



Gokaraju Rangaraju Institute of Engineering and Technology
(Autonomous)
Bachupally, Hyderabad-500090

GRIET/CE/BOS/IE/G/21-22

22nd Oct 2021

Minutes of Meeting

For

III & IV B.Tech Civil Engineering

(For students admitted from 2020-21 as per GR20 Regulations)

Board of Studies

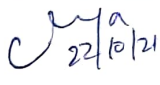




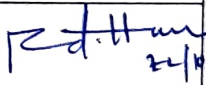

Held on 22nd Oct 2021

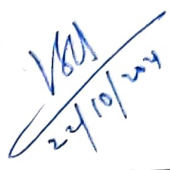


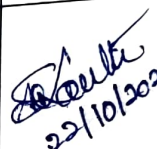





GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Autonomous)

Minutes of meeting of the BOS for B. Tech Civil Engineering, Syllabus approval for III & IV-year GR20 Regulation of Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous) held on 22nd Oct 2021 in the Department of Civil Engineering, GRIET at 3:00PM.

Venue: Room No:4212, Seminar Hall, Civil Engineering Department.

S.No.	Name of the member	Position in the Current Engagements	Position in the BOS	Signature
Chairperson				
1	Dr C Lavanya	Professor & I/C HOD, Department of Civil Engineering, GRIET, Hyderabad	Chairman	 22/10/21
University Nominee				
2	Dr S Vidyavathi	Professor, Department of Civil Engineering, JNTUH, Kukatpally	JNTUH Nominee	 22/10/2021
Educationist or Industrialist				
3	Dr M V Seshagiri Rao	Professor, Department of Civil Engineering, CVR College of Engineering	External Expert (Academics)	 22/10/2021
4	Dr. R. Prasanna Kumar	Professor & HOD, Department of Civil Engineering, Geetanjali College of Engineering & Technology.	External Expert (Academics)	 22/10/21
5	Dr V V Krishna Reddy	Chief Consultant & Proprietor, M/S Continental Designers Project Consultant	External Expert (Industry)	 ✓
Members				
6	Dr Mohammad Hussain	Professor, Department of Civil Engineering, GRIET, Hyderabad	Internal Member	 22/10/2021
7	Dr G V V Satyanarayana	Professor, Department of Civil Engineering, GRIET, Hyderabad	Internal Member	

8	Dr V Srinivasa Reddy	Professor, Department of Civil Engineering, GRIET, Hyderabad	Internal Member	 22/10/24
9	Dr T Srinivas	Professor, Department of Civil Engineering, GRIET, Hyderabad	Internal Member	
10	Dr Atulkumar Anil Manchalwar	Associate Professor, Department of Civil Engineering, GRIET, Hyderabad	Internal Member	 22/10/2024
11	Dr K Srikanth	Associate Professor, Department of Civil Engineering, GRIET, Hyderabad	Internal Member	 22/10/2024
12	Dr O S D Hima Bindu	Associate Professor, Department of Civil Engineering, GRIET, Hyderabad	Internal Member	 22/10/21
13	Mr T Srikanth	Associate Professor, Department of Civil Engineering, GRIET, Hyderabad	Internal Member	 22/10/21
14	Dr R Raman Goud	Professor, Department of Mechanical Engineering, GRIET, Hyderabad	Internal Member	 22/10/2021
15	Mr Mohammed Azharuddin	Student, PhD (Pursuing), Indian Institute of Technology Hyderabad	Alumni	M. Azhar.

Item 1: Syllabus subject to approval by Academic council is confirmed for B. Tech Civil Engineering III & IV Year.

Item 2: Subjects of BS, ES, HS and MC are confirmed by BOS of respective Departments.

Item 3: Evaluation Scheme suggested as per GR20 to be adopted.

Item 4: Panel of Examiners are suggested.

Item 5: Existing Practices to be strengthened and continued.



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY

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ACTION TO BE TAKEN IN B. Tech III and IV YEAR SYLLABUS

Minutes of meeting of the BOS for B. Tech Civil engineering (syllabus approval for III & IV year GR20 Regulation) of Gokaraju Rangaraju Institute of Engineering & Technology (Autonomous) Hyderabad held on 22nd October 2021 in the Department of Civil Engineering, Seminar Hall, GRIET at 3:00PM.

The following members constitute the board of studies of Civil Engineering, with effect from the Academic year 2021-22.

- | | |
|--|--------------------------------|
| 1. Dr C Lavanya, Professor & I/C HOD, DCE, GRIET | BOS Chairman |
| 2. Dr S Vidyavathi, Professor, DCE, JNTUH, Kukatpally | JNTU Nominee |
| 3. Dr M V Seshagiri Rao, Professor, DCE, CVR College of Engineering | External Expert
(Academics) |
| 4. Dr. R. Prasanna Kumar, Professor & HOD, DCE, Geetanjali College of Engineering & Technology | External Expert
(Academics) |
| 5. Dr V V Krishna Reddy, Chief Consultant & Proprietor, M/S Continental Designers Project Consultant | External Expert
(Industry) |
| 6. Dr Mohammad Hussain, Professor, DCE, GRIET | Internal Member |
| 7. Dr G V V Satyanarayana, Professor, DCE, GRIET | Internal Member |
| 8. Dr V Srinivasa Reddy, Professor, DCE, GRIET | Internal Member |
| 9. Dr T Srinivas, Professor, DCE, GRIET | Internal Member |
| 10. Dr Atulkumar Anil Manchalwar, Associate Professor, DCE, GRIET | Internal Member |
| 11. Dr K Srikanth, Associate Professor, DCE, GRIET | Internal Member |
| 12. Dr O S D Hima Bindu, Associate Professor, DCE, GRIET | Internal Member |
| 13. Mr T Srikanth, Associate Professor, DCE, GRIET | Internal Member |
| 14. Dr R Raman Goud, Professor, DME, GRIET | Co-opted Member |
| 15. Mr Mohammed Azharuddin, PhD (Pursuing), IITH | Alumni |

Head of the department welcomed all members in BOS meeting and discussed the following points to be considered in the syllabus.

S.No	Actionable Items	Action to be Taken by
1	Changes in Syllabus: Hydrology and Water Resources Engineering: Stability Analysis on Earthen dams and listing of Software applications of WRE to be included in Unit V	Dr Mohammed Hussain
2	Changes in Syllabus: Traffic Engineering and Management: Level of Service concept, applications and significations are to be covered as per Highway Capacity Manual.	Mr T Srikanth
3	Changes in Syllabus: Ground Water: Case Studies using MODFLOW to be included in Unit V.	Dr Mohammed Hussain
4	Changes in Syllabus: Irrigation Management: Listing of Applications of Software in Irrigation management has to be included in Unit V.	Dr Mohammed Hussain
5	Changes in Syllabus: Engineering Materials for Sustainability: 1. Unit II has to be shifted to Unit V as Environmental management standards need to be considered after completing all concepts and Unit III, Unit IV, Unit V were arranged as Unit II, III and IV. 2. Procedures of EIA in India with reference to Construction Projects only to be included in Unit V. 3. Integrated Life Cycle design of Materials and Structures, Alternative construction method topics are to be removed from Unit IV.	Mr Y Kamala Raju
6	Changes in Syllabus: Environmental Engineering: 1. BIS for potable water to be covered in Unit I. 2. BIS for disposal of Industrial waste water are to be included in Unit IV. 3. Tertiary treatment of waste water, Principles and classification to be added in Unit V.	Dr O S D Hima Bindu
7	Changes in Syllabus: Geographic Information System and Science: QGIS Open software- Salient features in brief to be included in Unit I.	Mr Rathod Ravinder
8	Changes in Syllabus: GIS lab: 1. Watershed Analysis and Network Analysis are to be taught as Civil Engineering aspects. 2. Performing SQL queries on created Thematic maps is introduced as new Exercise.	Ms I Chandana

9	Changes in Syllabus: Environmental Impact Assessment and Life Cycle Analysis: Case Studies on EIA with reference to Indian Scenario has to be covered in unit V.	Dr K Srikanth
10	Changes in Syllabus: Design of Hydraulic structures: Design of Type II Aqueduct (under Tunnel) concept is to be removed from Unit V as it is in post graduate level.	Dr Mohammed Hussain
11	Changes in Syllabus: Urban Transportation and Planning: Applications of RS&GIS in corridor identification to be included in Unit V.	Mr T Srikanth
12	All the subjects must be included with Text Books and References separately with latest edition and year of Publication.	Mrs K Hemalatha

C 22/10/21

BOS - Chairman



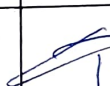



PROFESSOR AND HEAD
Department of Civil Engineering
Gokaraju Rangaraju Institute of
Engineering and Technology
Bachupally, Kukatpally,
Hyderabad-500 090



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Internal Minutes of meeting of the BOS for B. Tech Civil Engineering, Syllabus approval for III & IV- year GR20 Regulation of Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous) held on 19th Oct 2021 in the Department of Civil Engineering, GRIET at 9:30AM.

Venue: Room No:4212, Seminar Hall, Civil Engineering Department.

S.No.	Name of the member	Position in the Current Engagements	Position in the BOS	Signature
Chairperson				
1	Dr C Lavanya	Professor & I/C HOD, Department of Civil Engineering, GRIET, Hyderabad	Chairman	 19/10/21
Members				
2	Dr V Srinivasa Reddy	Professor, Department of Civil Engineering, GRIET, Hyderabad	Internal Member	 19/10
3	Dr T Srinivas	Professor, Department of Civil Engineering, GRIET, Hyderabad	Internal Member	 19/10/21
4	Dr Atulkumar Anil Manchalwar	Associate Professor, Department of Civil Engineering, GRIET, Hyderabad	Internal Member	 19/10/2021
6	Mr T Srikanth	Associate Professor, Department of Civil Engineering, GRIET, Hyderabad	Internal Member	
7	Mr Rathod Ravinder	Assistant Professor, Department of Civil Engineering, GRIET, Hyderabad	Internal Member	 19/10/21
8	Mr A Prakash	Assistant Professor, Department of Civil Engineering, GRIET, Hyderabad	Internal Member	 19/10/21

The members of board of studies during the meeting held on 19th October 2021 in the department of Civil Engineering, after having discussed thoroughly, drew the following recommendations for III and IV years of GR20:

1. All the subjects must be included with Pre-Requisites and action verbs in Course objectives, Course outcomes as per Blooms Taxonomy levels.
2. In GIS lab – Exercises were framed in brief as follows
 - i) Demonstrating the concept of Labeling in GIS using Quantum GIS.
 - ii) Demonstrating the concept of Symbolism in GIS using Quantum GIS.
 - iii) Creation of point features Maps using Toposheets
 - iv) Creation of Line features Maps using Toposheets
 - v) Creation of polygon features Maps using Toposheets
 - vi) Creation of thematic maps for a region of interest
 - vii) Identify the demographic study using attribute tool
 - viii) Preparation of contour maps, flow accumulation maps from Digital Elevation model maps
 - ix) GIS applications in various civil engineering aspects
3. In Environmental Engineering lab – Exercises are Reframed as follows
 - i) Determination of Chlorides and iron were combined as single exercise because of the unique Titration methods.
 - ii) Determination of Dissolved Oxygen and B.O.D were merged as single experiment as performing BOD test is continuity to DO.
 - iii) Determination of Nitrogen and total Phosphorous were combined.
4. In Construction Project Planning and Systems, Unit I and Unit II are reframed as per the discussions.


19/10/21
BOS-Chairman

PROFESSOR AND HEAD
Department of Civil Engineering
Gokaraju Rangaraju Institute of
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Bachupally, Kukatpally,
Hyderabad-500 090



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DEPARTMENT OF CIVIL ENGINEERING
Comparison of syllabus

S.No	Name of the Course	GR18 to GR20 (As per AICTE)
1	New Courses	Irrigation management and Tall Buildings are introduced as new courses in Professional Elective I & Professional Elective III
2	Professional electives and open electives	Six professional electives starting from III yr I sem and three open electives starting from III yr I sem
3	Structural Engineering thread	Structural Analysis II, Masonry Structures, Bridge Engineering, Industrial Structures, Prestressed Concrete, Earthquake Engineering
4	Geotechnical and Transportation Engineering thread	Traffic Engineering and Management, Rock Mechanics, Ground Improvement Techniques, Geometric Design of Highways, Pavement Design, Urban Transportation Planning
5	Environmental and Hydrology Engineering thread	Groundwater, Open Channel flow, Surface Hydrology, Physico-Chemical Processes for Water and Wastewater Treatment, Design of hydraulic structures, Green Building Technology
6	Construction Technology & Management thread	Irrigation Management, Construction Equipment & Automation, Tall Buildings, Rehabilitation & Retrofitting of Structures, Construction Project Planning & Systems, Pavement Materials

BOS-Chairman

PROFESSOR AND HEAD
Department of Civil Engineering
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Hyderabad-500 090

III B. Tech (CE) - I Semester

S.No	BOS	Group	CourseCode	Course Name	Credits				Hours				Int	Ext	Total Marks
					L	T	P	Total	L	T	P	Total			
1	CE	PC	GR20A3001	Geotechnical Engineering	2	0	0	2	2	0	0	2	30	70	100
2	CE	PC	GR20A3002	Concrete Technology	2	0	0	2	2	0	0	2	30	70	100
3	CE	PC	GR20A3003	Hydrology and Water Resources Engineering	3	0	0	3	3	0	0	3	30	70	100
4	CE	PC	GR20A3004	Design of Reinforced Concrete Structures	2	1	0	3	2	1	0	3	30	70	100
5	CE	PE		Professional Elective-I	3	0	0	3	3	0	0	3	30	70	100
6	CE	OE		Open Elective-I	3	0	0	3	3	0	0	3	30	70	100
7	CE	PC	GR20A3010	Geotechnical Engineering Lab	0	0	2	2	0	0	4	4	30	70	100
8	CE	PC	GR20A3011	Concrete Technology Lab	0	0	2	2	0	0	4	4	30	70	100
TOTAL					15	1	4	20	15	1	8	24	240	560	800
9	Mgmt	MC	GR20A2003	Constitution of India	2	0	0	2	2	0	0	2	30	70	100

Professional Elective-I			
S.No.	BOS	Course Code	COURSE
1	CE	GR20A3005	Structural Analysis - II
2	CE	GR20A3006	Traffic Engineering and Management
3	CE	GR20A3007	Groundwater
4	CE	GR20A3008	Irrigation Management

Open Elective-I			
S.No.	BOS	Course Code	COURSE
1	CE	GR20A3009	Engineering Materials for Sustainability

III B. Tech (CE) - II Semester

S.No	BOS	Group	CourseCode	Course Name	Credits				Hours				Int	Ext	Total Marks
					L	T	P	Total	L	T	P	Total			
1	CE	PC	GR20A3081	Design of Steel Structures	2	1	0	3	2	1	0	3	30	70	100
2	CE	PC	GR20A3082	Foundation Engineering	3	0	0	3	3	0	0	3	30	70	100
3	CE	PC	GR20A3083	Environmental Engineering	2	0	0	2	2	0	0	2	30	70	100
4	CE	PE		Professional Elective-II	3	0	0	3	3	0	0	3	30	70	100
5	CE	OE		Open Elective-II	3	0	0	3	3	0	0	3	30	70	100
6	CE	PC	GR20A3089	Environmental Engineering Lab	0	0	2	2	0	0	4	4	30	70	100
7	CE	PC	GR20A3090	GIS Lab	0	0	2	2	0	0	4	4	30	70	100
8	CE	PW	GR20A3141	Mini Project with Seminar	0	0	2	2	0	0	4	4	30	70	100
TOTAL					13	1	6	20	13	1	12	26	240	560	800

Professional Elective II			
S.No	BOS	Course Code	COURSE
1	CE	GR20A3084	Masonry Structures
2	CE	GR20A3085	Rock Mechanics
3	CE	GR20A3086	Open Channel Flow
4	CE	GR20A3087	Construction Equipment and Automation

Open Elective II			
S.No	BOS	Course Code	COURSE
1	CE	GR20A3088	Geographic Information Systems and Science