



1.3.3. Percentage of programmes that have components of field projects/ research projects/ internships during the last five years.



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

(Sponsored by TKR Educational Society, Approved by AEC, Accredited by NAAC)

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

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

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



College Code: R9

Guidelines for Summer Internship

(Applicable for the batches admitted from 2020-2021 and 2021-22 of TKREC R20 Regulations)

Introduction

Internship is an integral part of the academic curriculum. It is a learning activity that enhances and deepens the theoretical knowledge and skills attained in the classroom through practical application. This facilitates:

- ❖ Acquisition of practical skills such as observation, research, and information processing.
- ❖ Familiarization with the objectives and urgent issues of the sector the student is specializing in.
- ❖ Attainment of necessary employability skills.

The internship offers students an opportunity to gain hands on industrial or organizational exposure, integrate the knowledge and skills acquired through coursework, interact with professionals and other interns, and improve their presentation, writing, and communication skills. For many students, an internship often acts as a gateway to final placement.

Objectives

Industrial Exposure: Experience the industrial environment, which cannot be simulated in the classroom, to create competent professionals for the industry.

Skill Development: Provide opportunities to learn, understand, and sharpen Realtime technical and managerial skills required on the job.

Technological Awareness: Stay abreast of current technological developments relevant to the subject area of training.

Knowledge Application: Foster a quest for knowledge and its applicability in a job setting.

Guidelines to Apply for Internship and Academic Credentials

The following framework is designed to give academic credit for internships undertaken as part of the program:

Internship Types: Internships may be fulltime during the summer break or parttime/virtual during the academic session.

TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

(Sponsored by TNR Educational Society, Approved by AICTE, Affiliated to JNTUH)

Accredited by NAAC - 'A' Grade, Accredited in NBA

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

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



Internship Centre Role: The Internship Centre at TKREC identifies opportunities with various industries, NGOs, startups, external institutes, and government organizations.

Opportunity Sharing: Available opportunities are shared with students, and the centre facilitates campus/off campus/online selection processes for companies hiring interns.

Tracking and Records: The Internship Centre, along with each department's internship coordinator, maintains internship records and statistics.

Recommendation Letters: The centre issues recommendation letters to students for obtaining various external internships.

Completion Certificates: The centre issues internship completion certificates for inhouse internships.

Internship Opportunities during Semester Breaks

External Internships

- ❖ Industry Internship: With or without a stipend.
- ❖ Government / PSU Internship: NSIC, CITD, CDAC, BARC, Railways, ISRO, etc.
- ❖ NGO / Social Internship
- ❖ Family Business Internship
- ❖ External Academic Internship: With outside institutes or professors.
- ❖ Startup Internship: With startups or monitored incubation centres.
- ❖ Industrial Training Programs: Organized by external entities.
- ❖ Other Approved Internships: Any other internship approved by the concerned authorities.

These guidelines are designed to ensure that students gain valuable experience and skills that will aid in their professional development and career readiness. For further information, contact the internship coordinator of their respective Departments.



Wren-1218/22
PRINCIPAL

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



College Code: R9

Guidelines for Field Projects

(Applicable for batches admitted from 2022-23 onwards of TKREC R22 Regulations)

Introduction

The field project allows students to take on professional roles in order to learn skills, render services and participate in the provision and development of social work service. The hands-on experience reinforces the student's identification with the purposes, values and ethics of the profession; fosters the integration of empirical and practice-based knowledge, and promotes the development of professional competence. Field project is a field education program designed to integrate classroom study with practice in a social work setting. Students spend time in an agency while being supervised by a field instructor. Through practicum, students translate knowledge from all areas of the curriculum into practical skills and competencies.

Objectives

Through the field project, students will gain direct experience in some of the following areas:

- ❖ Understanding the interconnectedness of diverse sectors such as education, agriculture, environment, health, nutrition, energy, infrastructure, water, gender, and community development. Applying interdisciplinary approaches to address these cross-cutting issues;
- ❖ Integrating knowledge on cross-sectoral issues, local insights and community participation into field training projects and activities;
- ❖ Participation in a particular activity in the project cycle: from program conceptualization, design, implementation to monitoring and evaluation;
- ❖ Collaborating and building relationships with practitioners including government officials, NGOs, communities, donors and project personnel. Working in teams, oftentimes cross-cultural and interdisciplinary in composition;
- ❖ Communicating effectively and facilitating meetings with stakeholders utilizing methods such as Action Research, Participatory Rural Appraisal, collaborative planning meetings, visualization and feedback workshops. Students will come to understand the importance and means of cultivating respectful communication with communities and support agencies;
- ❖ Identifying promising strategies for policy interventions to advance sustainable development (at the local, national and/or regional level);

TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

(Sponsored by TKR Educational Society, Approved by AEC, TE, Affiliated to JNTUH)

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

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

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



- ❖ Applying techniques of self-reflection and inter-personal skills and dynamics to be cognizant of personal attitudes, perceptions and biases.

Outcomes

After successful completion of the course, students will be able to:		Knowledge Level (Bloom's Taxonomy)
CO1	Develop practice competence as an entry level professional in generalist social work practice within the organization, the community, social work skills of assessment, planning and evaluation, and the profession.	Apply
CO2	Analyze the structure and function of resource and delivery systems within the agency and community	Analyze
CO3	Develop the ability to utilize professional social work supervision as a mechanism to improve one's own practice.	Apply
CO4	Apply knowledge, values, and skills with diverse populations including people of colour, women, children, aged, physically and mentally challenged, socially and culturally diverse groups, the oppressed and populations at risk.	Apply

Event 3/2/24
PRINCIPAL

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



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

Sponsored by TKR Educational Society, Approved by AICTE, Affiliated to JNTUH
Accredited by NAAC - 'A' Grade, Assessment in 2014
Medbowli, Meerpeta, Balapur(M), Hyderabad, Telangana- 500097
Mob: 8498085218. Email: info@tkrec.ac.in, www.tkrec.ac.in



College Code: R9

Guidelines for Mini & Major Project

(Applicable for the batches admitted from 2020-2021 and 2021-22 of TKREC R20 Regulations)

1. Prepare the project report using Latex as per the Template circulated earlier by the Project Co-Ordinator.
2. Prepare Power point presentation for the review indicating the contribution of each team member of the project with maximum of 15 slides with the following contents:
 - Title of the Project, with team member details and guide name
 - Abstract (400 to 500 words), Keywords (5 to 8)
 - Problem Statement, Objectives and Scope
 - Literature Survey (all the 4 papers in two slides)
 - Proposed System (Flowchart)
 - Methodology
 - Results & Discussion
 - References (in IEEE format)
 - Paper publication (Communicated)
3. After the completion of the PPT and the Project report, submit the softcopy of the report to the concerned allotted Project guide for Verification and Suggestions.
4. Project guide has to submit the finalized soft copy of PPT, Project documentation and Paper publication to Project Co-Ordinator and HOD.
5. Project Viva-Voce will be conducted offline in the college to assess students' understanding, presentation skills, and ability to defend their research or project work orally in front of a panel of examiners.
6. Absenteeism to the viva voce will be considered as ABSENT and marks awarded will be Zero.



KVRAU 6/7/23
PRINCIPAL

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



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE (UGC-Autonomous)

(Sponsored by T.K.R. Educational Society, Approved by AICTE, Affiliated to JNTUH
Accredited by NAAC- 'A' Grade, Accredited by NBA

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

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



GUIDELINES FOR RESEARCH PROJECT REPORT PREPARATION



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

(Sponsored by TKR Educational Society, Approved by AICTE, Affiliated to JNTUH
Accredited by NAAC - 'A' Grade, Accredited by NBA)

Medbowli, Meerpeta, Balapur(M), Hyderabad, Telangana- 500097
Mob: 8498085218, Email: info@tkrec.ac.in, www.tkrec.ac.in



GUIDELINES TO PREPARE B.TECH MINI/MAJOR PROJECT DOCUMENTATION

1. Size and copies:

The Project Report should be submitted in A4 size Bond paper and (No. Of Students + 3) copies of the thesis are required to be submitted to the Department.

2. Paper, Typing & Format:

Bond paper should be used for the preparation of the Project report for both Mini & Major Projects. Typing should be done with the following format.

Font:	1. Chapter Names	-	16 TNR (bold) all caps (Times New Roman)
	2. Headings	-	14 TNR (bold) all caps
	3. Subheadings	-	14 TNR (bold) Title case
	4. Sub – sub headings	-	12 TNR (bold) Title case
	5. Body of Project	-	12 TNR
word)	6. Text in Diagrams	-	12 TNR (all lower case with capitalize each
	7. Diagrams / Table headings / Fig. Headings	-	12' TNR Title case
	8. If any text		12' TNR (Title case)

- Spacing :**
1. 1.5 Line spacing between heading and body text.
 2. 1.5 line spacing in body text.
 3. New paragraphs start with single tab.

Margins : Left 2.0'
Top 1.0'

Right 1.0'
Bottom 1.0'

- Page numbers:** Position: Bottom, Middle
1. Front Pages Small Roman Numbers (i, ii, iii)
(Excluding title page, Certificate page, Acknowledgement
page)
2. Body pages 1,2,3
3. Annexure I,II,III
- (Separate for each Annexure)

3. Binding:

The Project report shall be properly bound with spiral for Mini Project and for major project should be covered with soft cover of black color. The bound front cover should indicate in Golden Embossed letters with the following

Teegala Krishna Reddy Engineering College

(UGC-AUTONOMOUS)

Medbowli, Meerpeta, Hyderabad - 97.





TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

(Sponsored by TKR Educational Society. Approved by AICTE. Affiliated to JNTUH.)

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

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

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



4. Arrangement of the report

Front Pages: Title Page

Certificate

Acknowledgement

Contents

List of tables

List of diagrams

Abstract



sent

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



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

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

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

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

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



CONTENTS

S.No. Topic name

Pg.No.

1. Introduction

1.1 Motivation

1.2 Problem definition

1.3 Objective of Project

2. LITERATURE SURVEY(In case of IEEE paper based project, discussion of referred papers is required)

2.1 Existing System

2.2 Disadvantages of Existing system

2.3 Proposed System

3. ANALYSIS

3.1 REQUIREMENTS

3.1.1 Functional Requirements

3.1.2 Non-Functional Requirements

3.2 Sample data

3.3 Algorithm

4. DESIGN

4.1 Pseudo code

4.2 DFDs & UML diagrams

5. IMPLEMENTATION & TESTING

5.1 Method of Implementation

5.2 Testing

5.3 Output Screens

5.3.1 Result Analysis

6. CONCLUSION

First Paragraph -Project Conclusion

Second Paragraph -Future enhancement

REFERENCES :

1. Author Name, Title of Paper/ Book, Publisher's Name, Year of publication

2. Full URL Address





TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

Sponsored by TKR Educational Society. Approved by AICTE. Affiliated to JNTUH.
Accredited by NAAC - A Grade Accredited by NBA
Medbowli, Meerpeta, Balapur(M), Hyderabad, Telangana- 500097
Mob: 8498085218. Email: info@tkrec.ac.in, www.tkrec.ac.in



A Project report on

<<Title of the project>>

Project submitted to the Jawaharlal Nehru Technological University Hyderabad in Partial fulfillment of the requirements for the award of the degree of

Bachelor of Technology
in
Information Technology

Submitted By

<< Name/s of the Students >>

<< Hall Ticket No >>

Under the Guidance of

<< Guide Name >>

<< Designation >>



Department of Information Technology

TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
(Affiliated to JNTUH, Approved by AICTE, Accredited By NAAC)
Meerpeta, Saroor Nagar, Hyderabad

2018-19

wren

PRINCIPAL

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





TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

(Sponsored by TKR Educational Society, Approved by AICTE, Affiliated to JNTUH
Accredited by NAAC- 'A' Grade, Accredited by NHA)

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

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



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

DEPARTMENT OF INFORMATION TECHNOLOGY



CERTIFICATE

This is to certify that the project report entitled << Project Title >> submitted by << Students Name >>, bearing H.T. No.: << H.T.No >>, in IV B.Tech II semester Information Technology is a record bonafide work carried out by them.

<< Internal Guide >>

<< Head of the Department >>



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



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

(Sponsored by TKR Educational Society. Approved by AICTE, Affiliated to JNTUH)

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

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

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



**GUIDELINES FOR
REAL-TIME or FIELD BASED RESEARCH
PROJECT / INTERNSHIP
REPORT PREPARATION**

Sample Page 1

**THE TITLE OF THE REPORT ON THE COVER PAGE
SHALL LOOK LIKE THIS LINE**

(The title is in Times New Roman Font with 16-point size, bold, one and a half line spacing)

**T. Venkatesh
H T No**

(Candidate's name in Times New Roman Font, 14-point size in Bold Italic)



wren

PRINCIPAL

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

**THE TITLE OF THE REPORT ON THE SECOND PAGE
SHOULD LOOK LIKE THIS**

(Times New Roman, 16-point size, Bold and Centered)

**A REAL-TIME or FIELD BASED RESEARCH PROJECT (For II Semester students) /
INTERNSHIP REPORT (IV Semester students)**

(4 lines gap) (Times New Roman, 12-point size, Bold, Italic and Centered)

(1 line gap)

**Bachelor of Technology
in**

Computer Science and Engineering

(no gap) (Times New Roman, 14-point size, Bold, (Centered))

by

(1 line gap) (Times New Roman, 12-point size, Italic, (Centered))

T. Venkatesh

(H T Number)

(1 line gap) (Times New Roman, 14-point size, Bold, (Centered))



TKREC

(1 line gap) (Image size: 3.11 cm x 2.89 cm, colour, Centered)

Department of Computer Science and Engineering

(1 line gap) (Times New Roman, 14-point size, Bold, Centered)

Teegala Krishna Reddy Engineering College

(no gap) (Ariel, 18-point size, Bold, Centered)

(UGC Autonomous)

(no gap) (Times New Roman, 14-point size, Bold, Centered)

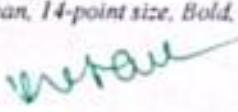
Medbowli, Meerpeta, Balapur(M), Hyderabad, Telangana- 500097 (1 line gap)

(Times New Roman, 14-point size, Bold, Centered)

July, 2024

(1 line gap) (Times New Roman, 14-point size, Bold, Centered)




PRINCIPAL

Teegala Krishna Reddy Engineering College
(UGC-AUTONOMOUS)
Medbowli, Meerpeta, Hyderabad - 500097.

DECLARATION

(Times New Roman, 14-point size, Bold, Centered)

I certify that

- a. The work contained in this report is original and has been done by me under the guidance of my supervisor (s).
- b. The work has not been submitted to any other Institute for any degree or diploma.
- c. I have followed the guidelines provided by the Institute for preparing the report.
- d. I have conformed to the norms and guidelines given in the Code of Conduct of the Institute.
- e. Whenever I have used materials (data, theoretical analysis, figures, and text) from other sources, I have given due credit to them by citing them in the text of the report and giving their details in the references. Further, I have taken permission from the copyright owners of the sources, whenever necessary.

Place:

Signature of the Student

Date:

H T No.



WATW

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

CERTIFICATE

(Times New Roman, 14 Bold, Regular)

ECIL / Relevant Certificate

Note:

Attach color certificate copy

✓new



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

APPROVAL SHEET

(Times New Roman, 14 Bold, Regular)

This REAL-TIME or FIELD BASED RESEARCH PROJECT (For II Semester students) / INTERNSHIP REPORT (IV Semester students) entitled (Title) by (Name of the student) is approved for the award of the Degree Bachelor of Technology in Branch (12 Regular).

Supervisor

Head of the Department

Date:

Place:

Wren

PRINCIPAL

Teegala Krishna Reddy Engineering College

(UGC-AUTONOMOUS)

Medbowli, Meerpet, Hyderabad - 97.



ABSTRACT

Keywords:

ONE PAGE ABSTRACT



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

CONTENTS

Title Page	I
Certificate by the Supervisor	I
Declaration	II
Acknowledgement	III
Abstract	IV
Contents	V
	VII

Chapter 1	Introduction	I
	1.1 Section	I
	1.2 Section	1
	1.3 Section	...
Chapter 2	Relevant data of Field Project / Internship	...
Appendix-I	Photos / Screen Shots Attachment	...
		...

Wew

PRINCIPAL

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



Next 8 to 10 Pages Field Project / Internship Report Brief Write up

minal

PRINCIPAL

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



Sample Page 9

One or two Photos or Screenshots of Training.



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

MINUTES OF THE ISOAKU OF STUDIES MEETING
FOR B.TECH. CIVIL ENGINEERING HELD ON 05.11.2021
AT 2.30PM. IN DEPARTMENT OF CIVIL ENGINEERING

Mode of Meeting : Online.

Platform :: Google Meet.

Meeting ID :: <https://meet.google.com/bjc-izck-fpc>

Members Present :-

1) Dr. D. Venkata 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, Jawaharlal 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. Sr. S.P. Anchuri, Industry Expert
Anchuri & Anchuri Consultant, Hyderabad

6) Mr. Mohammed Muneebuddin Ishaq
Member Secretary, Asst. Professor, Dept. of Civil Engg
TKREC, Hyderabad.

Special Invitee:

- 1) Dr. K. Venkata Murli Mohan, Principal TKREC
- 2) Dr. K.M.V. Madan Kumar, Dean Academic 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 BTech 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 Regulation were discussed and approved without any corrections.
- 5) The Syllabi of II year R22 Regulation 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

D. P. Venkat Ram Reddy

(B. R. Venkateswara)

Prof. Dr. V. Bhikshna

Dr. C. Sarla

(K. M. Reddy)

Dr. K. Machhusudan
Reddy

S. P. Anjani

Dr. Gr. S. P. Anjani

M. H. Muneeswadi

Khan



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

MINUTES OF THE BOARD OF STUDIES MEETING
FOR BTech. CIVIL ENGINEERING, HELD ON 24.01.
AT 10.30AM IN DEPARTMENT OF CIVIL ENGINEERING

Mode of Meeting : Online.

Platform : Google meet.

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

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, Osmania University, Hyderabad

4) Dr. K. Madhusudan Reddy, Subject Expert.

Associate Professor, Department of Civil Engineering,
Amaravati University, Hyderabad.

5) Dr. E. S.P. Andher, Industry Expert.

Andheri & Andheri 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.

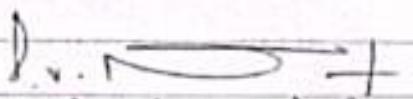
Teegala Krishna Reddy Engineering College, Hyderabad

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/ 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 as mentioned above.

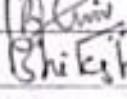
The meeting ended with thanks from the Chairperson and Member Secretary.



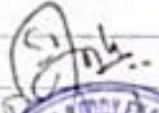
Dr. P. Venkata Rao Reddy.

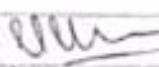


Prof. Dr. C. Sarala.


Prof. Dr. V. Bhikshma.


Dr. K. Madhusudan Reddy


Dr. Er. S. J. M. Muneeruddin


Mr. Mohammed Muneeruddin (Chair)





TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

Approved by AICTE, Affiliated by JNTUH, Accredited by NAAC- 'A' Grade
Medchal, Meerpet, Balapur, Hyderabad, Telangana- 500097
Mob: 8498085218, principal@tkrec.ac.in, ace@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. Bhikshma, 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. Srinivasa Rao, Dean Academics
Teegala Krishna Reddy Engineering College, Hyderabad

UWR *D. Gunti* *S. Jay. Sankar* *D. S. S. S. S. S. S.*



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

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



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. Bhikshumar

Dr. K. Madhusudan Reddy

Dr. Er. S. P. Athuri

Mr. Mohammed Muneerudin Khan



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



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/wqj-hpaf-nik>

MEMBERS PRESENT

1) Mr. P. VENKAT Ram Reddy

HOD, Department of Civil Engineering.

Teegala Krishna Reddy Engineering college, Hyd.

2. Prof. Dr. Q. Sarala, JNTUH Nominee
Professor, Center for Water Resources,
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. Madhuwadan 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. Seetharami Selvi, INTERNAL Member.
Associate Professor, Dept of Civil Engg.
Teegala Krishna Reddy Engg. College,
Hyderabad.

Contd —

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

Special Invitees:

1. Dr. K. Venkata Murli Mohan, Principal
Teegala Krishna Reddy Engg. College, Hyd

2. Dr. KMV Manankumar, DEAN Academic
Teegala Krishna Reddy Engg. College, Hyd

Dr. K. Venkata Murli Mohan, Principal
Teegala Krishna Reddy Engg. College, Hyd

Dr. K. Venkata Murli Mohan, Principal
Teegala Krishna Reddy Engg. College, Hyd

Dr. K. Venkata Murli Mohan, Principal
Teegala Krishna Reddy Engg. College, Hyd

Dr. K. Venkata Murli Mohan, Principal
Teegala Krishna Reddy Engg. College, Hyd

Dr. K. Venkata Murli Mohan, Principal
Teegala Krishna Reddy Engg. College, Hyd

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

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 Review it was Unanimously Resolved to approve the Course Structure and the Syllabi of B.Tech Course (Civil Engineering) (Annexure-1) and M.Tech Open Elective.
- the Meeting ended with Thanks from the Chairperson and Member Secretary.

P.V.N — +

P. VENKAT RAM REDDY

Prof. Dr. V. Bhikshma
(Signature)

C. Savala

Prof. Dr. C. Savala

(Signature)

Dr. K. Madhukar Reddy

contd —

Ranunculus

Dr. R. Senthil Selvi

Dr. Fr. S. P. Anshuri

Dr. R. Sentharmi Selv

For the next year, Bannister will focus on research and writing.

giant pectoral fish - 200m W

DR. R. H. H. A. M. D. I. L. L. I.

DR. R. H. ~~He~~^o-ma-Antilop



PRINCIPAL

Teekala Krishna Reddy Engineering College

~~UCC-Authorized~~

- Medbowri, Meerpet, Hyderabad - 97.

II Year B.Tech. CE - II Sem

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20ME4ES07	ES	Basic Mechanical Engineering for Civil	2	0	0	2
02	20CE4PC01	PC	Strength of Materials – II	3	0	0	3
03	20CE4PC02	PC	Hydraulics and Hydraulic Machinery	3	0	0	3
04	20CE4PC03	PC	Building Materials, Construction and Planning	3	0	0	3
05	20CE4PC04	PC	Structural Analysis – I	3	0	0	3
06	20EE4ES08	ES	Basic Electrical and Electronics Engineering	3	0	0	3
07	20CE4PC05	PC	Hydraulics and Hydraulic Machinery Lab	0	0	3	1.5
08	20CE4PC06	PC	Computer Aided Civil Engineering Drawing	0	0	3	1.5
09	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							21

III Year B.Tech. CE - I Sem

S. No	Subject Code	Category	Subject Name	Hours per			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		PE	Professional Elective-I	3	0	0	3
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	20CE5PC08	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							22



* 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.

IV Year B.Tech. CE - I Sem

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20CE7PC01	PC	Estimation, Costing and Project Management	3	1	0	4
02			Professional Elective – III	3	0	0	3
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							20

Professional Elective – III

S. No	Subject Code	Subject Name
1	20CE7PE01	Waste Management
2	20CE7PE02	Construction Technology and Management
3	20CE7PE03	Air Pollution and Control
4	20CE7PE04	Elements of Earthquake Engineering

Open Elective-II

S. No	Subject Code	Subject Name
01		REMOTE SENSING AND GIS
02		AIR POLLUTION

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.


PRINCIPAL

 TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
 (UGC-AUTONOMOUS)
 Medbowli, Meerpur, Hyderabad - 97.

IV Year B.Tech. CE - II Sem

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01		PE	Professional Elective – IV	3	0	0	3
02		PE	Professional Elective -V	3	0	0	3
03		OE	Open Elective - III	3	0	0	3
04	20CE8PW01	PC	Major Project	0	0	14	7
Total							16

Professional Elective – IV

S. No	Subject Code	Subject Name
1	20CE8PE01	Transportation Engineering – II
2	20CE8PE02	Foundation Engineering
3	20CE8PE03	Ground Water Hydrology
4	20CE8PE04	Design and Drawing of Irrigation Structure

Professional Elective – V

S. No	Subject Code	Subject Name
1	20CE8PE05	Disaster Management
2	20CE8PE06	Green Building Technology
3	20CE8PE07	Advanced Structural Design
4	20CE8PE08	Safety in Civil Engineering Practice

Open Elective-III

S. No	Subject Code	Subject Name
01		GREEN BUILDING TECHNOLOGY

* 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.



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

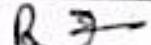
3rd Board of studies meeting
(Online mode)

Date: 29/01/2024

Time: 11.00AM

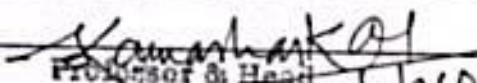
A meeting of Board of studies for EEE department was held on 29th January 2024, at 11.00 AM through online mode and the following points are suggested by Board members towards the approval of Course Structure and syllabus of 5th, 6th, 7th & 8th Semesters R-22 regulation for the students admitted from 2022-23 Academic year onwards.

The members present:

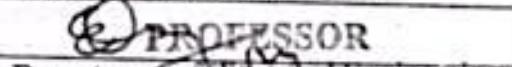
1. Dr. B. Vidyasagar professor EEE, BOS chairman TKREC (R9)


29/01/2024

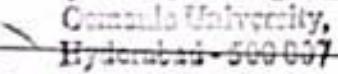
2. Dr. K. Bhaskar professor EEE, JNTUH, Nominee


 Professor & Head
 Dept. of Electrical & Electronics Engg.
 JNTUH College of Engineering
 Kukatpally, Hyderabad-500 083.

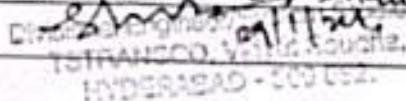
3. Dr. E. Vidyasagar professor EEE, OU, Member BOS


 PROFESSOR
 Department of Electrical Engineering
 University College of Engineering (A)

4. Dr. B. Mangw professor EEE, OU, Member BOS

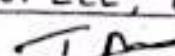

 PROFESSOR
 O.U.,
 Hyderabad-500 007

5. Dr. M. Sheshagiri D.E, TS TRANSCO, Industry Expert


 TS TRANSCO, Y.T. Ravada,
 HYDERABAD - 500 052.

6. Mr. Meiltha Babu T Associate professor EEE, Member BOS TKREC

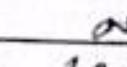


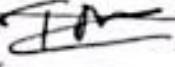

 PRINCIPAL
 Malleswaram Krishna Reddy Engineering College
 (UGC-AUTONOMOUS)
 Medbowli, Meerpeta, Hyderabad - 500 097.

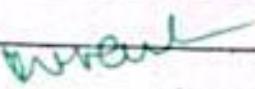
Minutes of the meeting.

- ⇒ 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 were 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 ie PCD to professional core subject.
- ⇒ Power Electronic Applications to Renewable Energy Sources (PE) subject is changed to professional elective (PE)
- ⇒ An 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. Vidya Rajwade)


Dr. N. Rajeshwar Verma
(Secretary, BOS)


(Member, BOS)
T. Madan Babu



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



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 Engg., Medchal
Ottamia University, Hyderabad - 500 072

(Dr. D. Krishne Reddy)

P. Sampath Kumar
(P. SAMPATH KUMAR)
SCB

M. Madhavi (Atta)
Department of ECE
JNTU College of Engg., 03/11/22
(Dr. M. MADHAVI C.R.T.A.)



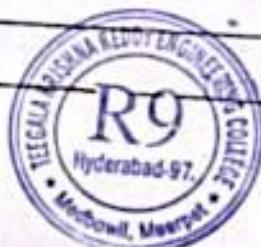
PRINCIPAL
Telgala Krishna Reddy Engineering College
(UGC-AUTONOMOUS)
Medbowli, Meerpeta, Hyderabad - 97.

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 Asst. professor & Head of EEE Dept. (✓)
14/07/2021
Chairman BOS, TKREC (R9)
2. Dr. K. Bhaskar Asst. professor EEE Kamleshwar
3. Dr. E. Vidya Sagar INTUH Nominee
Associate Professor
Electrical & Electronics Engineering
INTUH College of Engineering
Bhankapally, Hyderabad-72.
~~Asst. professor EEE~~
VICE PRINCIPAL
PROFESSOR
University College of Engineering
Osmania University, Hyderabad-500007
4. Prof. P. Manohar Member (Autonomous)
Department of Electrical Engineering
College of Engineering
Gannavaram, Visakhapatnam-530007
Member BOS
5. Dr. MHD Shashogini Divisional Engineer, System (Digital)
TSTRANSCO, Vidyut Soudha,
TS TRANSCO, HYDERABAD-500082.
6. Mr. Madhu Babu T Assoc. professor EEE, TPA
Member BOS, TKREC (R9)
7. Dr. N. Rajasekhar Varma Professor EEE
Member Secretary, TKREC (R9)
Member BOS, TKREC (R9)



PRINCIPAL
Krishna Reddy Engineering College
(UGC-Accredited/AACSB)
Jubwadi, Meenapet, Hyderabad - 97.

Minutes of the meeting (MOM)

- ⇒ 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 AICTE given model curriculums.
- ⇒ 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 by AICTE for allotting credits to subjects like HS, BS, ES, PC, PE, DE & PN.
- ⇒ One member asked to prepare the Credit Comparison between AICTE & R9 college.
One member suggested to follow the guidelines of AICTE 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 4th 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 AICTE.
- ⇒ 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 Electric instead of HFE or EHvac.



Rajiv Gandhi Engineering College
Autonomous
Hyderabad - 500 082

Meerpet, Hyderabad - 500 082

Minutes of meeting

- chairman BOS has introduced the new course structure of EEE Dept (49) to BOS members
- All the BOS members have discussed and accepted total credit distribution by the committee.
- 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 Elective.
- One BOS member raised the question if why Electrical control-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 to give the explanation for change of title is 'Elements of Electrical and Electronic Engineering' laboratory kept in 1- Semester in the course structure.
- one BOS member asked to review the 4/2 semester or VIII new f 2020 Regular course structure subjects.

RJ
(Chairman, BOS)
DR. S. Vidya Sagar

M. N. Rajsekhar Varma
(Secretary, BOS)
DR. N. Rajsekhar Varma

J.M.
(Member, BOS)
T. Mehmood Baba



PRINCIPAL
Jagadguru Krishna Reddy Engineering College
(UGC-AUTONOMOUS)
Medbowli, Meerpel, Hyderabad - 97.

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, at 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 sagar¹ Associate professor EEE, BOS chairman TKREC(R)

PROFESSOR JNTUH nominee
Department of Electrical Engineering
University College of Engineering (A)
Osmania University, OU Member BOS
Hyderabad - 500 007
2. Dr. K. Bhaskar² Associate professor

PROFESSOR JNTUH nominee
Department of Electrical Engineering
University College of Engineering (A)
Osmania University, OU Member BOS
Hyderabad - 500 007
3. Dr E. vidya sagar³ Associate professor

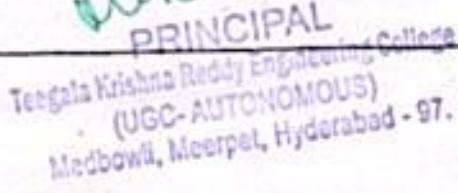
PROFESSOR
Department of Electrical Engineering
University College of Engineering (A)
Osmania University, OU Member BOS
Hyderabad - 500 007
4. Dr. B. Mange⁴ Professor EEE, Department of Electrical Engineering

PROFESSOR
University College of Engineering (A)
Osmania University,
Hyderabad - 500 007
5. Dr. M. sheshagiri⁵ D.E. TSTRANSCO, Industry expert

PROFESSOR
D.E. TSTRANSCO, Industry expert
6. Mr. Madhubabu⁶ Associate professor EEE, Member BOS TKREC

PROFESSOR
D.E. TSTRANSCO, Industry expert
7. Dr. N. Rajashankar Varma⁷ Professor EEE, Member secretary

PROFESSOR
TKREC (R9)

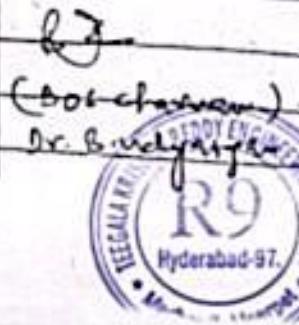


- ⇒ The member BOS suggested to include one more power electronic Subject i.e Power Semiconductor Drivers in 6th semester.
- ⇒ All the BOS members are discussed and suggested to change the name of industry oriented mini-project to summer internship, for this no need to give lecture hours to summer internship. 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-pomapping.
- ⇒ 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 deal by the industry expert in association with regular faculty.
- ⇒ Also suggested two subjects must include in course structure from mookas and NPTEL with equivalent credits.

4 weeks - 1 credit

8 weeks - 2 credits

12 weeks - 3 credits.



(BOS Chairman)
Dr. B. Venkateswaran

Dr. R. Rajeshwar Varma
(BOS, secretary)

DR. R. RAJESHWAR VARMA
DEPARTMENT OF ELECTRICAL ENGINEERING
JNTUH HYDERABAD

Hyderabad, Telangana, India - 500082

Hyderabad, Telangana, India - 500082

J.P.
(Member, BOS)

II Year B.Tech. EEE - II Sem

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20EE4PC01	PC	Power Electronics	3	1	0	4
02	20EE4PC02	PC	Digital electronics	3	0	0	3
03	20EE4PC03	PC	Electrical machines -II	3	1	0	4
04	20EE4BS07	BS	Numerical Methods & Complex Variables	3	1	0	4
05	20EE4PC05	PC	Power system-I	3	0	0	3
06	20EE4PC06	PC	Power Electronics lab	0	0	2	1
07	20EE4PC07	PC	Digital electronics lab	0	0	2	1
08	20EE4PC08	PC	Electrical machines lab -II	0	0	2	1
09	20MC4HS03	MC	Gender Sensitization Lab	0	0	2	0
10	20MC4HS10	MC	Quantitative Logical and Reasoning	2	0	0	0
Total				17	3	8	21

III Year B.Tech. EEE - I Sem

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20EE5PC01	PC	Control Systems	3	1	0	4
02	20EE5PC02	PC	Power system II	3	0	0	3
03	20EE5PC03	PC	Measurements and Instrumentation	3	0	0	3
04	20MS5HS03	MS	Business Economics and financial analysis	3	0	0	3
05		PE	Professional Elective -I	3	0	0	3
06	20EN5HS04	HS	Advanced communication skills lab	0	0	2	1
07	20EE5PC06	PC	Measurements and Instruments lab	0	0	2	1
08	20EE5PC07	PC	Control Systems lab	0	0	2	1
09	20EE5PC08	PC	Power system simulation lab	0	0	2	1
10	20MC5HS05	MC	Intellectual property Rights	3	0	0	0
11	20MC5HS06	MC	Personality Development Soft skills	2	0	0	0
12	20EE5PW01	PC	Summer Internship	0	0	0	1
Total				20	3	8	21

Professional Elective - I

S. No	Subject Code	Subject Name
1	20EE5PE11	Modern Power Electronics
2	20EE5PE12	High Voltage Engineering
3	20EE5PE13	Electrical Machine Design
4	20EE5PE14	Internet of Things

HOD

5	20EE7PC02	PC	Power Quality and Facts	3	0	0	3
6	20EE7PC03	PC	Electrical System Simulation Lab	0	0	3	1
7	20EE7PC04	PC	Industrial Oriented Mini Project	0	0	4	2
8	20EE7PC05	PC	Seminar	0	0	2	1
9	20EE7PC06	PC	Comprehensive test	0	0	0	1
10	20EE7PC07	PC	Project Stage - I	0	0	6	3
11	20EE7 HS 08	HS	Advance Technical Training (ATT)	3	0	0	0
Total				18	0	15	23

Professional Elective – III

S. No	Subject Code	Subject Name
1	20EE7PE11	Switched mode power conversion
2	20EE7PE12	Utilization of Electrical Power
3	20EE7PE13	Digital Control Systems
4	20EE7PE14	Embedded Systems

Professional Elective – IV

S. No	Subject Code	Subject Name
01	20EE7PE21	Electrical and Hybrid Vehicles
02	20EE7PE22	Optimization Techniques
03	20EE7PE23	Industrial Electrical systems
04	20EE7PE24	VLSI Design

Open Elective-II

S. No	Subject Code	Subject Name
01	20EE7OE21	Design of Electrical Systems
02	20EE7OE22	Energy Storage Systems

*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.
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

	EE704PC	Project Stage - I	0	0	5	3
		Total Credits	13	0	16	21

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	EE801PC	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

EE511PE	Computer Architecture
EE512PE	High Voltage Engineering
EE513PE	Electrical Machine Design

Professional Elective - II

EE611PE	Optimization Techniques
EE612PE	Power Semiconductor Drives
EE613PE	Wind and Solar Energy systems

Professional Elective - III

EE711PE	Digital Control systems
EE712PE	Digital Signal Processing
EE713PE	Electrical and Hybrid Vehicles

Professional Elective - IV

EE721PE	HVDC Transmission
EE722PE	Power System Reliability
EE723PE	Industrial Electrical Systems

Professional Elective - V

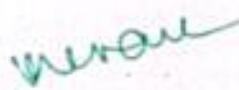
EE811PE	Power Quality & FACTS
EE812PE	Control Systems Design
EE813PE	AI Techniques in Electrical Engineering

Professional Elective - VI

EE821PE	Smart Grid Technologies
EE822PE	Electrical Distribution Systems
EE823PE	Advanced Control of Electric Drives



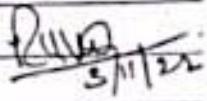
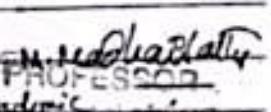
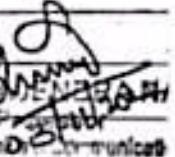
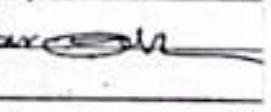
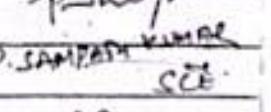
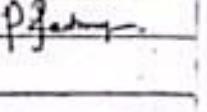
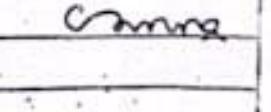
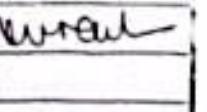
Electrical and Electronics Engineering
TK R Engineering College
Nearset, Hyderabad-500 079



3rd BOARD OF STUDIES MEETING (CONTINUED)

A meeting of Board of studies for Electronics and Communication Engineering Department was held on 3rd November '2022 at 4:00pm 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 SK. Kumar Parva | Prof & Head
Chairman (BOS)
TKREC | 
S/1/22 |
| 2. Dr. M. Madhavi LaJa | Professor
PROFESSOR
Director Academic
planning INTI College of Engineering
and Technology |  |
| 3. Dr. B. Ravendra AlaiK | Professor
B.R.A. COLLEGE OF ENGINEERING
Osmania University
University of Hyderabad
University of Engineering
Technology, Hyderabad-500
University of Hyderabad
University of Engineering
Technology, Hyderabad-500 |  |
| 4. Dr. D. Krishna Reddy | Prof & Head
CET, member
expert |  |
| 5. P. Sampath Kumar | Scientist (E), IISc
P. SAMPATH KUMAR
SCIE |  |
| 6. Dr. Padmaja | Professor
TKREC
BOS - Secretary |  |
| 7. Dr. C. Annapalagan | Professor
TKREC
member |  |
| 8. Dr. K.V. Murali Mohan | Professor
Principle
Dept of ECE
TKREC, member expert |  |



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

1. Dr. M. Madhavi Latha, madam, suggested

i. To incorporate Artificial Intelligence and machine learning Subjects as professional Electives.

2. To include Re Computer based/related Subjects in open Electives

3. To introduce The Computer Organization and Operating System

2. Dr. B. Rajendra Khair Sir suggested

1. To include more Communication related Subjects

2. To include Radar Systems in professional Elective - IV

3. Dr. D Krishna Reddy, sir suggested to to

1. To increase The Professional Electives in each Sem from Three to Four to give more options to Re students.

2. To include Re - Antenna Based Simulation Laboratory.

Recommendations for Re-admission Students:-

10 Substitute Subjects are recommended if any Candidate is Re-admitted in 1st year B.Tech Program or in the same regulations of any year.



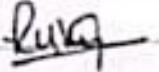
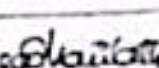
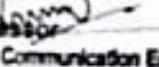
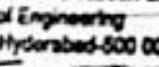
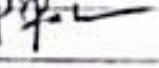
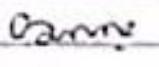
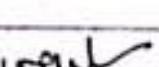
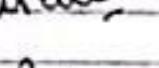
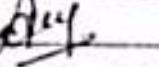
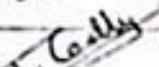
PRINCIPAL

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

4^H BOARD OF STUDIES MEETING 11

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 | Asst. Professor of ECE
JNTUH - Alumnae |  |
| 3. Dr. B. RAJENDRA NAIK | Professor of ECE
Osmania Dept. of Electronics & Communication Eng.
Uttar College of Engineering
Osmania University, Hyderabad-500 007 |  |
| 4. Dr. D. KRISHNA REDDY | Scientist-ERC |  |
| 5. Mr. P. SAMPATH KUMAR | Professor |  |
| 6. Dr. P. PADMAJA | Member Secretary
Prof. TKREC |  |
| 7. Dr. C. ANNADALIGAN | Prof. of ECE
TKREC |  |
| 8. Dr. K.V. MURALI MOHAN | Member of ECE
Prof. TKREC |  |
| 9. Dr. D. VENKATESH CHARY | Assoc. Prof.
TKREC |  |
| 10. Dr. E. RADHIMA | Member |  |
| 11. Dr. S. NAGI REDDY | Member
TKREC |  |
| 12. Dr. R. SHANKAR | |  |
| 13. Dr. G. C. K. REDDY | |  |
| 14. Dr. G. SIREESHA. | |  |



At the outset Dr. Sri. Umar Faruk, Head, Department of Electronics & Communication Engineering and chairman of the board of studies welcomed the members of BoS and apprised 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 - passed by the BoS - members

- Approved to offer the following subjects in 3rd semester (II yr - I sem) for the students admitted 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.	22EC205ES	Electronic Devices and Circuits	2	0	0	2
2	22EC209ES	Electronic Devices and Circuits (laboratory)	0	0	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 R22 regulations.

3. No substitute subjects are offered for the students transferred from JNTUA-R18 Regulation to JKEEC-R20 regulations as both the regulations are same.

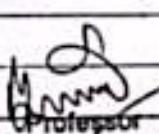
4. Recommended to conduct more certificate courses instead of value added courses.

5. Recommended to conduct more technical workshops and Seminars.

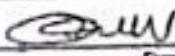
M. Venkateswarlu

S (102)

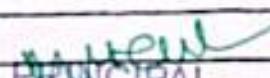
Dated
5/10/23


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

WTFB
S/10/23


Professor B. H. I. C. S.

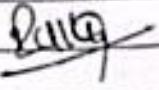


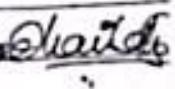

PRINCIPAL
Jagdeesh Krishna Reddy Engineering College
(UGC AUTONOMOUS)
Medbowli, Meerpeta, Hyderabad - 97.

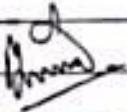
5th Board of Studies MEETING

The Board of studies meeting (BOS) for Electronics and Communication Engineering Department is conducted on 25/01/2024 - 10:30 AM through online mode to approve the course structure and syllabus for 3rd and 4th year for the students admitted in 2022 onwards.

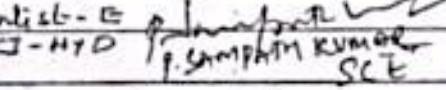
The following BOS members attended the meeting.

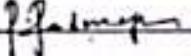
1. Dr. S. Umamaheswari chairman - BOS 

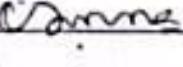
2. Dr. M. Madhavi Lata sr professor of ECE M. NO 

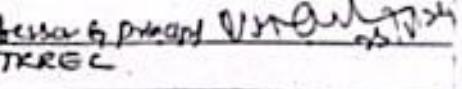
3. Dr. B. Rajendra Naik Professsor of ECE  osmania univ

4. Dr. D. Krishna Reddy Professsor of ECE  CBRIT

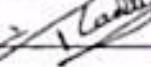
5. Mr. P. Sampath Kumar scientist - E  RCI - HYD p.sampath kumar SCT

6. Dr. P. padmaja member Secretary  Prof of ECE

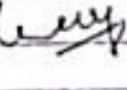
7. Dr. C. Annapalagan Prof of ECE  TREC

8. Dr. K. V. muralimohan Professsor & Director  TREC

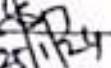
9. Dr. D. Venkata chary Assoc. Professor  TREC

10. Dr. E. Radhamma Assoc. Professor  TREC

11. Dr. R. Shankar Professor  TREC

12. Dr. S. Nagireddy Assoc. Professor  TREC

13. Dr. G. C. K. Reddy Assoc. Professor  TREC

14. Dr. G. Srikrishna Assoc. Prof  TREC

PRINCIPAL

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



Meeting minutes

At the outset Dr. Sri. 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 the proposed draft copy of the R22 regulations Course Structure and syllabus for 3rd and 4th year to get 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 techniques as a professional Elective.
4. Committee members suggested to define 5 roles for each theoretical subject
5. members recommended to incorporate Digital Image processing in Fourth Year instead of Third Year as a Professional Elective.



6. Committee member S recommended to incorporate
Artificial Artificial Intelligence as a professional elective
7. Members suggested to incorporate addition Lab
in Scripting Languages Lab in final year
first semester.

~~Jala~~
HOD ECE
Teegala Krishna Reddy Engineering College
Medbowli Meerpet Hyderabad - 57



Wtent
PRINCIPAL
Teegala Krishna Reddy Engineering College
(UGC AUTONOMOUS)
Medbowli, Meerpet, Hyderabad - 57.

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 Ist Semester for the students admitted in 2020-21 Academic Year.

Members Present

1. Dr. Sri. UNAR PAPU Prof & Head
Chairman-BOS
TKREC (R9)

~~Present~~

2. Dr. M. MADHAVI LATHA Professor M. madhavilatha
Director-Academic Planning 23/6/21
TANUH-Nominated

3. Dr. B. RAJENDRA NIK Prof & Head
University College, RSM
Member- Expert

~~Present~~

4. Dr. D. KRISHNA REDDY Professor
CBIT, Hyd
Member-Expert

~~Present~~

5. P. SAMPATH KUMAR Scientist (E)
RRI, Hyd
Industry Representation

~~Present~~

6. Dr. C. Annopalagan Professor
TKREC (R9)

~~C. anna~~

7. DR. D. Venkatachary Professor, TREC

~~Present~~

8. Dr. P. Padmaja Professor, TREC
Member Secretary

~~Present~~



9. Dr. K. Venkata Murali Molan

PROFESSOR ECE DEPT
TKREC.

9.

1. DR. M. Madhavi Latha Madam Suggested

1. 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 Communications Branch
- 7.

2. Dr. B. Rajendra Akar sir Suggested

1. To include Global Positioning System in V/VII Semester
2. To incorporate Speech processing in course in professional Elective
3. To Remove Chemistry or Engg Chemistry



3. Dr. D. Krishna Reddy sir Suggested

1. To introduce mandatory Course so as to promote industry requirements
2. To include New Courses Such as Analytical and logical Thinking
3. Courses on Design Thinking, Quantum Coupling Theory and its applications, pattern recognitions etc. Definite focus, Industry wise also be planned to include as delivery.

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

✓
PRINCIPAL

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



2nd Board of STUDIES MEETING⁷ (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 - 900 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. Umair Parwa Professor & Head
Chairman - ECE

2. Dr. M. Madhavi Lalla man Professor M. Nagabhushan
Director & Academic & planning
INTUH - Alimurugan

3. Dr. B. Rajendra Akki Professor
University Dept. of Electronics & Communication Engg.
member - Anna College of Engineering
Oriental University, Hyderabad-500 007.

4. Dr. D. Krishna Reddy Professor & Head
CBIT, Hyderabad HEAD
member-expert DEPARTMENT OF ECE
Chaitanya Bharathi Institute of Tech.,
Hyderabad-500 075

5. Mr P. Sampath Kumar Scientist(CE)
RCI, Hyderabad P. SAMPATH KUMAR
Industry Representative

6. Dr. C. Anna Palagan Professor
TKREC(Erg)

7. Dr. D. Venkana Chary Professor
TKRECC(R)

8. Dr. P. Padmaja Professor
member Secretary

9. Dr. K. Venkata muri Mitali Professor



Dr. M. Madhavi Hallā 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 cover 100 students at the end of the programme

Dr. B. Rajendra Naik sir

1. suggested to introduce Radar Systems of PE

Recommendations for Re-admission Students :-

- 1. No substitute subjects are recommended if any candidate takes re-admission into R20 (Autonomous) from R18 (INTU) in B.Tech II-2 from B.Tech I-I, II-II, III-I, III-II, IV-I & IV-II.



UNIVERSITY
Teegala Krishna Reddy Engineering College
(UGC-AUTONOMOUS)
Medbowli, Meerpeta, Hyderabad - 502

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	Credit S
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	20 EC6PC24	Python programming Lab	0	0	3	1.5
9	20MC6HS08	Basic Technical Training	3	0	0	0
		Total Credits	18	3	8	22.5

M. Ned Bain (att)

PROFESSION

Dept. of Mathematics & Computer Science
Montclair State University, Montclair, NJ 07043

20

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



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

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

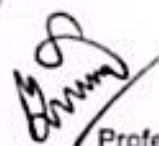
S. No.	Course Code	Course Title	L	T	P	Credits
1		Professional Elective - V	3	0	0	3
2		Professional Elective - VI	3	0	0	3
3		Open Elective - III	3	0	0	3
4	20EC8PW04	Project Stage - II	0	0	14	7
		Total Credits	9	0	14	16

M. Radhakrishna

PROFESSOR

Dept. of Electronics & Communication
Univ. College of Engineering
Osmania University, Hyderabad-500007.

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



Professor
Dept. of Electronics & Communication Engg.
Univ. College of Engineering
Osmania University, Hyderabad-500007.

PRINCIPAL

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



10
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 R22 regulation.
- As per the Regulation (R22) given by JNTUH, Teegala Krishna Reddy Engineering College (Fa) of CSE department is following the same course structure.
- As per the Regulation (R22) given by JNTUH, we are following the same syllabus upto II year II semester of all courses.
- As per the Regulation (R22) given by JNTUH, we are following the same syllabus for 1st year ECE, EEE & CIVIL i.e.

 - ECE (I-1) - C Programming for Engineering.
 - (I-2) - Applied Python Programming Laboratory.
 - EEE (I-1) - C Programming and Data Structures
 - (I-2) - Applied Python Programming
 - CIVIL (I-1) - C Programming and Data structures
 - (I-2) - Python Programming Laboratory.

- Due to deficiency of one credit in Ist semester AI lab has been introduced by JNTUH.

(Afterwards)
P. Martin Kumar (Chair)

Dr. D. Venkateswara
(Industry expert) Project- CSE
JNTUH premises

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

Dr. M. N. S. Rao
CSE
E&E Engineering
Institute
JNTUH

1 Dr. Ch. V. Phani Krishna

Prof & Head
CSC department
Bos. Chairman
TKRCC (R7) GDA

2 Dr K. Bhargavi

Prof - CSC dept
Bos. Member
TKRCC (R7)

3 PV RamaGopal Rao

Asst Prof. CSC
Bos. Member
TKRCC (R7)

4 G. Sreetha

Asst Professor CSC
Bos. Member
TKRCC (R7)



PRINCIPAL

Teegala Krishna Reddy Engineering College

(UGC-AUTONOMOUS)

Medbowli, Meerpet, Hyderabad - 97.

1st Meeting of the Board of Studies
of CSE - IInd Year on 11-10-2013

The Board of Studies for CSE department of
Teegala Krishna Reddy Engineering College, C.
convened a meeting on 11-10-2013.

Present Members

1. Dr Ch V Phani Krishna ~~W/o~~ Professor & Head of CSE
Chairman-Bos, TKRECCE
2. Dr D Vasumathi ~~W/o~~ Professor, HOD-CSE
Director of University Faculty, NITTE - Nominee
3. Dr G Suresh Babu ~~W/o~~ Asst Prof NITI-Nasangal
Member
4. Dr B Sugatha ~~W/o~~ Asst Prof OU-Coe
Member
5. P. Madhu Kumar Reddy ~~W/o~~ Associate Director - Nervili
Industry Expert
6. Dr B Srinivas Rao ~~B. Srinivas~~ Professor & Dean-Academic
Member.
7. Dr K Bhargavi ~~W/o~~ Asst Professor, Rq-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 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 (M))

CPL

Dr. CH.V. PHANI KRISHNA,
Ph.D
Head Of The Department
Computer Science and Engineering
Teegala Krishna Reddy Engineering College
Medbowli, Meerpet, Karim Nagar, H. 5-79
Medbowli, Meerpet, Karim Nagar, H. 5-79



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

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 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 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, JNTUH (IR)	Chairman BOS
2	Dr Vasumathi	Professor - CSE - JNTUH	JNTUH Nominated
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. Malla Babu BNV	Professor	Member
8	Dr Suresh Babu M	Professor	Member
9	Dr A Pranayananth Reddy	Associate Professor,	Member Secretary
10	All the faculty Members of CSE Department		

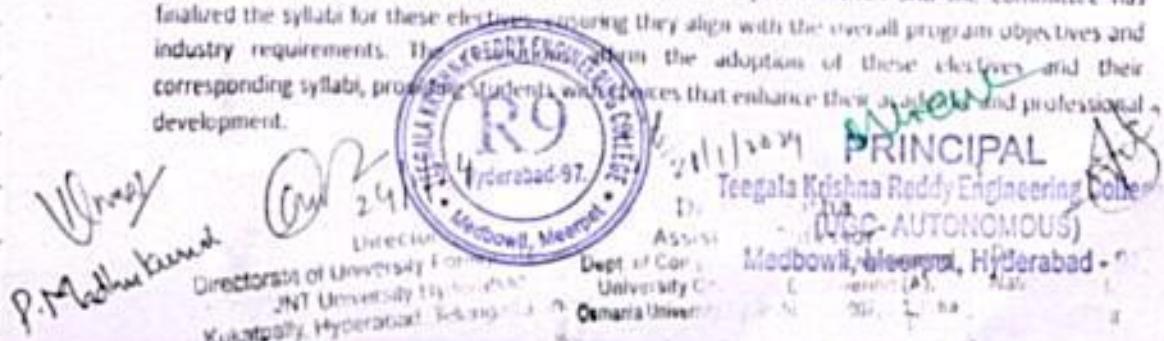
Agenda items and Resolution

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 approved 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 has approved the adoption of these electives and their corresponding syllabi, providing students with choices that enhance their academic and professional development.



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

Director
Directorate of University Foreign Relations
JNTU University, Hyderabad
Telangana, Hyderabad, Telangana
India

Dr. B. Sujatha
Assistant Professor
Dept. of Computer Engineering
University College
Osmania University

Engineering (A) Department of Computer Science & Engineering
T.S. Institute of Technology, W...

D. Madhukarana

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) | C.V.P |
| 2. Dr. D. Vasumathi | Professor, HOD-CSE JNTUH Nominee | D.V |
| 3. Dr. E. Suresh Babu | Asst. Prof. NIT-Karimnagar Member | E.S.B |
| 4. Dr. B. Sujatha | Asst. Prof., OU-COE Member | B.S |
| 5. P. Madhus Kumar Reddy | Asso. Director Novastis (Industry Conf.) | P.M.R |
| 6. Dr. K. Sarangam | Asst. Prof., R9-BOS Member | K.S |
| 7. Dr. M. Vadivelan | Asst. Prof. R9-BOS Member | M.V |
| 8. Dr. K. Bhargavi | Asst. Prof. R7-BOS Member Secretary | K.B |

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 Data structure.

2. Dr. E. 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 & Exceptions 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 of Algorithm practical course.
 - b) As searching & sorting topics are already covered in Data structure, hence not to incorporate in Design & Analysis of Algorithms
 - c) Adding of new concepts like Pattern Matching algorithm, Trie, Red Black tree & splay tree from Data structure to Advance Data structures.

4. Mr. P. Natarajan Kumar Sathy has suggested

- a) To introduce mandatory subjects so as to promote industry relevance.
- b) Courses with analytical & logical thinking can be introduced as a part of curriculum.

5. Dr. D. Vasumathi Nodam suggested to

- a) Incorporate Analog & Digital Electronics in II year I sem in place of Digital logic design.
- b) Operating systems and Real Time Economics & Financial Analysis to be substituted in II year II sem in place of IIIrd year.
- c) Automata Theory & DAAL (Design & Analysis of Algorithms) to be moved to II year I sem & III year II sem respectively.
- d) Mandatory course constitutes of Data interpretation in in II year I sem & III year II sem respectively.
- e) Incorporate Data Science concepts in R-programming course - IVth 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 UNIX
 - Professional Elective-IV - incorporate Deep learning as one of the course.
 - Professional Elective-V - incorporate Block chain Technology
 - Professional Elective-VI - incorporation of Augmented Reality as one of the course.
- g) Mam asked to prepare the syllabus for 2nd year & 4th year - Professional core (PC) & Profession 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 3rd and 4th year syllabus of P20. The following members were present and taken the following decisions.
- The 3rd and 4th year detailed syllabus for P20 regulations of Teegala Krishna Reddy Engineering College (Autonomous) was completely approved.
- Dr. D. Vasumathi, Professor & HOD - CSE, INTOM 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 HeI change with Randomized algorithms.

(CWR)

Uma

P. Mehta, Kumar

f
(Dr. G. Sujatha)

Asst Professor
Dept. of CSE
Osmania University, Hyd.

- | | |
|-------------------------------|--|
| 1. Dr. Ch.V. Sharani Krishnan | Professor Head
CSE Department,
BOS Chairman,
TFRCC (Pg) |
| 2. Dr. K. Bhargavi | Professor, CSE Department
BOS Member |
| 3. P. V. Ramagopal Rao | Astt. Professor, CSE Dept.
BOS Member |
| 4. G. Sreetha | Astt. Professor, CSE Dept.
BOS member |



PRINCIPAL

II Year B.Tech. CSE - II Sem

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
01	20MA4PC07	PC	Discrete Mathematics	3	0	0	3
02	20MS4HS03	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	1.5
07	20CS4PC12	PC	Java Programming Lab	0	0	3	1
08	20CS4PC13	PC	Database Management Systems Lab	0	0	3	1.5
09	20MC4HS03	MC	Gender Sensitization Lab	3	0	0	0
10	20MC4BS03	MC	Quantitative Logical and Reasoning	3	0	0	0
Total				21	2	9	21

III Year B.Tech. CSE - I Sem

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		PE- I	Professional Elective- I	3	0	0	3
04	20CS5PC16	PC	Design and Analysis of Algorithms	3	1	0	4
05		PE-II	Professional Elective- II	3	0	0	3
06		PE-II 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	20EN5HS04	HS Lab	Advanced Communication Skills Lab	0	0	3	1
09	20CS5PW01	PW	Summer Internship	0	0	0	1
10	20MC5HS05	MC	Intellectual Property Rights	3	0	0	0
11	20MC5HS06	MC	Personality and Soft Skills Development	3	0	0	0
Total				21	1	9	21

Professional Elective – I

S. No	Subject Code	Subject Name
1	20CS5PE11	Artificial Intelligence
2	20CS5PE12	Advanced Computer Architecture
3	20CS5PE13	Data Mining
4	20CS5PE14	Principles of Programming Languages
5	20CS5PE15	Information Retrieval System

Professional Elective – IV

S. No	Subject Code	Subject Name
1	20CS7PE41	Graph theory
2	20CS7PE42	Natural Language Processing
3	20CS7PE43	Neural Networks
4	20CS7PE44	Cloud Computing
5	20CS7PE45	Ad-hoc & Sensor Networks

Professional Elective – III Lab

S. No	Subject Code	Subject Name
1	20CS6PE35	Digital Image Processing Lab
2	20CS6PE36	Network Programming Lab
3	20CS6PE37	Scripting Languages Lab
4	20CS6PE38	Mobile Application Development Lab
5	20CS6PE39	Software Testing Methodologies Lab

Open Elective-I

S. No	Subject Code	Subject Name
01	20CS6OE11	Java
02	20CS6OE12	Computer Organization & Architecture

* 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.

IV Year B.Tech. CSE - I Sem

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
1	20CS7PC24	PC	Block Chain Technology	2	1	0	3
2	20CS7PC25	PC	Data Science and R-Programming	3	0	0	3
3		PE-IV	Professional Elective- IV	3	0	0	3
4		PE-V	Professional Elective- V	3	0	0	3
5		OE-II	Open Elective- II	3	0	0	3
6	20CS7PC26	PC LAB	R-Programming Lab	0	0	3	1
7	20CS7PW02	PW	Seminar	0	0	0	1
8	20CS7PW03	PW	Comprehensive Test	0	0	0	1
9	20CS7PW04	PW	Industrial Oriented Mini Project	0	0	3	2
10	20CS7PW05	PW	Project Stage-I	0	0	6	3
11	20MC7CS02	MC	Advanced Technical Training	3	0	0	0
Total				17	1	12	23

Professional Elective – IV

S. No	Subject Code	Subject Name
1	20CS7PE41	Graph theory
2	20CS7PE42	Natural Language Processing
3	20CS7PE43	Neural Networks
4	20CS7PE44	Cloud Computing
5	20CS7PE45	Ad-hoc & Sensor Networks

Professional Elective – V

S. No	Subject Code	Subject Name
1	20CS7PE51	High Performance Computing
2	20CS7PE52	Real Time Systems
3	20CS7PE53	Deep Learning
4	20CS7PE54	Design Patterns
5	20CS7PE55	Software Process & Project Management

Open Elective-II

S. No	Subject Code	Subject Name
01	20CS7OE21	Operating System
02	20CS7OE22	Artificial Intelligence

* 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.
IV Year B.Tech. CSE - II Sem

S. No	Subject Code	Category	Subject Name	Hours per			Credits
				L	T	P	
1	20SM8MS02	PC	Organizational Behavior	3	0	0	3
2		PE-VI	Professional Elective- VI	3	0	0	3
3		OE-III	Open Elective- III	3	0	0	3
4	20CS8PW06	PW	Project Stage-II	0	0	15	7
Total				9	0	15	16

Professional Elective – VI

S. No	Subject Code	Subject Name
1	20CS8PE61	Augmented & Virtual Reality
2	20CS8PE62	Modern Software Engineering
3	20CS8PE63	Randomized Algorithms
4	20CS8PE64	Cognitive Computing
5	20CS8PE65	Cyber Forensics

Open Elective-III

S. No	Subject Code	Subject Name
1	20CS8OE31	Cyber Security
2	20CS8OE32	Scripting Languages

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

Dr. CH.V. PHANI KRISHNA

Head Of The Department
Computer Science and Engineering
Teegala Krishna Reddy Engineering College
Madbowli, Meerpeta, Saroor Nagar, Hyd.



PRINCIPAL
Teegala Krishna Reddy Engineering College
(UGC-AUTONOMOUS)
Madbowli, Meerpeta, Hyderabad - 97.

03/11/22

1st Round of Studies Meeting

→ A meeting to review the studies for 11 dep was held on 03 Nov 22 through online mode.

by the following members for the **Approval**

1. Course Structure and syllabus in R22

Regulations

→ As per the Regulation (R22) given by JNNUH, Teegala Krishna Reddy Engineering College (Pg) IT Dept. is following the same course structure.

→ As per the Regulation (R22), we are following the same syllabus of JNNUH upto final year I semester of all courses.

→ Electives has to be changed as per Dr. Vajravoothi madam suggestion.

→ No substitute subjects for Readmitted I Sem B.Tech students.

(Dr. D. Vajravoothi)
~~Dr. E. Suresh Babu~~

Chairman - (Dr. D. Vajravoothi)
Dept. Head - (Dr. E. Suresh Babu)
Department of Computer Science & Engineering
National Institute of Technology, Warangal
Telangana - 506009
(Industry Expert)

Dr. B. Suganthi
Asst Prof
Dept. of CSE
OU

(Asst prof NITW)
(Asst prof OU)

Dr. J. Praveen Kumar

Assoc Prof, HOD of IT dept
Chairman BOS, TKREC(Pg)

(JPL)

Dr. M. Romy

Assoc Prof, Dept of IT
Member, TKREC(Pg)

(MRS)

Mr. S. Pavanji
Mrs. E. Aruna

Asst Prof, Member, TKREC(Pg)
Asst Prof, Member Secretary II

(TANU)
(Ayu)

Present

10/12/2019, Meeting of the Board of Studies - II

The Board of Studies for II dependent of Teeguda K. R. Eddy Engineering College convened a meeting on 10/12/2019 in the Management Office.

Present:

- | | |
|---------------------------|---|
| 1. Dr. V. Sridha Reddy | Professor, HOD of IT, Head of the Department, Chairman, BOS, TKREC(RD), Teeguda Krishna Reddy Engineering College |
| 2. Dr. D. Vasumathi | Professor, HOD-CSE |
| 3. Dr. E. Surech Babu | Ast. prof., NIT Warangal, Member |
| 4. Dr. B. Sujatha Sir | Ast. prof., CU-Colam, Member |
| 5. Mr. P Madhukumar Reddy | Assoc. Director, Novartis-Industry, Expert. |
| 6. Dr. Ramu Hoodu | Assoc. Professor, Member, TKREC(RD) |
| 7. Mrs. S. Pavani | Ast. Professor, Member, TKREC(RD) |
| 8. Mrs. E. Aruna | Ast. professor, Member Secretary. |

Whereas

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 R22 Regulation.

Resolution:

4.1. Re-admitted students from R20 Regulations to R22 Regulations are required to follow the R22 Regulation 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 3rd to 4th year.

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

Viewpoint

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

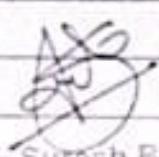
4.4. Students who have been readmitted into IV year B.Tech.
I am will adhere to follow R20 regulation of TREC.

St

Uma

P. Mallu Kumar

Professor
Dept. of ECE
Ost


Dr. E. Suresh Babu

Assistant Professor
Department of Computer Science & Engineering
National Institute of Technology
Warangal - 506 004, TS INDIA

Uma

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 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 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.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.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.

(Signature)
Dr. P. Madhu Kumar

Directorate of Distance Education
JNTU University Sector - II
Hyderabad, Telangana - 500004

(Signature)
Dr. J. Praveen Kumar

Dept. of CSE
Univ.

(Signature)
Dr. L. Suresh Babu

Department of Civil Engineering & Env.
National Institute of Technology, Warangal
Warangal, Andhra Pradesh - 506 004
(A).

(Signature)
M. Venkateswaran

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 Visualizations 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

Director
Directorate of University Foreign Relations
JNTU University, Hyderabad
Kukatpally, Hyderabad, Telangana, India

Dr. B. Sujatha
Assistant Prof
Dept. of Computer
Engineering
University Colle

Engineering
Department of Computer Science & Eng
T.S. Regional Institute of Technology, W

Wen
N Madhukar

Wen

22/06/2021
2:00 PM

2nd 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 | Asst. Prof., HOD of IT, Chairman-BOS, TKREC(R9). | 3.81 |
| 2. Dr. D. Vasumathi | Professor, HOD-CSE INTUH Nominee. | ✓ Ad 22/06/21 |
| 3. Dr. E. Suresh Babu | Asst. Prof., NIT Warangal, Member. | ✓ Ad 3.77/21 |
| 4. Dr. B. Sujatha | Asst. Prof. OU-COE Member. | ✓ Ad 3.77/21 |
| 5. Mr. P. Madhukumar Reddy | Assoc. Director, Novartis-Industry expert. | ✓ Ad 3.77/21 |
| 6. Dr. Ramu Moodu | Asst. Prof., Member, TKREC(R9). | ✓ Ad 3.77/21 |
| 7. Mrs. S. Pavani | Asst. Prof., Member, TKREC(R9). | ✓ Ad 3.77/21 |
| 8. Mrs. E. Aruna | Asst. Prof., Member Secretary. | ✓ Ad 3.77/21 |

Agreed

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 respective 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 Greed method should come before dynamic programming

3) Dr.B.Sujatha Madam Suggested

- a) Introduce shortest path and other related concept 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, Red-black trees and splay trees from data structures to Advance data structures.

✓
unseen

- 4) Mr. P. Marthu Kumar Reddy Suggested
- To introduce mandatory course, so as to promote industry requirements.
 - Courses with Analytical and logical thinking can be introduced as a part of curriculum.

5) Dr.D.Vasumathi Madam Suggested

- Incorporate Analog & Digital electronics in II year I Semester in place of Digital logic Design.
- Operating System and BEFA (Business Economics Financial Analysis) to be substituted in II year II Semester in place of III year.
- Automata theory & DAA (Design & Analysis of algorithms) to be moved to III year I semester & III year II Semester respectively.
- Mandatory course constitution of India incorporated in III year & II Semester.
- 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.

more

- Professional Elective - IV - Incorporate Blockchain Technology course.
- Professional Elective - V Incorporate Data Science using python programming & Software Process & Project Mng.
- Professional Elective - VI Incorporate Augmented Reality, mobile computing & Modern software Engineering as courses.

WAVES

6th And Board of Studies Meeting

- A meeting was held for BoS of IT department through online mode on 11.02.22 at 12:30PM to finalize the IIIrd and IVth year syllabus of P20. The following members were present and taking 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.

QD.

(Hmc)

P Madhu Kumar

(Dr. B. Sugato)

Asst. Professor

Dept. of CSE College of Engg
Osmania University, Hyd

venkat



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
(UGC-Autonomous)

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

St

Qur2
28/6/2021

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

Uma

Uma

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

10:

1/11/2022 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 year 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 I sem B.Tech Students.

1. Dr. Vadivelan Natarajan Prof & Head, AI-ML
Chairman (BOS)

TKREC (R9)

2. Dr. G. Vijayakumari Prof & Head
JHUB, JNTUH

JNTUH Nominee

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

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

Telangana - 500 087, India

4. Dr. B. Sugathaa Asst. Prof, OU-COE
Member

Dr. B. Sugathaa
Assistant Professor

Dept. of Computer Science & Engineering
University College of Engineering (AUCE)
Guntur University, AP, India

5. P. Madhukumar Reddy Asst. Director
Novartis (Industry)

6. Sonjeeta Jawar Asst. Prof, R9-BOS
Member Secretary

PRINCIPAL

Teegala Krishna Reddy Engineering College

(UGC AUTONOMOUS)

Hanuwadi, Meerpet, Hyderabad - 500 087.



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
(UGC-Autonomous)

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



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)

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



S. No	Category	SEMESTER								As per AICTE
		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
		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
 Department of Computer Science & Engineering
 National Institute of Technology, Warangal
 Telangana - INDIA - 506 004.

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

P. Mallikarjun

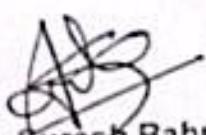
PRINCIPAL
 Teegala Krishna Reddy Engineering College
 (UGC-AUTONOMOUS)
 Medbowli, Meerpeta, Hyderabad - 97.

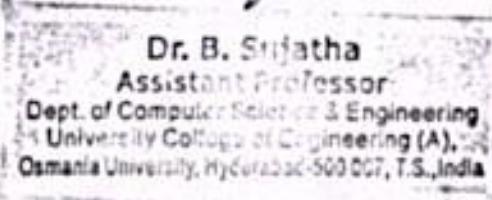
I YEAR I SEMESTER

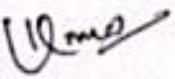
S. No.	Course Code	Course	L	T	P	Credits	
1.	22MA101BS	Matrices and Calculus	3	1	0	4	
2.	22PH102BS	Applied Physics	3	1	0	4	
3.	22CS103ES	Programming for Problem Solving	3	0	0	3	
4.	22ME104ES	Engineering Workshop	0	1	3	2.5	
5.	22EN105HS	English for Skill Enhancement	2	0	0	2	
6.	22CS106ES	Elements of Computer 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

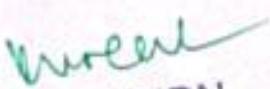
I YEAR II SEMESTER

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


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




P. Madhu Kuri

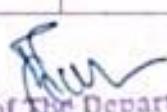

PRINCIPAL
 Teegala Krishna Reddy Engineering College
 (UGC-AUTONOMOUS)
 Madbowli, Meenapet, Hyderabad - 97.

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	3	0	0	3
6	22CS405PC	Database Management Systems Lab	0	0	2	1
7	22AI404PC	Java Programming Lab	0	0	2	1
8	22AI401PW	Real-time Research Project/Field Based Research Project	0	0	4	2
9	22MC409	Gender Sensitization Lab	0	0	2	0
10	22AI405PC	Skill Development Course (Prolog/ Lisp/ PySwip)	0	0	2	1
			Total	15	0	12
						20


 Head of the Department
 AI & ML (R9)
 Teegala Krishna Reddy Engineering College
 (UGC-AUTONOMOUS)
 Medbowli, Meerpeta, Hyderabad - 97.


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

12/10/2021
11:30 AM

Board of Studies Meeting
(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~~
TKECC (R9)
2. Dr. G. Vijaya Kumari Prof. & Head ~~Guru~~
JHUB, JNTUH.
JNTUH Nominee
3. Dr. E. Suresh Babu Asst. Prof NIT
Warangal, Member ~~STU~~
4. Dr. B. Sujatha Asst. Prof, OU-COE ~~STU~~
Member
5. P. Madhukumar Reddy Asso. Director ~~Wipro~~
Novartis (Industry)
6. Dr. K. Sarangam Asst. Prof. R9-Bos ~~KLGN~~
Member
7. Dr. N. Vadivelan Asst. Prof. R9-Bos ~~JNTU~~
Member
8. Dr. K. Bhargavi Asst. Prof. R9-Bos ~~JNTU~~
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 a (Introduction to ML) in IIIrd Semester.
 - d) introduce AT&ML labs from 5th 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 AT.
 - 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 AT&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 courses in AT 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 incorporated with Tensor flow or keras lab.
- c. Projects to be done individually by students using AT&ML tools.
- d. Practical sessions for ML algorithm
- e. If possible incorporate R-programming with Data science.

WISDOM
PRINCIPAL

Teegala Krishna Reddy Engineering College
(UGC-AUTONOMOUS)
Madbowli, Meerpur, Hyderabad - 57.

Teegala 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 - AIML

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 *(Signature)*
5. Dr B Srinivasa Rao, Dean Academics, TKREC *(Signature)*
6. Dr. Vadivelan Natarajan, BOS Chairman AIML *(Signature)*
7. Ms. Sangeeta Jawar, Member Secretary AIML *(Signature)*
8. Ms. J Rachana, Senior Faculty Member *(Signature)*

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.

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

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, Hvd

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

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



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
(UGC-Autonomous)

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

Medbowli, Meerpeta, Halapur, Hyderabad, Telangana - 500097

Mob: 9393949497. Email: info@tkrec.ac.in, deancademics@tkrec.ac.in



Department of Artificial Intelligence and Machine Learning (AIML)

Board of Studies (BOS) Meeting

Minutes of Board of Studies Meeting

Programme: B Tech - AIML

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	

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

Minutes:

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

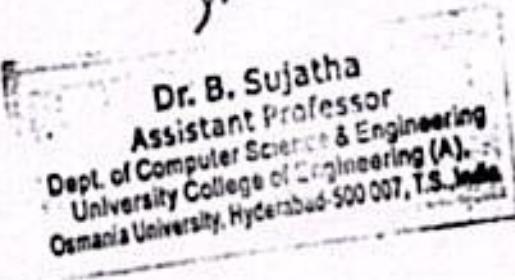
Action Item: The approved course structure will be implemented in the Department from the AY 2022-23 onwards.

- 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.



(Ilma)
P. Madhu Kumar

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

TEEGALAKRISHNAREDDYENGINEERINGCOLLEGE
(UGC-Autonomous)

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



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	OOPS Thru Java	3	0	0	3
3	20CSSPC13	PC	Formal Language Automata Theory/CD	3	0	0	3
4	21AI5PC05	PC	Introduction to Machine Learning	3	0	0	3
5		PE-1	Professional Elective I	3	0	0	3
6	21AI5PC06	PC	Computer Network LAB	0	0	3	1.5
7	21AI5PC07	PC	OOPS thru Java Lab	0	0	3	1.5
8	21AI5PC08	PC	Machine Learning LAB	0	0	3	1.5
9	20MCSPW01	PW	Summer Internship	0	0	0	1
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

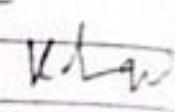
SNO	SUBJECT CODE	Category	NAME OF THE SUBJECT	NO OF HOURS			CREDITS
				L	T	P	
1	20CS6PC18	PC	Introduction to Artificial Intelligence	3	0	0	3
2	21AI6PC09	PC	Robotics	3	0	0	3
3	21AI6PC10	PC	Data Science	3	0	0	3
4	21AI6PC11	PC	Neural Networks	3	0	0	3
5		PE-II	Professional Elective II	3	0	0	3
6		OE-1	Open Elective I	0	0	3	3
7	20ENSHS01	HSMC	AECS Lab	0	0	3	1
8	21AI6PC12	PC	Tensor Flow Lab	0	0	3	1.5
9		PE-II	PE-II Lab	0	0	3	1
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

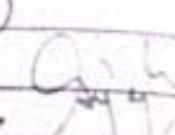
Dr. E. Suresh Babu
 Principal, T.K.R.E.C.,
 Medbowli, Meerpeta, Balapur,
 Hyderabad, Telangana - 500097.
 M.O.B: 9060000004

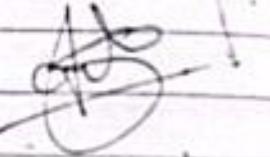
(Signature)
VIPRENDIPAL
 Teegala Krishna Reddy Engineering College
 (UGC-AUTONOMOUS)
 Medbowli, Meerpeta, Hyderabad - 500097.

- As per the Regulation (R22) given by JNTUH
Teagale Krishnam Reddy engineering college (W7) of
CSD department in following the same course like
- No break in study for admitted from given 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 W & IV year,
syllabus can be updated based on the emerging tech/
Industrial needs.

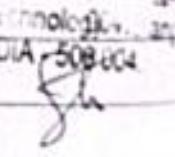
1. Dr. K. Salangam The members present were

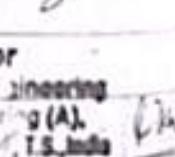
Prof & Head
CSD, Chairman 
BOS, TKREC (R9)

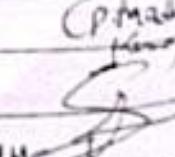
2. Dr. G. Vijayakumari Prof. & Head
JNTUH Nominee 

3. Dr. E. Suresh Babu Asst. Prof NIT
Walangail 

Dr. E. Suresh Babu
Department of Com.,
National Institute of Technology,
Telangana - INDIA - 500004

4. Dr. B. Sujatha professor, OU - COE
member 

5. P. Madhu Kumar Reddy ASSO. Prof
Dept. of Computer Software E. Engineering
University College
Guntur University, Guntur, A.P., India
Expert) 

6. S. Sanjeeva Rao Assoc. prof RG-BOS
Member Secretary 

Muvva



Department of Computer Science and Engineering (CS)
 Board of Studies (BOSt) Meeting
 Minutes of Board of Studies Meeting
 Programme: B.Tech - CSE

Agenda:

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

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	
7	Mr. B Kundan	Asst. Prof, CSD	Secretary Senior faculty member	
8	All faculty members of the department		Members	

Dates:

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

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

(Umar
P. Madhu Kumar)

As per the Regulation (Re2) given by JNTUH
TKREC R22 of CSD Department following the
same course structure and syllabus (III year
IV year) of the University.

Review

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

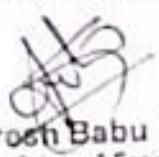
III YEAR I SEMESTER

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

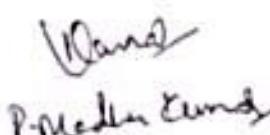
III YEAR II SEMESTER

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. Suresh Babu
 Department of Computer Science & Engineering
 National Institute of Technology, Warangal


Dr. B. Sripatha
 Assistant Professor
 Dept. of Computer Sci. & Engineering
 University College of Engineering /A/


P. Medha Kumar

12/10/21
11:30 AM

Board of studies meeting
(online mode)

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. Vijayakumari Prof. & Head JHUJB, JNTUH *✓✓✓*
JNTUH Nominee
3. Dr. E. Sush Babu Asst. Prof. NIT Warangal *✓✓✓*
4. Dr. B. Sujatha Professor, OU-COE Member *✓✓✓*
5. P. Madhukumar 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 *✓✓✓*

Meeting

1. Dr. G. Vijaya Kumari Ma'am 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. Sujalha Ma'am suggested

- a) to incorporate algorithm 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.

Moved

4. Mr. P. Madhu Kumar sir suggested -
- a) to include & change architecture of software design as per industry requirements.
 - b) including the case study of real time projects as block 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.

Present

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.

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

meewew



TEEGALAKRISHNAREDDYENGINEERINGCOLLEGE
(UGC-Autonomous)

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 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

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

P. Madhu Kumar

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



TEEGALAKRISHNAREDDY ENGINEERING COLLEGE

(UGC-Autonomous)

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



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	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	20HS8SMS02	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

Prof. P. Madhu Kumar
 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.

Tirupati Board of Studies
(Online Mode)

Tirupati Krishna Reddy Engineering College (R) 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 faculty concerned.

~~in charge of the department concerned~~
~~Students concerned~~ Academic Year

The following members were present-

members present-

Assoc Prof. MBA Dept.

1) V. Suhya Velayama chairman of Bos TKEC (R)

2) Dr. Simdhin professor

3) Dr. L. Srikrishna Reddy Aristotle PG College Principal

4) Dr. Nagunuri Srikrishna Rao St. Joseph PG College

5) P. Gangadhar Rao Production manager
Tata White Cappg. Rno

6) D. Srinivasulu ASST. Prof. (R) TKEC Member

7) K. Venkateswara ASST. Prof. (R) TKEC Member

8) Dr. Ravinder Chandru member secretary
(R) TKEC Rmg.

PRINCIPAL
Tirupati Krishna Reddy Engineering College

Tirupati (UGC-Accredited)
Medbowli, Meerpet, Hyderabad - 57.

Meeting Points

- ① Mr. P. Gangadhara Rao from Industry supported the selection of INTUH syllabus, it practically useful for the students and maintain Industry institute partnership, with practical industrial visits, may fuel the interest to learn more and more.
- ② Dr. Sivapriya madam expressed that the selection and adopting INTUH syllabus is best for the students and more realistic approach to teach and become more professional.
- ③ Dr. Romesh Chandra has explained about structure of course, and syllabus to the members present.
- ④ Dr. Magnus Srinivas supported for keeping the same syllabus and following the procedure of INTUH.
- ⑤ Dr. L Srinivas ¹⁰⁰ expressed that selection of INTUH syllabus is quite useful for the students and attain professional approach.

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

91 is followed by all the members present in the meeting of BOS and supported in choosing the INTUH syllabus without changing any content and expressed their positive opinion.

Members:-

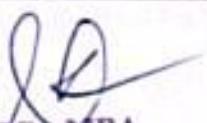
S.NO.	Name	Designation	Sig.
1.	V. Suryanarayana	Associate Prof.	<u>V.Suryanarayana</u>
2.	Dr. Sindhu	Prof & BOSI/C INTUH	<u>Dr. Sindhu</u>
3.	Dr. L. Srinivas Reddy	Prof. Principal.	<u>Dr. L. Srinivas Reddy</u>
4.	Dr. N. Srinivas	Prof.	<u>N. Srinivas</u>
5.	P. Gangadhar Rao	Production Manager P. Gangadhar Rao Tata White City.	<u>P. Gangadhar Rao</u>
6.	D. Sri sailam	Asst. Prof., TKREC	<u>D. Sri sailam</u>
7.	K. Venkata raju	Asst. Prof., TKREC	<u>K. Venkata raju</u>
8.	Dr. Ramesh chandramit	Asst. Prof. TKREC.	<u>Dr. Ramesh chandramit</u>

WAN
PRINCIPAL
Teegala Krishna Reddy Engineering College
(UGC-AUTONOMOUS)
Jeedibowli, Meenapet, Hyderabad - 97.

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
 S.B, Medibowli, Meerpet,
 Secunderabad - 500079. A.P.


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

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

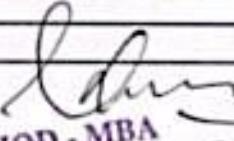
Course Code	Course Title	L	T	P	Credits
22MB3PC14	Production & Operations Management	4	0	0	4
22MB3PC15	Management Information Systems	4	0	0	4
22MB3PC16	Business Analytics	4	0	0	4
22MB3PC17	Summer Internship	0	0	2	2

Professional Elective-III (Marketing)

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
S.8, Medibowli, Meerpet,
Hyderabad - 500079, A.P.


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

Ist 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 relevant subjects concerned to MBA for the approval of (R9) for the students admitted in 20-21 Academic year. The following members were present-

members present-

1. V. Surya Malayama ASSOC PROF, HOD & MBA Deptt. chairman BOS, TICREC (R9)
2. Dr Sindhu Professor & BUS charge TNTUH
3. Dr L. Srinivas Reddy Aristotle PG College Principal
4. Dr Nagunuri Srinivas PROF, St Joseph PG College
5. P. Gangadhar Rao production manager (Industry) Tate Athiteclp.
6. D. Srinivas Iam ASST Prof member (R9 College)
7. K. Venkata Rao ASST Prof member (R9 college)

① Dr Ramesh Chandavath NSS Prof
Member Secretary PG

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 NLP projects and its importance, lectures in different areas HR, marketing, Finance and allocation of faculty etc. and also expressed other subjects in different seminars how INTU II has formed subclubs to make the students very professional

③

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

- (4) Dr. Nagurni, former professor that
Sita unit is in marketing subject
to change as contemporary to teach
the students. He also expresses Sk II
development is important in some areas.
- (5) Dr. L. Brincker has expressed his
opinion to have some correction in
syllabus headings regarding making
bold to look brighter and expressed
his happiness towards framing of
INTUIT syllabus to teach 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 deptt concerned
Subjects (severed from MSA). for
the students admitted in 20-21 Academic
Year

WEN

Members

① V. Shiva Surya Narayana Assoc Prof

sd.

16/06/11
23/6

② Dr. Sandhu

prof. B.C.S. Z/Fc
JNTU 11

Gupta

③ Dr. L. Greenitas Reddy prof
principal

④ Dr. N. Srinivas

prof

N. Srinivas
23/6

⑤ P. Gangadhar Rao Production
manager
Tata tekhite ch.8

Q
Ravi
23/6

⑥ D. Srinilalam

AGB- Prof
TKRECSrinilalam
23/6

⑦ K. Venkata Rao M.Sc- Prof
TKREC

V. Venkata
23/6/2011

⑧ Dr. R. Ramesh Chindavat Prof
TKREC

R. Ramesh
23/6/14

Board of Studies meeting (online mode)

Teegala Krishna Reddy Engineering College (R9)
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 men department, for
Approval

Members Present

- 1) V. Susheela Rayana. Assoc Prof MBA dep Chairman of BBS
TICKEE (R9) 1/2/24
- 2) Dr Simdhu Principal & Professor
INTUIT 1/2/24
- 3) Dr L. Srinivas Reddy Naistotle Ph college
principal 1/2/24
- 4) Dr N. Srinivas St Joseph P.G college N. Srinivas
1/2/24
- 5) P. Gopadhar Rao Production manager 1/2/24
- 6) Dr Ramash Chandeloh Member Secretary
MBA Dept.
TICKEE 1/2/24
- 7) D. Sreedharan Member
(TICKEE) 1/2/24
- 8) M. Annapoorna Member 1/2/24

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

Meeting Points

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

Meeting ended without any technical problem

P.R. PRINCIPAL
 Sri Satya Sai Baba Mission Reddy Engineering College
 (UGC-AUTONOMOUS)
 Madhurawada, Meenapet, Hyderabad - 57.

g1. is resolved by all the members present in the meeting of BOS and supported the structure and syllabus and expressed positively

Members

- 1) V. Surya Sekharayya Chair person Dr
- 2) Dr Srinath Principal & Prof JNTUH ~~5/11/24~~
- 3) Dr L. Sreenivas Reddy Prof & Prof (P)
Aristotle PH ~~5/11/24~~
- 4) Dr N. Srinivas Prof & HOD N ~~5/11/24~~
6/12/24
- 5) Dr P. Gangadhar Rao Production manager ~~5/11/24~~
- 6) Dr Ramesh Chandakath ASSISTANT PROF TICREC ~~5/11/24~~
- 7) Dr Sreedharan ASSISTANT PROF TICREC ~~5/11/24~~
- 8) M. Annapoorna ASSISTANT PROF TICREC ~~5/11/24~~
6/12/24

Mr. Venkateswaran
PRINCIPAL
Teegala Krishna Reddy Engineering College
(UGC-AUTONOMOUS)
Medchal, Masrur, Hyderabad - 97.



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
(UGC-Autonomous)

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



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

[Signature]
HOD - MBA
 Teegala Krishna Reddy Engg. College
 Medbowli, Meerpeta,
 Hyderabad - 500097.

PRINCIPAL
PRINCIPAL
 Teegala Krishna Reddy Engg. College
 Medbowli, Meerpeta, Hyderabad - 500097.
 (UGC-AUTONOMOUS)



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
(UGC-Autonomous)

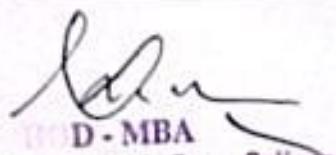
Approved by AICTE, Affiliated by JNTUH, Accreditated by NAAC- 'A' Grade
 Medbowli, Meerpet, Balapur, Hyderabad, Telangana- 500097
 Mob: 9393959597. Email: info@tkrec.ac.in, deanacademics@tkrec.ac.in



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


D - MBA

Teega Krishna Reddy Engg. College
 Medbowli, Meerpet,
 Sareenagar, Hyderabad - 500079, A.P.


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



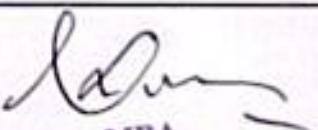
**TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
(UGC-Autonomous)**

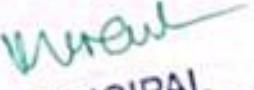
Approved by AICTE, Affiliated by JNTUH, Accredited by NAAC- 'A' Grade
Medbowli, Meerpeta, Balapur, Hyderabad, Telangana- 500097
Mob: 9393959597. Email: info@tkrec.ac.in, deanacademics@tkrec.ac.in



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


Dr. D. MBA
 Teegala Krishna Reddy Engg. College
 S.B. Medbowli, Meerpeta,
 Saroor Nagar, Hyderabad - 500079, A.P.


PRINCIPAL
 Teegala Krishna Reddy Engineering College
 (UGC-AUTONOMOUS)
 S.B. Medbowli, Meerpeta, Hyderabad - 500079

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/H3/3I/E3 T. S. Reddy Engg. College	(MRKG/HRM/FIN/ENTP)	3	1	0	4

S. B. Medbowli, Meerpet,
Saroornagar, Hyderabad - 500079, A.P.

PRINCIPAL
T. S. Reddy Engineering College
(UGC-AUTONOMOUS)
Meerpet, Hyderabad - 57

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 D -	Creativity/Innovation and Entrepreneurship	4

3/11/22

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 JNNUH, 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 JNNUH upto IInd year sem for all courses.

Chair
CSE

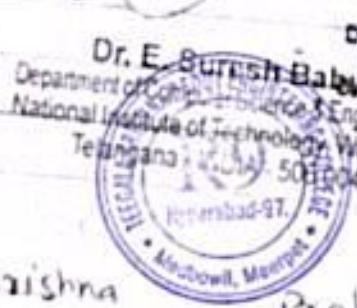
P. V. Ramgopal

1. Dr. C.H.Y. Phani Krishna

2. Dr. K. Bhargavi

3. P. V. Ramgopal (M)

4. M. Chinnababu



Asst. Professor, CSE Dept
Member, TKECC(P22)

Asst. Professor, CSE Dept
Member, TKECC(P22) (M)

ft

Engineering
(A).
T.S. India

PRINCIPAL

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

Professor, CSE Dept. w/
Chairman BOS, TKECC(P22)

Professor, CSE Dept.
Member, TKECC(P22)

Asst. Professor, CSE Dept
Member, TKECC(P22)

22/6/21
11:00 AM

1st Board of Studies Meeting (Online Mode)

A meeting of Board of studies for MTech -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) | G.B |
| 2. Dr. D. Vasumathi | Professor HOD-CSE
JNTUH Nominee | Amr2 |
| 3. Dr. E. Suresh Babu | Asst. Prof. NIT-
Warangal, Member | 11 |
| 4. Dr. B. Sujatha | Asst. Prof. OU-COE
Member | fti |
| 5. P. Madhu Kumar Roddy | Asso. Director,
Mamtilis (Industry
Expert) | Qmre |
| 6. Dr. K. Sarangam | Asst. Prof. RT-Bos
Member | N. I. aw |
| 7. Dr. N. Vadivelan | Asst. Prof. RT-Bos
Member | Sw |
| 8. Dr. K. Bhargavi | Asst. Prof. RT-Bos
Member secretary | Bonyan |

1. Dr. D. Vasumathi Madam suggested for changing subjects in Mnet regulation.
2. Dr. E. Suresh Babu sir suggested for replacing "High Performance computing" with Cloud & fog computing.
3. Dr. B. sujatha Madam suggested for incorporating new electives in MTech Tyeds II sem.
4. Mr. Madhu Kumar Reddy sir suggested for internships 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.



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



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE

(UGC-Autonomous)

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



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



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
(UGC-Autonomous)

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



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



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
(UGC-Autonomous)

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



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				
02	20MT2PC07	Professional Core - IV	Advanced Computer Architecture	3	0	0	3
03	20MT2PE31	Professional Elective - III	1. Web and Database Security				
04	20MT2PE32		2. Internet of Things				
05	20MT2PE33		3. Data Science				
06	20MT2PE41	Professional Elective - IV	1. Cyber Security				
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				
13	20MT2MC22		2. Disaster Management				
14	20MT2MC23		3. Sanskrit for Technical Knowledge				
15	20MT2MC24		4. Value Education				
Total				14	0	12	18



TEEGALA KRISHNA REDDY ENGINEERING COLLEGE
(UGC-Autonomous)

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



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

[Signature]
PRINCIPAL

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

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

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

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	3	0	0	3
Dissertation	Dissertation Work Review - II	0	0	12	6
	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