of 8 question patterns" for semester-end exams during pandemic time as per the JNTUH.
- Follow single evaluation system during pandemic period only.
- For minimum attendance and credit requirements for promotion to next semester, the guidelines given by JNTUH should be followed during the pandemic time only.

Item 14: Regulations for readmitted and Transfer students

It is resolved that:

- The student who is detained due to either lack of attendance or credits and seeks readmission in TKREC autonomous, then he/she will follow corresponding TKREC autonomous regulations only.
- The student seeks transfer from other college (Autonomous or Non-autonomous) and if falls into TKREC autonomous, then he/she will follow corresponding TKREC autonomous regulations only.
- For the above students, the substitute subjects will be issued by the corresponding BOS.

Item 15: Challenging valuation

Committee has decided not to have Recounting or Re-Valuation for all subjects as the double valuation was adopted. But, the students will be given a chance to apply for challenging valuation for all the theory Subjects (No Practical/lab subjects) within one week from the date of declaration of results.

Whenever the students apply for challenge valuation of answer scripts of semester end examinations, the students should submit their applications (through the HOD) within one week from the date of declaration of the results to the Examination Branch by paying Rs.10,000 (Rupees Ten Thousand only) per subject, in the form of Demand Draft, Drawn in Favor of "TKREC AUTONOMOUS". Any application received after the due date of submission for Challenge valuation, shall not be accepted under any circumstances.



Handwritten signatures and text:
Virendra
Engineering College
(JGC-AUTONOMOUS)
Madbowli, Meerpet, Hyderabad - 97.

On receipt of the DD

The answer script of the applied subject will be shown to the candidate to verify whether it belongs to him or not and the script will be evaluated by the senior faculty of the college appointed by the Controller of examinations. If there is any change in marks (Equal or above 15% of the maximum marks) the new marks will be awarded to the student. Otherwise, there will be no change in old marks. If the change in marks (Equal or above 15% of the maximum marks) occurs, an amount of Rs.9,000/- will be refunded to the student. Otherwise, the student will forfeit the total amount which he/she paid.

Item 16: Other issues

It is resolved that:

- The inspection by UGC for according autonomous was delayed due to the pandemic in Teegala Krishna Reddy Engineering College, Hyderabad. Hence, the college has to follow JNTUH existing syllabus, regulations and academic calendar for the first year admitted batch for the academic year 2020-2021.

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PRINCIPAL
Teegala Krishna Reddy Engineering College
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Teegala Krishna Reddy Engineering College (UGC Autonomous)

THIRD MEETING OF THE ACADEMIC COUNCIL

Date : 29.10.2022

Time : 2.00 pm

The third meeting of the Academic Council of Teegala Krishna Reddy Engineering College (UGC Autonomous) was held on 29th October 2022 at 2.00 pm in virtual mode.

Members present

- Welcome, introduction of Members of Council followed by the presentation by the Chairman and Member Secretary.

SNo	Name of The Expert	Designation	Position	Signature
01	Dr. K V Murali Mohan	Principal, TKREC, Hyderabad	Chairman	
02	Dr. M Farooq Hussain	Prof. of ME, Registrar, JNTUH.	Expert nominated by JNTUH	
03	Dr. D Srinivasa Rao	Prof. of ECE & Director, AAC, JNTUH	Expert nominated by JNTUH	
04	Dr. B.Padmaja Rani	Prof. of CSE, JNTUH	Expert nominated by JNTUH	
04	Dr. D V L N Somayajulu	Prof. of CSE & Director of IIT DM, Kurnool	Academic Expert	
05	Dr. A D Sharma	Prof. of ECE & Director R&D, CBIT, Hyderabad	Academic Expert	Approved through Emails
06	Mr. K V Chandra Sekhar	Vice President, ICS, Broad Ridge Financial Services, Hyderabad	Industry Expert	
07	Mr. A Appa Rao	Advocate, High Court of Telangana, Hyderabad	Legal Expert	
08	Dr. K M V Madan Kumar	Dean Academics, TKREC, Hyderabad	Member Secretary	
09	Dr. Umer Farooq	HOD- ECE	Member	
10	Dr. Ch V Phani Krishna	HOD-CSE	Member	
11	Dr A Nagarjuna	HOD- S&IT	Member	
12	Dr V Surayanrayana	HOD- MBA	Member	



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Minutes of Third Academic Council Meeting

AGENDA

1. Briefing about previous academic council meeting minutes.
2. Approval of previous processed results.
3. Approval for B.Tech (1st, 2nd and 3rd Year) academic calendars.
4. Approval for MBA/M.Tech (1st and 2nd) academic calendars.
5. Approval for detained students list.
6. Approval for promotion rules after pandemic.
7. Lateral entry admitted students.

Issues Presented, Discussed and Resolved

Part A

Item I: Confirmation of the minutes of second academic council meeting

The Principal welcomed the members and presented the minutes of second Academic Council Meeting.

The minutes of 2nd academic council meeting were confirmed without any further comments.

Item II: Approval of previous processed results

The principal presented processed results of B.Tech, M.Tech and MBA programs of academic year 2021-22.

Resolution:

The results were ratified as they were in line with the promotion rules of JNTUH in internal and external evaluation in the academic year 2021-22. A suggestion was made to improve marks for internal exams in the coming academic years.

Item III: Approval of academic calendars for B.Tech, I, II and III year class work

The principal presented the academic calendars and highlighted few details about duration of instruction time in semester and duration of internal exams.

Resolution:

The academic calendars were approved by the Council as they were made in accordance with JNTUH guidelines.



Item IV: Approval for MBA/M.Tech (I and II) academic calendars.

The principal presented the academic calendars for MBA/M.Tech. (I and II) which were in line with JNTUH

Resolution:

The academic calendars for the postgraduate programs were approved by the Council.

Item V: Approval for detained students list

Details and number of detained students in B.Tech program in the academic year 2021-22 were presented. It was made clear that the detention was not due to lack of credits.

Resolution:

The detention of 5 students was ratified as it was based on existing promotion rules.

Item VI: Approval for promotion rules after pandemic.

- From the A.Y. 2022-23 onwards the credit or attendance based detention and question paper pattern for end semester examinations will be followed as per existing regulations in vogue/ as applicable to the respective academics regulations.
- The rules for the credit based detention system for the A.Y. 2021-22 i.e., promoting the students to the A.Y.2022-23 are as follows.

Promotions from	Required credits for B.Tech	
	Regular	Lateral Entry
I year to II year	9 credits out of 37	--
II year to III year *	19 credits out of 78 or 79	10 credits out of 41 or 42

* Secured credits to be considering up to September 2022 examinations

- The council approved all the promotion rules after pandemic including question paper pattern, evaluation procedures, attendance and credit-based detention, etc.



A. Ram

Charan

PRINCIPAL

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Part B

Item I: Proposal for change of academic regulation to R22 in line with JNTUH

- R20 regulation has been followed since the academic year 2020-21.
- The Academic council proposed to adopt the changed regulation of JNTUH i.e. R22 regulations from the academic year 2022.
- Adoption of R22 Regulations and syllabus offers more advantages to student community such as introduction of emerging major and minor degrees, chance of multiple entry and exit during graduation, introduction of NEP-2020 change in scheme of evaluation 40 and 60 in internal and external exams respectively.
- Conduction of BOS meetings to get the approval for TKREC (R9) R22 syllabi at the beginning of academic year 2022-23.

Resolution:

The following points were discussed,

- The undergraduate degree with multiple entry and exit options with appropriate certifications.
- Emerging major and minor degrees and possibilities for students to choose and learn the subject(s) of their choice.
- Provisions for students to take a break and complete graduation in a span of 8 years.
- Distribution of marks 40 for internal and 60 for external examinations for both theory and labs.
- Freedom to offer courses or electives according to the requirements of the industry in the course structure.

Item II: Question paper pattern for internal exams for B-Tech, MBA and M.Tech in R-22

It is resolved that:

- Comprehensive exam papers without internal choice are to be devised for continuous internal assessment (Midterm examinations). Number of questions should be 5 and each question carries 5 marks (5x5=25 Marks).
- Frame questions according to Bloom's Taxonomy, considering the level of difficulty and the time allotted for the exam.

Item III: Evaluation process

It is resolved that:

- Double evaluation of the answer scripts in the external examinations is followed.
- The average of the two evaluations shall be considered as final marks.



A. Ram Reddy
Principal
T. V. Raghunatha Reddy Engineering College
(UGC-AUTONOMOUS)
Meerpel, Meerpel, Hyderabad - 97.

- If the difference of two valuations is more than or equal to 15 marks, third evaluation shall be recommended.
- If any difference appeared in the marks after the third valuation also, average of two evaluations will be considered whose difference is minimum as final marks.

Item IV: Challenging valuation

Committee has decided not to have Recounting or Re-Valuation for all subjects as the double valuation was adopted. But, the students will be given a chance to apply for challenging valuation for all the theory Subjects (No Practical/lab subjects) within one week from the date of declaration of results.

Whenever the students apply for challenge valuation of answer scripts of semester end examinations, the students should submit their applications (through the HOD) within one week from the date of declaration of the results to the Examination Branch by paying Rs.10,000 (Rupees Ten Thousand only) per subject, in the form of Demand Draft, Drawn in Favor of "TKREC AUTONOMOUS". Any application received after the due date of submission for Challenge valuation, shall not be accepted under any circumstances.

On receipt of the DD

The answer script of the applied subject will be shown to the candidate to verify whether it belongs to him or not and the script will be evaluated by the senior faculty of the college appointed by the Controller of examinations. If there is any change in marks (Equal or above 15% of the maximum marks) the new marks will be awarded to the student. Otherwise, there will be no change in old marks. If the change in marks (Equal or above 15% of the maximum marks) occurs, an amount of Rs.9,000/- will be refunded to the student. Otherwise, the student will forfeit the total amount which he/she paid.

Item V: Approval for any one valuation of external examination scripts by the internal faculty as we are following double valuation

Briefed about the need for any one evaluation of external answer scripts by internal faculty.

Resolution:

- Any one valuation of external exam scripts by the internal faculty was approved.
- Frame external exam papers according to Bloom Taxonomy and link all the questions to course objectives and outcomes, as it is necessary for NBA.

Item VI: Others



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Issues related to pass percentage in the academic year 2021-22 in B.Tech admissions in M.Tech program, faculty and student's achievements and placement details were discussed and the following suggestions were made.

- Identify difficult subjects in which pass percentage is less and conduct remedial classes to improve it.
- Identify reasons for poor admission in M.Tech. Program as it affects the extension of the course in future.
- Display faculty and students achievements related to academics and research and the details of workshops and conferences.
- Present branch-wise placement details with maximum and minimum packages.

K. Srinivas

P. Srinivas

R. Srinivas

M. Srinivas

A. Srinivas

A. Srinivas

A. Srinivas

A. Srinivas

A. Srinivas

A. Srinivas

A. Srinivas

A. Srinivas

K. Srinivas



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11/15/22, 9:58 AM

TEEGALA KRISHNA REDDY ENGINEERING COLLEGE Mail - III Academic Council Minutes

TKREC PRINCIPAL <principal@tkrec.ac.in>

III Academic Council Minutes

2 messages

Tue, Nov 15, 2022 at 5:05 PM

TKREC PRINCIPAL <principal@tkrec.ac.in>
To: adsarma_ece@cbit.ac.in

Sir
I am herewith sending the **THIRD ACADEMIC COUNCIL MEETING MINUTES** for your approval as per the discussions in the online academic council meeting



Dr. K. Venkata Murali Mohan
B.E,M.Tech,Ph.D(ECE),Ph.D(CSE),MISTE,MIETE
PRINCIPAL
Teegala Krishna Reddy Engineering College,
(UGC-AUTONOMOUS)

(Affiliated to JNTUH, Approved by AICTE, Accredited by NBA & NAAC 'A' Grade) Medbowli, Meerpet (V), Balapur(M), Hyderabad, Telangana-500 097.
Phone: 9393959587 Cell: 9246109293

Minutes of 3rd Academic Council Meeting.doc
83K

Dr.A.D.Sarma Professor (C) <adsarma_ece@cbit.ac.in>
To: TKREC PRINCIPAL <principal@tkrec.ac.in>

Tue, Nov 15, 2022 at 8:40 PM

Dear Sir,

Thank you for the e-mail.

The minutes are accepted.

Regards

Sarma

Prof.A.D.Sarma Ph.D(Engg.) London(UK)

Director, Research and Development

Chaitanya Bharathi Institute of Technology

Kokapet, Gandipet, RR Dist. Hyderabad - 500 075 TS

Tel:040-24193276/77

Cell: +91-9440934242

Former Director, Research & Training Unit for Navigational Electronics, Osmania University, Hyderabad-500 007.

[Quoted text hidden]

awrew

PRINCIPAL
Teegala Krishna Reddy Engineering College
(UGC-AUTONOMOUS)
Medbowli, Meerpet, Hyderabad - 97.



TKREC PRINCIPAL <principal@tkrec.ac.in>

III Academic Council Minutes of Teegala Krishna Reddy Engineering College

2 messages

Wed, Nov 16, 2022 at 10:08 AM

TKREC PRINCIPAL <principal@tkrec.ac.in>
To: padmaja_jntuh@jntuh.ac.in, padmaja_jntuh@yahoo.co.in

Dear Madam

I am herewith sending the **THIRD ACADEMIC COUNCIL MEETING MINUTES** for your approval as per the discussions in the online academic council meeting



Dr. K. Venkata Murali Mohan
B.E,M.Tech,Ph.D(ECE),Ph.D(CSE),MISTE,MEITE
PRINCIPAL
Teegala Krishna Reddy Engineering College,
(UGC-AUTONOMOUS)

(Affiliated to JNTUH, Approved by AICTE, Accredited by NBA & NAAC 'A' Grade) Medbowli, Moerpet (V), Balapur(M), Hyderabad, Telangana-500 097.
Phone: 9333659507 Cell: 9248109293

3 attachments

- Minutes of 3rd Academic Council Meeting.doc
83K
- THIRD MEETING OF THE ACADEMIC COUNCIL.pdf
1353K
- Academic Council Member orders Dr B Padmaja Rani 03112022.pdf
6691K

Dr.B. Padmaja Rani <padmaja_jntuh@jntuh.ac.in>
To: TKREC PRINCIPAL <principal@tkrec.ac.in>
Cc: padmaja_jntuh@yahoo.co.in

Wed, Nov 16, 2022 at 10:27 AM

I here by approve the minutes sent to me

Regards
Dr. B. Padmaja Rani
(Quoted text hidden)



Dr. B. Padmaja Rani
PRINCIPAL
Teegala Krishna Reddy Engineering College
(UGC-AUTONOMOUS)
Medbowli, Moerpet, Hyderabad - 97.

MINUTES OF THE ISOAKU OF STUDIES MEETING
FOR B.TECH. CIVIL ENGINEERING HELD ON 05.11.2022
AT 2.30PM. IN DEPARTMENT OF CIVIL ENGINEERING

Mode of Meeting : Online.

Platform : Google Meet.

Meeting ID : <https://meet.google.com/dyc-izck-fgc>

Members Present :-

- 1) Dr. D. Venkat Ram Reddy, Chairman
HOD, Department of Civil Engineering.
Teegala Krishna Reddy Engineering College.
- 2) Prof. Dr. C. Sarala, JNTUH Nominee
Professor, Centre for Water Resources, Institute of
Science and Technology, Jawahar Lal Nehru, Technological
University, Hyderabad.
- 3) Prof. V. Bhikshma, Subject Expert
Professor of Civil Engineering, Osmania University,
Hyderabad.
- 4) Dr. K. Madhusudan Reddy, Subject Expert
Associate Professor, Department of Civil Engg
Annamayya University Hyderabad
- 5) Dr. Er. S.P. Anchuri, Industry Expert
Anchuri & Anchuri Consultant, Hyderabad
- 6) Mr. Mohammed Muneeruddin Khan.
Member Secretary, Asst. Professor, Dept. of Civil Engg
TKREC. Hyderabad.

Special Invites:

- 1) Dr. K. Venkata Murli Mohan, Principal TKREC.
- 2) Dr. K.M.V. Madan Kumar, Dean Academics TKREC.

The meeting started with full quorum. The member Secretary, BOS, welcomed the members and the BOS Chairman about the purpose of meeting.

The following items were discussed:

1) The Syllabi of IV year R20 Regulation was presented by the member secretary. It was discussed and approved without any corrections.

2) The Syllabi of B.Tech open electives were discussed and approved without any corrections.

3) The Course Structure of B.Tech Civil Engg. R22 Regulation was presented by member Secretary and discussed in detail. A few suggestions were made. The course structure was unanimously approved after incorporating the corrections, as suggested.

4) The Syllabi of I year R22 Regulations were discussed and approved without any corrections.

5) The Syllabi of II year R22 Regulations were discussed and approved without any corrections.

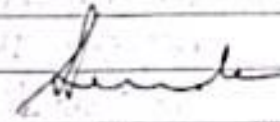
6) The recommended suggestions / corrections / revisions were duly incorporated in the syllabi. After incorporation of suggestions, corrections & revisions, it was unanimously resolved to approve the

Course Structure and the Syllabi as mentioned above. Further no Substitute Subjects are recommended for the readmitted to same regu. of any year.

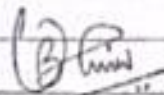
7) The meeting ended with thanks from the Chairperson and member secretary



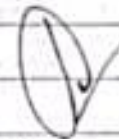
D. P. Venkat Ram Reddy



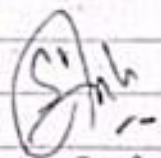
Prof. Dr. C. Sarda



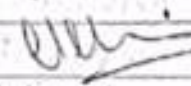
Prof. Dr. V. Bhikshma



Dr. K. Madhusudan Reddy



Dr. G. S. P. Anbum



Mr. Mohd. Mumtazuddin Khan



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Teegala Krishna Reddy Engineering College
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Medbowli, Meerpet, Hyderabad - 97.

MINUTES OF THE BOARD OF STUDIES MEETING
FOR BTECH. CIVIL ENGINEERING, HELD ON 24.01.2024
AT 10.30AM IN DEPARTMENT OF CIVIL ENGINEERING
6

Mode of Meeting : Online.

Platform : Google meet.

Meeting ID : <https://meet.google.com/ork-ptje-...>

Members Present:-

1) Dr. P. Venkat Ram Reddy, Chairman
Associate Professor, Department of Civil Engineering,
Teegala Krishna Reddy Engineering College, Hyderabad

2) Professor Dr. C. Sarala, JNTUH Nominee.
Professor JNTUH.

3) Professor Dr. V. Bhikshma, Subject Expert.
Professor of Civil Engineering, O.Smania University, Hyderabad

4) Dr. K. Madhusudan Reddy, Subject Expert.
Associate Professor, Department of Civil Engineering,
Annam University, Hyderabad.

5) Dr. E. S.P. Anchari, Industry Expert.
Anchari & Anchari Consultants, Hyderabad.

6) Mr. Mohammed Muneeruddin Khan, Member Secretary
Assistant Professor, Department of Civil Engineering,
Teegala Krishna Reddy Engineering College, Hyderabad

Special Invitees:-

1) Dr. K. Venkata Murali Mohan, Principal.
Teegala Krishna Reddy Engineering College, Hyderabad.

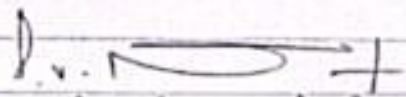
2) Dr. B. Srinivasa Rao, Dean Academics.
Teegala Krishna Reddy Engineering College, Hyderabad

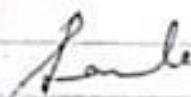
The meeting started with full quorum. The member Secretary, BOS, welcomed the members and the BOS Chairman about the purpose of the meeting.

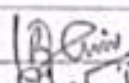
The following items were discussed:

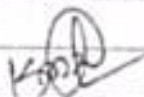
- 1) The syllabi of III & IV Year R22 Regulation, was presented by the member Secretary and discussed in detail. Suggestions were made. The course structure was approved after incorporating the corrections as suggested.
- 2) The syllabi of R22 Regulation, Open electives were discussed and approved.
- 3) The recommended suggestions/corrections/revision were duly incorporated in the syllabi. After incorporation suggestions, corrections and revisions it was unanimously resolved to approve the course structure and the syllabi as mentioned above.

The meeting ended with thanks from the Chairperson and Member Secretary.

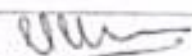

Dr. P. Venkat Ram Reddy.

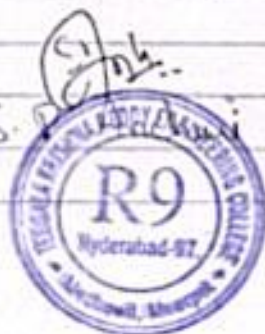

Prof. Dr. C. Sarala.


Prof. Dr. V. Shikshma.


Dr. K. Madhusudan Reddy.


Dr. Er. S. [unclear]


Mr. Mohammed Muneeruddin Khan.



PRINCIPAL
Teegala Krishna Reddy Engineering College
(UGC AUTONOMOUS)
Medbowli, Meenar, Hyderabad-57



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE (UGC-Autonomous)

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Medhawal, Meerpet, Balapur, Hyderabad, Telangana- 500097
Mob: 8498085218. principal@tkrec.ac.in, acc@tkrec.ac.in



MINUTES OF THE BOARD OF STUDIES MEETING FOR B.TECH. CIVIL ENGINEERING HELD ON 24.01.2024 AT 10:30 A.M IN DEPARTMENT OF CIVIL ENGINEERING

Mode of Meeting : Online
Platform : Google Meet
Meeting ID : <https://meet.google.com/ork-pbfo-cgj>

Members present:

1. Dr. P. Venkat Ram Reddy, Chairman
Associate Professor, Department of Civil Engineering,
Teegala Krishna Reddy Engineering College, Hyderabad
2. Prof. Dr. C. Sarala, JNTUH Nominee
Professor, Centre for Water Resources, Institutes of Science and Technology
Jawaharlal Nehru Technological University, Hyderabad
3. Prof. V. Bhikshina, Subject Expert
Professor of Civil Engineering, Osmania University, Hyderabad
4. Dr. K. Madhusudan Reddy, Subject Expert
Associate Professor, Department of Civil Engineering,
Anurag University, Hyderabad.
5. Dr. Er. S.P. Anchuri, Industry Expert
Anchuri & Anchuri consultants, Hyderabad
6. Mr. Mohammed Muneeruddin Khan, Member Secretary
Assistant Professor, Department of Civil Engineering
Teegala Krishna Reddy Engineering College, Hyderabad

Special Invitees:

1. Dr. K. Venkata Murali Mohan, Principal
Teegala Krishna Reddy Engineering College, Hyderabad
2. Dr. B. Erinivasa Rao, Dean Academics
Teegala Krishna Reddy Engineering College, Hyderabad



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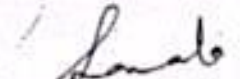
The meeting started with full quorum. The Member Secretary, BOS welcomed the members and the BOS Chairman about the purpose of meeting.

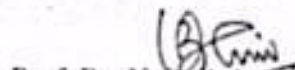
The following items were discussed:

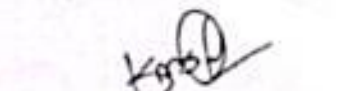
1. The syllabi of III & IV Year R22 regulation, was presented by the Member Secretary and discussed in detail. Suggestions were made. The course structure was approved after incorporating the corrections, as suggested.
2. The syllabi of R22 Regulation, open Electives were discussed and approved.
3. The recommended suggestions/corrections/revisions were duly incorporated in the syllabi. After incorporation suggestions, corrections and revisions, it was unanimously resolved to approve the course structure and the syllabi as mentioned above.

The meeting ended with thanks from the Chairperson and Member Secretary.


Dr. P. Venkat Ram Reddy


Prof. Dr. C. Sarala


Prof. Dr. V. Bhikshamar


Dr. K. Madhusudan Reddy


Dr. Er. S. P. Anithuri


Mr. Mohammed Muneeruddin Khan



PRINCIPAL
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MINUTES OF THE BOARD OF STUDIES MEETING
FOR B.Tech CIVIL ENGINEERING, HELD ON 18/06/2021
AT 1:00PM IN DEPARTMENT OF CIVIL ENGINEERING.

Mode of Meeting : Online

Platform : GOOGLE MEET

Meeting ID : <https://meet.google.com/wkj-hpud-nkt>

MEMBERS Present.

- 1) Mr. P. VENKAT Ram REDDY.
HOD, Department of Civil Engineering.
Teegala Krishna Reddy Engineering college, Hyd.
2. Prof. Dr. C. Sarala, JNTU Nominee
Professor, Center for Water Resource,
Institute of Science and Technology,
JNTU, HYDERABAD.
3. Prof. Dr. Y. BHIKSHMA, Subject Expert,
Professor of Civil Engineering Department,
OSMANIA UNIVERSITY, HYDERABAD.
4. Dr. K. Madhuvandan Reddy, Subject Expert,
Associate Professor, Department of Civil Engg.
ANURAG UNIVERSITY, HYDERABAD.
5. Dr. E. S. P. ANCHURI, Industry Expert.
ANCHURI & ANCHURI CONSULTANTS, HYDERABAD
6. Dr. R. Seetharamil Selvi, INTERNAL Membr.
Associate Professor, Dept of Civil Engg.
Teegala Krishnarreddy Engg. college,
HYDERABAD.

Contd —

7. Dr. R. Hema Anika, Member Secretary
Professor, Department of Civil Engineering
Teegala Krishna Reddy Engg. College, Hyd

Special Invitees

1. Dr. K. Venkata Murali Mohan, Principal
Teegala Krishna Reddy Engg. College,
HYDERABAD

2. Dr. K.M.V. Madan Kumar, Dean Academic
Teegala Krishna Reddy Engineering College,
HYDERABAD

The Meeting started with full quorum. The Member Secretary, BOS welcomed the members and the BOS chairman briefed about the purpose of Meeting.

The following items were discussed.

1. The course structure of B.Tech Civil Engineering was presented by the member secretary and discussed in detail. A few suggestions were made. The course structure was unanimously approved after incorporating the corrections as suggested.
 2. The syllabi of I year B.Tech course were discussed and approved without any corrections.
 3. The syllabi of II year B.Tech course were discussed and approved without any corrections.
 4. The syllabi of III year B.Tech were discussed and reviewed by the members. A few suggestions, corrections, revisions were recommended.
 5. The syllabi of M.Tech Open Electives were discussed and approved without any corrections.
 6. The recommended suggestions/corrections/revisions were duly incorporated in the syllabi. After incorporating suggestions, corrections and revisions it was unanimously resolved to approve the course structure and the syllabi of B.Tech course (Civil Engineering) (Annexure-1) and M.Tech Open Electives.
- The Meeting ended with Thanks from the chairperson and Member Secretary.

P.V. Venkat Ram Reddy
P. VENKAT RAM REDDY

C. Sarala
* Prof. Dr. C. Sarala

Prof. Dr. V. Bhikshma

Dr. K. Madhusudan Reddy

contd -

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Dr. E. S. P. ANCHURI

Dr. R. Senthil Selva

[Handwritten signature]
Dr. R. Hema Anilika



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Teegala Krishna Reddy Engineering College
(UGC-AUTONOMOUS)
Medbowli, Meerpet, Hyderabad - 97.



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE (UGC-Autonomous)

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Mob: 9393959597. Email: info@tkrec.ac.in, deanacademics@tkrec.ac.in



B. Tech. I Semester (R20)

S. No.	Subject Code	Category	Subject Name	Hours Per Week			Credits
				L	T	P	
1.	20MA1BS01	BS	Mathematics	3	1	0	4
2.	20PH1BS02	BS	Engineering Physics	3	1	0	4
3.	20CS1ES01	ES	Programming for Problem Solving	3	1	0	4
4.	20ME1ES02	ES	Engineering Graphics	1	0	4	3
5.	20PH1BS03	BS	Engineering Physics Lab	0	0	3	1.5
6.	20CS1ES03	ES	Programming for Problem Solving Lab	0	0	3	1.5
7.	20MC1ES04	ES	Environmental Science	3	0	0	0
Total Credits							18

B. Tech. II Semester (R20)

S. No.	Subject Code	Category	Subject Name	Hours Per Week			Credits
				L	T	P	
1.	20MA2BS04	BS	Mathematics-II	3	1	0	4
2.	20CH2BS05	BS	Chemistry	3	1	0	4
3.	20ME2ES05	ES	Engineering Mechanics	3	1	0	4
4.	20ME2ES06	ES	Engineering Workshop	1	0	3	2.5
5.	20EN2HS01	HS	English	2	0	0	2
6.	20CH2BS06	BS	Engineering Chemistry Lab	0	0	3	1.5
7.	20EN2HS02	HS	English Language and Communication Skills Lab	0	0	2	1
Total Credits							19

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Mob: 9393959597. Email: info@tkrec.ac.in, deanacademics@tkrec.ac.in



B. Tech. III Semester (R20)

S. No.	Subject Code	Category	Subject Name	Hours Per Week			Credits
				L	T	P	
1.	20CM3BS07	BS	Probability and Statistics	3	1	0	4
2.	20CE3PC01	PC	Strength of Materials – I	4	0	0	4
3.	20CE3PC02	PC	Fluid Mechanics	4	0	0	4
4.	20CE3PC03	PC	Engineering Geology	2	0	0	2
5.	20CE3PC04	PC	Surveying and Geomatics	3	0	0	3
6.	20CE3PC05	PC	Surveying Lab	0	0	3	1.5
7.	20CE3PC06	PC	Strength of Materials Lab	0	0	3	1.5
8.	20CE3PC07	PC	Engineering Geology Lab	0	0	2	1
9.	20MC3HS01	HS	Professional and Engineering Ethics	2	0	0	0
10.	20MC3BS02	BS	Quantitative Analysis-I	2	0	0	0
Total Credits							21

B. Tech. IV Semester (R20)

S. No.	Subject Code	Category	Subject Name	Hours Per Week			Credits
				L	T	P	
1.	20ME4ES07	ES	Basic Mechanical Engineering for Civil Engineers	2	0	0	2
2.	20CE4PC01	PC	Strength of Materials – II	3	0	0	3
3.	20CE4PC02	PC	Hydraulics and Hydraulic Machinery	3	0	0	3
4.	20CE4PC03	PC	Building Materials, Construction and Planning	3	0	0	3
5.	20CE4PC04	PC	Structural Analysis – I	3	0	0	3
6.	20EE4ES08	ES	Basic Electrical and Electronics Engineering	3	0	0	3
7.	20CE4PC05	PC	Hydraulics and Hydraulic Machinery Lab	0	0	3	1.5
8.	20CE4PC06	PC	Computer Aided Civil Engineering Drawing	0	0	3	1.5
9.	20EE4ES09	ES	Basic Electrical and Electronics Engineering Lab	0	0	2	1
10.	20MC4HS03	MC	Gender Sensitization Lab	2	0	0	0
11.	20MC4BS03	MC	Quantitative Logical & Reasoning	2	0	0	0
Total Credits							21

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3 **PRINCIPAL**
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TEEGALA KRISHNA REDDY ENGINEERING COLLEGE (UGC-Autonomous)

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Mob: 9393959597, Email: info@tkrec.ac.in, deansacademics@tkrec.ac.in



B. Tech. V Semester (2020)

S. No.	Subject Code	Category	Subject Name	Hours Per Week			Credits
				L	T	P	
01	20CE5PC01	PC	Environmental Engineering	3	0	0	3
02	20CE5PC02	PC	Design of Reinforced Concrete Structures	3	1	0	4
03	20CE5PC03	PC	Geotechnical Engineering	3	0	0	3
04	20CE5PC04	PC	Structural Analysis - II	3	0	0	3
05	20CE5PE01	PE	Professional Elective-I				
	20CE5PE02		1. Advanced Structural Analysis				
	20CE5PE03		2. Watershed Management	3	0	0	3
	20CE5PE04		3. Traffic Engineering 4. Bridge Engineering				
06	20SM5HS05	HS	Engineering Economics and Accountancy	2	0	0	2
07	20CE5PC06	PC	Geotechnical Engineering Lab	0	0	3	1.5
08	20CE5PC07	PC	Environmental Engineering Lab	0	0	3	1.5
09	20CE5PW01	PW	Summer Internship	0	0	0	1
10	20CE5MC09	MC	Intellectual Property Rights	2	0	0	0
11	20CE5MC10	MC	Personality Development and Soft Skills	2	0	0	0
Total Credits							22

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Mob: 9393959597, Email: info@tkrec.ac.in, deanacademics@tkrec.ac.in



B. Tech. VI Semester (R20)

S. No.	Subject Code	Category	Subject Name	Hours Per Week			Credits
				L	T	P	
01	20CE6PC01	PC	Hydrology and Water Resources Engineering	3	1	0	4
02	20CE6PC02	PC	Concrete Technology	3	0	0	3
03	20CE6PC03	PC	Transportation Engineering – I	3	0	0	3
04	20CE6PC04	PC	Design of Steel Structures	3	1	0	4
05	20CE6PE01 20CE6PE02 20CE6PE03 20CE6PE04	PE	Professional Elective – II	3	0	0	3
			1. Rehabilitation and Retrofitting of Structures				
			2. Ground Improvement Techniques				
			3. Prestressed Concrete				
06		OE	Open Elective – I	3	0	0	3
07	20CE6PC05	PC	Highway Engineering and Concrete Technology Lab	0	0	2	1
08	20CE6PC06	PC	Computer Aided Structural Design Lab – I	0	0	2	1
09	20EN6HS04	HS	Advanced Communication Skills Lab	0	0	2	1
10	20CE6MC08	MC	Basic Technical Training	0	0	2	0
Total Credits							23

Handwritten signature



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Medbowli, Meerpet, Balapur, Hyderabad, Telangana- 500097
Mob: 9393959597. Email: info@tkrec.ac.in, deanacademics@tkrec.ac.in



B. Tech. VII Semester (R20)

S. No.	Subject Code	Category	Subject Name	Hours Per Week			Credits
				L	T	P	
01	20CE7PC01	PC	Estimation, Costing and Project Management	3	1	0	4
02	20CE7PE01	PE	Professional Elective - III	3	0	0	3
	1. Waste Management						
	2. Construction Technology and Management						
	3. Air Pollution and Control						
20CE7PE03	4. Elements of Earthquake Engineering						
20CE7PE04							
03		OE	Open Elective -II	3	0	0	3
04	20CE7HS01	HS	Professional Practice Law & Ethics	2	0	0	2
05	20CE7PC03	PC	Computer Aided Structural Design Lab - II	0	0	2	1
06	20CE7PW04	PC	Industrial Oriented Mini Project/Summer Internship	0	0	0	2
07	20CE7PW05	PC	Project - Stage I			6	3
08	20CE7PW06	PC	Seminar	0	0	2	1
09	20CE7PC07	PC	Comprehensive Exam	0	0	2	1
10	20CE7MC08	MC	Advanced Technical Training	0	0	2	0
Total Credits							20

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B. Tech. VIII Semester (R20)

S. No.	Subject Code	Category	Subject Name	Hours Per Week			Credits
				L	T	P	
01	20CE8PE01	PE	Professional Elective – IV	3	0	0	3
	20CE8PE02		1. Transportation Engineering – II				
	20CE8PE03		2. Foundation Engineering				
	20CE8PE04		3. Ground Water Hydrology 4. Design and Drawing of Irrigation Structure				
02	20CE8PE05	PE	Professional Elective – V	3	0	0	3
	20CE8PE06		1. Disaster Management				
	20CE8PE07		2. Green Building Technology				
	20CE8PE08		3. Advanced Structural Design 4. Safety in Civil Engineering Practice				
03		OE	Open Elective - III	3	0	0	3
04	20CE8PW01	PC	Major Project	0	0	14	7
Total							16

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech. in CIVIL ENGINEERING
COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

S.No.	Course Code	Course Title	L	T	P	Credits
1	MA101BS	Mathematics-I	3	1	0	4
2	PH102BS	Engineering Physics	3	1	0	4
3	CS103ES	Programming for Problem Solving	3	1	0	4
4	ME104ES	Engineering Graphics	1	0	4	3
5	PH105BS	Engineering Physics Lab	0	0	3	1.5
6	CS106ES	Programming for Problem Solving Lab	0	0	3	1.5
7	*MC109ES	Environmental Science	3	0	0	0
		Induction Programme				
		Total Credits	13	3	10	18

I YEAR II SEMESTER

S.No.	Course Code	Course Title	L	T	P	Credits
1	MA201BS	Mathematics-II	3	1	0	4
2	CH202BS	Chemistry	3	1	0	4
3	ME203ES	Engineering Mechanics	3	1	0	4
4	ME205ES	Engineering Workshop	1	0	3	2.5
5	EN205HS	English	2	0	0	2
6	CH206BS	Engineering Chemistry Lab	0	0	3	1.5
7	EN207HS	English Language and Communication Skills Lab	0	0	2	1
		Total Credits	12	3	8	19.0

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II YEAR I SEMESTER

S.No.	Course Code	Course Title	L	T	P	Credits
1	CE301PC	Surveying and Geomatics	3	0	0	3
2	CE302PC	Engineering Geology	2	0	0	2
3	CE303PC	Strength of Materials-I	3	1	0	4
4	MA304BS	Probability and Statistics	3	1	0	4
5	CE305PC	Fluid Mechanics	3	1	0	4
6	CE306PC	Surveying Lab	0	0	3	1.5
7	CE307PC	Strength of Materials Lab	0	0	3	1.5
8	CE308PC	Engineering Geology Lab	0	0	2	1
9	*MC309	Constitution of India	3	0	0	0
		Total Credits	17	3	8	21

II YEAR II SEMESTER

S.No.	Course Code	Course Title	L	T	P	Credits
1	EE401ES	Basic Electrical and Electronics Engineering	3	0	0	3
2	CE402ES	Basic Mechanical Engineering for Civil Engineers	2	0	0	2
3	CE403PC	Building Materials, Construction and Planning	3	0	0	3
4	CE404PC	Strength of Materials-II	3	0	0	3
5	CE405PC	Hydraulics and Hydraulic Machinery	3	0	0	3
6	CE406PC	Structural Analysis-I	3	0	0	3
7	CE407PC	Computer aided Civil Engineering Drawing	0	0	3	1.5
8	CE408PC	Hydraulics and Hydraulic Machinery Lab	0	0	3	1.5
9	EL409ES	Basic Electrical and Electronics Engineering Lab	0	0	2	1
10	*MC409	Gender Sensitization Lab	0	0	2	0
		Total Credits	17	0	10	21

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III YEAR I SEMESTER

S.No.	Course Code	Course Title	L	T	P	Credits
4	CE501	Structural Analysis-II	3	0	0	3
2	CE502PC	Geotechnical Engineering	3	0	0	3
3	CE503PC	Structural Engineering-I(RCC)	3	1	0	4
4	CE504PC	Transportation Engineering	3	0	0	3
5		Professional Elective-I	3	0	0	3
6	SM505MS	Engineering Economics and Accountancy	2	0	0	2
7	CE506PC	Highway Engineering and Concrete Technology Lab	0	0	3	1.5
8	CE507PC	Geotechnical Engineering Lab	0	0	3	1.5
9	EN508HS	Advanced Communication Skills Lab	0	0	2	1
10	*MC509	Intellectual Property Rights	3	0	0	0
		Total Credits	20	1	8	22

III YEAR II SEMESTER

S.No	Course Code	Course Title	L	T	P	Credits
1	CE601PC	Hydrology & Water Resources Engineering	3	1	0	4
1	CE602PC	Environmental Engineering	3	0	0	3
2	CE603PC	Foundation Engineering	3	0	0	3
3	CE604PC	Structural Engineering-II(Steel)	3	1	0	4
5		Professional Elective-II	3	0	0	3
6		Open Elective -I	3	0	0	3
7	CE605PC	Environmental Engineering Lab	0	0	2	1
8	CE606PC	Computer Aided Design Lab	0	0	2	1
9	*MC609	Environmental Science	3	0	0	0
		Total Credits	21	2	4	22

*MC609- Environmental Science–Should be Registered by Lateral Entry Students Only.

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IVYEAR I SEMESTER

S.No.	Course Code	Course Title	L	T	P	Credits
1	CE701PC	Estimation, Costing and Project Management	3	1	0	4
2		Professional Elective-III	3	0	0	3
3		Professional Elective-IV	3	0	0	3

4		Open Elective -II	3	0	0	3
5	SM702MS	Professional Practice, Law & Ethics	2	0	0	2
6	CE703PC	Industrial Oriented Mini Project / Summer Internship	0	0	0	2*
7	CE704PC	Seminar	0	0	2	1
8	CE705PC	Project Stage-I	0	0	6	3
		Total Credits	14	1	12	21

IVYEAR II SEMESTER

S.No.	Course Code	Course Title	L	T	P	Credits
1		Professional Elective-V	3	0	0	3
2		Professional Elective-VI	3	0	0	3
3		Open Elective-III	3	0	0	3
4	CE801PC	Project Stage-II	0	0	14	7
		Total Credits	9	0	14	16

*MC-Satisfactory/Unsatisfactory

Note: Industrial Oriented Mini Project/ Summer Internship is to be carried out during the summer vacation between 6th and 7th semesters. Students should submit report of Industrial Oriented Mini Project/ Summer Internship for evaluation.

Professional Elective-I

CE511PE	Concrete Technology
CE512PE	Theory of Elasticity
CE513PE	Rock Mechanics

Professional Elective-II

CE611PE	Prestressed Concrete
CE612PE	Elements of Earth Quake Engineering
CE613PE	Advanced Structural Analysis

Professional Elective-III

CE711PE	Remote Sensing & GIS
CE712PE	Ground Improvement Techniques
CE713PE	Advanced Structural Design

Professional Elective-IV

CE721PE	Irrigation and Hydraulic Structures
CE722PE	Pipeline Engineering
CE723PE	Ground Water Hydrology

Professional Elective-V

CE811PE	Solid Waste Management
CE812PE	Environmental Impact Assessment
CE813PE	Air pollution




Professional Elective-VI

CE821PE	Airports, Railways and Waterways
CE822PE	Urban Transportation Planning
CE823PE	Finite Element Methods for Civil Engineering

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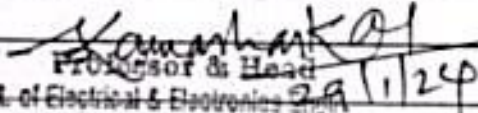
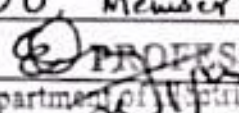
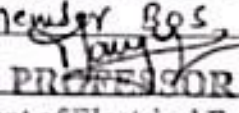
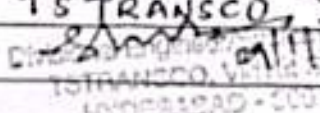
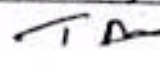
3rd Board of Studies meeting (online mode)

Date: 29/01/2024

Time: 11:00 AM

A meeting of Board of studies for EEE department was held on 29th January 2024, at 11:00 AM through online mode and the following points are suggested by Board members towards the approval of course structure and syllabus of 5th, 6th, 7th & 8th semesters R-22 regulation for the students admitted from 2022-23 Academic year onwards.

The members present:

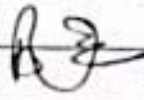
1. Dr. B. Vidyasagar Professor EEE, BOS chairman TKREC (R₂)
29/01/2024
2. Dr. K. Bhaskar Professor EEE, JNTUH, Nominee

 Professor & Head
 Dept. of Electrical & Electronics Engg
 JNTUH College of Engineering
 Kukatpally, Hyderabad-500 083.
3. Dr. E. Vidyasagar Professor EEE, OU, Member BOS

 PROFESSOR
 Department of Electrical Engineering
 University College of Engineering (A)
 Osmania University,
 Hyderabad-500 007.
4. Dr. B. Mangun Professor EEE, OU, Member BOS

 PROFESSOR
 Department of Electrical Engineering
 University College of Engineering (A)
 Osmania University,
 Hyderabad-500 007.
5. Dr. M. Sheshagiri D.E, TSTRANSCO, Industry Expert

 Director
 TSTRANSCO, Vengal Rao Circle,
 HYDERABAD - 500 052.
6. Mr. Madhukrishna.T Associate professor EEE, Member BOS TKREC


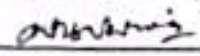



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Minutes of the meeting.

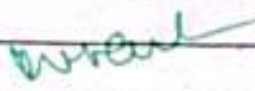
- Chairman BOS EEE has been introduced R-22 3rd & 4th year B.Tech regular to BOS members
- ⇒ Detailed course structure with credit weightage has been explained to committee members
- All committee members discussed about the new syllabus
- ⇒ Few changes only accepted by the BOS members
- ⇒ III-2 control system lab is shifted to III-1 semester & III-1 semester AECs lab is shifted to III-2 semester.
- Four mandatory courses have been included in the course structure.
- ⇒ BOS members are accepted to change professional elective subject is PCO to professional core subject.
- ⇒ Power Electronic Applications to Renewable Energy sources (PCE) subject is changed to professional elective (PE)
- ⇒ Two open elective (OE-II) & open elective III (OE-III) two subjects are allowed to interchange each other.
- ⇒ Chairman BOS has concluded the meeting with thanks to all BOS members present in the meeting.


 29/01/2024
 Chairman BOS
 (Dr. S. Vidyaashwari)


 (Secretary, BOS)
 Dr. N. Rajashekar Varma


 (Member, BOS)
 T. Madhusudhan




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I Year I Semester

S. No.	Course Code	Course Title	L	T	P	Credits
1	22MA101BS	Matrices and Calculus	3	1	0	4
2	22CH102BS	Engineering Chemistry	3	1	0	4
3	22EE103ES	C Programming and Data Structures	3	0	0	3
4	22EE105ES	Electrical Circuit Analysis - I	3	0	0	3
5	22ME105ES	Computer Aided Engineering Graphics	1	0	4	3
6	22EE106ES	Elements of Electrical and Electronics Engineering	0	0	2	1
7	22CH107BS	Engineering Chemistry Laboratory	0	0	2	1
8	22EE108ES	C Programming and Data Structures Laboratory	0	0	2	1
		Induction Program				
		Total Credits	13	2	10	20

I Year II Semester

S. No.	Course Code	Course Title	L	T	P	Credits
1	22MA201BS	Ordinary Differential Equations and Vector Calculus	3	1	0	4
2	22PH202BS	Applied Physics	3	1	0	4
3	22ME203ES	Engineering Workshop	0	1	3	2.5
4	22EN204HS	English for Skill Enhancement	2	0	0	2
5	22EE205ES	Electrical Circuit Analysis - II	2	0	0	2
6	22EE206ES	Applied Python Programming Laboratory	0	1	2	2
7	22PH207BS	Applied Physics Laboratory	0	0	3	1.5
8	22EN208HS	English Language and Communication Skills Laboratory	0	0	2	1
9	22EE209ES	Electrical Circuit Analysis Laboratory	0	0	2	1
10	22MC210	Environmental Science	3	0	0	0
		Total Credits	13	2	14	20

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	22MA301BS	Numerical Methods and Complex variables	3	1	0	4
2	22EE301PC	Electrical Machines-I	3	1	0	4
3	22EC310PC	Power System-I	3	0	0	3
4	22EE302PC	Analog Electronic Circuits	3	0	0	3
5	22EE303PC	Electro Magnetic Fields	3	0	0	3
6	22EE304PC	Electrical Machines Laboratory-I	0	0	2	1
7	22EC311PC	Analog Electronic Circuits Laboratory	0	0	2	1
8	22EE305PC	Electrical Simulation tools Laboratory	0	0	2	1
9	22MC309	Gender Sensitization Laboratory	0	0	2	0
		Total Credits	15	2	08	20

First Board of Studies meeting
(online mode)

Date : 03/07/2021,
Time : 11:00 AM

A Meeting of Board of Studies for EEE Department was held on 3rd July 2021, at 11:00 AM through online mode and the following points are suggested by the Board members towards the approval of course structure, syllabus upto 6th semester (R20) for the students admitted in 2020-21 Academic Year

The members present

1. Dr. B. Vidya Sagar Assoc. professor & Head of EEE Dept. (Chairman) 14/07/2021
2. Dr. K. Bhaskar Assoc. professor EEE JNTUH Nominee
3. Dr. E. Vidya Sagar Assoc. professor EEE Electrical & Electronics Engineering, JNTU College of Engineering, Kukatpally, Hyderabad-72.
4. Prof. B. Manjula Devi (Vice Principal) University College of Engineering, Osmania University, Hyderabad-500007
5. Dr. M. Y. S. Sheshagiri Divisional Engineer, Systems, TSTRANSCO, Vidyan Soudha, Hyderabad-500082.
6. Mr. Madhu Babu T Assoc. professor EEE, Member BOS, TKREC(R9)
7. Dr. N. Rajasekhari Varma Professor EEE Member Secretary, TKREC(R9)



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Minutes of the meeting (MOM)

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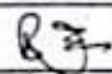
- ⇒ Member Secretary of BOS has introduced the new course structure of EEE Dept (R9) to BOS members.
- ⇒ All the BOS members have discussed and verified the total credits in the AJCTE given model curriculum.
- ⇒ It has been decided that the range could be vary from 150 credits to max 160 credits for the award of the B.Tech degree.
- ⇒ BOS members have discussed of any flexibility in AJCTE for allotting credits to subjects like HS, BS, ES, PC, PE, OE & PW.
- ⇒ One member asked to prepare the credit comparison between AJCTE & R9 college.
one member suggested to follow the guidelines of AJCTE not JNTUH.
- ⇒ BOS members were advised to conduct common board of studies of all the departments in the college.
- ⇒ As the syllabus is no change up to 6th sem the spread must take from academic council meeting.
- ⇒ One of the member has raised the question how did you reduce the subject credits in BS & OE subjects with reference to AJCTE.
- ⇒ one member raised the question how did you increase project work credits 3 to 7 in semester 7
- ⇒ One member suggested the year & semester names in the course must be in Sem-1, Sem-2, Sem 3 --- Sem-8 instead of I year I sem, I year II sem --- IV year II semester.
- ⇒ One member suggested to include Deregulated Power System subject in professional Elective instead of HVE or EHVAC.

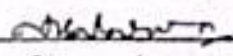



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Minutes of meeting

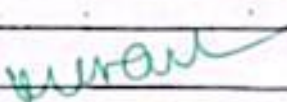
- Chairman BOS has introduced the new course structure of EEE Dept (R9) to BOS members
- All the BOS members have discussed and accepted total credits distribution in the curriculum.
- As per the guidelines of JNTUH, the course structure upto 2/2 semester has been accepted by the BOS members
- Very few changes in syllabus also approved by the BOS members
- One BOS member has raised the question, how to keep theory & practical of the same subject in one semester.
- Will it be possible to conduct theory in one semester and practical in another semester.
- Only electrical subjects have to keep in professional Electives
- One BOS member raised the question of why Electrical circuit-1 subject lab is named different title.
- One BOS member asked whether you are following syllabus as per JNTUH regular or not.
- One BOS member raised why Real time Research project title given for project work.
- Principal of the college has given the expansion for change of title is 'Elements of Electrical and Electronics Engineering Laboratory' kept in 1-semester in the course structure.
- One BOS member asked to review the 4/2 semester or VIII Sem of 2020 Regular course structure subjects.


(Chairman, BOS)
Dr. S. Vidyasagar


(Secretary, BOS)
Dr. N. Rajasekhara Varma


(Member, BOS)
T. Madhubabu




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Second Board of studies meeting

(online mode)

Date: 05-11-2022

Time: 11:30 AM

A meeting of Board of Studies for EEE department was held on 5th November 2022, @ 11:30 AM through online mode and the following points are suggested by the Board members towards the approval of course structure, syllabus of 7th & 8th Semester (R20) regulation for the students admitted from 2020-21 Academic year and also have given the approval of course structure, syllabus up to 4th Semester R22 regulation for the students admitted in 2022-23 Academic year.

The members present

1. Dr. B. Vidya Sagar / Associate professor EEE, BOS chairman TKREC (R9)
2. Dr. K. Bhaskar / Associate professor JNTUH Nominee
PROFESSOR
Department of Electrical Engineering
University College of Engineering (A)
Osmania University,
Hyderabad - 500 007
3. Dr. E. Vidya Sagar / Associate professor EEE, OU member BOS
PROFESSOR
Department of Electrical Engineering
University College of Engineering (A)
Osmania University,
Hyderabad - 500 007
4. Dr. B. Mangun / Professor EEE, Department of Electrical Engineering
PROFESSOR
Department of Electrical Engineering
University College of Engineering (A)
Osmania University,
Hyderabad - 500 007
5. Dr. M. Shekhar / D.E. TSTRANSCO, Industry Expert
6. Mr. Madhubabu / Associate professor EEE, Member BOS TKREC
7. Dr. N. Rajashankar Varma / Professor EEE, Member Secretary TKREC (R9)



Principal
Tergala Krishna Reddy Engineering College
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⇒ The member who suggested to include one new Power electronic Subject in Power Semiconductor Drives in 6th semester.

⇒ All the BOS members are discussed and suggested to change the name of Industry Oriented mini-project to Summer Internship, for this no need to give lecture hours to Summer Internship. Also suggested to provide faculty advisor for Summer Internship.

⇒ All the members in the BOS committee suggested while framing the syllabus for theory & practical Subject must include prerequisites, Course objectives, Course outcomes, if possible Co-mapping.

⇒ All the BOS members have been resolved to do the major projects in the campus under the guidance of faculty.

⇒ Member industry expert suggested and invited the students to TSTRANSCO for doing project work.

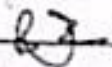
⇒ One of the member BOS has given the suggestion that for industry related subjects at least first unit must be dealt by the industry expert in association with regular faculty.

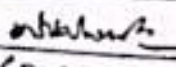
⇒ Also suggested two subjects must include in course structure from moocs and NPTEL with equivalent credits.

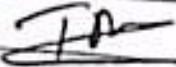
4 weeks - 1 credit

8 weeks - 2 credits

12 weeks - 3 credits.


(BOS Chairman)
Dr. B. Vidyasagar


(BOS Secretary)
Dr. N. Rajasekhar Varma


(Member BOS)



R20

I Year B.Tech. EEE - I Sem

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20MA1BS01	BS	Mathematics-I	3	1	0	4
02	20CH1BS02	BS	Chemistry	3	1	0	4
03	20EE1ES01	ES	Basic Electrical Engineering	3	0	0	3
04	20ME1ES02	ES	Engineering Workshop	1	0	3	2.5
05	20EN1HS01	HS	English	2	0	0	2
06	20CH1BS03	BS	Engineering Chemistry Lab	0	0	3	1.5
07	20EN1HS02	HS	English Language and Communication Skills Lab	0	0	2	1
08	20EE1ES03	ES	Basic Electrical Engineering Lab	0	0	1	1
09			Induction Programme				
Total				12	2	10	19

I Year B.Tech. EEE - II Sem

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20MA2BS04	BS	Mathematic-II	3	1	0	4
02	20AP2BS05	BS	Applied Physics	3	1	0	4
03	20CS2ES04	ES	Programming for Problem Solving	3	1	0	4
04	20ME2ES02	ES	Engineering Graphics	1	0	4	3
05	20AP2BS06	BS	Applied Physics Lab	0	0	3	1.5
06	20CS2ES06	ES	Programming for Problem Solving Lab	0	0	3	1.5
07	20MC2ES07	MC	Environmental Science	3	0	0	0
Total				13	3	10	18

II Year B.Tech. EEE - I Sem

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20EE3PC01	PC	Analog electronics	3	0	0	3
02	20EE3PC02	PC	Electrical circuit analysis	3	1	0	4
03	20EE3PC03	PC	Electrical machines - I	3	1	0	4
04	20EE3PC04	PC	Electromagnetic fields	3	1	0	4
05	20EE3ES08	ES	Engineering mechanics	3	0	0	3
06	20EE3PC05	PC	Analog electronics lab	0	0	2	1
07	20EE3PC06	PC	Electrical circuits lab	0	0	2	1
08	20EE3PC07	PC	Electrical machines lab-I	0	0	2	1
09	20MC3HS01	MC	Professional & Engineering Ethics	2	0	0	0
10	20MC3BS02	MC	Quantitative Analysis - I	2	0	0	0
Total				19	3	6	21

[Signature]
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III Year B.Tech. EEE - II Sem

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
1	20EE6PC01	PC	Power system operation and control	3	0	0	3
2	20EE6PC02	PC	Microprocessor and Microcontrollers	3	0	0	3
3	20EE6PC03	PC	Power system protection	3	0	0	3
4	20EE6PC04	PC	Power Semiconductor Drives	3	0	0	3
5		OE	Open Elective-I	3	0	0	3
6		PE	Professional Elective - II	3	0	0	3
7	20EE6PC05	PC	Microprocessor and Microcontrollers lab	0	0	2	1
8	20EE6PC06	PC	Power system lab	0	0	2	1
9	20EE6PC07	PC	Electrical Workshop lab	0	0	2	1
10	20EE6HS08	HS	Basic Technical Training (BTT)	3	0	0	0
Total				21	0	6	21

Professional Elective – II

S. No	Subject Code	Subject Name
1	20EE6PE21	Smart Grid Technologies
2	20EE6PE22	Renewable energy sources
3	20EE6PE23	Special Machines
4	20EE6PE24	Computer Organization

Open Elective-I

S. No	Subject Code	Subject Name
01	20EE6OE11	Renewable energy sources
02	20EE6OE12	Electrical Engineering materials

*Open Elective subjects' syllabus is provided at the end of the document.

*Open Elective – Students should take Open Electives from the List of Open Electives Offered by Other Departments/Branches Only.

Ex: - A Student of Mechanical Engineering can take Open Electives from all other departments/branches except Open Electives offered by Mechanical Engineering Dept.

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IV Year B.Tech.EEE - II Sem

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
1		OE	Open Elective-III	3	0	0	3
2		PE	Professional Elective -V	3	0	0	3
3		PE	Professional Elective -VI	3	0	0	3
4	20EE8PC01	PC	Project Stage - II	0	0	14	7
Total				9	0	14	16

Professional Elective- V

S. No	Subject Code	Subject Name
1	20EE8PE11	HVDC Transmission
2	20EE8PE12	Deregulated Power System
3	20EE8PE13	AI Techniques in Electrical Engineering
4	20EE8PE14	Signals and Systems

Professional Elective - VI

S. No	Subject Code	Subject Name
1	20EE8PE21	Advanced Electric Drives
2	20EE8PE22	Electrical Distribution Systems
3	20EE8PE23	Control Systems Design
4	20EE8PE24	Digital Signal Processing

Open Elective-III

S. No	Subject Code	Subject Name
01	20EE8OE31	Utilization of Electrical Energy
02	20EE8OE32	Energy conservation and Audit

*Open Elective subjects' syllabus is provided at the end of the document.

*Open Elective – Students should take Open Electives from the List of Open Electives Offered by Other Departments/Branches Only.

Ex: - A Student of Mechanical Engineering can take Open Electives from all other departments/branches except Open Electives offered by Mechanical Engineering Dept.

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech. in ELECTRICAL AND ELECTRONICS ENGINEERING
COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA101BS	Mathematics - I	3	1	0	4
2	CH102BS	Chemistry	3	1	0	4
3	EE103ES	Basic Electrical Engineering	3	0	0	3
4	ME105ES	Engineering Workshop	1	0	3	2.5
5	EN105HS	English	2	0	0	2
6	CH106BS	Engineering Chemistry Lab	0	0	3	1.5
7	EN107HS	English Language and Communication Skills Lab	0	0	2	1
8	EE108ES	Basic Electrical Engineering Lab	0	0	2	1
		Induction Programme				
		Total Credits	12	2	10	19

I YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA201BS	Mathematics - II	3	1	0	4
2	AP202BS	Applied Physics	3	1	0	4
3	CS203ES	Programming for Problem Solving	3	1	0	4
4	ME204ES	Engineering Graphics	1	0	4	3
5	AP205BS	Applied Physics Lab	0	0	3	1.5
6	CS206ES	Programming for Problem Solving Lab	0	0	3	1.5
7	*MC209ES	Environmental Science	3	0	0	0
		Total Credits	13	3	10	18

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	EE301ES	Engineering Mechanics	3	1	0	4
2	EE302PC	Electrical Circuit Analysis	3	1	0	4
3	EE303PC	Analog Electronics	3	0	0	3
4	EE304PC	Electrical Machines - I	3	1	0	4
5	EE305PC	Electromagnetic Fields	3	0	0	3
6	EE306PC	Electrical Machines Lab - I	0	0	2	1
7	EE307PC	Analog Electronics Lab	0	0	2	1
8	EE308PC	Electrical Circuits Lab	0	0	2	1
9	*MC309	Gender Sensitization Lab	0	0	2	0
		Total Credits	15	3	8	21

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA401BS	Laplace Transforms, Numerical Methods & Complex variables	3	1	0	4

IV YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1		Power Semiconductor Drives	3	1	0	4
2		Open Elective-II	3	0	0	3
3		Professional Elective-III	3	0	0	3
4		Professional Elective-IV	3	0	0	3
5		Fundamentals of Management for Engineers	2	0	0	2
6		Simulation of Renewable Energy Systems Laboratory	0	0	4	2
7		Project Stage - I	0	0	6	3
8	MC	Advance Technical Training (ATT)	3	0	0	0
Total Credits			17	1	10	20

IV YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1		Open Elective-III	3	0	0	3
2		Professional Elective-V	3	0	0	3
3		Professional Elective-VI	3	0	0	3
4		Project Stage - II including Seminar	0	0	22	11
Total Credits			9	0	22	20

*MC – Satisfactory/Unsatisfactory Professional

Elective - I

22EE511PE	IoT Applications in Electrical Engineering
22EE512PE	High Voltage Engineering
22EE513PE	Computer Aided Electrical Machine Design

Professional Elective - II

22EE611PE	Cyber-Physical Systems
22EE612PE	Power Electronic Applications to Renewable Energy Systems
22EE613PE	Wind and Solar Energy systems

Professional Elective-III

	Mobile Application Development
	Signals and Systems
	Electric and Hybrid Vehicles

Professional Elective-IV

	HVDC Transmission
	Power System Reliability
	Embedded Systems Applications

Professional Elective-V

	Power Quality & FACTS
	Solar Power Batteries
	AI Techniques in Electrical Engineering

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3rd BOARD OF STUDIES MEETING (CONUNE)

A meeting of Board of studies for Electronics and Communication Engineering Department was held on 3rd November 2022 at 4:00 pm through online mode to approve the Course structure and Syllabus upto IVth semester for the students admitted in 2022-23 Academic year onwards.

Members Present

1. Dr. S. K. Umar Parva Prof. A Head
Chairman BOS *[Signature]*
TKREC 3/11/22
2. Dr. M. Madhavi Latha Professor
Director Academic *[Signature]*
Planning PROFESSOR
TKREC Director Academic
TKREC
3. Dr. B. Rajendra Naik Professor
University *[Signature]*
Osmania Director
University of Engineering
Hyderabad-500
4. Dr. D. Krishna Reddy Prof. & Head
CBET, member *[Signature]*
expert
5. P. Sampath Kumar Scientist (E) *[Signature]*
P. SAMPATH KUMAR
ECE
6. Dr. PadmaJa Professor
TKREC *[Signature]*
BOS - Secretary
7. Dr. C. Annapalagan Professor
TKREC *[Signature]*
member
8. Dr. K. V. Murali Mohan Professor &
Principal *[Signature]*
Dept of ECE
TKREC, member expert



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1. Dr. H. Madhuri Latha madam suggested

1. To incorporate Artificial Intelligence and machine learning Subjects as Professional Electives.
2. To include the Computer based/related Subjects in open Electives
3. To introduce the Computer Organization and Operating Systems

2. Dr. B. Rajendra Raik SIV suggested

1. To include more Communication related Subjects
2. To include Radar systems as Professional Elective - IV

3. Dr. D Krishna Reddy sir suggested to

1. To increase the Professional Electives in each Sem from three to four to give more options to the students.
2. To include the Antenna Based simulation Laboratory.

Recommendations for Re-admission students:-

Also substitute Subjects are recommended if any candidate is re-admitted in 7th year B.Tech program or in the same Regulation of any year.

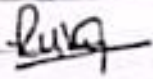
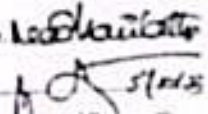
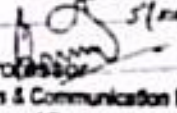
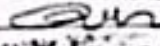
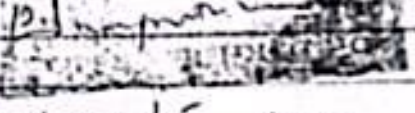
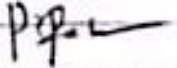
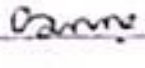
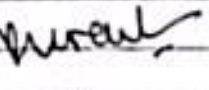
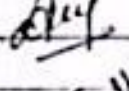
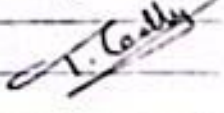
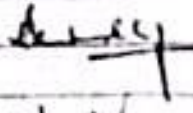
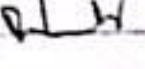

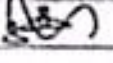


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4th BOARD OF STUDIES MEETING

The Board of Studies Meeting - for
Electronics and Communication Engineering Department
is Conducted on 05-10-2023 at 3:00pm through online

The Following BOS members attended the meeting

1. Dr. SK. UMAR FARUK | Chairman-BOS 
2. Dr. M. MADHAVI LATHA | Sr. Professor of ECE, M. K. Reddy Institute of Technology & Sciences, JNTU H. Abhimata 
3. Dr. B. RAJENDRA NAIK | Professor of ECE, Professor, Osmania Dept. of Electronics & Communication Engg, Utk. College of Engineering, Osmania University, Hyderabad-500 007 
4. Dr. D. KRISHNA REDDY | Scientist E, RCI 
5. Mr. P. SAMPATH KUMAR | P. Sampath Kumar 
6. Dr. P. PADMAJA | member secretary, Prof. TKREC 
7. Dr. C. ANNADALAGAN | Prof. of ECE, TKREC 
8. Dr. K.V. MURALI MOHAN | member, Prof. of ECE, TKREC 
9. Dr. D. VEMANA CHARY | Assoc. Prof, TKREC 
10. Dr. E. RADHAMA | Member 
11. Dr. S. NAGI REDDY | member, TKREC 
12. Dr. R. SHANKAR | " 
13. Dr. G.C.K. REDDY | " 
14. Dr. G. SIREESHA. | " 



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At the outset Dr. Sr. Umar Faruk, Head, Department of Electronics & Communication Engineering and chairman of the board of studies welcomed the members of BOS and appraised the purpose of the meeting. He also briefed about the previous BOS meeting, existing TKREC-R20 and TKREC-R22 regulations and credit gap between the R20 and R22 regulations.

Board of Studies members reviewed the proposed agenda and the following items have been resolved unanimously by all the members of BOS -

Resolution - approved by the BOS members.

1. Approved to offer the following subjects in 3rd semester (II yr - I sem) for the students readmitted in TKREC-R22 regulations from TKREC-R20 regulations to balance the credit gap (3-credits) between both the regulations.

S.NO	Subject Code	Subject Name	L	T	P	Credits
1.	22EC20SES	Electronic Devices and Circuit	2	0	0	2
2.	22EC20RES	Electronic Devices and Circuits Laboratory	0	0	2	2

2. No substitute subjects are offered in third semester (II yr - I sem) for students transferred from TKREC-R20 to TKREC-R22 regulations as there is no repetition of subjects in



3. No substitute subjects are offered for the students transitioned from JNTUHR Regulation to JKRRC-R20 regulations as both the regulations are same.

4. Recommended to conduct more certificate courses instead of value added courses.

5. Recommended to conduct more technical workshops and seminars.

H. Venkatesh Babu
5/10/23

Ravi
5/10/23

Professor
Dept. of Electronics & Communication Engg.
Univ. College of Engineering
Osmania University, Hyderabad-500 007.

W. Venkatesh
5/10/23

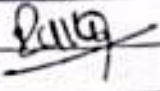
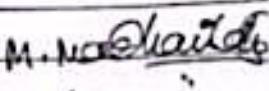
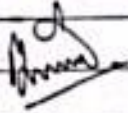

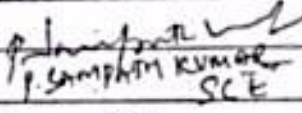
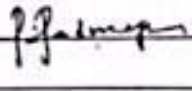
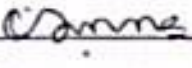
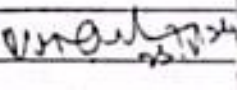

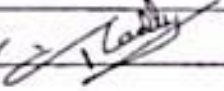
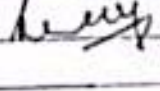
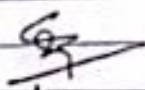
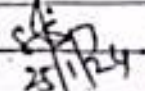
Professor & HOD / CBIT

Principal
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5th BOARD OF STUDIES MEETING

The Board of Studies meeting (BOS) for Electronics and Communication Engineering Department is conducted on 25/01/2024 at 10:30 AM through online mode to approve the course structure and syllabus for 2nd and 4th year for the students admitted in 2022 onwards.

The following BOS members attended the meeting.

- | | | |
|-------------------------|-------------------------------------|---|
| 1. Dr. S.K. Umar Faruk | Chairman - BOS |  |
| 2. Dr. M. Madhavi Latha | Sr Professor of ECE
JNTUH-Norina |  |
| 3. Dr. B. Rajendra Naik | Professor of ECE
Aronia Univ |  |
| 4. Dr. D. Krishna Reddy | Professor of ECE
CBIT |  |
| 5. Mr. P. Sampath Kumar | Scientist - E
RCI - HYD |  |
| 6. Dr. P. Padmaja | Member Secretary
Avt of ECE |  |
| 7. Dr. C. Annapalagan | Prof of ECE
TKREC |  |
| 8. Dr. K.V. Muralimohan | Professor & principal
TKREC |  |
| 9. Dr. D. Venkata chary | Assoc. Professor
TKREC |  |
| 10. Dr. E. Radhamma | Assoc. Professor
TKREC |  |
| 11. Dr. R. Shankar | Professor
TKREC | |
| 12. Dr. S. Nasiruddey | Assoc. Professor
TKREC |  |
| 13. Dr. G.C.K. Reddy | Assoc. Professor
TKREC |  |
| 14. Dr. G. Sireesha | Assoc. Prof
TKREC |  |



Principal
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Meeting minutes

At the outset Dr. Sr. Umme Faruk, Head, Department of Electronics and Communication Engineering and chairman of Board of studies welcomed all the members of BOS appraised the purpose of meeting. He also briefed the about the previous BOS meeting existing R20^{and} R22^{Regulations} and also presented the proposed draft copy of the R22 regulation Course Structure and Syllabus for 3rd and 4th year for approval.

- Board of Studies members reviewed the thoroughly (R22 - course structure & syllabus) unanimously recommended the following.

1. members recommended to incorporate object oriented programming as a open Elective under the Rule of 4.9 of R22 regulations.
2. Members recommended to discard the Quantitative aptitude and reasoning proposed by the chairman.
3. Committee members recommended to introduce coding features as a Professional Elective.
4. Committee members suggested to define 5 CO's for each Theoretical Subject.
5. members recommended to incorporate Discrete Image Processing in Fourth Year instead of Third Year as a Professional Elective.



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- 6. Committee members is recommended to incorporate ~~Artificial~~ Artificial Intelligence as a Professional Elective
- 7. Members suggested to incorporate additional labs in Scripting Languages Lab in final year first semester.

Ravi
HOD ECE
Teegala Krishna Reddy Engineering College
Medbowli, Meerpet, Hyderabad-57



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TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC - AUTONOMOUS)


B.Tech. in ELECTRONICS AND COMMUNICATION ENGINEERING
COURSE STRUCTURE, I & II YEAR SYLLABUS (R22 Regulations)
Applicable from AY 2022-23 Batch

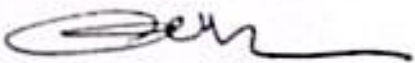
I Year I Semester

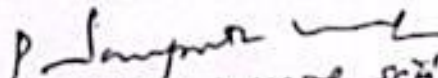
S. No.	Course Code	Course Title	L	T	P	Credits
1.	MA101BS	Matrices and Calculus	3	1	0	4
2.	PH102BS	Applied Physics	3	1	0	4
3.	EC103ES	C Programming for Engineers	3	0	0	3
4.	ME104ES	Engineering Workshop	0	1	3	2.5
5.	EN105HS	English for Skill Enhancement	2	0	0	2
6.	EC106ES	Elements of Electronics and Communication Engineering	0	0	2	1
7.	PH107BS	Applied Physics Laboratory	0	0	3	1.5
8.	EC108ES	C Programming for Engineers Laboratory	0	0	2	1
9.	EN109HS	English Language and Communication Skills Laboratory	0	0	2	1
		Induction Programme				
Total			14	3	12	20

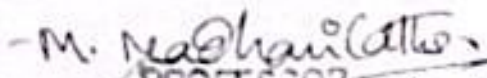
I Year II Semester

S. No.	Course Code	Course Title	L	T	P	Credits
1.	MA201BS	Ordinary Differential Equations and Vector Calculus	3	1	0	4
2.	CH202BS	Engineering Chemistry	3	1	0	4
3.	ME203ES	Computer Aided Engineering Graphics	1	0	4	3
4.	EE204ES	Basic Electrical Engineering	2	0	0	2
5.	EC205ES	Electronic Devices and Circuits	2	0	0	2
6.	EC206ES	Applied Python Programming Laboratory	0	1	2	2
7.	CH207BS	Engineering Chemistry Laboratory	0	0	2	1
8.	EE208ES	Basic Electrical Engineering Laboratory	0	0	2	1
9.	EC209ES	Electronic Devices and Circuits Laboratory	0	0	2	1
Total			11	3	12	20


Dr. B. RAJENDRA NAIK
Professor
Dept. of Electronics & Communication Engg.
University College of Engineering
Osmania University, Hyderabad-502 007


(Dr. D. Krishna Reddy)


P. Sampath Kumar
(P. SAMPATH KUMAR SCB)
TOD, ENTUST, RCL
MOD. GOVT. OR INDEA)


M. Madhavi Latha
PROFESSOR
Department of ECE
R22
03/11/22
R22U College of Engineering
(Dr. M. MADHAVI LATHA)



II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1		Numerical Methods and Complex Variables	3	1	0	4
2		Analog Circuits	3	0	0	3
3		Network analysis and Synthesis	3	0	0	3
4		Digital Logic Design	3	0	0	3
5		Signals and Systems	3	1	0	4
6		Analog Circuits Laboratory	0	0	2	1
7		Digital logic Design Laboratory	0	0	2	1
8		Basic Simulation Laboratory	0	0	2	1
9	*MC	Constitution of India	3	0	0	0
		Total Credits	18	2	6	20

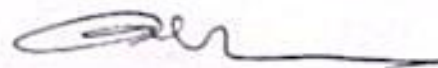
II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1		Probability Theory and Stochastic Processes	3	0	0	3
2		Electromagnetic Fields and Transmission Lines	3	0	0	3
3		Analog and Digital Communications	3	0	0	3
4		Linear and Digital IC Applications	3	0	0	3
5		Electronic Circuit Analysis	3	0	0	3
6		Analog and Digital Communications Laboratory	0	0	2	1
7		Linear and Digital IC Applications Laboratory	0	0	2	1
8		Electronic Circuit Analysis Laboratory	0	0	2	1
9		Real Time Project/ Field Based Project	0	0	4	2
10	*MC	Gender Sensitization Lab	0	0	2	0
		Total Credits	15	0	12	20

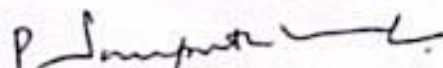


Dr. B. RAJENDRA NAIK
Professor

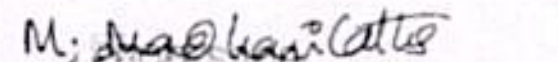
Dept. of Electronics & Communication Engg.
University College of Engineering
Osmania University, Hyderabad



(Dr. D. Krishna Reddy)



(P. SAMPATH KUMAR)
SCB



M. Madhavi Latha
Department of ECE
JNTU College of Engineering
03/11/22
(DR. M. MADHAVI LATHA)

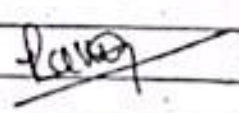
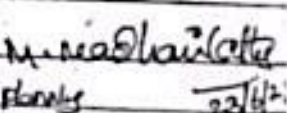
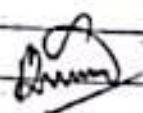
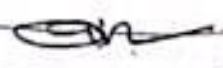
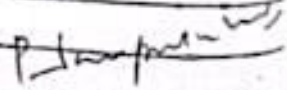
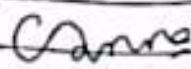

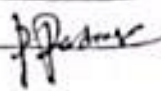


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Medbowli, Meerpet, Hyderabad - 97.

1st - BOARD OF STUDIES MEETING (ONLINE)

A Meeting of Board of studies for Electronics and Communication Engineering Department was held on 23rd June 2021 at 10:30 AM through online mode and the following points were suggested by the Board members towards the approval of B.Tech (UG) Course Structure and the Syllabus upto 4th Semester for the students admitted in 2020-21 Academic year.

Members Present

1. Dr. S.K. Umar Parth Prof. & Head
Chairman-BOS
TKREC (RA) 
2. Dr. M. Madhavi Latha Professor
Director - Academic Studies
JADUH - Nominia 
3. Dr. B. Rajendra Naik Prof. & Head
University College, OSM
Member - Expert 
4. Dr. D. Krishna Reddy Professor
CBIT, Hyd
Member - Expert 
5. P. Sampath Kumar Scientist (E)
RAI, Hyd
Industry Representation 
6. Dr. C. Annapalagan Professor
TKREC (RG) 
7. Dr. D. Venkateshwarlu Professor, TKREC 
8. Dr. P. Padma Rao Professor, TKREC
Member Secretary 



9. Dr. K. Venkata Murali Mohan

Professor, ECE Department
TKREC.

1. Dr. M. Madhavi Latha Madam Suggested

i. To Incorporate Bio-Medical Electronics in Professional Elective-IV

2. To Rename Electronic Circuit Analysis as Analog Pulse Circuits with certain modifications in Syllabus

3. To Introduce Antenna and Simulation Lab to Enhance the Scope in related Domain

4. To Design Microwave Engineering as a Separate Course

5. To Rename Digital Logic Design as Switching Theory and Logic Design

6. To incorporate ^{more} Communication related subjects to fulfil the flavor of Communication Branch

7.

2. Dr. B. Rajendra Lakshmi SIV Suggested

1. To include Global Positioning System in V/VIth Semester

2. To incorporate Speech processing in Course in Professional Elective

3. To Rename Chemistry as Engg Chemistry



3. Dr. D. Krishna Reddy sir Suggested

1. To introduce mandatory Course so as to promote industry requirements
2. To include ~~the~~ Courses such as Analytical and logical Thinking
3. Courses on Design Thinking, Quantum Computing, Drone and its applications, pattern recognition, ~~Sp. Outlined Radio~~, Industry expo also be planned to include as Elective.

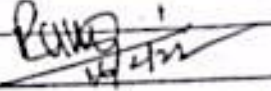
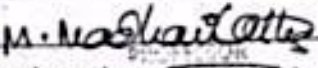
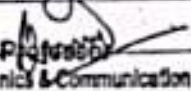
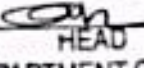
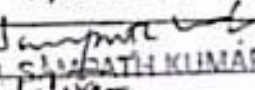
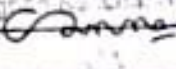
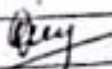
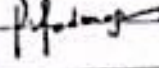
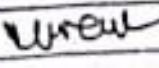
4. Mr. P. Sampath Kumar sir Suggested

1. To incorporate more simulation based Laboratories
2. To introduce industry oriented internship in the End of Fourth Semester



2nd Board of Studies Meeting (ONLINE)

Board of studies meeting of the Department of Electronics and Communication Engineering was conducted on 16/02/22 at 3:00 PM through online mode and suggested by the members - Key Points towards the approval of B.Tech course structure and Syllabus (upto 8th sem) - for the students admitted in 2020-21 Academic Year.

1. Dr. SK. Umar Farooq - Prof & Head
Chairman - EES 
2. Dr. M. Madhavi Lalitha - Professor
Director of Academic & Planning
JNTUH - Alwarthi 
3. Dr. B. Rajendra Naik - Professor
University of Hyderabad
member - e-Paradise University, Hyderabad-500 007. 
4. Dr. D. Krishna Reddy - Professor & Head
CBIT, Hyd
member - expert
DEPARTMENT OF ECE
Jawahar Bharathi Institute of Tech,
Hyderabad-500 075 
5. Mr. P. Sampath Kumar - Scientist (E)
RCI, Hyd
Industry Representative
P. SAMPATH KUMAR 
6. Dr. C. Anna Palagan - Professor
TKREC (E) 
7. Dr. D. Venana Chary - Professor
TKREC (RA) 
8. Dr. P. Padmaja - Professor
Member Secretary 
9. Dr. K. Venkata muali Holan - Professor 



Principal
Teegala Krishna Reddy Engineering College
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Medbowli, Meerpet, Hyderabad - 97.

Dr. M. madhavi Lalla madam Suggested

1. To Incorporate Computer Networks and its associated Lab in 5th sem
2. To incorporate Advanced Programming Languages like Python Programming as Lab/practical
3. To include the Electronic measurements and Instrumentation as professional Elective
4. To incorporate Data Analytics as professional Elective

Dr. D. Krishna Reddy sir Suggested To

1. To Incorporate industry oriented subjects like IoT and its applications, Radio Frequency Circuits.
2. To incorporate Artificial Intelligence as professional Elective.

Dr. P. Sampath -Kumar Suggested

1. To introduce Comprehensive Test to assess the students at the end of the programme.

Dr. B. Rajendra Naik sir

1. Suggested to introduce Radar system as PE

Recommendations for Re-admission Students :-

- No substitute subjects are recommended if any candidate takes re-admission into R20 (Autonomous) from R1E (JNTU) in B.Tech II-2 from B.Tech II-1, II-2, III-1, III-2, IV-1 & IV-2.



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
(UGC-Autonomous)

Approved by AICTE, Affiliated to JNTUH, Accredited by NAAC-'A' Grade

COURSE STRUCTURE (2020-21)

I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	20MA1BS01	Mathematics-I	3	1	0	4
2	20CS1ES01	Programming For Problem Solving	3	1	0	4
3	20ME1ES02	Engineering Graphics	1	0	4	3
4	20AP1BS02	Applied Physics	3	1	0	4
5	20CS1ES03	Programming For Problem Solving Lab	0	0	3	1.5
6	20AP1BS03	Applied Physics Lab	0	0	3	1.5
7	20MC1ES04	Environmental Science	3	0	0	0
		Total Credits	13	3	10	18

II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	20MA2BS04	Mathematics-II	3	1	0	4
2	20CH2BS05	Chemistry	3	1	0	4
3	20EE2ES05	Basic Electrical Engineering	3	0	0	3
4	20EN2HS01	English	2	0	0	2
5	20ME2ES06	Engineering Workshop	1	0	3	2.5
6	20CH2BS06	Engineering Chemistry Lab	0	0	3	1.5
7	20EN2HS02	English Language And Communication skills Lab	0	0	2	1
8	20EE2ES07	Basic Electrical Engineering Lab	0	0	2	1
		Total Credits	12	2	10	19

P. Jayaram
P. SAMBATH KUMAR
Sci. E
RCI
Vidya
Ministry of Defence
Hyderabad.

Dr. D. Krishna Reddy
Dr. D. Krishna Reddy
Prof & Head
CBIT, HYD

M. Madhavi Latha
PROFESSOR
Dept of Electronics & Communication Engg.
JNTUH
JNTUH-Nominating

Dr. Jayaram
Professor
Dept. of Electronics & Communication Engg.
Univ. College of Engineering
Osmania University, Hyderabad-500 007.



TKREC-UG-Autonomous-Regulations-R-20

K. Venkatesh
PRINCIPAL
Teegala Krishna Reddy Engineering College
(UGC-AUTONOMOUS)
Medbowli, Meerpet, Hyderabad - 97.

TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
(UGC-Autonomous)

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III SEMESTER

S. No.	CourseCode	CourseTitle	L	T	P	Credits
1	20EC3PC01	Electronic Devices And Circuits	3	1	0	4
2	20EC3PC02	Network Analysis and Transmission Lines	3	0	0	3
3	20EC3PC03	Switching Theory and Logic Design	3	1	0	4
4	20EC3PC04	Signals and Systems	3	1	0	4
5	20EC3ES08	Probability Theory and Stochastic Processes	3	0	0	3
6	20EC3PC05	Electronic Devices and Circuits Lab	0	0	2	1
7	20 EC3PC06	Switching Theory and Logic Design Lab	0	0	2	1
8	20EC3ES09	Basic simulation lab	0	0	2	1
9	20MC3HS01	Professional and Engineering Ethics	3	0	0	0
10	20MC3BS02	Quantitative analysis	3	0	0	0
		Total Credits	21	3	6	21

IV SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	20EC4PC07	Analog and Digital Communications	3	1	0	4
2	20EC4PC08	Electromagnetic Fields And Waves	3	0	0	3
3	20EC4PC09	Analog and Pulse Circuits	3	0	0	3
4	20MA4BS07	Numerical Methods & Complex Variables	3	1	0	3
5	20EC4PC10	Linear IC Applications	3	0	0	3
6	20EC4PC11	Analog And Digital Communications Lab	0	0	3	1.5
7	20EC4PC12	Analog and Pulse Circuits Lab	0	0	3	1.5
8	20EC4PC13	IC Applications Lab	0	0	2	1
9	20MC4HS03	Gender Sensitization Lab	3	0	0	0
10	20MC4HS04	Logical Reasoning	3	0	0	0
		Total Credits	21	2	8	20

P. Sampath Kumar
P. SAMPATH KUMAR
Scientist-E
R&I DRDO, Ministry of Defence
Moghan Karicla, Hyderabad

Dr. D. Krishna Reddy
Dr. D. Krishna Reddy
Prof & Head
CBIT, TMD

M. Madhavi Latha
M. Madhavi Latha
PROFESSOR

Dept of Electronics & Communication Engg.
JNTU College of Engineering Hyderabad - 500027

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Professor
Dept of Electronics & Communication Engg.
Univ. College of Engineering
Osmania University, Hyderabad-500 007.

V SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	20SM5MS01	Business Economics & Financial Analysis	3	0	0	3
2	20EC5PC14	Antenna and Wave Propagation	3	1	0	4
3	20EC5PC15	Computer Networks	3	0	0	3
4	20EC5PC16	Microprocessors & Microcontrollers	3	1	0	4
5		Professional Elective - I	3	0	0	3
6	20EC5PC17	Computer Networks Lab	0	0	2	1
7	20EC5PC18	Microprocessors & Microcontrollers Lab	0	0	3	1.5
8	20EN5HS05	Advanced Communication Skills Lab	0	0	2	1
9	20MC5HS06	Intellectual Property Rights	3	0	0	0
10	20MC5HS07	Personality Development and Soft Skills	2	0	0	0
11	20EC5PW01	Summer Internship	0	0	0	1
		Total Credits	20	2	8	21.5

VI SEMESTER

S. No.	CourseCode	Course Title	L	T	P	Credits
1	20EC6PC19	Control Systems	3	1	0	4
2	20EC6PC20	Digital Signal Processing	3	1	0	4
3	20EC6PC21	VLSI Design	3	1	0	4
4		Professional Elective - II	3	0	0	3
5		Open Elective - I	3	0	0	3
6	20EC6PC22	Digital Signal Processing Lab	0	0	3	1.5
7	20EC6PC23	e-CAD Lab	0	0	3	1.5
8	20EC6PC24	Python programming Lab	0	0	3	1.5
9	20MC6HS08	Basic Technical Training	3	0	0	0
		Total Credits	18	3	8	22.5

P Sampath Kumar
P SAMPATH KUMAR
 Scientist - E
 IIT Hyderabad
 Hyderabad

Dr. D. Krishna Reddy
Dr. D. Krishna Reddy
 Prof & Head
 CBIT, HYD

M. Neelakrishna

PROFESSOR
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Dr. S. Aruna

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VII SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	20EC7PC25	Microwave Engineering	3	0	0	3
2		Professional Elective - III	3	0	0	3
3		Professional Elective - IV	3	0	0	3
4		Open Elective - II	3	0	0	3
5	20SM7MS02	Fundamentals Of Management For Engineers	2	0	0	2
6	20EC7PC26	Microwave Engineering Lab	0	0	2	1
7	20EC7PW02	Industrial Oriented Mini Project/ Summer Internship	0	0	0	2
8	20EC7PC27	Comprehensive Exam	0	0	0	1
9	20EC7PC28	Seminar	0	0	2	1
10	20EC8PW03	Project Stage - I	0	0	6	3
		Total Credits	14	0	10	22

VIII SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1		Professional Elective - V	3	0	0	3
2		Professional Elective - VI	3	0	0	3
3		Open Elective - III	3	0	0	3
4	20EC8PW04	Project Stage - II	0	0	14	7
		Total Credits	9	0	14	16

P. Jayaprakash
 P. Jayaprakash
 Scientist
 RCH-DVNO
 Vengal Rao Nagar, Hyderabad.

Dr. D. Krishna Reddy
 Dr. D. Krishna Reddy
 Prof & Head
 CBIT, HED

M. Madhavi Latha

PROFESSOR
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Dr. Aruna

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Professional Elective - I

S. No	Subject Code	Subject Name
01	20EC5PE11	Computer Organization & Operating Systems
02	20EC5PE12	Electronic Measurements and Instrumentation
03	20EC5PE13	Data Analytics

Professional Elective - II

S. No	Subject Code	Subject Name
01	20EC6PE21	Cellular and Mobile Communications
02	20EC6PE22	Embedded System Design
03	20EC6PE23	Information Theory and Coding

Professional Elective - III

S. No	Subject Code	Subject Name
01	20EC7PE31	Digital Image Processing
02	20EC7PE32	Wireless Sensor Networks
03	20EC7PE33	Neural Networks & Applications

Professional Elective - IV

S. No	Subject Code	Subject Name
01	20EC7PE41	Satellite Communications
02	20EC7PE42	Speech Processing
03	20EC7PE43	Bio-Medical Electronics

Professional Elective - V

S. No	Subject Code	Subject Name
01	20EC8PE51	IoT and its Applications
02	20EC8PE52	Network Security and Cryptography
03	20EC8PE53	Radar Systems

Professional Elective - VI

S. No	Subject Code	Subject Name
01	20EC8PE61	Optical Communications
02	20EC8PE62	Artificial Intelligence
03	20EC8PE63	Global Positioning System

R. Sampath Kumar

R. Sampath Kumar
 E
 Head of Department

Dr. D. Krishna Reddy
 Prof & Head
 CBIT, HCU

M. Madhukatta

PROFESSOR

Dept. of Electronics & Communication Engg.
 Anna University, Chennai

[Signature]

Professor

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 Univ. College of Engineering
 Osmania University, Hyderabad-500 007



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Open Elective - I

20EC6OE11	Principles of Electronic Communications
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Open Elective - II

20EC7OE21	Fundamentals of Signal Processing
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Open Elective - III

20EC8OE31	Electronic Measuring Instruments
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M. Madhavilathas

PROFESSOR

Dept. of Electronics & Communication Engg.
Osmania University, Hyderabad-500 007

JNTUH-Nominee

Dr. D. Krishna Reddy
Prof. & Head
CBIT, THD

P. Sampath Kumar
P. SAMPATH KUMAR
Scientist - E
RCI-DADS, Ministry of Defence
Vignana Manjula, Hyderabad.

A. Anand

Professor

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K. V. Rao
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Medbowli, Meerpet, Hyderabad - 97.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech. in ELECTRONICS AND COMMUNICATION ENGINEERING
COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA101BS	Mathematics - I	3	1	0	4
2	AP102BS	Applied Physics	3	1	0	4
3	CS103ES	Programming for Problem Solving	3	1	0	4
4	ME104ES	Engineering Graphics	1	0	4	3
5	AP105BS	Applied Physics Lab	0	0	3	1.5
6	CS106ES	Programming for Problem Solving Lab	0	0	3	1.5
7	*MC109ES	Environmental Science	3	0	0	0
		Induction Programme				
		Total Credits	13	3	10	18

I YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA201BS	Mathematics - II	3	1	0	4
2	CH202BS	Chemistry	3	1	0	4
3	EE203ES	Basic Electrical Engineering	3	0	0	3
4	ME205ES	Engineering Workshop	1	0	3	2.5
5	EN205HS	English	2	0	0	2
6	CH206BS	Engineering Chemistry Lab	0	0	3	1.5
7	EN207HS	English Language and Communication Skills Lab	0	0	2	1
8	EE208ES	Basic Electrical Engineering Lab	0	0	2	1
		Total Credits	12	2	10	19

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	EC301PC	Electronic Devices and Circuits	3	1	0	4
2	EC302PC	Network Analysis and Transmission Lines	3	0	0	3
3	EC303PC	Digital System Design	3	1	0	4
4	EC304PC	Signals and Systems	3	1	0	4
5	EC305ES	Probability Theory and Stochastic Processes	3	0	0	3
6	EC306PC	Electronic Devices and Circuits Lab	0	0	2	1
7	EC307PC	Digital System Design Lab	0	0	2	1
8	EC308ES	Basic Simulation Lab	0	0	2	1
9	*MC309	Constitution of India	3	0	0	0
		Total Credits	18	3	6	21

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA401BS	Laplace Transforms, Numerical Methods & Complex Variables	3	1	0	4
2	EC402PC	Electromagnetic Fields and Waves	3	0	0	3



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3	EC403PC	Analog and Digital Communications	3	1	0	4
4	EC404PC	Linear IC Applications	3	0	0	3
5	EC405PC	Electronic Circuit Analysis	3	0	0	3
6	EC406PC	Analog and Digital Communications Lab	0	0	3	1.5
7	EC407PC	IC Applications Lab	0	0	3	1.5
8	EC408PC	Electronic Circuit Analysis Lab	0	0	2	1
9	*MC409	Gender Sensitization Lab	0	0	2	0
		Total Credits	15	2	10	21

III YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	EC501PC	Microprocessors & Microcontrollers	3	1	0	4
2	EC502PC	Data Communications and Networks	3	1	0	4
3	EC503PC	Control Systems	3	1	0	4
4	SM504MS	Business Economics & Financial Analysis	3	0	0	3
5		Professional Elective - I	3	0	0	3
6	EC505PC	Microprocessors & Microcontrollers Lab	0	0	3	1.5
7	EC506PC	Data Communications and Networks Lab	0	0	3	1.5
8	EN508HS	Advanced Communication Skills Lab	0	0	2	1
9	*MC510	Intellectual Property Rights	3	0	0	0
		Total Credits	18	3	8	22

III YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	EC601PC	Antennas and Propagation	3	1	0	4
2	EC602PC	Digital Signal Processing	3	1	0	4
3	EC603PC	VLSI Design	3	1	0	4
4		Professional Elective - II	3	0	0	3
5		Open Elective - I	3	0	0	3
6	EC604PC	Digital Signal Processing Lab	0	0	3	1.5
7	EC605PC	e - CAD Lab	0	0	3	1.5
8	EC606PC	Scripting Languages Lab	0	0	2	1
9	*MC609	Environmental Science	3	0	0	0
		Total Credits	18	3	8	22

IV YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	EC701PC	Microwave and Optical Communications	3	0	0	3
2		Professional Elective - III	3	0	0	3
3		Professional Elective - IV	3	0	0	3
4		Open Elective - II	3	0	0	3
5	SM702MS	Professional Practice, Law & Ethics	2	0	0	2
6	EC703PC	Microwave and Optical Communications Lab	0	0	2	1
7	EC704PC	Industrial Oriented Mini Project/ Summer Internship	0	0	0	2*
8	EC705PC	Seminar	0	0	2	1
9	EC706PC	Project Stage - I	0	0	6	3
		Total Credits	14	0	10	21



IV YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1		Professional Elective – V	3	0	0	3
2		Professional Elective – VI	3	0	0	3
3		Open Elective - III	3	0	0	3
4	EC801PC	Project Stage - II	0	0	14	7
		Total Credits	9	0	14	16

*MC - Environmental Science – Should be Registered by Lateral Entry Students Only.

*MC – Satisfactory/Unsatisfactory

Note: Industrial Oriented Mini Project/ Summer Internship is to be carried out during the summer vacation between 6th and 7th semesters. Students should submit report of Industrial Oriented Mini Project/ Summer Internship for evaluation.

Professional Elective – I

EC511PE	Computer Organization & Operating Systems
EC512PE	Error Correcting Codes
EC513PE	Electronic Measurements and Instrumentation

Professional Elective – II

EC611PE	Object Oriented Programming through Java
EC612PE	Mobile Communications and Networks
EC613PE	Embedded System Design

Professional Elective – III

EC711PE	Artificial Neural Networks
EC712PE	Scripting Languages
EC713PE	Digital Image Processing

Professional Elective – IV

EC721PE	Biomedical Instrumentation
EC722PE	Database Management Systems
EC723PE	Network Security and Cryptography

Professional Elective – V

EC811PE	Satellite Communications
EC812PE	Radar Systems
EC813PE	Wireless Sensor Networks

Professional Elective – VI

EC821PE	System on Chip Architecture
EC822PE	Test and Testability
EC823PE	Low Power VLSI Design



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3rd Board of Studies Meeting

- A meeting of Board of Studies for CSE department was held on 03 November 2022 through online mode by the following members for the approval of course structure and syllabus of P22 Regulation.
- As per the Regulation (P22) given by JNTUH, Teegala Krishna Reddy Engineering College (F9) of CSE department is following the same course structure.
- As per the Regulation (P22) given by JNTUH, we are following the same syllabus upto 2nd Year II semester of all courses.
- As per the Regulation (P22) given by JNTUH, we are following the same syllabus for 1st Year ECE, EEE & CIVIL. i.e.
 - ECE (1-1) - C Programming for Engineering.
(1-2) - Applied Python Programming Laboratory.
 - EEE (1-1) - C Programming and Data Structures
(1-2) - Applied Python Programming
 - CIVIL (1-1) - C Programming and Data Structures
(1-2) - Python Programming Laboratory.
- Due to deficiency of one credit in 2nd Semester AI lab has been introduced by JNTUH.

(Industry expert)
P. Madhu Kumar

Dr. D. Vasanth
Professor - CSE
JNTUH Nuzvid

Dr. E. Suresh Babu
Department of Computer Science & Engineering
National Institute of Technology

Dr. H. S. R. Reddy
Department of Computer Science & Engineering
National Institute of Technology

1. Dr. Ch. V. Phani Krishna

Prof & Head
CSC department
Pos. Chairman
TKREC (P.T.)

2. Dr. K. Bhargavi

Prof - CSC dept
Cos. Member
TKREC (P.T.)

3. PV Rama Gopal Rao

Asst. Prof. CSC
Cos. Member
TKREC (P.T.)

4. G. Sutha

Asst. Professor
Cos. Member
TKREC (P.T.)


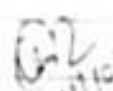
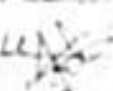



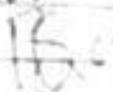


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14 Minutes of the Board of Studies
Meeting - 14th dated on 11-10-2015

The Board of Studies for CSE department of
Teejaga Krishna Reddy Engineering College
conferred a meeting on 11-10-2015

Present Members

1. Dr. Ch. V. Phani Krishna  Professor & Head of CSE
Chairman - BOS, TKRECET
2. Dr. D. Vasumathi  Professor, HOD - CSE
Director of University Foreign Dept.
JNTUHI - Nominee
3. Dr. E. G. Swish Babu  Asst Prof NII - Wasungul
Member
4. Dr. B. Sujatha  Asst Prof OU - COE
Member
5. P. Madhu Kumar Reddy  Associate Director - Nexas
Industry Expert
6. Dr. B. Srinivas Rao  Professor & Dean - Academic
Member
7. Dr. K. Bhargavi  Asst. Professor, R9-Bos
Member secretary.

The agenda points and resolutions are
as follows :-

Agenda:

- IV.1. Additional or substitute subjects for readmitted students in I B Tech, I Semester under TKREC R22 Regulations.
- IV.2. Additional or substitute subjects for readmitted students in I B Tech II Semester from TKREC R20 Regulations to TKREC R22 Regulations
- IV.3. Additional subjects for II B Tech I Semester Students from TKREC R20 Regulations to TKREC R22 Regulations
- IV.4. Additional or substitute subjects for II B Tech II Semester Students from TKREC R20 Regulations to TKREC R22 Regulations
- IV.5 Additional or substitute subjects for IV B Tech I Semester students from JNTU R18 regulations to TKREC R20 Regulations
- IV.6. Readmission for Students admitted to the same regulations from the same regulations.

Resolutions

IV.1. Resolution: Students admitted under TKREC R22 regulations, previously detained due to attendance shortage from either TKREC R20 or TKREC R22 Regulations, seeking readmission in I B Tech, I Semester, must adhere to R22 Regulations. No additional or substitute subjects are required for their studies.

IV.2. Resolution: Students admitted under TKREC R20 regulations, who were detained due to attendance shortage in I B Tech, II Semester and seek readmission for A.Y 2023-24 must comply with R22 Regulations. They are required to take the following mandatory substitution subjects due to subject repetition and to balance the one credit shortage in TKREC R20 Regulations. The syllabus for the substitution subjects will be as per the BOS approved syllabus of TKREC R22 Regulations.

S. No	Subject studied in R20 and repeated subject in R22	No of Credits	Substitution Subjects in R22	No of Credits
1	Engineering Workshop	2.5	Computer Aided Engineering Graphics	2.5
2	English	2	Programming for Problem-Solving	3
3	English Language and Communication Skills Lab	1	Programming for Problem-Solving Laboratory	1
Total Credits		5.5	Total Credits	6.5

IV.3. Resolution: Students admitted under TKREC R20 regulations, who were detained due to credit shortage or attendance shortage and seek readmission in II B Tech, I Semester must comply with R22 Regulations and must study the following additional subjects to balance the shortage of 3 credits to get the B Tech degree with Minimum of 160 credits. The syllabus for the additional subjects will be as per the BOS approved syllabus of TKREC R22 Regulations

S. No	Name of Substitution Subjects in R22 Regulations	No of Credits
1	Python Programming	2
2	Elements of Computer Science	1

IV.4. Resolution: Students admitted under TKREC R20 regulations, who were detained due to attendance shortage and seek readmission in II B Tech, II Semester must comply with R22 Regulations, and no additional or substitute subjects are required to study.

IV.5 Resolution: Students admitted under JNTU R18 regulations, who were detained due to credit shortage and seek readmission in IV B Tech, I Semester must comply with TKREC R20 Regulations, and no additional or substitute subjects are required since the College is following JNTU R18 curriculum only.

IV.6. Resolution: Students readmitted under the same regulations need not study any additional or substitute subjects.

Bhargavi
(Dr. K. Bhargavi)
(Member Secretary)

B. Srinivas
(Dr. B. SRINIVASA LU)

Chani

Dr. CH.V. PHANI KRISHNA
Ph.D
Head Of The Department
Computer Science and Engineering
Teegala Krishna Reddy Engineering College
Modbowl, Meerpet, Sarath Nagar, Hyderabad - 500079



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Minutes of the V Board of Studies Meeting

The Board of Studies for the Computer Science and Engineering (CSE) Department of Teegala Krishna Reddy Engineering College was convened on 24.01.2024 at 2.30 PM. The meeting took place in a blended mode at the Board Room.

Agenda:

- 1) Review and finalize the R22 III and IV year B Tech CSE detailed syllabus.
- 2) Review and finalize the R22 Professional Electives, Open Electives and their syllabus.

Members Present

S.No	Name of the Expert	Designation	Position
1	Dr Ch V Phani Krishna	Professor & HOD CSE, TRRIE (ITM)	Chairman BOS
2	Dr Vasumathi	Professor- CSE- JNTUH	JNTUH Nominee
3	Dr L Suresh Babu	Asst Professor, NIT Warangal	Member
4	Dr B Sujatha	Asst Professor, OU-COE	Member
5	Mr P Madhu Kumar Reddy	Associate Director, Novartis	Industry Expert
6	Dr . B. Srinivas Rao	Professor & Dean Academics	Member
7	Dr. Madhu Babu BNV	Professor	Member
8	Dr Suresh Babu M	Professor	Member
9	Dr A Pranayanath Reddy	Associate Professor,	Member Secretary
10	All the faculty Members of CSE Department		

Agenda items and Resolution

Agenda 5.1: Review and finalize the R22 III and IV-year B Tech CSE detailed syllabus

Resolution: The committee has reviewed and finalized the R22 III and IV-year B Tech CSE detailed syllabus. The finalized syllabus incorporates relevant and up-to-date topics. The committee approved syllabus for implementation in the upcoming academic sessions.

Agenda 5.2: Review and finalize the R22 Professional Electives, Open Electives and their Syllabus

Resolution: The committee diligently examined the R22 Professional Electives, Open Electives, and their respective syllabus. Taking into account the evolving needs of the industry, the committee approve the proposed list of Professional Electives and Open Electives and the committee has finalized the syllabi for these electives ensuring they align with the overall program objectives and industry requirements. The committee also approve the adoption of these electives and their corresponding syllabi, providing students with courses that enhance their academic and professional development.

Handwritten signature
P.M. Madhu Kumar

Directorate of University Education
JNT University Hyderabad
Kukatpally, Hyderabad



24/1/2024
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Assis
Dept of Com
University of
Omania University

B Tech I Semester (R22)

I-SEM

S.N O	Course Code	Course	L	T	P	Cre dits
1	22MA101BS	Matrices and Calculus	3	1	0	4
2	22CH102BS	Engineering Chemistry	3	1	0	4
3	22CS103ES	Programming for Problem Solving	3	0	0	3
4	22EE104ES	Basic Electrical Engineering	2	0	0	2
5	22ME105ES	Computer Aided Engineering Graphics	1	0	4	3
6	22CS106ES	Elements of Computer Science & Engineering	0	0	2	1
7	22CH107BS	Engineering Chemistry Laboratory	0	0	2	1
8	22CS108ES	Programming for Problem Solving Laboratory	0	0	2	1
9	22EE109ES	Basic Electrical Engineering Laboratory	0	0	2	1
		Induction Program				
		TOTAL	12	2	12	20

II-SEM

S.N O	Course Code	Course	L	T	P	Cre dits
1	22MA201BS	Ordinary Differential Equations and Vector Calculus	3	1	0	4
2	22PH202BS	Applied Physics	3	1	0	4
3	22ME203ES	Engineering Workshop	0	1	3	2.5
4	22EN204HS	English for Skill Enhancement	2	0	0	2
5	22EC205ES	Electronic Devices and Circuits	2	0	0	2
6	22CS206ES	Python Programming Laboratory	0	1	2	2
7	22PH207BS	Applied Physics Laboratory	0	0	3	1.5
8	22EN208HS	English Language and Communication Skills Laboratory	0	0	2	1
9	22CS209ES	IT Workshop	0	0	2	1
		TOTAL	13	4	12	20

CH.V. PHANI KRISHMA
Head Of The Department
Computer Science and Engineering
Krishna Reddy Engineering College
Jwili, Meerpet, Sarif

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III-SEM

S. No	Subject Code	Subject Name	Hours per			Credits
			L	T	P	
1	22EC308PC	Digital Electronics	3	0	0	3
2	22CS301PC	Data Structures	3	0	0	3
3	22MA302BS	Computer Oriented Statistical Methods	3	1	0	4
4	22CS302PC	Computer Organization and Architecture	3	0	0	3
5	22CS303PC	Object Oriented Programming through Java	3	0	0	3
6	22CS304PC	Data Structures Lab	0	0	3	1.5
7	22CS305PC	Object Oriented Programming through Java Lab	0	0	3	1.5
8	22CS306PC	Skill Development Course (Data visualization- RProgramming/ Power BI)	0	0	2	1
9	22MC309	Gender Sensitization Lab	0	0	2	0
TOTAL			15	1	10	20

IV-SEM

S. No	Subject Code	Subject Name	Hours per			Credits
			L	T	P	
1	22MA401BS	Discrete Mathematics	3	0	0	3
2		Business Economics & Financial Analysis	3	0	0	3
3	22CS401PC	Operating Systems	3	0	0	3
4	22CS402PC	Database Management Systems	3	0	0	3
5	22CS403PC	Software Engineering	3	0	0	3
6	22CS404PC	Operating Systems Lab	0	0	2	1
7	22CS405PC	Database Management Systems Lab	0	0	2	1
8	22CS401PW	Real-time Research Project/ Societal Related Project	0	0	4	2
9	22CS406PC	Skill Development Course (Node JS/ React JS/ Django)	0	0	2	1
10	22MC410	Constitution of India	3	0	0	0
TOTAL			18	0	10	20

Dr. CH.V. PHANI KRISHNA

Ph.D

Head Of The Department

Computer Science and Engineering

Teegala Krishna Reddy Engineering College

Meerpet, Hyderabad - 500030

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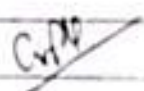
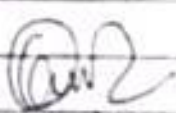


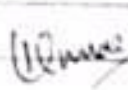
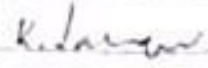
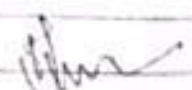
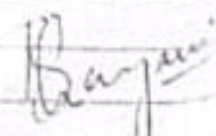
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22/6/2021²
11:00 AM

1st Board of Studies Meeting (Online Mode)

A meeting of Board of Studies for CSE department was held on 22 June 2021, at 11:00 AM through online mode and the following points were suggested by the following members towards the approval of course structure, syllabus upto 4th semester (R20) for the students admitted in 2020-21 Academic Year.

The Members Present

1. Dr. Ch. V. Phani Krishna Professor & Head of CSE Dept, Chairman-BOS, TKRECC (R9) 
2. Dr. D. Vasumathi Professor, HoD-CSE JNTUH Nominee 
3. Dr. E. Suresh Babu Asst. Prof NIT-Warangal Member 
4. Dr. B. Sujatha Asst. Prof, OU-COE Member 
5. P. Madhu Kumar Reddy Asso. Director Novartis (Industry Expert) 
6. Dr. K. Sarangam Asst. Prof, R9-BOS Member 
7. Dr. N. Vadivelan Asst. Prof R9-BOS Member 
8. Dr. K. Bhargavi Asst. Prof R9-BOS Member Secretary 

1. Dr. D. Vasumathi Madam suggested

- a) Confine the topics in Programming for Problem Solving from next regulations onwards.
- b) R-programming with Data science to be updated in course structure.

2. Dr. K. Suresh Babu Sir suggested

- a) To arrange the programs/experiments in any lab courses in the order with respect to the theory.
- b) In object oriented Programming lab course incorporate experiments from Polymorphism, Inheritance & Exception Handling.
- c) In Design & Analysis of Algorithms - Theory, Greedy Method should come before Dynamic Programming.

3. Dr. B. Sujatha Ma'am suggested

- a) Introduce Shortest path & other related concept in Design & Analysis Algorithms practical course.
- b) As searching & sorting topics are already covered in Data structures, hence not to incorporate in Design & Analysis of Algorithms.
- c) Adding of some concepts like Pattern Matching Algorithm, Trie, Red Black tree & splay tree from Data structures to Advance Data structures.

4. Ms. P. Mathu Kumar Paddy suggested

- a) to introduce Mandatory course, so as to promote industry requirements.
- b) Courses with Analytical & Logical thinking can be introduced as a part of curriculum.

5. Dr. D. Vasumathi Madam suggested to

- a) incorporate Analog & Digital electronics in II year I sem in place of Digital Logic Design.

- b) operating systems and Basic Business Economics & Financial Analysis to be substituted in II year II sem in place of IIIrd year.

- c) Automata theory & DAA (Design & analysis algorithms) to be moved to III year I sem & III year II sem respectively.

- d) Mandatory course contributions of India incorporated in IIIrd year.

- e) Incorporate Data Science concepts as R-programming course in IIIrd year I sem.

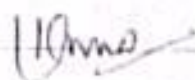
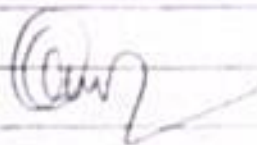
f) Rearrange Elective courses as with respect to Professional core.

- Professional Elective I - introduce Artificial Intelligence as one of Elective course
- Professional Elective-II - incorporate IOT
- Professional Elective-IV - incorporate Deep Learning as one of the course.
- Professional Elective-V - incorporate Blockchain Technology
- Professional Elective-VI - incorporation of Augmented Reality as one of the course.

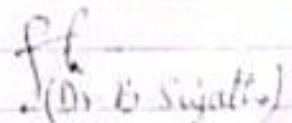
g) Mam asked to prepare the syllabus for 3rd year & 4th year - Professional Core (PC) & Professional Electives (PE's) as per the suggestions given in BOS Meeting.

6th 2nd Board of Studies meeting

- A meeting was held for Board of Studies of CSE Department through online mode on 11.02.22 at 12:30 PM to finalize the IIIrd and IVth year syllabus of P20. The following members were present and taken the following decisions.
- The IIIrd and IVth year detailed syllabus for P20 regulations of Teegala Krishna Reddy Engineering College (Autonomous) was completely approved.
- Dr. D. Vasumathi, Professor & HOD - CSE, JNTUH suggested to change UNIX Programming in Professional elective II with DevOps.
- Madam suggested Augmented Reality with augmented and virtual reality.
- and also she suggested incorporate Digital Image Processing in Professional elective III.
- In Professional elective six madam suggested - In place of HCI change with Randomized algorithms.



Prachi Kumar



Asst. Professor

Dept of CSE
Ossunil University, Hyd

1. Dr. CH. V. Phani Krishna

Professor head

CSE Department.

BDS Chairman, *(w/o)*

TRFEC (Pg)

2. Dr. K. Bhargavi

Professor, CSE Department

BDS Member

TRFEC (Pg)

3. P. V. Ramagopal Rao

Asst. Professor, CSE DEPT.

BDS member

TRFEC (Pg)

4. G. Sreetha

Asst. Professor, CSE Dept

BDS member

TRFEC (Pg)



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 Teegala Krishna Reddy Engineering College
 (UGC-AUTONOMOUS)
 Medbowli, Meerpet, Hyderabad - 97.

**ACADEMIC REGULATIONS,
COURSE STRUCTURE,
AND
DETAILED SYLLABUS**

COMPUTER SCIENCE AND ENGINEERING

For
B.Tech.FOUR YEAR DEGREE COURSE
(Applicable for the batches admitted from 2020-2021)



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
(UGC- AUTONOMOUS)

Sponsored by TKR Educational Society, Approved by AICTE, Affiliated to JNTUH
Accredited by NAAC with 'A' Grade. Accredited by NBA
(Medbowli, Meerpet, Balapur(M), Hyderabad, Telangana- 500097)



TEEGALAKRISHNAREDDYENGINEERINGCOLLEGE
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Approved by AICTE, Affiliated by JNTUH, Accredited by NAAC-'A' Grade
Medbowli, Meerpet, Balapur, Hyderabad, Telangana-500097
Mob: 8498085218. Email: info@tkrec.ac.in, ace@tkrec.ac.in



B.Tech I Semester (R20)

S.No	Subject Code	Category	Subject Name	Hours per Week			Credits
				L	T	P	
01	20MA1BS01	BS	Mathematics-I	3	1	0	4
02	20CH1BS02	BS	Chemistry	3	1	0	4
03	20EE1ES01	ES	Basic Electrical Engineering	3	0	0	3
04	20ME1ES05	ES	Engineering Workshop	1	0	3	2.5
05	20EN1HS01	HS	English	2	0	0	2
06	20CH1BS03	BS	Engineering Chemistry Lab	0	0	3	1.5
07	20EN1HS02	HS	English Language and Communication Skills Lab	0	0	2	1
08	20EE1ES03	ES	Basic Electrical Engineering Lab	0	0	2	1
09	20MC1ES09	MC	Environmental Science	0	0	2	0
10		MC	Induction Programme				
Total				12	2	10	19

B.Tech II Semester (R20)

S.No	Subject Code	Category	Subject Name	Hours per Week			Credits
				L	T	P	
01	20MA2BS04	BS	Mathematics-II	3	1	0	4
02	20AP2BS05	BS	Applied Physics	3	1	0	4
03	20CS2ES04	ES	Programming for Problem Solving	3	1	0	4
04	20ME2ES05	ES	Engineering Graphics	1	0	4	3
05	20AP2BS06	BS	Applied Physics Lab	0	0	3	1.5
06	20CS2ES06	ES	Programming for Problem Solving Lab	0	0	3	1.5
07	20MC2ES07	MC	Environmental Science	3	0	0	0
Total				13	3	10	18

Asst. Professor
Dept of CSE College of Engg
Osmania University, Hvd

JPB

P. Madhu Kumar

Dr. E. Suresh Babu
Principal
Teegal Krishna Reddy Engineering College
Department of Computer Science & Engineering
National Institute of Technology, Warangal
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S. No	Category	SEMESTER S								Asper
		1	2	3	4	5	6	7	8	AICE T
01	HS	3				3	5			11
02	BS	8.5	8.5	3	3					23
03	ES	8.5	9.5	4						22
04	PC			14	18	16	5	6		59
05	PE					3	6	6	3	18
06	OE						3	3	6	12
07	PW						1	3	11	15
Total Credits		20	18	21	21	22	20	18	20	160

Sno	Category	SEMESTER S								R9-CSE
		1	2	3	4	5	6	7	8	Total
1	HSMC	3			3	1			3	10
2	BS	9.5	9.5	3	3					25
3	ES	6.5	8.5	3						18
4	PC			14	15	11.5	15	7		62.5
5	PE					7.5	4	6	3	20.5
6	OE						3	3	3	9
7	PW					1		7	7	15
TOTAL		19	18	20	21	21	22	23	16	160

Dr. E. Suresh Babu
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B.Tech III Semester (R20)

SNo.	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
1	20MA3BS08	BS	Computer Oriented Statistical Methods	3	0	0	3
2	20CS3PC01	PC	Computer Organization	3	1	0	4
3	20CD3PC01	PC	Object Oriented Programming using Java	2	0	0	2
4	20CS3PC03	PC	Data Structures	3	1	0	4
5	20CS3ES08	ES	Analog & Digital Electronics	3	0	0	3
6	20CS3PC04	PC	IT WORKSHOP Lab	0	0	2	1
7	20CS3PC05	PC-LAB	Data Structures Lab	0	0	3	1.5
8	20CD3PC02	PC-LAB	Object Oriented Programming using Java Lab	0	0	3	1.5
9	20MC3HS01	MC	Professional & Engineering Ethics	3	0	0	0
10	20MC3BS02	MC	Quantitative Analysis-1	3	0	0	0
TOTAL				20	2	8	20

B.Tech IV Semester (R20)

SNo.	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
1	20MA4PC07	BS	Discrete Mathematics	3	0	0	3
2	20MS4HS03	HSMC	Business Economics & Financial Analysis	3	0	0	3
3	20CS4PC09	PC	Operating Systems	3	0	0	3
4	20CS5PC14	PC	Software Engineering	3	1	0	4
5	20CS4PC10	PC	Database Management Systems	3	1	0	4
6	20CS4PC11	PC-LAB	Operating System Lab	0	0	3	1.5
7	20CD4PC03	PC-LAB	Software Engineering Lab	0	0	2	1
8	20CS4PC13	PC-LAB	Database Management Systems Lab	0	0	3	1.5
9	20MC4HS03	MC	Gender Sensitization Lab	0	0	2	0
10	20MC4BS03	MC	Quantitative Logical and Reasoning	3	0	0	0
TOTAL				18	2	10	21

Asst. Professor
of CSE College
Jawahar University

P. Madhu Kumar

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B.Tech V Semester (R20)

SNo.	Subject Code	Category	Subject Name	Hours per week			Credits
				L	T	P	
1	20CS5PC14	PC	Formal Languages & Automata Theory	3	0	0	3
2	20CD5PC04	PC	Software Design & Architecture	3	0	0	3
3	20CS5PC16	PC	Design and Analysis of Algorithms	3	1	0	4
4	20CD5PE10	PE- I	Professional Elective- I	3	0	0	3
5	20CD5PE20	PE-II	Professional Elective- II	3	0	0	3
6	20CD5PE20	PE-II-LAB	Professional Elective -II Lab	0	0	3	1.5
7	20CS5PC17	PC-LAB	Design and Analysis of Algorithms Lab	0	0	3	1.5
8	20EN5HS04	HSMC	Advanced Communication Skills Lab	0	0	3	1
9	20CD5PW01	PW	Summer Internship	0	0	0	1
10	20MC5HS05	MC	Intellectual Property Rights	3	0	0	0
11	20MC5HS06	MC	Personality Development & Soft Skills	3	0	0	0
TOTAL				21	1	9	21

B.Tech VI Semester (R20)

Sno	Subject Code	Category	Subject Name	Hours per week			Credits
				L	T	P	
1	20CD6PC05	PC	Design pattern	3	0	0	3
2	20CD6PC06	PC	Software Project Management	3	0	0	3
3	20CS6PC18	PC	Computer Networks	3	1	0	4
4	20CD6PC07	PC	Software Testing	2	0	0	2
5	20CD6PE30	PE -III	Professional Elective- III	3	0	0	3
6	20CD6OE10	OE- I	Open Elective- I	3	0	0	3
7	20CD6PE30	PE-III Lab	Professional Elective- III Lab	0	0	2	1
8	20CD6PC08	PC-LAB	Computer Networks Lab	0	0	3	1.5
9	20CD6PC09	PC-LAB	Software Testing Lab	0	0	3	1.5
	20MC6HS07	MC	Constitution of India	3	0	0	0
10	20MC6CS01	MC	Basic Technical Training	3	0	0	0
TOTAL				23	1	8	22

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Asst. Professor
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Umas
P. Madhu Kumar

AS
Dr. E. Suresh Babu
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B.Tech VII Semester (R20)

Sno.	Subject Code	Category	Subject Name	Hours per week			Credits
				L	T	P	
1	20CD7PC10	PC	Extreme Programming	2	1	0	3
2	20CD7PC11	PC	Devops	3	0	0	3
3	20CD8PE40	PE-IV	Professional Elective- IV	3	0	0	3
4	20CD8PE50	PE-V	Professional Elective- V	3	0	0	3
5	20CD8OE20	OE-II	Open Elective- II	3	0	0	3
6	20CD7PCT2	PC LAB	Devops - Lab	0	0	3	1
7	20CD5PW02	PW	Seminar	0	0	2	1
8	20CD5PW03	PW	Comprehensive Exam	0	0	0	1
9	20CD5PW04	PW	Industry oriented Mini Project	0	0	0	2
10	20CD5PW05	PW	Project Stage -I	0	0	6	3
11	20MC7CS02	MC	Advance Technical Training	3	0	0	0
TOTAL				17	1	11	23

B.Tech VIII Semester (R20)

Sno.	Subject Code	Category	Subject Name	Hours per week			Credits
				L	T	P	
1	20HS8MS02	HSMC	Organization Behavior	3	0	0	3
2	20CD8PE60	PE-VI	Professional Elective-VI	3	0	0	3
3	20CD8OE30	OE-III	Open Elective- III	3	0	0	3
4	20CD8PW06	PW	Project stage -II	0	0	15	7
TOTAL				9	0	15	16

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Uma
P-Madhu Kumar

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Professional Elective -1	
20CD5PE11	Artificial Intelligence
20CD5PE12	Advanced Computer Architecture
20CD5PE13	Service Oriented Architecture
20CD5PE14	Requirement Engineering

Professional Elective -2	
20CD5PE21	Component Based Technologies
20CD5PE22	Web Technologies
20CD5PE23	OOAD Through UML
20CD5PE24	Middleware Technologies

Professional Elective -3	
20CD6PE31	Introduction to Statistical Software
20CD6PE32	Android Application Development
20CD6PE33	Internet of Things
20CD6PE34	Python Programming

Professional Elective -4	
20CD7PE41	Distributed Database
20CD7PE42	Agile Programming
20CD7PE43	Software Metrics
20CD7PE44	Cloud Computing

Professional Elective -5	
20CD7PE51	Advanced Algorithms
20CD7PE52	Data Science
20CD7PE53	Software Quality Management
20CD7PE54	Computer vision

Professional Elective -6	
20CD8PE61	Software Security Engineering
20CD8PE62	Data Warehousing & Data Mining
20CD8PE63	Software Verification & Validation
20CD8PE64	Data Analytics

P. Madhu Kumar

Dr. E. Suresh Babu

Dr. E. Suresh Babu
Department of Computer Science & Engineering
National Institute of Technology, Warangal
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Asst. Prof. (CSE)
Dept. of CSE College of Engg
Osmania University, Hyd

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech. in COMPUTER SCIENCE AND ENGINEERING
COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA101BS	Mathematics - I	3	1	0	4
2	CH102BS	Chemistry	3	1	0	4
3	EE103ES	Basic Electrical Engineering	3	0	0	3
4	ME105ES	Engineering Workshop	1	0	3	2.5
5	EN105HS	English	2	0	0	2
6	CH106BS	Engineering Chemistry Lab	0	0	3	1.5
7	EN107HS	English Language and Communication Skills Lab	0	0	2	1
8	EE108ES	Basic Electrical Engineering Lab	0	0	2	1
		Induction Programme				
		Total Credits	12	2	10	19

I YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA201BS	Mathematics - II	3	1	0	4
2	AP202BS	Applied Physics	3	1	0	4
3	CS203ES	Programming for Problem Solving	3	1	0	4
4	ME204ES	Engineering Graphics	1	0	4	3
5	AP205BS	Applied Physics Lab	0	0	3	1.5
6	CS206ES	Programming for Problem Solving Lab	0	0	3	1.5
7	*MC209ES	Environmental Science	3	0	0	0
		Total Credits	13	3	10	18

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS301ES	Analog and Digital Electronics	3	0	0	3
2	CS302PC	Data Structures	3	1	0	4
3	MA303BS	Computer Oriented Statistical Methods	3	1	0	4
4	CS304PC	Computer Organization and Architecture	3	0	0	3
5	CS305PC	Object Oriented Programming using C++	2	0	0	2
6	CS306ES	Analog and Digital Electronics Lab	0	0	2	1
7	CS307PC	Data Structures Lab	0	0	3	1.5
8	CS308PC	IT Workshop Lab	0	0	3	1.5
9	CS309PC	C++ Programming Lab	0	0	2	1
10	*MC309	Gender Sensitization Lab	0	0	2	0
		Total Credits	14	2	12	21

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS401PC	Discrete Mathematics	3	0	0	3
2	SM402MS	Business Economics & Financial Analysis	3	0	0	3
3	CS403PC	Operating Systems	3	0	0	3
4	CS404PC	Database Management Systems	3	1	0	4
5	CS405PC	Java Programming	3	1	0	4
6	CS406PC	Operating Systems Lab	0	0	3	1.5
7	CS407PC	Database Management Systems Lab	0	0	3	1.5
8	CS408PC	Java Programming Lab	0	0	2	1
9	*MC409	Constitution of India	3	0	0	0
		Total Credits	18	2	8	21

III YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS501PC	Formal Languages & Automata Theory	3	0	0	3
2	CS502PC	Software Engineering	3	0	0	3
3	CS503PC	Computer Networks	3	0	0	3
4	CS504PC	Web Technologies	3	0	0	3
5		Professional Elective-I	3	0	0	3
6		Professional Elective -II	3	0	0	3
7	CS505PC	Software Engineering Lab	0	0	3	1.5
8	CS506PC	Computer Networks & Web Technologies Lab	0	0	3	1.5
9	EN508HS	Advanced Communication Skills Lab	0	0	2	1
10	*MC510	Intellectual Property Rights	3	0	0	0
		Total Credits	21	0	8	22

III YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS601PC	Machine Learning	3	1	0	4
2	CS602PC	Compiler Design	3	1	0	4
3	CS603PC	Design and Analysis of Algorithms	3	1	0	4
4		Professional Elective - III	3	0	0	3
5		Open Elective-I	3	0	0	3
6	CS604PC	Machine Learning Lab	0	0	3	1.5
7	CS605PC	Compiler Design Lab	0	0	3	1.5
8		Professional Elective-III Lab	0	0	2	1
9	*MC609	Environmental Science	3	0	0	0
		Total Credits	18	3	8	22

IV YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS701PC	Cryptography & Network Security	3	0	0	3
2	CS702PC	Data Mining	2	0	0	2

3		Professional Elective -IV	3	0	0	3
4		Professional Elective -V	3	0	0	3
5		Open Elective - II	3	0	0	3
6	CS703PC	Cryptography & Network Security Lab	0	0	2	1
7	CS704PC	Industrial Oriented Mini Project/ Summer Internship	0	0	0	2*
8	CS705PC	Seminar	0	0	2	1
9	CS706PC	Project Stage - I	0	0	6	3
		Total Credits	14	0	10	21

IV YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	SM801MS	Organizational Behaviour	3	0	0	3
2		Professional Elective - VI	3	0	0	3
3		Open Elective - III	3	0	0	3
4	CS802PC	Project Stage - II	0	0	14	7
		Total Credits	9	0	14	16

*MC - Environmental Science – Should be Registered by Lateral Entry Students Only.

*MC – Satisfactory/Unsatisfactory

Note: Industrial Oriented Mini Project/ Summer Internship is to be carried out during the summer vacation between 6th and 7th semesters. Students should submit report of Industrial Oriented Mini Project/ Summer Internship for evaluation.

Professional Elective - I

CS511PE	Information Theory & Coding
CS512PE	Advanced Computer Architecture
CS513PE	Data Analytics
CS514PE	Image Processing
CS515PE	Principles of Programming Languages

Professional Elective - II

CS521PE	Computer Graphics
CS522PE	Advanced Operating Systems
CS523PE	Informational Retrieval Systems
CS524PE	Distributed Databases
CS525PE	Natural Language Processing

Professional Elective - III

CS611PE	Concurrent Programming
CS612PE	Network Programming
CS613PE	Scripting Languages
CS614PE	Mobile Application Development
CS615PE	Software Testing Methodologies

* Courses in PE - III and PE - III Lab must be in 1-1 correspondence.

Professional Elective - IV

CS711PE	Graph Theory
CS712PE	Introduction to Embedded Systems

CS713PE	Artificial Intelligence
CS714PE	Cloud Computing
CS715PE	Ad-hoc & Sensor Networks

Professional Elective - V

CS721PE	Advanced Algorithms
CS722PE	Real Time Systems
CS723PE	Soft Computing
CS724PE	Internet of Things
CS725PE	Software Process & Project Management

Professional Elective - VI

CS811PE	Computational Complexity
CS812PE	Distributed Systems
CS813PE	Neural Networks & Deep Learning
CS814PE	Human Computer Interaction
CS815PE	Cyber Forensics

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03/10/22

8th Board of Studies Meeting

→ A meeting of Board of studies for IT Dept was held on 03 Nov 22 through online mode by the following members for the **approval of course structure and syllabus of B22 Regulation**

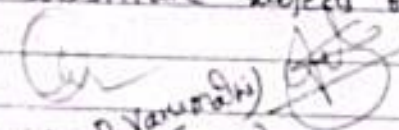
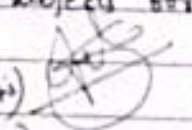
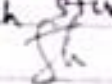
→ AS per the Regulation (B22) given by JNTUW, Teegala Krishna Reddy Engineering College (TKREC)

IT Dept is following the same course structure.

→ AS per the Regulation (B22), we are following the same syllabus of JNTUW upto final year 1st semester of all courses.

→ Electives has to be changed as per Dr. Vasunathan madhav suggestion.

→ NO substitute subjects for readmitted 1st sem B.Tech students.

(Dr. D. Vasunathan) (Dr. E. Suresh Babu) (Dr. B. Sujatha)
 (Asst. Prof. CSE) (Asst. Prof. NITW) (Asst. Prof. OU)
 Department of Computer Science & Engineering
 National Institute of Technology, Tirupur
 Tirupur, Tamil Nadu
 (Industry Expert) (Asst. prof. NITW) (Asst. prof. OU)
 Madhav

Dr. J. Praveen Kumar

Assoc. Prof., HOD of IT Dept
Chairman BOS, TKREC(Rg)

J.P.K

Dr. M. Ramya

Assoc. Prof., Dept of IT
Member, TKREC(Rg)

M.Ramya

Mrs. S. Pavani

Asst. Prof., Member, TKREC(Rg)

S.Pavani

Mrs. E. Anura

Asst. Prof., Member Secretary II

E.Anura

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1st Minutes of the Board of Studies Meeting - 20

The Board of Studies for IT department of Teegula Krishna Reddy Engineering College convened a meeting on Wednesday at 10:30 AM in the Management Office.

Present:

1. Dr. V. Sidda Reddy Professor, HOD of IT, Chairman - BOS, TKREC(R9).
Head of the Department of Information Technology, Teegula Krishna Reddy Engineering College, Member, BOS
2. Dr. D. Vasumathi Professor, HOD - CSE, JNTUH Nominee.
Professor, HOD - CSE, JNTUH Nominee
3. Dr. E. Suresh Babu Asst. Prof., NIT Warangal, Member.
Asst. Prof., NIT Warangal, Member
4. Dr. B. Sujatha Asst. Prof., CU-CO, Member.
Asst. Prof., CU-CO, Member
5. Mr. P. Madhukumar Reddy Asso. Director, Novartis - Industry, Expert.
Asso. Director, Novartis - Industry, Expert
6. Dr. Rama Meedu Asso. Professor, Member, TKREC(R9).
Asso. Professor, Member, TKREC(R9)
7. Mrs. S. Pavani Asst. Professor, Member, TKREC(R9).
Asst. Professor, Member, TKREC(R9)
8. Mrs. E. Aruna Asst. Professor, Member Secretary.
Asst. Professor, Member Secretary

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Agenda

4.1. Re-admission of ii B.Tech, I Semester students under TKREC R20 Regulation admitted in the Academic year 2022-23 to TKREC R22 Regulation.

4.2. Credit Requirements for Re-admitted students under TKREC R20 Regulation admitted in the Academic year 2022-23 to TKREC R22 Regulation.

4.3. Re-admission of iii B.Tech, I Semester students under TKREC R20 Regulation admitted in the Academic year 2021-22 to TKREC R22 Regulation.

4.4. Re-admission of iv B.Tech, I Semester students under TKREC R20 Regulation admitted in the Academic year 2020-21 to TKREC R20 Regulation.

Resolution:

4.1. Re-admitted students from R20 Regulations to R22 Regulations are required to follow the R22 Regulations and enroll in subjects starting from the ii B.Tech, I Sem onwards. Substitution subjects are not applicable as there is no subject repetition between the R20 regulations for the 2nd to 4th year.

4.2. Students who have been readmitted into ii B.Tech, I Sem, transitioning from R20 regulations to R22 Regulations must complete the following additional courses from the R22 Regulation.

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4.3. Students who have been readmitted into III year B.Tech, I Sem, transitioning from R20 Regulations to the same R20 Regulations will continue to adhere to the R20 regulations without any changes.

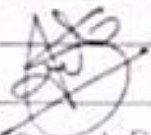
4.4. Students who have been readmitted into IV year B.Tech, I Sem, will adhere to follow R20 regulation of TRREC.

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Asst. Professor
Dept. of SEC of TNGG
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P. Malles Kumar



Dr. E. Suresh Babu
Assistant Professor
Department of Computer Science & Engineering
National Institute of Technology
Warangal - 506 004, T.S. INDIA

Warrant

Minutes of the V Board of Studies Meeting

The Board of Studies for the Information Technology (IT) Department of Tengala Krishna Reddy Engineering College was convened on 24/01/2024 at 2:30 P.M. The meeting took place in a blended mode at the Board Room.

Agenda:

- 1) Review and finalize the R22 III and IV year B Tech IT detailed syllabus.
- 2) Review and finalize the R22 Professional Electives, Open Electives and their syllabus.

Members Present

S.No	Name of the Expert	Designation	Position
1	Dr.J.Praveen Kumar	Professor & HOD IT, TKREC(R9)	Chairman-BOS
2	Dr.D. Vasumathi	Professor- CSE- JNTUH	JNTUH Nominee
3	Dr.E. Suresh Babu	Asst Professor, NIT Warangal	Member
4	Dr.B. Sujatha	Asst Professor, OU-COE	Member
5	Mr.P. Madhu Kumar Reddy	Associate Director, Novartis	Industry Expert
6	Dr. B. Srinivas Rao	Professor & Dean Academics	Member
7	Dr.Ramu Moodu	Associate Professor	Member
8	Mrs.S.Pavani	Assistant Professor	Member
9	Mrs.E.Aruna	Assistant Professor	Member Secretary
10	All the faculty Members of IT Department		

Agenda items and Resolution

Agenda 5.1: Review and finalize the R22 III and IV-year B Tech IT detailed syllabus.

Resolution: The committee has reviewed and finalized the R22 III and IV-year B Tech IT detailed syllabus. The finalized syllabus incorporates relevant and up-to-date topics. The committee approved syllabus for implementation in the upcoming academic sessions.

Agenda 5.2: Review and finalize the R22 Professional Electives, Open Electives and their Syllabus

Resolution: The committee diligently examined the R22 Professional Electives, Open Electives, and their respective syllabus. Taking into account the evolving needs of the industry, the committee approves the proposed list of Professional Electives and Open Electives and the committee has finalized the syllabi for these electives, ensuring they align with the overall program objectives and industry requirements. The resolutions affirm the adoption of these electives and their corresponding syllabi, providing students with choices that enhance their academic and professional development.

P. Madhu Kumar

Dr. J. Praveen Kumar
 Director of Information Technology (IT) Department
 JNT University Hyderabad
 Hyderabad, Telangana

Dr. E. Suresh Babu
 Asst. Prof.
 Dept. of IT
 JNTU

Dr. E. Suresh Babu
 Department of Computer Science & Engg
 National Institute of Technology, Warangal
 Engineering - IT, DIT - 505 004
 Warangal (A),

in review

B Tech I Year I Semester (R22)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	22MA101BS	BS	Matrices and Calculus	3	1	0	4
02	22CH102BS	BS	Engineering Chemistry	3	1	0	4
03	22CS103ES	ES	Programming for Problem Solving	3	0	0	3
04	22EE104ES	ES	Basic Electrical Engineering	2	0	0	2
05	22ME105ES	ES	Computer Aided Engineering Graphics	1	0	4	3
06	22CS106ES	ES	Elements of Computer Science & Engineering	0	0	2	1
07	22CH107BS	BS	Engineering Chemistry Laboratory	0	0	2	1
08	22CS108ES	ES	Programming for Problem Solving Laboratory	0	0	2	1
09	22EE109ES	ES	Basic Electrical Engineering Laboratory	0	0	2	1
Induction Program							
Total				12	2	12	20

B Tech I Year II Semester (R22)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	22MA201BS	BS	Ordinary Differential Equations and Vector Calculus	3	1	0	4
02	22PH202BS	BS	Applied Physics	3	1	0	4
03	22ME203ES	ES	Engineering Workshop	0	1	3	2.5
04	22EN204HS	HS	English for Skill Enhancement	2	0	0	2
05	22EC205ES	ES	Electronic Devices and Circuits	2	0	0	2
06	22PH207BS	ES	Applied Physics Laboratory	0	0	3	1.5
07	22CS206ES	BS	Python Programming Laboratory	0	1	2	2
08	22EN208HS	HS	English Language and Communication Skills Laboratory	0	0	2	1
09	22CS209ES	ES	IT Workshop	0	0	2	1
Total				13	4	12	20

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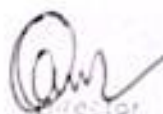
 Dr. E. Suresh Babu
 Department of Computer Science & Engi
 National Institute of Technology, Vist

B Tech II Year I Semester (R22)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	22EC308PC	PC	Digital Electronics	3	0	0	3
02	22CS301PC	PC	Data Structures	3	0	0	3
03	22MA302BS	BS	Computer Oriented Statistical Methods	3	1	0	4
04	22IT301PC	PC	Computer Organization and Microprocessor	3	0	0	3
05	22IT302PC	PC	Introduction to IoT	2	0	0	2
06	22EC309PC	PC	Digital Electronics Lab	0	0	2	1
07	22CS304PC	PC	Data Structures Lab	0	0	3	1.5
08	22IT303PC	PC	Internet of Things Lab	0	0	3	1.5
09	22MC309		Gender Sensitization Lab	0	0	2	0
10	22CS306PC	PC	Skill Development Course (Data visualization, R Programming, Power BI)	0	0	2	1
Total				14	1	12	20

B Tech II Year II Semester (R22)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	22MA401BS	BS	Discrete Mathematics	3	0	0	3
02	22SM401MS	MS	Business Economics & Financial Analysis	3	0	0	3
03	22CS401PC	PC	Operating Systems	3	0	0	3
04	22CS402PC	PC	Database Management Systems	3	0	0	3
05	22IT401PC	PC	Java Programming	2	0	0	2
06	22CS404PC	PC	Operating Systems Lab	0	0	2	1
07	22CS405PC	PC	Database Management Systems Lab	0	0	2	1
08	22IT402PC	PC	Java Programming Lab	0	0	2	1
09	22IT401PW	PW	Real-time Research Project/ Societal-Related Project	0	0	4	2
10	22MC410		Constitution of India	0	0	2	0
11	22CS406PC	PC	Skill Development Course (Node JS, React JS, Django)	3	0	0	1
Total				17	0	12	20



Directorate of University Foreign Relations
JNT University Hyderabad
Kulapet, Hyderabad, Telangana, India

Dr. B. Sujatha
Assistant Professor

Dept. of Computer Science
University College
Sri Lanka



Dr. E. Suresh Babu
Department of Computer Science & Engg
T.S. Jagananna Institute of Technology, V.

Umesh
D. Madhu Kumar

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B Tech III Year I Semester (R22)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	22IT501PC	PC	Software Engineering	3	0	0	3
02	22IT502PC	PC	Data Communications and Computer Networks	3	1	0	4
03	22CS501PC	PC	Machine Learning	3	0	0	3
04	22IT510PE	PE- I	Professional Elective- I	3	0	0	3
05	22IT520PE	PE- II	Professional Elective- II	3	0	0	3
06	22IT503PC	PC	Software Engineering Lab	0	0	2	1
07	22CS502PC	PC	Machine Learning Lab	0	0	2	1
08	22IT504PC	PC	Computer Networks Lab	0	0	2	1
09	22MC511	MC	Intellectual Property Rights	3	0	0	0
10	22CS504PC	PC	Skill Development Course (UI design-Flutter)	0	0	2	1
Total				18	1	8	20

Professional Elective – I

S. No	Subject Code	Subject Name
1	22IT511PE	Biometrics
2	22IT512PE	Advanced Computer Architecture
3	22IT513PE	Data Analytics
4	22IT514PE	Image Processing
5	22IT515PE	Principles of Programming Languages

Professional Elective – II

S. No	Subject Code	Subject Name
1	22IT521PE	Computer Graphics
2	22IT522PE	Quantum Computing
3	22IT523PE	Advanced Operating Systems
4	22IT524PE	Distributed Databases
5	22IT525PE	Pattern Recognition

Directorate of IT
JNT University, Hyderabad
Kukatpally, Hyderabad, Telangana

Dr. B. Sujatha
Assistant Professor
Dept. of Computer Science
University College
Osmania University, Hyderabad

Dr. E. Suresh Babu
Department of Computer Science & Engineering
National Institute of Technology, Warangal
Telangana - INDIA - 506 004

P. Madhukumar

K. Venkatesh

B Tech III Year II Semester (R22)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	22IT601PC	PC	Automata Theory and Compiler Design	3	0	0	3
02	22IT602PC	PC	Algorithm Design and Analysis	3	0	0	3
03	22EC601ES	ES	Embedded Systems	3	0	0	3
04	22CS601PC	PC	Compiler Design Lab	0	0	2	1
05	22IT610PE	PE- III	Professional Elective- III	3	0	0	3
06	22IT610OE	OE- I	Open Elective- I	3	0	0	3
07	22EN504HS	HS Lab	Advanced Communication Skills Lab	0	0	2	1
08	22IT610PE	PE lab- III	Professional Elective- III Lab	0	0	2	1
09	22IT601PW	PW	Industrial Oriented Mini Project/ Internship/ Skill Development Course (Big data-Spark)	0	0	4	2
10	22MC612	MC	Environmental Science	3	0	0	0
Total				18	0	10	20

Professional Elective – III

S. No	Subject Code	Subject Name
1	22IT611PE	Full Stack Development
2	22IT612PE	Data Mining
3	22IT613PE	Scripting Languages
4	22IT614PE	Mobile Application Development
5	22IT615PE	Software Testing Methodologies

Professional Elective Lab – III

S. No	Subject Code	Subject Name
1	22IT616PE	Full Stack Development Lab
2	22IT617PE	Data Mining Lab
3	22IT618PE	Scripting Languages Lab
4	22IT619PE	Mobile Application Development Lab
5	22IT6110PE	Software Testing Methodologies Lab

Director,
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Dr. E. Suresh Babu
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National Institute of Technology, Warangal
Telangana - INDIA - 506 004.

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B Tech IV Year I Semester (R22)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	22IT701PC	PC	Information Security	3	0	0	3
02	22IT702PC	PC	Cloud Computing	3	0	0	3
03	22IT710PE	PE- IV	Professional Elective- IV	3	0	0	3
04	22IT720PE	PE- V	Professional Elective- V	3	0	0	3
05	22IT710OE	OE- II	Open Elective- II	3	0	0	3
06	22IT703PC	PC	Information Security Lab	0	0	2	1
07	22IT704PC	PC	Cloud Computing Lab	0	0	2	1
08	22IT702PW	PW	Project Stage- I	0	0	6	3
Total				15	0	10	20

Professional Elective – VI

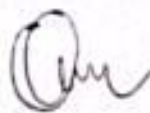
S. No	Subject Code	Subject Name
1	22IT711PE	Human Computer Interaction
2	22IT712PE	High Performance Computing
3	22IT713PE	Artificial Intelligence
4	22IT714PE	Information Retrieval Systems
5	22IT715PE	Ad-hoc & Sensor Networks

Professional Elective – V

S. No	Subject Code	Subject Name
1	22IT721PE	Intrusion Detection Systems
2	22IT722PE	Real Time Systems
3	22IT723PE	Blockchain Technology
4	22IT724PE	Deep Learning
5	22IT725PE	Software Process & Project Management



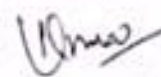
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Department of Computer Science & Engineering
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Telangana - INDIA - 506 004



Director
JNT University Hyderabad
University, Hyderabad, Telangana, India



Dr. B. S. Saha
Assistant Professor
Dept. of Computer Science & Engineering
University of Osmania
Osmania University, Hyderabad, India


P. Madhukumar



B Tech IV Year II Semester (R22)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	22HS802MC	PC	Organizational Behavior	3	0	0	3
02	22IT810PE	PE- VI	Professional Elective- VI	3	0	0	3
03	22IT810OE	OE	Open Elective- III	3	0	0	3
04	22IT803PW	PW	Project Stage- II including Seminar	0	0	22	9-2
Total				9	0	22	20

Professional Elective – VI

S. No	Subject Code	Subject Name
1	22IT811PE	Natural Language Processing
2	22IT812PE	Distributed Systems
3	22IT813PE	Augmented Reality & Virtual Reality
4	22IT814PE	Web Security
5	22IT815PE	Cyber Forensics

Director
JNT University Hyderabad
Kukatpally, Hyderabad, Telangana, India

Asst. Prof.
Dept. of Cr
Univer
Osmania

Dr. E. Suresh
Department of Computer Science
(A), National Institute of Technolo
I.S., India
Telangana - INDIA - 50

P. Madhukar

22/06/2021
2:00pm

2nd 1st Board of Studies Meeting (Online mode)

A meeting of Board of Studies for IT Department was held on 22nd June, 2021 at 11:00 AM through online mode and the following points were suggested by the following members towards the approval of course structure, syllabus upto 4th semester (R20) for the students admitted in 2020-21 Academic year.

The following members attended

1. Dr. J. Praveen Kumar Asso. Prof, HOD of IT, Chairman-BOS, TKREC(R9). J.P.K
2. Dr. D. Vasumathi Professor, HOD-CSE JNTUH Nominee. D.V
3. Dr. E. Suresh Babu Asst. Prof, NIT Warangal, Member. E.S.B
4. Dr. B. Sujatha Asst. Prof, OU-COE Member. B.S
5. Mrs. P. Madhukumar Reddy Assoc. Director, Novartis-Industry Expert. P.M.R
6. Dr. Ramu Moodu Assoc. Prof, Member, TKREC(R9). R.M
7. Mrs. S. Pavani Asst. Prof, Member, TKREC(R9). S.P
8. Mrs. E. Aruna Asst. Prof, Member Secretary. E.A

Aruna

1) Dr. D. Vasumathi Madam Suggested

- a) Confine the topics in programming for problem solving from regulation onwards.
- b) R programming with data science to be updated in the course structure.

2) Dr. E. Suresh Babu Sir Suggested

- a) To arrange the programs/Experiments in any practical courses in the order with respect to the theory.
- b) In Object oriented programming practical course incorporate experiments from polymorphism, inheritance and exception handling.
- c) In Design and Analysis of Algorithms - theory Greedy method should come before dynamic programming

3) Dr. B. Sujatha Madam Suggested

- a) Introduce shortest path and other related concepts in Design and Analysis of Algorithm practical course.
- b) As searching and sorting topics are already covered in data structures, hence not to incorporate in Design and Analysis of Algorithms.
- c) Adding of some concepts like pattern matching algorithms, tries, Red-black trees and splay trees from data structures to Advance data structures.

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4) Ms. P. Madhu kumar Reddy Suggested

a) To introduce mandatory course, so as to promote industry requirements.

b) Courses with Analytical and logical thinking can be introduced as a part of curriculum.

5) Dr. D. Vasumathi Madam Suggested

a) Incorporate Analog & Digital electronics in II year I Semester in place of Digital logic Design.

b) Operating System and BEFA (Business Economics & Financial Analysis) to be substituted in II year II Semester in place of III year.

c) Automata theory & DAA (Design & Analysis of algorithms) to be moved to III year I Semester & III year II Semester respectively.

d) Mandatory course constitution of India incorporated in III year I Semester.

e) Incorporate Data Science Concepts in R-programming course - IV year I Semester.

f) Rearrange elective courses as with respect to professional core.

→ Professional elective - I - Introduce Artificial Intelligence as one of elective course.

→ Professional elective - II - incorporate Machine Learning

→ Professional elective - IV - incorporate Deep Learning as one of the course.

review

- Professional Elective - iv - Incorporate Block chain Technology course.
- Professional Elective - v Incorporate Data Science using python programming & Software Process & Project Mang.
- Professional Elective - vi Incorporate Augmented Reality, mobile computing & Modern software Engineering as courses.

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11/02/2022

12:30 pm

6th And Board of Studies Meeting

→ A meeting was held for BOS of IT department through online mode on 11/02/22 at 12:30 PM to finalize the IIIrd and IVth year syllabus of P20. The following members were present and took the following decisions:

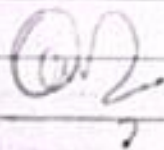
→ The IIIrd and IVth year syllabus for P20 regulations of TKREC (Autonomous) was completely approved.

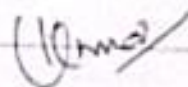
→ Dr. D. Vasumathi, Professor suggested to incorporate DevOps as Professional elective and the DevOps lab

→ In Professional elective six madam suggested in place of augmented reality Augmented and virtual reality.

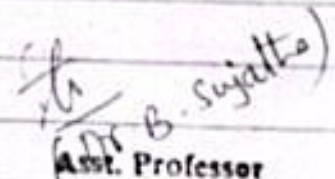
→ In Professional elective six madam suggested in place of HCI change Cognitive computing.

→ In place of Image Processing change with Digital Image Processing.





P. Madhusudana



Asst. Professor
Dept. of CSE College of Engg
Osmania University, Hyderabad

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TEEGALA KRISHNA REDDY ENGINEERING COLLEGE (UGC-Autonomous)

Approved by AICTE, Affiliated by JNTUH, Accredited by NAAC- 'A' Grade
Medbowli, Meerpet, Balapur, Hyderabad, Telangana- 500097
Mob: 9393959597. Email: info@tkrec.ac.in, deanacademics@tkrec.ac.in



B Tech I Year I Semester (R20)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20MA1BS01	BS	Mathematics - I	3	1	0	4
02	20CH1BS02	BS	Chemistry	3	1	0	4
03	20EE1ES03	ES	Basic Electrical Engineering	3	0	0	3
04	20ME1ES05	ES	Engineering Workshop	1	0	3	2.5
05	20EN1HS05	HS	English	2	0	0	2
06	20CH1BS06	BS	Engineering Chemistry Lab	0	0	3	1.5
07	20EN1HS07	HS	English Language and Communication Skills Lab	0	0	2	1
08	20EE1ES08	ES	Basic Electrical Engineering Lab	0	0	2	1
09	20MC1ES09	MC	Environmental Science	3	0	0	0
10		MC	Induction Programme				
Total				15	2	10	19

B Tech I Year II Semester (R20)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20MA2BS01	BS	Mathematics - II	3	1	0	4
02	20AP2BS02	BS	Applied Physics	3	1	0	4
03	20CS2ES03	ES	Programming for Problem Solving	3	1	0	4
04	20ME2ES04	ES	Engineering Graphics	1	0	4	3
05	20AP2BS05	BS	Applied Physics Lab	0	0	3	1.5
06	20CS2ES06	ES	Programming for Problem Solving Lab	0	0	3	1.5
Total				10	3	10	18

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2.8/6/2021

HEAD OF THE DEPARTMENT
Dept. Of Computer Science & Engineering
JNTUH College Of Engineering Hyderabad
Kukatpally, Hyderabad, Telangana-500 085.

[Signature]



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE (UGC-Autonomous)

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Mob: 9393959597. Email: info@tkrec.ac.in, deanacademics@tkrec.ac.in



B Tech II Year I Semester (R20)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20MA3BS01	BS	Computer Oriented Statistical Methods	3	0	0	3
02	20IT3PC01	PC	Computer Organization	3	1	0	4
03	20CS3PC02	PC	Object Oriented Programming using C++	2	0	0	2
04	20CS3PC03	PC	Data Structures through C	3	1	0	4
05	20CS3ES01	ES	Analog and Digital Electronics	3	0	0	3
06	20CS3PC04	PC	IT WORKSHOP Lab	0	0	2	1
07	20CS3PC05	PC	Data Structures Lab	0	0	3	1.5
08	20CS3PC06	PC	Object Oriented Programming using C++ Lab	0	0	3	1.5
09	20MC3HS01	MC	Professional and Engineering Ethics	0	0	2	0
10		MC	Quantitative Analysis- I	3	0	0	0
Total				19	2	8	20

B Tech II Year II Semester (R20)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20CS4PC07	PC	Discrete Mathematics	3	0	0	3
02	20SM4MS01	MS	Business Economics and Financial Analysis	3	0	0	3
03	20CS4PC08	PC	Java Programming	3	1	0	4
04	20CS4PC09	PC	Operating Systems	3	0	0	3
05	20CS4PC10	PC	Database Management Systems	3	1	0	4
06	20CS4PC11	PC	Operating Systems Lab	0	0	3	1
07	20CS4PC12	PC	Java Programming Lab	0	0	3	1.5
08	20CS4PC13	PC	Database Management Systems Lab	0	0	3	1.5
09	20MC4MS02	MC	Gender Sensitization	3	0	0	0
Total				18	2	9	21

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28/6/2021

HEAD OF THE DEPARTMENT
Dept. Of Computer Science & Engineering
JNTUH College Of Engineering Hyderabad
Kukatpally, Hyderabad, Telangana-500 065.

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TEEGALA KRISHNA REDDY ENGINEERING COLLEGE (UGC-Autonomous)

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Mob: 9393959597. Email: info@tkrec.ac.in, deanacademics@tkrec.ac.in



B Tech III Year I Semester (R20)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20CS5PC14	PC	Formal Languages and Automata Theory	3	0	0	3
02	20CS5PC15	PC	Software Engineering	3	0	0	3
03	20IT5PE10	PE- I	Professional Elective- I	3	0	0	3
04	20CS5PC16	PC	Design and Analysis of Algorithms	3	1	0	4
05	20IT5PE20	PE-II	Professional Elective- II	3	0	0	3
06	20IT5PE20	PE-Lab	Professional Elective- II Lab	0	0	3	1.5
07	20CS5PC17	PC Lab	Design and Analysis of Algorithms lab	0	0	3	1.5
08	20EN5HS01	HS Lab	AECS LAB	0	0	3	1
09	20IT5PW01	PW	Summer Internship	0	0	0	1
10	20MC5HS02	MC	Intellectual Property Rights	3	0	0	0
11		MC	Personality and Soft Skills Development	3	0	0	0
Total				21	1	9	21

B Tech III Year II Semester (R20)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20CS6PC18	PC	Computer Networks	3	1	0	4
02	20CS6PC19	PC	Compiler Design	3	0	0	3
03	20IT6PC01	PC	Internet of Things	3	0	0	3
04	20CS6PC20	PC	Web Technologies	2	0	0	2
05	20IT6PE30	PE -III	Professional Elective- III	3	0	0	3
06	20IT6OE10	OE- I	Open Elective- I	3	0	0	3
07	20CS6PC21	PC Lab	Web Technologies & Computer Networks Lab	0	0	3	1
08	20IT6PC02	PC Lab	Internet of Things Lab	0	0	3	1.5
09	20IT6PE30	PE-III Lab	Professional Elective- III Lab	0	0	2	1.5
09	20MCGHS03	MS	Constitution of India	3	0	0	0
10		MC	Basic Technical Training	3	0	0	0
Total				23	1	8	22

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20/6/2021

HEAD OF THE DEPARTMENT
Dept. Of Computer Science & Engineering
JNTUH College of Engineering Hyderabad
Kukatpally, Hyderabad, Telangana-500 085.

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TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
(UGC-Autonomous)

Approved by AICTE, Affiliated by JNTUH, Accredited by NAAC- 'A' Grade
Medbowli, Meerpet, Balapur, Hyderabad, Telangana- 500097
Mob: 9393959597. Email: info@tkrec.ac.in, deanacademics@tkrec.ac.in



B Tech IV Year I Semester (R20)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20CS7PC22	PC	Information Security	3	0	0	3
02	20CS7PC23	PC	Data Mining	3	0	0	3
03	20IT7PE40	PE-IV	Professional Elective- IV	3	0	0	3
04	20IT7PE50	PE-V	Professional Elective- V	3	0	0	3
05	20IT7OE20	OE-II	Open Elective- II	3	0	0	3
06	20CS7PC24	PC LAB	Data Mining Lab	0	0	3	1
07	20IT7PW02	PW	Industrial Oriented Mini Project	0	0	0	2
08	20IT7PW03	PW	Seminar	0	0	2	1
09	20IT7PW04	PW	Comprehensive Test	0	0	0	1
10	20IT7PW05	PW	Project Stage- I	0	0	6	3
11		MC	Advanced Technical Training	3	0	0	0
Total				15	0	11	23

B Tech IV Year II Semester (R20)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20SM8MS02	PC	Organizational Behavior	3	0	0	3
02	20IT8OE30	OE-III	Open Elective- III	3	0	0	3
03	20IT8PE60	PE-VI	Professional Elective- VI	3	0	0	3
04	20IT8PC06	PW	Project Stage-II	0	0	15	7
Total				9	0	15	16

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HEAD OF THE DEPARTMENT
Dept. Of Computer Science & Engineering
JNTUH College Of Engineering Hyderabad
Kukatpally, Hyderabad, Telangana-500 085.

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Professional Elective - I

S. No	Subject Code	Subject Name
01	20IT5PE11	Artificial Intelligence
02	20IT5PE12	Advanced Computer Architecture
03	20IT5PE13	Image Processing
04	20IT5PE14	Principles of Programming Languages

Professional Elective - II

S. No	Subject Code	Subject Name
01	20IT5PE21	Python Programming
02	20IT5PE22	Object Oriented Analysis and Design
03	20IT5PE23	Network Programming
04	20IT5PE24	Unix Programming
05	20IT5PE25	Advanced Data Structures through C++

Professional Elective - III

S. No	Subject Code	Subject Name
01	20IT6PE31	Machine Learning
02	20IT6PE32	Ethical Hacking
03	20IT6PE33	Scripting Languages
04	20IT6PE34	Mobile Application Development
05	20IT6PE35	Software Testing Methodologies

Professional Elective - IV

S. No	Subject Code	Subject Name
01	20IT7PE41	Neural Networks & Deep Learning
02	20IT7PE42	High Performance Computing
03	20IT7PE43	Web Security
04	20IT7PE44	Cloud Computing
05	20IT7PE45	Blockchain Technology

Professional Elective - V

S. No	Subject Code	Subject Name
01	20IT7PE51	Data Science using R-Programming
02	20IT7PE52	Human Computer Interaction
03	20IT7PE53	Cyber Forensics
04	20IT7PE54	Ad-hoc & Sensor Networks
05	20IT7PE55	Software Process & Project Management

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28/10/2021
DEPARTMENT
Dept of Computer Science & Engineering
JNTUH College Of Engineering Hyderabad
Kukatpally, Hyderabad, Telangana-500 085.

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Professional Elective - VI

S. No	Subject Code	Subject Name
01	20IT3PE61	Big Data
02	20IT3PE62	Augmented Reality
03	20IT3PE63	Soft Computing
04	20IT3PE64	Mobile Computing
05	20IT3PE65	Modern Software Engineering

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JNTUH College Of Engineering Hyderabad
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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B.Tech. in INFORMATION TECHNOLOGY
COURSE STRUCTURE & SYLLABUS (R18)

Applicable From 2018-19 Admitted Batch

I YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA101BS	Mathematics - I	3	1	0	4
2	CH102BS	Chemistry	3	1	0	4
3	EE103ES	Basic Electrical Engineering	3	0	0	3
4	ME105ES	Engineering Workshop	1	0	3	2.5
5	EN105HS	English	2	0	0	2
6	CH106BS	Engineering Chemistry Lab	0	0	3	1.5
7	EN107HS	English Language and Communication Skills Lab	0	0	2	1
8	EE108ES	Basic Electrical Engineering Lab	0	0	2	1
		Induction Programme				
		Total Credits	12	2	10	19

I YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	MA201BS	Mathematics - II	3	1	0	4
2	AP202BS	Applied Physics	3	1	0	4
3	CS203ES	Programming for Problem Solving	3	1	0	4
4	ME204ES	Engineering Graphics	1	0	4	3
5	AP205BS	Applied Physics Lab	0	0	3	1.5
6	CS206ES	Programming for Problem Solving Lab	0	0	3	1.5
7	*MC209ES	Environmental Science	3	0	0	0
		Total Credits	13	3	10	18

II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS301ES	Analog and Digital Electronics	3	0	0	3
2	CS302PC	Data Structures	3	1	0	4
3	MA303BS	Computer Oriented Statistical Methods	3	1	0	4
4	IT304PC	Computer Organization and Microprocessor	3	0	0	3
5	CS305PC	Object Oriented Programming using C++	2	0	0	2
6	CS306ES	Analog and Digital Electronics Lab	0	0	2	1
7	CS307PC	Data Structures Lab	0	0	3	1.5
8	IT308PC	IT Workshop and Microprocessor Lab	0	0	3	1.5
9	CS309PC	C++ Programming Lab	0	0	2	1
10	*MC309	Gender Sensitization Lab	0	0	2	0
		Total Credits	14	2	12	21

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS401PC	Discrete Mathematics	3	0	0	3

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2	SM402MS	Business Economics & Financial Analysis	3	0	0	3
3	CS403PC	Operating Systems	3	0	0	3
4	CS404PC	Database Management Systems	3	1	0	4
5	CS405PC	Java Programming	3	1	0	4
6	CS406PC	Operating Systems Lab	0	0	3	1.5
7	CS407PC	Database Management Systems Lab	0	0	3	1.5
8	CS408PC	Java Programming Lab	0	0	2	1
9	*MC409	Constitution of India	3	0	0	0
Total Credits			18	2	8	21

III YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	CS501PC	Formal Languages & Automata Theory	3	0	0	3
2	CS502PC	Software Engineering	3	0	0	3
3	IT503PC	Data Communication & Computer Networks	3	1	0	4
4	IT504PC	Web Programming	2	0	0	2
5		Professional Elective - I	3	0	0	3
6		Professional Elective - II	3	0	0	3
7	CS505PC	Software Engineering Lab	0	0	3	1.5
8	IT506PC	Computer Networks & Web Programming Lab	0	0	3	1.5
9	EN508HS	Advanced Communication Skills Lab	0	0	2	1
10	*MC510	Intellectual Property Rights	3	0	0	0
Total Credits			20	1	8	22

III YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	IT601PC	Introduction to Embedded Systems	3	0	0	3
2	IT602PC	Principles of Compiler Construction	3	0	0	3
3	IT603PC	Algorithm Design and Analysis	3	0	0	3
4	IT604PC	Internet of Things	3	0	0	3
5		Professional Elective -III	3	0	0	3
6		Open Elective-I	3	0	0	3
7	IT605PC	Embedded Systems & Internet of Things Lab	0	0	3	1.5
8	IT606PC	Compiler Construction Lab	0	0	3	1.5
9		Professional Elective-III Lab	0	0	2	1
10	*MC609	Environmental Science	3	0	0	0
Total Credits			21	0	8	22

IV YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	IT701PC	Information Security	3	0	0	3
2	CS702PC	Data Mining	2	0	0	2
3		Professional Elective -IV	3	0	0	3
4		Professional Elective -V	3	0	0	3
5		Open Elective-II	3	0	0	3
6	IT703PC	Information Security Lab	0	0	2	1
7	IT704PC	Industrial Oriented Mini Project/ Summer Internship	0	0	0	2
8	IT705PC	Seminar	0	0	2	1

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9	IT706PC	Project Stage - I	0	0	6	3
		Total Credits	14	0	10	21

IV YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	SM801MS	Organizational Behaviour	3	0	0	3
2		Professional Elective -VI	3	0	0	3
3		Open Elective-III	3	0	0	3
4	IT802PC	Project Stage - II	0	0	14	7
		Total Credits	9	0	14	16

*MC - Environmental Science – Should be Registered by Lateral Entry Students Only.

*MC – Satisfactory/Unsatisfactory

NOTE: Industrial Oriented Mini Project/ Summer Internship is to be carried out during the summer vacation between 6th and 7th semesters. Students should submit report of Industrial Oriented Mini Project/ Summer Internship for evaluation.

Professional Elective - I

IT511PE	Biometrics
CS512PE	Advanced Computer Architecture
CS513PE	Data Analytics
CS514PE	Image Processing
CS515PE	Principles of Programming Languages

Professional Elective - II

CS521PE	Computer Graphics
IT521PE	Database Security
CS522PE	Advanced Operating Systems
IT523PE	Machine Learning
IT524PE	Pattern Recognition

Professional Elective - III

IT611PE	Ethical Hacking
CS612PE	Network Programming
CS613PE	Scripting Languages
CS614PE	Mobile Application Development
CS615PE	Software Testing Methodologies

* Courses in PE - III and PE - III Lab must be in 1-1 correspondence.

Professional Elective -IV

IT711PE	Web Security
IT712PE	High Performance Computing
CS713PE	Artificial Intelligence
CS714PE	Cloud Computing
CS715PE	Ad-hoc & Sensor Networks

Professional Elective -V

IT721PE	Intrusion Detection Systems
CS722PE	Real Time Systems
CS723PE	Soft Computing
IT724PE	Distributed Databases
CS725PE	Software Process & Project Management

Professional Elective -VI

IT811PE	Natural Language Processing
CS812PE	Distributed Systems
CS813PE	Neural Networks & Deep Learning
CS814PE	Human Computer Interaction
CS815PE	Cyber Forensics

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
R18 B.TECH. List of Open Electives
Applicable From 2018-19 Admitted Batch

Branch	III Yr II Sem Open Elective (OE - I)	IV Yr I Sem Open Elective (OE - II)	IV Yr II Sem Open Elective (OE - III)
Civil Engineering	Disaster Preparedness & Planning Management	Remote Sensing & GIS	Environmental Impact Assessment
Computer Science & Engineering / Information Technology	1. Entrepreneurship 2. Fundamentals of Management for Engineers 3. Cyber Law & Ethics	1. Data Structures 2. Artificial Intelligence 3. Python Programming 4. Java Programming	1. Machine Learning 2. Mobile Application Development 3. Scripting Languages 4. Database Management Systems
Electronics and Instrumentation Engineering	Basics of Sensors Technology	Fundamentals of Biomedical Applications	Basics of Virtual Instrumentation
Electronics and Communication Engineering	Fundamentals of Internet of Things	Electronic Sensors	Measuring Instruments
Electrical and Electronics Engineering	1. Reliability Engineering 2. Renewable Energy Sources	1. Utilization of Electrical Energy 2. Electric Drives and Control	1. Basics of Power Plant Engineering 2. Energy Sources and Applications
Mechanical Engineering	Quantitative Analysis for Business Decisions	Basic Mechanical Engineering	Non-Conventional Sources of energy
Aeronautical Engineering	Quantitative Analysis for Business Decisions	Basics of Aeronautical Engineering	Elements of Rocket Propulsion
Mechatronics	1. Industrial Management 2. Non-Conventional Energy Sources	1. Intellectual Property Rights 2. Principles of Entrepreneurship 3. Basic Mechanical Engineering	1. Fundamentals of Robotics 2. Linear and Non-Linear Optimization Techniques 3. Total Quality Management
Petroleum Engineering	General Geology	Natural Gas Engineering	Green Fuel Technologies
Metallurgical and Materials Engineering	1. Testing of Materials 2. Alloy Steels	1. Engineering Materials 2. Surface Engineering	1. High Temperature Materials 2. Light Metals and Alloys
Mining Engineering	1. Introduction to Mining Technology 2. Coal Gasification, CBM & Shale Gas	1. Health & Safety in Mines 2. Material Handling in Mines	1. Solid Fuel Technology 2. Remote Sensing and GIS in Mining

***Note:** Students should take Open Electives from the List of Open Electives Offered by Other Departments/Branches Only.

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10/11/2022 Board of Studies Meeting AI&ML

- As per the Regulation (R22) given by JNTUH, Teegala Krishna Reddy Engineering College (R9) of AI&ML Department is following the same course structure as University.

- BOS Members towards the approval of four years course structure and syllabus upto 4th semester for AI&ML Program (R22) for the students admitted in 2022-23 academic year onwards.

- If any suggestion received from BOS members in the due course for the III and IV year course syllabus can be updated based on the emerging Technology / Industrial Needs. No substitute subjects for readmitted 1 sem B.Tech students.

1. Dr. Vadivelan Natarajan Prof & Head, AIML
Chairman (BOS)

2. Dr. G. Vijaya Kumari Prof & Head
JHUB, JNTUH
JNTUH Nominee

3. Dr. E. Suresh Babu Asst. Prof NIT
Warangal, Member

Dr. E. Suresh Babu

Department of Computer Science & Engineering
National Institute of Technology
Telangana

4. Dr. B. Sujatha

Asst. Prof, OU - COE
Member

Dr. B. Sujatha
Assistant Professor

5. P. Madhukumar Reddy

Asso. Director
Movartis (Industry)

Department of Computer Science & Engineering
University College of Engineering (AU)
Osmania University, Hyderabad

6. Sangeeta Jawar

Asst. Prof, R9 - BOS
Member Secretary

P. Sangeeta Kumar

PRINCIPAL
Teegala Krishna Reddy Engineering College
(UGC-AUTONOMOUS)
Madbowli, Meerpel, Hyderabad - 507 007.



**TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
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Medbowli, Meerpet, Balapur, Hyderabad, Telangana-500097
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DEPARTMENT OF AI & ML

R22 REGULATION

COURSE STRUCTURE

B.TECH [AI/ML] - I to VIII SEM

**FOR
B. TECH [AI/ML] COURSE
(Applicable for the batches admitted
(2022-2023))**



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE (UGC-Autonomous)


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


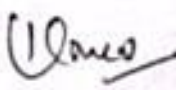
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		1	2	3	4	5	6	7	8	
01	HS	3				3	5			11
02	BS	8.5	8.5	3	3					23
03	ES	8.5	9.5	4						22
04	PC			14	18	16	5	6		59
05	PE					3	6	6	3	18
06	OE						3	3	6	12
07	PW						1	3	11	15
Total Credits		20	18	21	21	22	20	18	20	160

S. No	Category	SEMESTER								As per JNTUH
		1	2	3	4	5	6	7	8	
01	HSMC	3			3	1			3	10
02	BS	9.5	9.5	4						23
03	ES	6.5	8.5	4						19
04	PC			13	18	15	15	12	7	80
05	PE					6	4	6	3	19
06	OE						3	3	3	9
07	PW									
Total Credits		19	18	21	21	22	22	21	16	160

Sno	Category	SEMESTERS								R9- CSE Total
		1	2	3	4	5	6	7	8	
1	HSMC	3			3		1		3	10
2	BS	9.5	9.5	3	3					25
3	ES	6.5	8.5	3						18
4	PC			15	14	17.5	13.5	3		63.0
5	PE					3	4	10	3	20.0
6	OE						3	3	3	9
7	PW					1		7	7	15
TOTAL		19	18	21	20	21.5	21.5	23	16	160


Dr. E. Suresh Babu
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P. Madhu Kumar

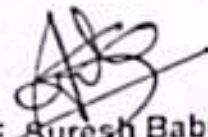
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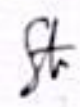
I YEAR I SEMESTER

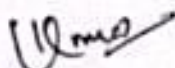
S. No.	Course Code	Course	L	T	P	Credits
1.	22MA101BS	Matrices and Calculus	3	1	0	4
2.	22PH102BS	Applied Physics	3	1	0	4
3.	22CS103ES	Programming for Problem Solving	3	0	0	3
4.	22ME104ES	Engineering Workshop	0	1	3	2.5
5.	22EN105HS	English for Skill Enhancement	2	0	0	2
6.	22CS106ES	Elements of Computer Science & Engineering	0	0	2	1
7.	22PH107BS	Applied Physics Laboratory	0	0	3	1.5
8.	22CS108ES	Programming for Problem Solving Laboratory	0	0	2	1
9.	22EN109HS	English Language and Communication Skills Laboratory	0	0	2	1
10.	22MC110	Environmental Science	3	0	0	0
11.		Induction Program				
Total			11	3	12	20

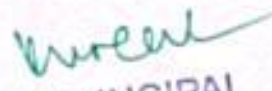
I YEAR II SEMESTER

S. No.	Course Code	Course	L	T	P	Credits
1.	22MA201BS	Ordinary Differential Equations and Vector Calculus	3	1	0	4
2.	22CH202BS	Engineering Chemistry	3	1	0	4
3.	22ME203ES	Computer Aided Engineering Graphics	1	0	4	3
4.	22EE204ES	Basic Electrical Engineering	2	0	0	2
5.	22EC205ES	Electronic Devices and Circuits	2	0	0	2
6.	22CH207BS	Engineering Chemistry Laboratory	0	0	2	1
7.	22EE208ES	Basic Electrical Engineering Laboratory	0	0	2	1
8.	22CS206ES	Python Programming Laboratory	0	1	2	2
9.	22CS209ES	IT Workshop	0	0	2	1
Total			11	3	12	20


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P. Madhu Kumar



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
II YEAR I SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1	22MA303BS	Mathematical and Statistical Foundations	3	0	0	3
2	22CS301PC	Data Structures	3	0	0	3
3	22CS302PC	Computer Organization and Architecture	3	0	0	3
4	22AI301PC	Software Engineering	3	0	0	3
5	22AI302PC	Operating Systems	3	0	0	3
6	22CS304PC	Data Structures Lab	0	0	3	1.5
7	22AI303PC	Operating Systems Lab	0	0	3	1.5
8	22AI304PC	Software Engineering Lab	0	0	2	1
9	22MC310	Constitution of India	3	0	0	0
10.	22AI305PC	Skill Development Course (Node JS/ React JS/ Django)	0	0	2	1
Total			18	0	10	20

II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits			
1	22MA401BS	Discrete Mathematics	3	0	0	3			
2	22AI401PC	Automata Theory and Compiler Design	3	0	0	3			
3	22CS402PC	Database Management Systems	3	0	0	3			
4	22AI402PC	Introduction to Artificial Intelligence	3	0	0	3			
5	22AI403PC	Object Oriented Programming through Java	0	0	2	1			
6	22CS405PC	Database Management Systems Lab	0	0	2	1			
7	22AI404PC	Java Programming Lab	0	0	4	2			
8	22AI401PW	Real-time Research Project/Field Based Research Project	0	0	2	0			
9	22MC409	Gender Sensitization Lab	0	0	2	1			
10	22AI405PC	Skill Development Course (Prolog/ Lisp/ Pyswp)	Total			15	0	12	20


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P. Madhukumar

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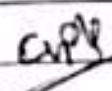
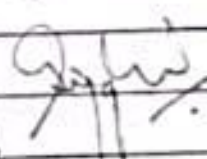

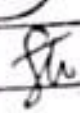
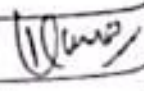
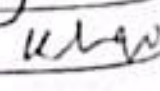
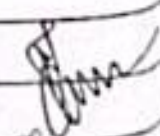
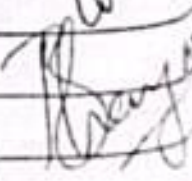
Board of Studies Meeting

11:30 AM

(Online Mode) AI & ML

A meeting of Board of Studies for CSE department was held on 12/10/21, at 11:30 AM through online mode and the following points were suggested by Bos Members towards the approval of course structure, syllabus upto 4th semester for AI and ML program (R20) for the students admitted in 2021-22 academic year.

The Members present were

1. Dr. Ch. V. Phani Krishna Prof. & Head
CSE dept. 
Chairman (Bos)
TKREC (R9)
2. Dr. G. Vijaya Kumari Prof. & Head 
JHUB, JNTUH.
JNTUH Nominee
3. Dr. E. Suresh Babu Asst. Prof. NIT 
Warangal, Member
4. Dr. B. Sujatha Asst. Prof., OU-COE 
Member
5. P. Madhukumar Reddy Asso. Director 
Novartis (Industry)
6. Dr. K. Sarangam Asst. Prof. R9-Bos 
Member
7. Dr. N. Vadivelan Asst. Prof. R9-Bos 
Member
8. Dr. K. Bhargavi Asst. Prof. R9-Bos 
Member Secretary

1. Dr. Vijayakumari Madam suggested

- a) inclusion of AIML related courses as professional core & substituting CSE professional core courses.
- b) not to move humanities & Management science courses to professional Electives
- c) introducing statistical basics as a course (Introduction to ML) in IIIrd Semester.
- d) introduce AI & ML labs from Vth Semester onwards.
- e) All professional Electives should be with respect to professional core or in-continuation of that.

2. Dr. E. Suresh Babu Sir suggested

- a) to arrange the experiments in lab courses in the order with respect to the theory.
- b) include Tensor flow or Keras as one of the lab for AI.
- c) In Design & Analysis of Algorithms (DAA) theory - Greedy Method should come before Dynamic Programming.

3. Dr. B. Sujatha Ma'am suggested

- a) As for AI & ML Neural Networks is core & basic. So include Neural Networks as one of the professional core.
- b) Also to include application areas as one of the course in AI and ML.

4. Mr. P. Madhu Kumar Reddy sir - suggested

a. to include courses on par with industry requirements.

b. AI theory course must be incorporate with Tensor flow or keras Lab.

c. Projects to be done individually by students using AI & ML tools.

d. Practical sessions for ML algorithms

e. If possible incorporate R-programming with Data science.

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Teegla Krishna Reddy Engineering College

Department of Artificial Intelligence and Machine Learning (AIML)
3rd Board of Studies (BOS) Meeting
Minutes of Board of Studies Meeting
Programme: B Tech - AIM

Meeting Date: 01-03-2023

Meeting Time: 11.00 A.M

Venue: ZOOM Online Meeting

Attendees

1. Prof. Dr. Vijaya Kumari Madam, Director J-Hub, Professor in CSE, JNTUH Nominee
2. Dr. E Suresh Babu, Associate professor, NIT Warangal
3. Dr. B Sujatha, Associate professor, Dept. of CSE, Osmania University
4. Mr. Madhu Kumar, Associate director, NOVARTIS
5. Dr B Srinivasa Rao, Dean Academics, TKREC
6. Dr. Vadivelan Natarajan, BOS Chairman AIML
7. Ms. Sangeeta Jawar, Member Secretary AIML
8. Ms. J Rachana, Senior Faculty Memeber

Agenda: Approval of III Year and IV Year Syllabus of R20 Regulations

Discussion Points


1. Dr. G. Vijayakumari Madam proposed the inclusion of Design Pattern in PE-I instead of Text Recognition since it is already covered in Professional Elective-V. She also suggested the introduction of AI & ML Labs from V Semester onwards. The proposal was agreed upon by all members.
2. Dr. E. Suresh Babu Sir recommended the establishment of MOUs with recognized companies for students' summer internships. He also proposed the incorporation of Tensor Flow Lab in the curriculum, which was previously suggested. The proposal was accepted by all members.
3. Dr. B Sujatha Madam suggested the conduction of Comprehensive Tests for core subjects and the inclusion of Neural Networks as a core subject in VI Semester, in line with an earlier recommendation. The proposal was agreed upon by all members.
4. Mr. P. Madhukumar Reddy Sir proposed that Mini projects be undertaken individually by students. He also suggested the inclusion of R Programming subject with lab in Professional Elective-II, which was recommended earlier. The proposal was accepted by all members.


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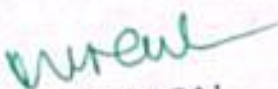
• Action Items

1. Dr. G. Vijayakumari Madam to update the curriculum to include Design Pattern in Professional Elective-I and AI & ML Labs from V Semester onwards.
2. Dr. E. Suresh Babu Sir to establish MOUs with recognized companies for students' summer internships and incorporate Tensor Flow Lab in the curriculum.
3. Dr. B Sujatha Madam to conduct Comprehensive Tests for core subjects and include Neural Networks as a core subject in VI Semester.
4. Mr. P. Madhukumar Reddy Sir to ensure that Mini projects are undertaken individually by students and include R Programming subject with lab in Professional Elective-II.
5. Approved all the individual syllabus of V,VI ,VII and VIII semester of R20 regulation

Meeting Adjourned.


Asst. Professor
Dept of CSE College of Engg
Osmania University, Hyd


Dr. E. Suresh Babu
Department of Computer Science & Engineering
National Institute of Technology, Warangal
Telangana - INDIA - 506 004.


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Department of Artificial Intelligence and Machine Learning (AIML)

Board of Studies (BOS) Meeting

Minutes of Board of Studies Meeting

Programme: B Tech - AIM

Agenda:

- 1) Approval of the TKREC R-22 course structure for the first and second semesters of III and IV B Tech in AIML.
- 2) Approval of the TKREC R-22 detailed syllabus for the first and second semesters of III and IV B Tech in AIML.

SNo	Name of the Expert	Designation	Position	Signature
1	Prof. Dr. Vijaya Kumari	Professor in CSE, JNTUH	JNTUH Nominee	
2	Dr. E Suresh Babu	Associate Professor, NIT Warangal	Member	
3	Dr. B Sujatha	Associate Professor, Dept. of CSE, Osmania University	Member	
4	Mr. Madhu Kumar	Associate Director, NOVARTIS	Industry Representative	
5	Dr. B Srinivasa Rao	Professor, Dept. of CSE	Dean Academics	
5	Dr. Vadivelan Natarajan	HOD AIML	Chairman	
6	Ms. Sangeeta Jawar	Asst. Prof, AIML	Member Secretary	
7	Ms. J Rachna	Asst. Prof, AIML	Senior faculty member	
8	All faculty members of the department		Members	

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Minutes:


- 1) Approval of the TKREC R-22 course structure for the first and second semesters of III and IV B Tech in AIML.


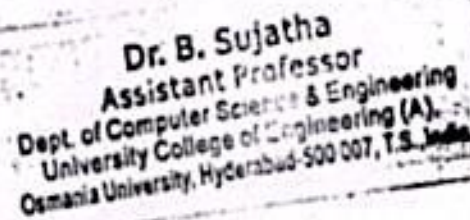
Action Item: The approved course structure will be implemented in the Department from the AY 2022-23 onwards.

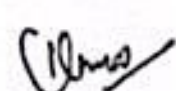
- 2) Approval of the TKREC R-22 detailed syllabus for the first and second semesters of III and IV B Tech in AIML.

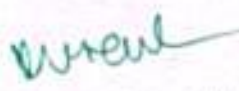
Action Item: The endorsed detailed syllabus will be communicated to the concerned departments for implementation.

- 3) Ratification of the single-point agenda circulated to the BOS members regarding Readmission Student from TKREC R20 to R22 Regulations --dated on 06/12/23.


Dr. E. Suresh Babu
Department of Computer Science & Engineering
National Institute of Technology, Warangal
Telangana - INDIA - 506 004.



Dr. B. Sujatha
Assistant Professor
Dept. of Computer Science & Engineering
University College of Engineering (A)
Osmania University, Hyderabad-500 007, T.S. India


P. Madhu Kumar


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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

R2L REGULATION

COURSE STRUCTURE

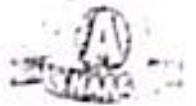
B.TECH [AI/ML] - I to VIII SEM

FOR
B. TECH [AI/ML] COURSE
(Applicable for the batches admitted)
(2021-2022)



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B.Tech I Semester

S.No	Subject Code	Category	Subject Name	Hours per Week			Credits
				L	T	P	
01	20MA1BS01	BS	Mathematics-I	3	1	0	4
02	20CH1BS02	BS	Chemistry	3	1	0	4
03	20EE1ES03	ES	Basic Electrical Engineering	3	0	0	3
04	20ME1ES05	ES	Engineering Workshop	1	0	3	2.5
05	20EN1HS05	HS	English	2	0	0	2
06	20CH1BS06	BS	Engineering Chemistry Lab	0	0	3	1.5
07	20EN1HS07	HS	English Language and Communication Skills Lab	0	0	2	1
08	20EE1ES08	ES	Basic Electrical Engineering Lab	0	0	2	1
09	20MC1ES09	MC	Environmental Science	3	0	0	0
10		MC	Induction Programme				
Total				15	2	10	19

B.Tech II Semester

S.No	Subject Code	Category	Subject Name	Hours per Week			Credits
				L	T	P	
01	20MA2BS01	BS	Mathematics-II	3	1	0	4
02	20AP2BS02	BS	Applied Physics	3	1	0	4
03	20CD2ES03	ES	Programming for Problem Solving	3	1	0	4
04	20ME2ES04	ES	Engineering Graphics	1	0	4	3
05	20AP2BS05	BS	Applied Physics Lab	0	0	3	1.5
06	20CS2ES06	ES	Programming for Problem Solving Lab	0	0	3	1.5
Total				10	3	10	18

(Signature)

P. Madhu Kumar

(Signature)

Dr. E. Suresh Babu

Department of Computer Science & Engineering

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B.Tech III Semester

SNO	SUBJECT CODE	Category	NAME OF THE SUBJECT	NO OF HOURS			CREDITS
				L	T	P	
1	20MA4BS02	BS	Discrete Mathematics	3	0	0	3
2	20CS3PC01	PC	Computer Organization	3	1	0	4
3	21AI3PC01	PC	Basic Python Programming	3	0	0	3
4	20CS3PC03	PC	Data Structures	3	1	0	4
5	20CS3ES01	ES	Analog and Digital Electronics	3	0	0	3
6	20CS3PC04	PC	IT Workshop LAB	2	0	0	1
7	20CS3PC05	PC	Data Structures LAB	0	0	3	1.5
8	21AI3PC02	PC	Python Programming LAB	0	0	3	1.5
9	20MC3HS01	MC	Professional & Engineering Ethics	0	0	2	0
10		MC	Quantitative Analysis-1	3	0	0	0
Total Credits				20	2	8	21

B.Tech IV Semester

SNO	SUBJECT CODE	Category	NAME OF THE SUBJECT	NO OF HOURS			CREDITS
				L	T	P	
1	20MA4BS03	BS	Foundations of ML	3	0	0	3
2	21AI4PC03	HSMC	BEFA	3	0	0	3
3	20CS4PC07	PC	Operating Systems - OS	3	0	0	3
4	20CS4PC09	PC	Database Management Systems	3	0	0	3
5	20CS4PC15	PC	Design and Analysis of Algorithms	3	1	0	4
6	20CS4PC10	PC	Operating System - LAB	0	0	3	1
7	21AI4PC04	PC	DAA through Java - LAB	0	0	3	1.5
8	20CS4PC12	PC	Database Management Systems - LAB	0	0	3	1.5
9	20MC4HS02	MC	Gender Sensitization Lab	3	0	0	0
Total Credits				18	1	9	20

Or. E. Suresh Babu

Department of Computer Science & Engineering
Institute of Technology, Warangal
Warangal - 506 004.

Madhu Kumar

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B.Tech V Semester

SNO	SUBJECT CODE	Category	NAME OF THE SUBJECT	NO OF HOURS			CREDITS
				L	T	P	
1	20CS6PC19	PC	Computer Networks	3	1	0	4
2	21AI5PC05	PC	OOP's Thru Java	3	0	0	3
3	20CS5PC13	PC	Formal Language Automata Theory/CD	3	0	0	3
4	21AI5PC05	PC	Introduction to Machine Learning	3	0	0	3
5		PE-I	Professional Elective 1	3	0	0	3
6	21AI5PC06	PC	Computer Network LAB	0	0	3	1.5
7	21AI5PC07	PC	OOP's thru Java Lab	0	0	3	1.5
8	21AI5PC08	PC	Machine Learning LAB	0	0	0	1
9	20MC5PW01	PW	Summer Internship	3	0	0	0
10	20MC5HS03	MC	Intellectual Property Rights	3	0	0	0
11		MC	Personality Development & Soft Skills	3	0	0	0
Total Credits				21	1	9	21.5

B.Tech VI Semester

SNO	SUBJECT CODE	Category	NAME OF THE SUBJECT	NO OF HOURS			CREDITS
				L	T	P	
1	20CS6PC18	PC	Introduction to Artificial Intelligence	3	0	0	3
2	21AI6PC09	PC	Robotics	3	0	0	3
3	21AI6PC10	PC	Data Science	3	0	0	3
4	21AI6PC11	PC	Neural Networks	3	0	0	3
5		PE-II	Professional Elective II	3	0	0	3
6		OE-1	Open Elective 1	0	0	3	3
7	20EN5HS01	HSMC	AECS Lab	0	0	3	1.5
8	21AI6PC12	PC	Tensor Flow Lab	0	0	3	1.5
9		PE-II	PE-II Lab	0	0	3	1.5
10	20MC6HS04	MC	Constitution of India	3	0	0	0
11		MC	Basic Technical Training	3	0	0	0
Total Credits				21	0	12	21.5

Dr. E. Suresh Babu
 Professor and Head of Department
 Department of Computer Engineering
 Teegala Krishna Reddy Engineering College
 Medbowli, Meerpet, Hyderabad - 500097

Chandra

WARRANT
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B.Tech VII Semester

SNO	SUBJECT CODE	Category	NAME OF THE SUBJECT	NO OF HOURS			CREDITS
				L	T	P	
1	21AI7PC13	PC	Deep Learning	3	0	0	3
2		OE	Open elective -II	3	0	0	3
3		PE-III	Professional Elective III	3	0	0	3
4		PE-IV	Professional Elective IV	3	0	0	3
5		PE-V	Professional Elective V	3	0	0	3
6		PE-III	Professional Elective III Lab	3	0	0	1
7	20MC5PW02	PW	Comprehensive Test	0	0	0	1
8	20MC5PW03	PW	Seminar	0	0	2	1
9	20MC5PW04	PW	Industrial oriented Mini Project	0	0	0	2
10	20MC5PW05	PW	Major Project Stage-1	0	0	6	3
11		MC	Advance Technical Training	3	0	0	0
Total Credits				21	0	8	23

B.Tech VIII Semester

SNO	SUBJECT CODE	Category	NAME OF THE SUBJECT	NO OF HOURS			CREDITS
				L	T	P	
1	21AI8PC14	HSMC	ORGANISATION BEHAVIOUR	3	0	0	3
2		OE-III	Open Elective-III	3	0	0	3
3		PE-VI	Professional Elective VI	3	0	0	3
5	20MC8PW06	PW	Major Project Stage-2	0	0	15	7
Total Credits				9	0	15	16

12
Dr. E. Suresh Babu

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Professional Electives-I

21AI5PE11	Expert System
21AI5PE12	Fuzzy Logic
21AI5PE13	Computer Vision
21AI5PE14	Text Recognition

Professional Electives-II

21AI5PE21	R Programming
21AI5PE22	Deep Learning with Keras
21AI5PE23	Software Testing & Project Management
21AI5PE24	Advanced Algorithms

Professional Electives-III

21AI6PE31	Advanced Python Programming
20CS6PC20	Web Technology
21AI6PE32	Natural Language Processing
20CS5PE22	Internet of Things

Professional Electives-IV

21AI7PE41	Document Analysis & speech recognition
21AI7PE42	Application of ML
21AI7PE43	Robotics & Intelligent system
21AI7PE44	Virtual Reality

Professional Electives-V

21AI7PE51	Text Recognition
21AI7PE52	Block chain Technology
21AI7PE53	Grid Computing
21AI7PE54	Augmented reality

Professional Electives- VI

20CS7PE42	Image Processing
21AI8PE61	Big data computing
21AI8PE62	Pattern warehouse
21AI8PE63	Agent system

Dr. E. Suresh Babu
Department of ...
Halapur, Hyderabad
Telangana

Principal
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Open Elective-I

S.No	Subject Code	Subject Name
01	20CS6OE11	JAVA
02	20CS6OE12	COMPUTER ORGANISATION & ARCHITECTURE

Open Elective-II

S.No	Subject Code	Subject Name
01	20CS7OE21	OPERATING SYSTEM
02	20CS7OE22	ARTIFICIAL INTELLIGENCE

Open Elective-III

S.No	Subject Code	Subject Name
01	20CS7OE31	CYBERSECURITY
02	20CS7OE32	SCRIPTING LANGUAGES

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Dr. E. Suresh Babu
Department of Computer Science & Engineering
National Institute of Technology, Warangal
Telangana - 506004

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At the end of the program, a student will have:

- Install knowledge in the major areas of Information Technology such as Artificial Intelligence, Machine Learning, Networking, Databases, Data Analytics, Web Development, Cloud Computing and Data Mining.
- Allows the students to use professional engineering practices, strategies, tools and techniques to solve problems in Data Science, AI and ML.
- Innovate efficient and real time intelligent solutions to existing problems in interdisciplinary domains for societal benefits through projects.
- Ability to adapt to future technologies through acquired skills and knowledge to ideate, design, test and deploy computationally intensive applications or solutions for different business environments.
- Carry out knowledge development in the advanced areas of AI & ML and addressing the basic needs of the society.

W. S. S. S.

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- Ability to adapt to future technologies through acquired skills and knowledge to ideate, design, test and deploy computationally intensive applications or solutions for different business environments.
- Carry out knowledge development in the advanced areas of AI & ML, and addressing the basic needs of the society.

A handwritten signature in green ink is positioned above the principal's name. The signature is cursive and appears to read 'M. V. S. R.'.

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01/11/22 8 Board of studies meeting CSD

- As per the Regulation (R22) given by JNTUH Teagala Krishna Reddy Engineering College (TKREC) of CSD Department in following the same course structure.
- No final list given to admitted 1st year student
- BOS members towards approval of four years course structure and syllabus upto 4th semester for the branch of (CSD) computer science and design program R22 for the students admitted in the Academic year 2022-23 onwards
- If any suggestions required for the BOS members in the said due course for the III & IV year syllabus can be updated based on the emerging tech. Industrial needs.

1. Dr. K. Salangam The members present were

Prof. & Head
CSD, Chairman V.L.W.
BOS, TKREC (R9)

2. Dr. G. Vijayakumari

Prof. & Head
JNTUH Nominee

3. Dr. E. Suresh Babu

Asst. prof NIT
Walangal

Dr. E. Suresh Babu
Department of Com.
National Institute of Technology
Telangana - INDIA 509 004

4. Dr. B. Sujatha

Professor, OU - COE
Member Dr. B. Sujatha

5. P. Madhu Kumar Reddy

ASSO. Prof. of CSD
NOVA (Expert)
Assistant Professor
Department of Computer Science & Engineering
University College of Engineering (A)
NOVA University, Hyderabad, T.S. India

6. S. Sanjeeva Rao

Assoc. prof R9-BOS
Member Secretary

minutes



Department of Computer Science and Information Technology
Board of Studies (BOS) Meeting
Minutes of Board of Studies Meeting
Programme: B Tech - CSG

Agenda:

- 1) Approval of the TKRUC R-22 course structure for the first and second semester of III and IV B Tech in CSD
- 2) Approval of the TKRUC R-22 detailed syllabus for the first and second semester of III and IV B Tech in CSD

SNo	Name of the Expert	Designation	Position	Signature
1	Prof. Dr. Vijaya Kumari	Professor in CSE, JNTUH	JNTUH Nominee	
2	Dr. E Suresh Babu	Associate Professor, NIT Warangal	Member	
3	Dr. B Sujatha	Associate Professor, Dept. of CSE, Osmania University	Member	
4	Mr. Madhu Kumar	Associate Director, NOVARTIS	Industry Representative	
5	Dr. B Srinivasa Rao	Professor, Dept. of CSE	Dean Academics	
5	Dr. J Praveen Kumar	HOD CSD	Chairman	
6	Mr. Sanjeeva Rao	Asst. Prof, CSD	Member Secretary	
7	Mr. B Kundan	Asst. Prof, CSD	Senior faculty member	
8	All faculty members of the department		Members	

Notes:


- 1) Approval of the TKREC R-22 course structure for the first and second semesters of III and IV B Tech in CSD.


Action Item: The approved course structure will be implemented in the Department from the AY 2022-23 onwards

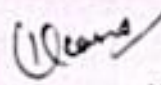
- 2) Approval of the TKREC R-22 detailed syllabus for the first and second semesters of III and IV B Tech in CSD.

Action Item: The endorsed detailed syllabus will be communicated to the concerned departments for implementation.


- 3) Ratification of the single-point agenda circulated to the BOS members regarding Readmission Student from TKREC R20 to R22 Regulations --dated on 06/12/23.

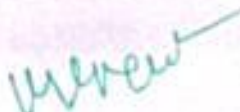

Dr. E. Suresh Babu
Department of Computer Science & Engineering
National Institute of Technology, Warangal
Telangana - INDIA - 506 004.


Dr. B. Sujatha
Assistant Professor
Dept. of Computer Science & Engineering
University College of Engineering
Osmania University, Hyderabad-500 075, India


P. Madhu Kumar

As per the Regulation (Reg) given by JNTUH TKREC R22 of CSD Department following the same course structure and syllabus (III year & IV year) of the University.





I YEAR I SEMESTER


S. No.	Course Code	Course	L	T	P	Credits
1		Matrices and Calculus	3	1	0	4
2		Engineering Chemistry	3	1	0	4
3		Programming for Problem Solving	3	0	0	3
4		Basic Electrical Engineering	2	0	0	2
5		Computer Aided Engineering Graphics	1	0	4	3
6		Elements of Computer Science & Engineering	0	0	2	1
7		Engineering Chemistry Laboratory	0	0	2	1
8		Programming for Problem Solving Laboratory	0	0	2	1
9		Basic Electrical Engineering Laboratory	0	0	2	1
		Induction Program				
Total			12	2	12	20

I YEAR II SEMESTER


S. No.	Course Code	Course	L	T	P	Credits
1		Ordinary Differential Equations and Vector Calculus	3	1	0	4
2		Applied Physics	3	1	0	4
3		Engineering Workshop	0	1	3	2.5
4		English for Skill Enhancement	2	0	0	2
5		Electronic Devices and Circuits	2	0	0	2
6		Python Programming Laboratory	0	1	2	2
7		Applied Physics Laboratory	0	0	3	1.5
8		English Language and Communication Skills Laboratory	0	0	2	1
9		IT Workshop	0	0	2	1
10		Environmental Science	3	0	0	0
Total			13	4	12	20

II YEAR I SEMESTER

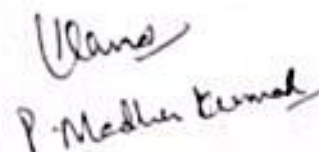
S. No.	Course Code	Course Title	L	T	P	Credits
1		Digital Electronics	3	0	0	3
2		Data Structures	3	0	0	3
3		Computer Oriented Statistical Methods	3	1	0	4
4		Computer Organization and Architecture	3	0	0	3
5		Object Oriented Programming through Java	3	0	0	3
6		Data Structures Lab	0	0	3	1.5
7		Object Oriented Programming through Java Lab	0	0	3	1.5
8		Data visualization - R Programming/ Power BI	0	0	2	1
9	*MC	Gender Sensitization Lab	0	0	2	0
Total Credits			15	01	10	20

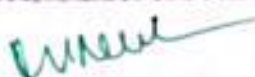

Dr. E. Suresh Babu

Department of Computer Science & Engineering
National Institute of Technology, Warangal
Telangana - INDIA - 506 004.


Dr. B. Sujatha
Assistant Professor

Dept. of Computer Science & Engineering
University College of Engineering (A),
Osmania University, Hyderabad-500 007, T.S., India


P. Madhu Kumar



II YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1		Discrete Mathematics	3	0	0	3
2		Business Economics & Financial Analysis	3	0	0	3
3		Operating Systems	3	0	0	3
4		Database Management Systems	3	0	0	3
5		Software Engineering	3	0	0	3
6		Operating Systems Lab	0	0	2	1
7		Database Management Systems Lab	0	0	2	1
8		Real-time Research Project/ Field Based Research Project	0	0	4	2
9		Node JS/ React JS/ Django	0	0	2	1
10	*MC	Constitution of India	3	0	0	0
Total Credits			18	0	10	20

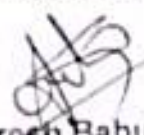
III YEAR I SEMESTER


S. No.	Course Code	Course Title	L	T	P	Credits
1		Design Thinking	3	1	0	4
2		Computer Networks	3	0	0	3
3		Computer Graphics	3	0	0	3
4		Professional Elective-I	3	0	0	3
5		Professional Elective -II	3	0	0	3
6		Computer Networks Lab	0	0	2	1
7		Computer Graphics Lab	0	0	2	1
8		Advanced Communication Skills Lab	0	0	2	1
9		UI design - Flutter	0	0	2	1
10	*MC	Intellectual Property Rights	3	0	0	0
Total Credits			18	01	08	20

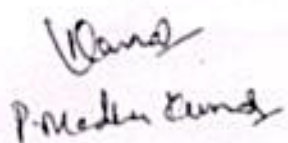
III YEAR II SEMESTER

S. No.	Course Code	Course Title	L	T	P	Credits
1		Algorithm Design and Analysis	3	0	0	3
2		Formal Languages and Automata Theory	3	0	0	3
3		Introduction to Engineering Design	3	0	0	3
4		Professional Elective - III	3	0	0	3
5		Open Elective-I	3	0	0	3
6		Engineering Design Lab	0	0	4	2
7		Professional Elective-III Lab	0	0	2	1
8		Industrial Oriented Mini Project/ Internship/ Skill Development Course (Google Animation/ Hadoop Flash/ Open Toonz)	0	0	4	2
9	*MC	Environmental Science	3	0	0	0
Total Credits			18	0	10	20

Environmental Science in III Year II Semester Should be Registered by Lateral Entry Students Only.


Dr. E. Surosh Babu
 Department of Computer Science & Engineering
 National Institute of Technology, Warangal


Dr. B. Sriatha
 Assistant Professor
 Dept. of Computer Science & Engineering
 University College of Engineering (A),


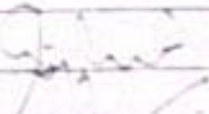


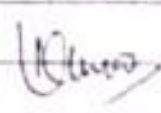
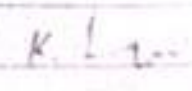

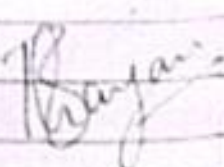

P. Madhu Kumar

12/10/21
11:30 AM

Board of Studies Meeting (Online Mode) 2021

A meeting of Board of Studies for CSE department was held on 12/10/21 at 11:30 AM through online mode & the following Bos Members were present, and suggested the following points for the approval of course structure (CSD) (R20) & syllabus upto 4th sem. for the students admitted in 2021-22 academic year.

The Members present were:

- 1) Dr. Ch. V. Phani Krishna Prof. & Head
CSE, chairman
Bos, TKREC (R9) 
- 2) Dr. G. Vijaya Kumari Prof. & Head
JHUB, JNTUH
JNTUH Nominee 
- 3) Dr. E. Suresh Babu Asst. Prof. NIT
Warangal. 
- 4) Dr. B. Sujatha Professor, OU-COE
Member 
- 5) P. Madhu Kumar Reddy Asso. Director
Novartis (Industry
Expert) 
- 6) Dr. K. Sarangam Asst. Prof. R9-Bos
Member 
- 7) Dr. N. Vadivelan Asst. Prof. R9-Bos
Member 
- 8) Dr. K. Bhargavi Asst. Prof. R9-Bos
Member Secretary 

Unseen

1. Dr. G. Vijaya Kumari Madam suggested
 - a) to incorporate courses related to software engineering, software design & software testing.
 - b) courses related to software engineering should be included in professional electives as well.
 - c) Inclusion of Agile programming with Lab in 6th semester.
 - d) Devops with Lab in 7th semester.
 - e) Extreme programming to be incorporated in 7th semester.

2. Dr. E. Suresh Babu sir suggested
 - a) to incorporate courses like software testing with Lab.
 - b) to include real time projects design & testing as a part of case studies in software Project Management.

3. Dr. B. Sujatha Madam suggested
 - a) to incorporate algorithms based courses as a part of professional core
 - b) software testing labs to be incorporated as Professional core.
 - c) software Architect & Design should be incorporated as professional core.

movement

4. Mr. P. Madhu Kumar sir suggested -

- a) to include & change architect of software design as per industry requirements.
- b) including the case study of real time projects as tech course.
- c) incorporate courses related to industry requirements & necessity.
- d) training on some modules through industry experts.
- e) Updating the lab experiments with industry need & necessity.

WVW

Teegla Krishna Reddy Engineering College

Department of Computer Science and Design (CSG)
3rd Board of Studies (BOS) Meeting
Minutes of Board of Studies Meeting
Programme: B Tech - CSG

Meeting Date: 01-03-2023

Meeting Time: 11.00 A.M

Venue: Zoom Online Meeting

Attendees

1. Prof. Dr. Vijaya Kumari Madam, Director J-Hub, Professor in CSE, JNTUH
2. Dr. E Suresh Babu, Associate professor, NIT Warangal
3. Dr. B Sujatha, Associate professor, Dept. of CSE, Osmania University
4. Mr. Madhu Kumar, Associate director, NOVARTIS
5. Dr B Srinivasa Rao, Dean Academics, TKREC
6. Dr. J Praveen Kumar, HOD CSD
7. Mr. Snajeeva Rao, Member Secretary, CSD
8. Mr. B Kundan, Senior faculty member, CSD

Agenda: Approval of III Year and IV Year Syllabus of R20 Regulations

Discussion Points:

1. Prof. Dr. Vijaya Kumari Madam suggested several improvements to the curriculum, including introducing Computer Networks and Computer Networks lab in III B.Tech, VI Semester in place of Agile Programming. She also advised incorporating Computer Networks in Professional Elective -IV in VII Semester and replacing Android Operating System with Android Application Development in Professional Elective -III in VI Semester. Additionally, she suggested including Python programming instead of R Programming since the R programming course has already been covered in Introduction to Statistical software using R in VII Semester. All members agreed with the proposals.
2. Dr. E Suresh Babu recommended using Google Firebase database instead of SQL Lite in Android Application Development Lab. He also suggested incorporating real-time project design and testing as part of course studies in software project management. The proposal was agreed upon by all members.

M. Suresh

3. Dr. B Sujatha proposed implementing DAA LAB experiments in JAVA instead of C programming and encouraging students to do internships in IT/ITES related companies during the Summer Internship program. All members agreed with the proposal.
4. Mr. Madhu Kumar advised conducting training programs on software project management with industry experts and updating the labs/lab experiments based on industry needs. The proposal was accepted by all members.

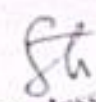
Action Items:

1. Prof. Dr. Vijaya Kumari Madam to update the curriculum to include the suggested improvements, such as Computer Networks and Computer Networks lab in III B.Tech, VI Semester, and incorporating Python programming in VII Semester.
2. Dr. E Suresh Babu Sir to update the Android Application Development Lab to use Google Firebase database and incorporate real-time project design and testing in software project management.
3. Dr. B Sujatha Madma to implement DAA LAB experiments in JAVA instead of C programming and encourage students to do internships in IT/ITES related companies during the Summer Internship program.
4. Mr.P Madhu Kumar Sir to conduct training programs on software project management with industry experts and update the labs/lab experiments based on industry needs.
5. Approved all the individual syllabus of V,VI ,VII and VIII semester of R20 regulation

Meeting Adjourned.



Dr. E. Suresh Babu
Department of Computer Science & Engineering
National Institute of Technology, Warangal
Telangana - INDIA - 506 004.



Asst. Professor
Dept of CSE College of Engg
Osmania University, Hvd

Waver



TEEGALAKRISHNAREDDYENGINEERINGCOLLEGE

(UGC-Autonomous)

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B.Tech I Semester (R20)

S.No	Subject Code	Category	Subject Name	Hours per Week			Credits
				L	T	P	
01	20MA1BS01	BS	Mathematics-I	3	1	0	4
02	20CH1BS02	BS	Chemistry	3	1	0	4
03	20EE1ES01	ES	Basic Electrical Engineering	3	0	0	3
04	20ME1ES05	ES	Engineering Workshop	1	0	3	2.5
05	20EN1HS01	HS	English	2	0	0	2
06	20CH1BS03	BS	Engineering Chemistry Lab	0	0	3	1.5
07	20EN1HS02	HS	English Language and Communication Skills Lab	0	0	2	1
08	20EE1ES03	ES	Basic Electrical Engineering Lab	0	0	2	1
09	20MC1ES09	MC	Environmental Science	0	0	2	0
10		MC	Induction Programme				
Total				12	2	10	19

B.Tech II Semester (R20)

S.No	Subject Code	Category	Subject Name	Hours per Week			Credits
				L	T	P	
01	20MA2BS04	BS	Mathematics-II	3	1	0	4
02	20AP2BS05	BS	Applied Physics	3	1	0	4
03	20CS2ES04	ES	Programming for Problem Solving	3	1	0	4
04	20ME2ES05	ES	Engineering Graphics	1	0	4	3
05	20AP2BS06	BS	Applied Physics Lab	0	0	3	1.5
06	20CS2ES06	ES	Programming for Problem Solving Lab	0	0	3	1.5
07	20MC2ES07	MC	Environmental Science	3	0	0	0
Total				13	3	10	18

Asst. Professor
Dept. of CSE College of Engg
Osmania University, Hyd

P. Madhu Kumar

Dr. E. Suresh Babu
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TEEGALAKRISHNAREDDY ENGINEERING COLLEGE

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B.Tech III Semester (R20)

SNo.	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
1	20MA3BS08	BS	Computer Oriented Statistical Methods	3	0	0	3
2	20CS3PC01	PC	Computer Organization	3	1	0	4
3	20CD3PC01	PC	Object Oriented Programming using Java	2	0	0	2
4	20CS3PC03	PC	Data Structures	3	1	0	4
5	20CS3ES08	ES	Analog & Digital Electronics	3	0	0	3
6	20CS3PC04	PC	IT WORKSHOP Lab	0	0	2	1
7	20CS3PC05	PC-LAB	Data Structures Lab	0	0	3	1.5
8	20CD3PC02	PC-LAB	Object Oriented Programming using Java Lab	0	0	3	1.5
9	20MC3HS01	MC	Professional & Engineering Ethics	3	0	0	0
10	20MC3BS02	MC	Quantitative Analysis-1	3	0	0	0
TOTAL				20	2	8	20

B.Tech IV Semester (R20)

SNo.	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
1	20MA4PC07	BS	Discrete Mathematics	3	0	0	3
2	20MS4HS03	HSMC	Business Economics & Financial Analysis	3	0	0	3
3	20CS4PC09	PC	Operating Systems	3	0	0	3
4	20CS5PC14	PC	Software Engineering	3	1	0	4
5	20CS4PC10	PC	Database Management Systems	3	1	0	4
6	20CS4PC11	PC-LAB	Operating System Lab	0	0	3	1.5
7	20CD4PC03	PC-LAB	Software Engineering Lab	0	0	2	1
8	20CS4PC13	PC-LAB	Database Management Systems Lab	0	0	3	1.5
9	20MC4HS03	MC	Gender Sensitization Lab	0	0	2	0
10	20MC4BS03	MC	Quantitative Logical and Reasoning	3	0	0	0
TOTAL				18	2	10	21

Asst Professor
Dept of CSE College
Jawahar University, H

P. Madhu Kumar
P. Madhu Kumar

Dr. E. Suresh Babu
Dr. E. Suresh Babu
Department of Computer Science & Engineering
National Institute of Technology, Warangal
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B.Tech V Semester (R20)

SNo.	Subject Code	Category	Subject Name	Hours per week			Credits
				L	T	P	
1	20CS5PC14	PC	Formal Languages & Automata Theory	3	0	0	3
2	20CD5PC04	PC	Software Design & Architecture	3	0	0	3
3	20CS5PC16	PC	Design and Analysis of Algorithms	3	1	0	4
4	20CD5PE10	PE-I	Professional Elective- I	3	0	0	3
5	20CD5PE20	PE-II	Professional Elective- II	3	0	0	3
6	20CD5PE20	PE-II-LAB	Professional Elective -II Lab	0	0	3	1.5
7	20CS5PC17	PC-LAB	Design and Analysis of Algorithms Lab	0	0	3	1.5
8	20EN5HS04	HSMC	Advanced Communication Skills Lab	0	0	3	1
9	20CD5PW01	PW	Summer Internship	0	0	0	1
10	20MC5HS05	MC	Intellectual Property Rights	3	0	0	0
11	20MC5HS06	MC	Personality Development & Soft Skills	3	0	0	0
TOTAL				21	1	9	21

B.Tech VI Semester (R20)

Sno	Subject Code	Category	Subject Name	Hours per week			Credits
				L	T	P	
1	20CD6PC05	PC	Design pattern	3	0	0	3
2	20CD6PC06	PC	Software Project Management	3	0	0	3
3	20CS6PC18	PC	Computer Networks	3	1	0	4
4	20CD6PC07	PC	Software Testing	2	0	0	2
5	20CD6PE30	PE-III	Professional Elective- III	3	0	0	3
6	20CD6OE10	OE-I	Open Elective- I	3	0	0	3
7	20CD6PE30	PE-III Lab	Professional Elective- III Lab	0	0	2	1
8	20CD6PC08	PC-LAB	Computer Networks Lab	0	0	3	1.5
9	20CD6PC09	PC-LAB	Software Testing Lab	0	0	3	1.5
	20MC6HS07	MC	Constitution of India	3	0	0	0
10	20MC6CS01	MC	Basic Technical Training	3	0	0	0
TOTAL				23	1	8	22

Sh
Asst. Professor
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Osmania University, Hvd

Umas
P. Madhu Kumar

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B.Tech VII Semester (R20)

Sno.	Subject Code	Category	Subject Name	Hours per week			Credits
				L	T	P	
1	20CD7PC10	PC	Extreme Programming	2	1	0	3
2	20CD7PC11	PC	Devops	3	0	0	3
3	20CD8PE42	PE-IV	Professional Elective- IV	3	0	0	3
4	20CD8PE50	PE-V	Professional Elective- V	3	0	0	3
5	20CD8OE20	OE-II	Open Elective- II	3	0	0	3
6	20CD7PC12	PC LAB	Devops - Lab	0	0	3	1
7	20CD5PW02	PW	Seminar	0	0	2	1
8	20CD5PW03	PW	Comprehensive Exam	0	0	0	1
9	20CD5PW04	PW	Industry oriented Mini Project	0	0	0	2
10	20CD5PW05	PW	Project Stage -I	0	0	6	3
11	20MC7CS02	MC	Advance Technical Training	3	0	0	0
TOTAL				17	1	11	23

B.Tech VIII Semester (R20)

Sno.	Subject Code	Category	Subject Name	Hours per week			Credits
				L	T	P	
1	20HS8MS02	HSMC	Organization Behavior	3	0	0	3
2	20CD8PE60	PE-VI	Professional Elective-VI	3	0	0	3
3	20CD8OE30	OE-III	Open Elective- III	3	0	0	3
4	20CD8PW06	PW	Project stage -II	0	0	15	7
TOTAL				9	0	15	16

fh
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Dept of CSE College of Engg
Osmania University, Hvd

Uma
P. Madhukumar

ASB
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Department of Computer Science & Engineering
National Institute of Technology, Warangal
Telangana - INDIA - 506 004.

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TEEGALAKRISHNAREDDY ENGINEERING COLLEGE
(UGC-Autonomous)

Approved by AICTE, Affiliated by JNTUHL, Accredited by NAAC - A Grade
Medhovi, Meerpeta, Balapur, Hyderabad, Telangana - 500097
Mob: 8498085218 Email: info@tkrec.ac.in, www.tkrec.ac.in



Professional Elective -1	
20CD5PE11	Artificial Intelligence
20CD5PE12	Advanced Computer Architecture
20CD5PE13	Service Oriented Architecture
20CD5PE14	Requirement Engineering

Professional Elective -2	
20CD5PE21	Component Based Technologies
20CD5PE22	Web Technologies
20CD5PE23	OOAD Through UML
20CD5PE24	Middleware Technologies

Professional Elective -3	
20CD6PE31	Introduction to Statistical Software
20CD6PE32	Android Application Development
20CD6PE33	Internet of Things
20CD6PE34	Python Programming

Professional Elective -4	
20CD7PE41	Distributed Database
20CD7PE42	Agile Programming
20CD7PE43	Software Metrics
20CD7PE44	Cloud Computing

Professional Elective -5	
20CD7PE51	Advanced Algorithms
20CD7PE52	Data Science
20CD7PE53	Software Quality Management
20CD7PE54	Computer vision

Professional Elective -6	
20CD8PE61	Software Security Engineering
20CD8PE62	Data Warehousing & Data Mining
20CD8PE63	Software Verification & Validation
20CD8PE64	Data Analytics

P. Madhu Kumar

Dr. E. Suresh Babu
Department of Computer Science & Engineering
National Institute of Technology, Warangal
Telangana - INDIA - 506 004.

Dr. E. Suresh Babu

Dr. E. Suresh Babu
Dept. of CSE College of Engg
Osmania University, Hyd

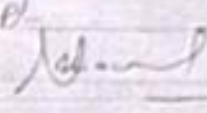


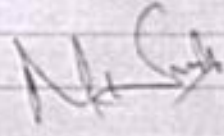
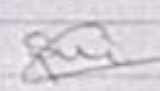

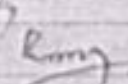
Third Board of Studies (on line mode)

Teegda Krishna Reddy Engineering College (R9)
MBA Department Board of Studies meeting
was held on 17/07/22 at 2:30 through online
mode and discussed about the course structure
Syllabus and other department-Subsidiary concerned.

~~In view of the circumstances of the
Students admitted in 2021-22 Academic year~~

The following members were present-

members present-

- | | | |
|--------------------------|---|---|
| 1) V. Subha Nalayana | Assoc Prof MBA Dept.
Chairman of BOS
TKREC (R9) |  |
| 2) Dr. Sreedha | Professor |  |
| 3) Dr. L. Srinivas Reddy | Aristotle PG College
Principal |  |
| 4) Dr. Nagumusi Srinivas | Prof. St. Joseph
PG College |  |
| 5) P. Gangadhar Rao | Production manager
Tata White Clippa. Rao | |
| 6) D. Srisailam | Asst. Prof (R9)
TKREC
Member |  |
| 7) K. Venkatesou | Asst. Prof (R9)
TKREC
Member |  |
| 8) Dr. Ramesh Chandrabh | Member Secretary
(R9) TKREC |  |

TEEGDA KRISHNA REDDY

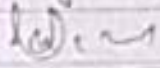
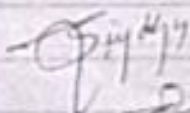

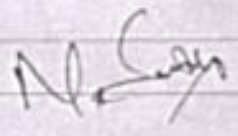
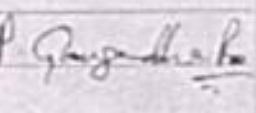


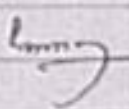
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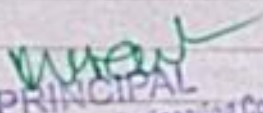
Meeting Points

- ① Mr. P. Gangadhar Rao from Industry supported the selection of JNTUH syllabus is practically useful for the students and maintain Industry institute partnership, with practical industrial visits, may boost the interest to learn more and more.
- ② Dr. Simha madam expressed that the selection and adopting JNTUH syllabus is boon for the students and more realistic approach to reach and become more professional.
- ③ Dr. Ramesh Chandavath has explained about structure of course, and syllabus to the members present.
- ④ Dr. Nagari. Somivar supported for keeping the same syllabus and following the procedure of JNTUH.
- ⑤ Dr. L. Somivar^{also} expressed that selection of JNTUH syllabus is quite useful for the students and attain professional approach.

It is resolved by all the members present in the meeting of BOS and supported in checking the JNTUH syllabus without changing any content and expressed their positive opinion

Members:-

S.No.	Name	Designation	Sig.
1.	V. Suryanarayana	Associate prof.	
2.	Dr. Sindhu	Prof & BOS/C JNTUH	
3.	Dr. L. Sreenivas Reddy	Prof. Principal.	
4.	Dr. N. Srinivas	Prof.	
5.	P. Gangadhar Rao	Production Manager Tata White clip.	
6.	D. Srisailem	Asst. Prof., TKREC	
7.	K. Venkataraju	Asst. Prof., TKREC	
8.	Dr. Ramesh chandrababu	Asst. Prof. TKREC.	


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22MB3PEM1	Digital Marketing	4	0	0	4
22MB3PEM2	Sales and Promotion Management	4	0	0	4
22MB3PEM3	Consumer Behavior	4	0	0	4
Professional Elective-III (Finance)					
22MB3PEF1	Security Analysis and Portfolio Management	4	0	0	4
22MB3PEF2	Risk Management and Financial Derivatives	4	0	0	4
22MB3PEF3	Strategic Cost and Management Accounting	4	0	0	4
Professional Elective-III (Human Resources)					
22MB3PEH1	Talent and Performance Management Systems	4	0	0	4
22MB3PEH2	Learning and Development	4	0	0	4
22MB3PEH3	Employee Relations	4	0	0	4
Professional Elective-III (Entrepreneurship)					
22MB3PEE1	Startup and MSME Management	4	0	0	4
22MB3PEE2	Technology Business Incubation	4	0	0	4
22MB3PEE3	Innovation and Entrepreneurship	4	0	0	4
TOTAL		24	0	2	26

II Year II Semester

Course Code	Course Title	L	T	P	Credits
22MB4PC18	Strategic Management	4	0	0	4
22MB4PC19	Pre-submission project Seminar	0	0	2	2
22MB4PC20	Main Project Viva-Voce	0	0	4	4
Professional Elective-IV (Marketing)					
22MB4PEM4	International Marketing	4	0	0	4
22MB4PEM5	Services Marketing	4	0	0	4
22MB4PEM6	Marketing Analytics	4	0	0	4
Professional Elective-IV (Finance)					
22MB4PEF4	International Financial Management	4	0	0	4
22MB4PEF5	Strategic Financial Management	4	0	0	4
22MB4PEF6	Financial Analytics	4	0	0	4
Professional Elective-IV (Human Resources)					
22MB4PEH4	International Human Resource Management	4	0	0	4
22MB4PEH5	Leadership and Change Management	4	0	0	4
22MB4PEH6	HR Analytics	4	0	0	4
Professional Elective-IV (Entrepreneurship)					
22MB4PEE4	Entrepreneurial Finance	4	0	0	4
22MB4PEE5	Entrepreneurial Marketing	4	0	0	4
22MB4PEE6	Family Business Management	4	0	0	4
TOTAL		16	0	6	22
All total credits		90	0	12	102



HOD - MBA

Teegala Krishna Reddy Engg. College
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1st Board of Studies meeting (Online mode)

MBA Department Board of Studies meeting was held on 23rd June, 2021 at 12:00 pm through on-line mode and discussed about the course structure, syllabus and other department subjects concerned to MBA for the approval of (R20) for the students admitted in 20-21 Academic year. The following members were present-

members present-

- | | |
|--------------------------|--|
| 1. V. Sujya Nalayana | ASSOC PROF, HOD of
MBA Dept. chairman
BOS, TCRAC (R20) |
| 2. Dr Sindhu | Professor & BOS chairperson
JNTUHT |
| 3. Dr. L. Srinivas Reddy | Aristotle PC. College
Principal |
| 4. Dr. Nagunuri Srinivas | Prof. St Joseph
PC. College |
| 5. P. Gangadhar Rao | production manager
(Industry) Tata Tech. CLP. |
| 6. D. Srisailam | ASSOC Prof.
member (R20 college) |
| 7. K. Venkata Ravi | ASSOC Prof.
member (R20 college) |

① Dr Ramesh Chandavath Asst Prof
Member Secretary Rgs

Meeting Points

① Mr P. Gangadhar Rao interacted with all members and suggested that HR is the main resource to develop any Organisation or institution.

Industry Interaction through Workshop, Seminars to develop the Students to develop practically

② Dr Sindhu madam has expressed Dept Projects and its importance, Electives in different areas HR, marketing, Finance and allocation of faculty etc. and also expressed different subjects in different Semesters. how JNTU has formed fulltime to make the Students Very Professional

③ Dr Ramesh Chandavath has explained about course structure and fulltime to the members and cleared the doubts to the members

(4) Dr Nagurani Shrivastava expressed that 5th unit- in marketing subject to change as contemporary to teach the students. He also expressed skill development is important in some areas.

(5) Dr L. Shivani has expressed his opinion to have some correction in syllabus headings regarding making bold to look brighter and expressed his happiness towards framing of INTU II syllabus to reach the students. But should and must students prove practically and put their efforts.

It is resolved by all the members and approved the MBA syllabus R 20 and also approved other depart concerned subjects (seized from MBA) for the students admitted in 20-21 Academic year

WHEW

Members

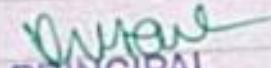
- (1) V. Sulya Sanya Nayana Assoc Prof sd.
Admission
23/6
- (2) Dr Sindhu Prof & BOS Z/c
JKRCE [Signature]
23/6
- (3) Dr L. Sreenivas Reddy Prof
Principal [Signature]
- (4) Dr N. Srinivas Prof N. Srinivas
23/6
- (5) P. Gangadhar Rao Production
manager
Tata Kihilo clg [Signature]
24/6
- (6) D. Srinilam Asst-Prof
JKRCE [Signature]
20/6/24
- (7) K. Venkata Ravi Asst-Prof
JKRCE K. Venkata Ravi
23/06/2024
- (8) Dr R. Ramesh chandra Asst-Prof
JKRCE Ramesh
23/6/24

Board of Studies meeting (online mode)

Teegala Krishna Reddy Engineering College (R&A) MBA Department Board Studies meeting was held on 27/01/2024 at 12:30 pm through online mode and discussed about the structure of the concerned subjects to be served for other UG (Subjects) courses from MBA department, for approval

Members Present

- 1) V. Susya Nalayana: Assoc Prof MBA Dep
Chairman of BOS
TKREC (R&A) [Signature]
- 2) Dr. Simsha: Principal & Professor
JNTUHT [Signature]
- 3) Dr. L. Srinivas Reddy: Nri Sthala Ph College
Principal [Signature]
- 4) Dr. N. Srinivas: Prof St Joseph
Ph College N. Srinivas
01/2/24
- 5) P. Ganfadhara Rao: Production manager [Signature]
- 6) Dr. Ramesh Chandevu: Member Secretary
MBA Dept.
TKREC [Signature]
- 7) D. Sreedharan: member
(TKREC) [Signature]
- 8) M. Annapurna: member A.T
05/2/24


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meeting Points

- ① Dr. Sindhu madam expressed that authors of the syllabus framed are old and to be changed accordingly.
- ② Mr. P. Gangadhar Rao expressed about the organization behaviour subjects to be updated with the present trends to meet the current challenges.
- ③ Dr. N. Srinivas supported the structure of the syllabus.
- ④ Dr. L. Srinivas also supported that the selection topics are upto the mark.
- ⑤ Dr. Ramesh Chandavath explained about syllabus and structure for the approval.

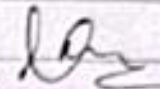
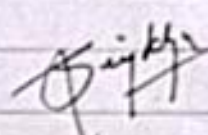
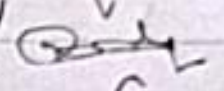
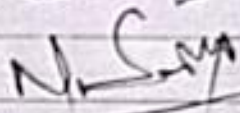
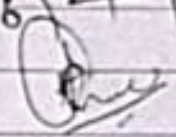


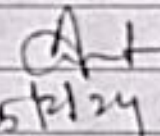
Meeting ended without any technical problem.


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91. is resolved by all the members present in the meeting of BOS and supported the structure and syllabus and expressed positively

Members

- 1) V. Suleya Nalayani Chair Person 
- 2) Dr Pinckhy Principal & PooL JNTUHT 
- 3) Dr L. Sreenivas Reddy Prof & Principal Aristotle's Ph 
- 4) Dr N. Srinivas Prof & HOD N. Srinivas 
6/2/24
- 5) Dr P. Gangadhar Reddy Production manager 
- 6) Dr Ramesh Chandakath ASSI PooL TIEREC 
- 7) Dr Sreedasilan ASSI PooL TIEREC 
- 8) M. Annapoorna ASSI PooL TIEREC 
15/2/24


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MASTER OF BUSINESS ADMINISTRATION MBA (Regular) R-22
Effective from Academic Year 2022- 23 Admitted Batch

I Year I Semester COURSE STRUCTURE AND SYLLABUS

Course Code	Course Title	L	T	P	Credits
22MB1PC01	Management and Organizational Behavior	4	0	0	4
22MB1PC02	Business Economics	4	0	0	4
22MB1PC03	Financial Reporting & Analysis	4	0	0	4
22MB1PC04	Research Methodology and Statistical Analysis	4	0	0	4
22MB1PC05	Legal and Business Environment	4	0	0	4
Open Elective-I					
22MB1OE11	Business Ethics and Corporate Governance	3	0	0	3
22MB1OE12	Project Management				
22MB1OE13	Sustainability Management				
22MB1OE14	Cross Cultural Management				
22MB1PC06	Business Communication Lab	0	0	2	2
22MB1PC07	Statistical Data Analysis Lab	0	0	2	2
TOTAL		23	0	4	27

I Year II Semester

Course Code	Course Title	L	T	P	Credits
22MB2PC08	Human Resource Management	4	0	0	4
22MB2PC09	Marketing Management	4	0	0	4
22MB2PC10	Financial Management	4	0	0	4
22MB2PC11	Quantitative Analysis for Business Decisions	4	0	0	4
22MB2PC12	Entrepreneurship and Design Thinking	4	0	0	4
22MB2PC13	Logistics & Supply Chain Management	4	0	0	4
Open Elective-II					
22MB2OE21	Total Quality Management	3	0	0	3
22MB2OE22	Marketing Research				
22MB2OE23	International Business				
22MB2OE24	Rural Marketing				
TOTAL		27	0	0	27

Internship during summer vacation (after Semester-II)

II Year I Semester

Course Code	Course Title	L	T	P	Credits
22MB3PC14	Production & Operations Management	4	0	0	4
22MB3PC15	Management Information Systems	4	0	0	4
22MB3PC16	Business Analytics	4	0	0	4
22MB3PC17	Summer Internship	0	0	2	2
Professional Elective-III (Marketing)					

HOD - MBA

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 Sarcoornagar, Hyderabad - 500079. A.P.

REUNION
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MASTER OF BUSINESS ADMINISTRATION MBA (Regular) R-20
Effective from Academic Year 2020- 21 Admitted Batch

I Year I Semester COURSE STRUCTURE AND SYLLABUS

Course Code	Course Title	L	T	P	Credits
20MB1PC01	Management and Organizational Behavior	3	1	0	4
20MB1PC02	Business Economics	3	1	0	4
20MB1PC03	Financial Accounting & Analysis	3	1	0	4
20MB1PC04	Research Methodology and Statistical Analysis	3	1	0	4
20MB1PC05	Legal and Business Environment	3	1	0	4
Open Elective-I					
20MB1OE11	Business Ethics and Corporate Governance	3	0	0	3
20MB1OE12	Project Management				
20MB1OE13	Technology Management				
20MB1OE14	Cross Cultural Management				
20MB1PC06	Business Communication Lab.	0	0	2	2
20MB1PC07	Statistical Data Analysis Lab	0	0	2	2
TOTAL		18	5	4	27

I Year II Semester

Course Code	Course Title	L	T	P	Credits
20MB2PC08	Human Resource Management	3	1	0	4
20MB2PC09	Marketing Management	3	1	0	4
20MB2PC10	Financial Management	3	1	0	4
20MB2PC11	Quantitative Analysis for Business Decisions	3	1	0	4
20MB2PC12	Entrepreneurship	3	1	0	4
20MB2PC13	Logistics & Supply Chain Management	3	1	0	4
Open Elective-II					
20MB2OE21	Total Quality Management	3	0	0	3
20MB2OE22	Marketing Research				
20MB2OE23	International Business				
20MB2OE24	Rural Marketing				
TOTAL		21	6	0	27

HOD. SDA

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Internship during summer vacation (after Semester-II)

II Year I Semester

Course Code	Course Title	L	T	P	Credits
20MB3PC14	Production & Operations Management	3	1	0	4
20B3PC15	Management Information Systems	3	1	0	4
20MB3PC16	Data Analytics	3	1	0	4
20MB3PC17	Summer Internship	0	0	0	2
Professional Elective-III (Marketing)					
20MB3PEM1	Digital Marketing	3	1	0	4
20MB3PEM2	Advertising and Sales Management	3	1	0	4
20MB3PEM3	Consumer Behavior	3	1	0	4
Professional Elective-III (Finance)					
20MB3PEF1	Security Analysis and Portfolio Management	3	1	0	4
20MB3PEF2	Financial Institutions, Markets & Services	3	1	0	4
20MB3PEF3	Strategic Management Accounting	3	1	0	4
Professional Elective-III (Human Resources)					
20MB3PEH1	Performance Management Systems	3	1	0	4
20MB3PEH2	Learning and Development	3	1	0	4
20MB3PEH3	Management of Industrial Relations	3	1	0	4
Professional Elective-III (Entrepreneurship)					
20MB3PEE1	Startup Management	3	1	0	4
20MB3PEE2	MSME Management	3	1	0	4
20MB3PEE3	Family Business Management	3	1	0	4
	TOTAL	18	6	0	26

HOD - MBA

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II Year II Semester

Course Code	Course Title	L	T	P	Credits
20MB4PC18	Strategic Management	3	1	0	4
20MB4PC19	Pre-submission project Seminar	0	0	2	2
20MB4PC20	Main Project Viva-Voce	0	2	4	4
Professional Elective-IV (Marketing)					
20MB4PEM4	Customer Relationship Management	3	1	0	4
20MB4PEM5	International Marketing	3	1	0	4
20MB4PEM6	Services Marketing	3	1	0	4
Professional Elective-IV (Finance)					
20MB4PEF4	International Financial Management	3	1	0	4
20MB4PEF5	Strategic Investment and Financing Decisions	3	1	0	4
20MB4PEF6	Risk Management and Financial Derivatives	3	1	0	4
Professional Elective-IV (Human Resources)					
20MB4PEH4	International Human Resource Management	3	1	0	4
20MB4PEH5	Leadership and Change Management	3	1	0	4
20MB4PEH6	Talent and Knowledge Management	3	1	0	4
Professional Elective-IV (Entrepreneurship)					
20MB4PEE4	Entrepreneurial Finance	3	1	0	4
20MB4PEE5	Entrepreneurial Marketing	3	1	0	4
20MB4PEE6	Creativity Innovation and Entrepreneurship	3	1	0	4
TOTAL		12	6	6	22
All total credits		69	23	10	102

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Saroornagar, Hyderabad - 500078, A.P.

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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MASTER OF BUSINESS ADMINISTRATION MBA (Regular) R-19
 Effective from Academic Year 2019 - 20 Admitted Batch

COURSE STRUCTURE AND SYLLABUS

I Year I Semester

Course Code	Course Title	L	T	P	Credits
19MBA01	Management and Organizational Behaviour	3	1	0	4
19MBA02	Business Economics	3	1	0	4
19MBA03	Financial Accounting & Analysis	3	1	0	4
19MBA04	Research Methodology and Statistical Analysis	3	1	0	4
19MBA05	Legal and Business Environment	3	1	0	4
Open Elective-I 19MBA06	6A Business Ethics and Corporate Governance 6B Project Management 6C Technology Management 6D Cross Cultural Management	3	0	0	3
19MBA07	Business Communication Lab.	0	0	2	2
19MBA08	Statistical Data Analysis Lab	0	0	2	2
	TOTAL	18	5	4	27

I Year II Semester

Course Code	Course Title	L	T	P	Credits
19MBA09	Human Resource Management	3	1	0	4
19MBA10	Marketing Management	3	1	0	4
19MBA11	Financial Management	3	1	0	4
19MBA12	Quantitative Analysis for Business Decisions	3	1	0	4
19MBA13	Entrepreneurship	3	1	0	4
19MBA14	Logistics & Supply Chain Management	3	1	0	4
Open Elective-II 19MBA15	15A Total Quality Management 15B Marketing Research 15C International Business 15D Rural Marketing	3	0	0	3
	TOTAL	21	6	0	27

Internship during Summer vacation (after Semester -II)

II Year I Semester

Course Code	Course Title	L	T	P	Credits
19MBA16	Production & Operations Management	3	1	0	4
19MBA17	Management Information Systems	3	1	0	4
19MBA18	Data Analytics	3	1	0	4
19MBA19 M1/H1/F1/E1	(MRKG/HRM/FIN/ENTP)	3	1	0	4
19MBA20 M2/H2/F2/E2	(MRKG/HRM/FIN/ENTP)	3	1	0	4
19MBA21 M3/H3/F3/E3	(MRKG/HRM/FIN/ENTP)	3	1	0	4

19MBA22	Summer Internship	0	0	0	2
	TOTAL	18	6	3	26

II Year II Semester

Course Code	Course Title	L	T	P	Credits
19MBA 23	Strategic Management	3	1	0	4
19MBA 24 M4/H4/F4/E4	(MRKG/HRM/FIN/ENTP)	3	1	0	4
19MBA25 M5/H5/F5/E5	(MRKG/HRM/FIN/ENTP)	3	1	0	4
19MBA26 M6/H6/F6/E6	(MRKG/HRM/FIN/ENTP)	3	1	0	4
19MBA27	Pre-submission project Seminar	0	0	2	2
19MBA28	Main Project Viva-Voce	0	2	4	4
	TOTAL	12	6	6	22

LIST OF ELECTIVE SUBJECTS

Students have to select any One Specialization (Marketing, Finance, Human Resources, and Entrepreneurship) and he/she needs to select the Core Elective subjects listed under the chosen specialization only.

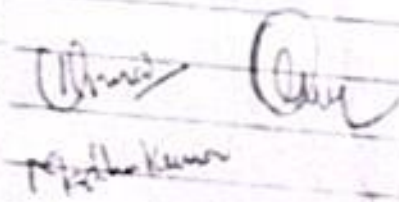
Course Code	Specialization	Credits
	MARKETING	
19MBA19M1	Digital Marketing	4
19MBA20 M2	Advertising and Sales Management	4
19MBA21 M3	Consumer Behaviour	4
19MBA24 M4	Customer Relationship Management	4
19MBA25 M5	International Marketing	4
19MBA26 M6	Services Marketing	4
	FINANCE	
19MBA19F1	Security Analysis and Portfolio Management	4
19MBA20 F2	Financial Institutions, Markets & Services	4
19MBA21 F3	Strategic Management Accounting	4
19MBA24 F4	International Financial Management	4
19MBA25 F5	Strategic Investment and Financing Decisions	4
19MBA26F6	Risk Management and Financial Derivatives	4
	HUMAN RESOURCES	
19MBA19H1	Performance Management Systems	4
19MBA20 H2	Learning and Development	4
19MBA21 H3	Management of Industrial Relations	4
19MBA24 H4	International Human Resource Management	4
19MBA25H5	Leadership and Change Management	4
19MBA26 H6	Talent and Knowledge Management	4
	ENTREPRENEURSHIP	
19MBA19E1	Startup Management	4
19MBA20 E2	MSME Management	4
19MBA21 E3	Family Business Management	4
19MBA24E4	Entrepreneurial Finance	4
19MBA25 E5	Entrepreneurial Marketing	4
19MBA26 E6 IIC	Creativity Innovation and Entrepreneurship	4

Board of Studies meeting

→ A meeting of board of studies for CSE department was held on 3/11/22 through online mode by the following members for the approval of course structure and syllabus of P22 regulation.

→ As per the Regulation (P22) given by JNTUH, Teegala Krishna Reddy Engineering College (P22) of CSE department is following the same course structure.

→ As per the Regulation (P22), we are following the same syllabus of JNTUH upto IInd year for all courses.


Dr. Ch. Y. Phani Krishna





Dr. E. Suresh Babu
Department of Computer Science & Engineering
National Institute of Technology, Warangal
Telangana - 506004



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1. Dr. CH. Y. Phani Krishna

Professor, CSE Dept. with
Chairman BOS, TRPEC (P22)

2. Dr. K. Bhargavi

Professor, CSE Dept.
member, TRPEC (P22)

3. P. V. Ramgopal Rao

Asst. Professor, CSE Dept
member, TRPEC (P22)

4. M. Chinnababu


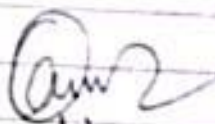
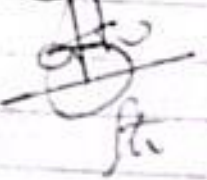
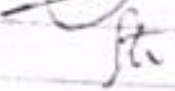
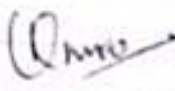
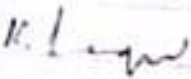
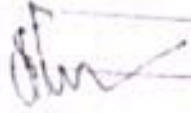
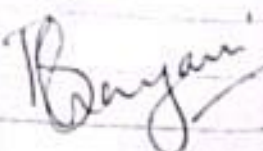
Asst. Professor, CSE Dept
Member, TRPEC (P22)

22/6/21
11:00 AM

1st Board of Studies Meeting (Online Mode)

A meeting of Board of Studies for M.Tech - CSE department was held on 22nd June 2021, at 11:00 AM through online mode & the following points were suggested by Members, towards the approval of course structure syllabus upto 4th semester (R20) for the students admitted in 2020-21 academic year.

The Members Present

- | | | |
|--------------------------------|--|---|
| 1. Dr. Ch. V. Phani
Krishna | Professor, HOD-CSE
Chairman - BOS
TKREC (R9) |  |
| 2. Dr. D. Vasumathi | Professor HOD-CSE
JNTUH Nominee |  |
| 3. Dr. E. Suresh Babu | Asst. Prof. MIT-
Warangal, Member |  |
| 4. Dr. B. Sujatha | Asst. Prof. OU-COE
Member |  |
| 5. P. Madhu Kumar
Reddy | Asso. Director,
Mamatis (Industry
Expert) |  |
| 6. Dr. K. Sarangam | Asst. Prof. R9-BOS
Member |  |
| 7. Dr. N. Vadivelan | Asst. Prof. R9-BOS
Member |  |
| 8. Dr. K. Bhargavi | Asst. Prof. R9-BOS
Member Secretary |  |

1. Dr. D. Vasumathi Madam suggested for changing subjects in next regulation.
2. Dr. E. Suresh Babu su suggested for replacing "High Performance computing" with "cloud & fog computing".
3. Dr. B. Sujatha Madam suggested for incorporating new electives in M.Tech Tyar II sem.
4. Mr. Madhu Kumar Reddy sir suggested for intershships and real time projects in different domains.
5. Dr. D. Vasumathi Madam suggested for the incorporation of High Performance Computing in place of Deep learning.

6.



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M. Tech I Year I Semester (R20)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20MT1PC01	Professional Core - I	Mathematical Foundations of Computer Science	3	0	0	3
02	20MT1PC02	Professional Core - II	Advanced Data Structures	3	0	0	3
03	20MT1PE11	Professional	1.Information Security	3	0	0	3
04	20MT1PE12	Elective - I	2.Mobile Application Development				
05	20MT1PE13		3.Machine Learning				
06	20MT1PE21	Professional	1.Network Security	3	0	0	3
07	20MT1PE22	Elective - II	2.Cloud Computing				
08	20MT1PE23		3.Data Mining				
09	20MT1PC03	Lab - I	Advanced Data Structures Lab	0	0	4	2
10	20MT1PC04	Lab - II	Machine Learning Lab	0	0	4	2
11	20MT1PC05		Research Methodology & IPR	2	0	0	2
12	20MT1MC11	Audit Course - I	1.Constitution on India	2	0	0	0
13	20MT1MC12		2.Pedagogy Studies				
14	20MT1MC13		3.Stress Mgmt by Yoga				
15	20MT1MC14		4.Prsonality Development Through Life				
Total				16	0	8	18

CPK

CH.V. PHANI KRISHNA,
Ph.D

Head Of The Department
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M. Tech I Year II Semester (R20)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20MT2PC06	Professional Core - III	Advanced Algorithms	3	0	0	3
02	20MT2PC07	Professional Core - IV	Advanced Computer Architecture	3	0	0	3
03	20MT2PE31	Professional Elective - III	1. Web and Database Security	3	0	0	3
04	20MT2PE32		2. Internet of Things				
05	20MT2PE33		3. Data Science				
06	20MT2PE41	Professional Elective - IV	1. Cyber Security	3	0	0	3
07	20MT2PE42		2. Advanced Computer Networks				
08	20MT2PE43		3. Big Data Analytics				
09	20MT2PC08	Lab - III	Advanced Algorithms Lab	0	0	4	2
10	20MT2PC09	Lab - IV	Data Science Lab	0	0	4	2
11	20MT2MP01	Mini Project with Seminar	Mini Project with Seminar	0	0	4	2
12	20MT2MC21	Audit Course - II	1. English for Research Paper Writing	2	0	0	0
13	20MT2MC22		2. Disaster Management				
14	20MT2MC23		3. Sanskrit for Technical Knowledge				
15	20MT2MC24		4. Value Education				
Total				14	0	12	18

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M. Tech II Year I Semester (R20)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20MT3PE51	Professional Elective - V	1. Digital Forensics	3	0	0	3
02	20MT3PE52		2. Cloud and Fog Computing				
03	20MT3PE53		3. High Performance Computing				
04		Open Elective		3	0	0	3
05	20MT3PW01	Dissertation	Dissertation Work Review - II	0	0	12	6
Total				6	0	12	12

Open Elective

01	20MT3OE11	Open Elective	1. Composite Materials	3	0	0	3
02	20MT3OE12		2. Energy from Waste				
03	20MT3OE13		3. Cost Management of Engineering Projects				
04	20MT3OE14		4. Business Analytics				
04	20MT3OE15		5. Industrial Safety				

M. Tech II Year II Semester (R20)

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20MT4PW02	Dissertation	Dissertation Work Review - III	0	0	12	6
02	20MT4PW03	Dissertation	Project Viva-Voce	0	0	28	14
Total				0	0	40	20

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

R22 REGULATION

COURSE STRUCTURE

M.TECH

**FOR
M. TECH COURSE
(Applicable for the batches admitted 2023-2024)**

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I Semester

Sno.	Course Code	Core/ Elective	Course Title	L	T	P	Credits
1	22MT101PC	PC	Mathematical Foundations of Computer Science	3	0	0	3
2	22MT102PC	PC	Advanced Data Structures	3	0	0	3
3	22MT111PE	PE-I	1.Database Programming with PL/SQL	3	0	0	3
	22MT112PE		2.Deep Learning				
	22MT113PE		3. Natural Language Processing				
4	22MT121PE	PE-II	1.Applied Cryptography	3	0	0	3
	22MT122PE		2.Software Quality Engineering				
	22MT123PE		3.Mining Massive Datasets				
5	22MT103PC	PC	Advanced Data Structures Lab	0	0	4	2
6		PE1-LAB	Professional Elective - I Lab	0	0	4	2
7	22MT104PC	PC	Research Methodology & IPR	2	0	0	2
8		MC	Audit Course- I	2	0	0	0
Total				16	0	8	18

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II Semester

Sno.	Course Code	Core/ Elective	Course Title	L	T	P	Credits
1	22MT201PC	PC	Advanced Algorithms	3	0	0	3
2	22MT202PC	PC	Advanced Computer Architecture	3	0	0	3
3	22MT231PE	PE-III	1. Enterprise Cloud Concepts	3	0	0	3
	22MT232PE		2. Advanced Computer Networks				
	22MT233PE		3. Edge Analytics				
4	22MT241PE	PE-IV	1. Bioinformatics	3	0	0	3
	22MT242PE		2. Nature Inspired Computing				
	22MT243PE		3. Robotic Process Automation				
5	22MT203PC	PC	Advanced Algorithms Lab	0	0	4	2
6		PE-III LAB	Professional Elective - III Lab	0	0	4	2
7	22MT201PW	PW	Mini Project with Seminar	0	0	4	2
8			Audit Course- II	2	0	0	0
Total				14	0	12	18

III Semester

Sno.	Course Code	CORE/ELECTIVE	Course Title	L	T	P	Credits
1	22MT351PE	PE-V	1. Digital Forensics	3	0	0	3
	22MT352PE		2. High Performance Computing				
	22MT353PE		3. Quantum Computing				
2		OE	Open Elective	3	0	0	3
3	22MT301PW	PW	Dissertation Work Review - II	0	0	12	6
Total				6	0	12	12

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IV Semester

Sno.	Course Code	CORE/ELECTIVE	Course Title	L	T	P	Credits
1	22MT401PW	PW	Dissertation Work Review - III	0	0	12	6
2	22MT402PW	PW	Dissertation Viva-Voce	0	0	28	14
Total				0	0	40	20

Professional Elective -I

22MT111PE	PE-I	1.Database Programming with PL/SQL
22MT112PE		2.Deep Learning
22MT113PE		3.Natural Language Processing
22MT114PE	PE-I LABS	1.Database Programming with PL/SQL
22MT115PE		2.Deep Learning
22MT116PE		3.Natural Language Processing

Professional Elective -II

22MT121PE	PE-II	1. Applied Cryptography
22MT122PE		2. Software Quality Engineering
22MT123PE		3. Mining Massive Datasets

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Professional Elective -III

22MT231PE	PE-III	1. Enterprise Cloud Concepts
22MT232PE		2. Advanced Computer Networks
22MT233PE		3. Edge Analytics
22MT234PE	PE-III LABS	1. Enterprise Cloud Concepts
22MT235PE		2. Advanced Computer Networks
22MT236PE		3. Edge Analytics

Professional Elective -IV

22MT241PE	PE-IV	1. Bioinformatics
22MT242PE		2. Nature Inspired Computing
22MT243PE		3. Robotic Process Automation

Professional Elective -V

22MT351PE	PE-V	1. Digital Forensics
22MT352PE		2. High Performance Computing
22MT353PE		3. Quantum Computing

Audit -I & II

22MT101AC	Audit- I & II	English for Research Paper Writing
22MT102AC		Disaster Management
22MT103AC		Sanskrit for Technical Knowledge
22MT104AC		Value Education
22MT105AC		Constitution of India
22MT106AC		Pedagogy Studies
22MT107AC		Stress Management by yoga
22MT108AC		Personality Development Through Life Enlightenment Skills

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Open Electives -CSE Department

Course Code	CORE/ELECTIVE	Course Title
22MT301OE	OPEN ELECTIVE	1. IPR
22MT302OE		2. Fault Tolerance Systems
22MT303OE		3. Intrusion Detection Systems
22MT304OE		4. Digital Forensics
22MT305OE		5. Optimization Techniques
22MT306OE		6. Cyber Physical Systems
22MT307OE		7. Graph Analytics

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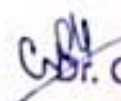
JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M. Tech. COMPUTER SCIENCE AND ENGINEERING/COMPUTER SCIENCE
EFFECTIVE FROM ACADEMIC YEAR 2019 - 20 ADMITTED BATCH
R19 COURSE STRUCTURE AND SYLLABUS

I YEAR I – SEMESTER

Course Code	Course Title	L	T	P	Credits
Professional Core - I	Mathematical Foundations of Computer Science	3	0	0	3
Professional Core - II	Advanced Data Structures	3	0	0	3
Professional Elective - I	1. Information Security 2. Mobile Application Development 3. Machine Learning	3	0	0	3
Professional Elective - II	1. Network Security 2. Cloud Computing 3. Data Mining	3	0	0	3
Lab - I	Advanced Data Structures Lab	0	0	4	2
Lab - II	Machine Learning Lab	0	0	4	2
	Research Methodology & IPR	2	0	0	2
Audit - I	Audit Course - I	2	0	0	0
	Total	16	0	8	18

I YEAR II – SEMESTER

Course Code	Course Title	L	T	P	Credits
Professional Core - III	Advanced Algorithms	3	0	0	3
Professional Core - IV	Advanced Computer Architecture	3	0	0	3
Professional Elective - III	1. Web and Database Security 2. Internet of Things 3. Data Science	3	0	0	3
Professional Elective - IV	1. Cyber Security 2. Advanced Computer Networks 3. Big Data Analytics	3	0	0	3
Lab - III	Advanced Algorithms Lab	0	0	4	2
Lab - IV	Data Science Lab	0	0	4	2
	Mini Project with Seminar	0	0	4	2
Audit - II	Audit Course - II	2	0	0	0
	Total	14	0	12	18


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II YEAR III - SEMESTER

Course Code	Course Title	L	T	P	Credits
Professional Elective - V	1. Digital Forensics 2. High Performance Computing 3. Deep Learning	3	0	0	3
Open Elective	Open Elective				
Dissertation	Dissertation Work Review - II	3	0	0	3
	Total	6	0	12	12

II YEAR II - SEMESTER

Course Code	Course Title	L	T	P	Credits
Dissertation	Dissertation Work Review - III	0	0	12	6
Dissertation	Dissertation Viva-Voce	0	0	28	14
	Total	0	0	40	20

*For Dissertation Work Review - I, Please refer 7.8 in R19 Academic Regulations.

Audit Course I & II:

1. English for Research Paper Writing
2. Disaster Management
3. Sanskrit for Technical Knowledge
4. Value Education
5. Constitution of India
6. Pedagogy Studies
7. Stress Management by yoga
8. Personality Development Through Life Enlightenment Skills

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