



**GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
**(Autonomous)**

GRIET/CE/BOS/IE/G/19-20

18 July 2019

**Minutes of Meeting**

For

**III & IV B Tech Civil Engineering**

*(For students admitted from 2018-19 as per GR18 Regulations)*

**Board of Studies**


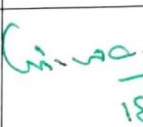





Held on 18 July 2019

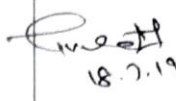



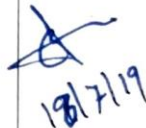
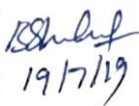

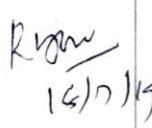



**GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
**(Autonomous)**

Minutes of meeting of the BOS for B.Tech Civil Engineering (syllabus approval for III & IV Year GR18 Regulation) of Gokaraju Rangaraju Institute of Engineering & Technology (Autonomous) Hyderabad held on 18<sup>th</sup> July 2019 in the department of Civil Engineering, GRIET at 10:00 AM.

Members Present:

S.No	Name of the Member	Designation	Signature with Date
1	Dr V Mallikarjuna Reddy Professor & HOD Department of Civil Engineering GRIET, Bachupally, Hyderabad.	Chairman BOS Department of Civil Engineering GRIET	 18/7/19
2	Dr. G. K. Viswanadh Professor & Director UGC- HRDC, JNTUH, Kukatpally, Hyderabad.	Member Board of studies JNTU Nominee	 18-7-19
3	Dr. M. V. Seshagiri Rao Professor Department of Civil Engineering CVR College of Engineering, Hyderabad.	Member Board of Studies External Expert	 18/7/19
4	Prof. P. Sreenivas Sarma Professor Department of Civil Engineering CBIT, Gandipet, Hyderabad	Member Board of Studies External Expert	
5	Dr. V. V. Krishna Reddy Chief Consultant & Proprietor, M/S Continental Designers Project Consultant, Hyderabad.	Member Board of Studies Industry	
6	Dr. Mohammad Hussain Professor Department of Civil Engineering GRIET, Bachupally, Hyderabad.	Member Board of Studies	 18/7/19
7	Dr. N. Sanjeev Professor Department of Civil Engineering GRIET, Bachupally, Hyderabad.	Member Board of Studies	 18/7/19

8	Dr GVV Satyanarayana Professor Department of Civil Engineering GRIET, Bachupally, Hyderabad.	Member Board of Studies	 18.7.19
9	Dr V Srinivasa Reddy Professor Department of Civil Engineering GRIET, Bachupally, Hyderabad.	Member Board of Studies	
10	Dr. C Lavanya Professor Department of Civil Engineering GRIET, Bachupally, Hyderabad.	Member Board of Studies	 18/7/19
11	Dr. T Srinivas Professor Department of Civil Engineering GRIET, Bachupally, Hyderabad.	Member Board of Studies	 18/7/19
12	Dr. Atulkumar Anil Manchalwar Associate Professor Department of Civil Engineering GRIET, Bachupally, Hyderabad.	Member Board of Studies	 18/7/19
13	Mr. B Shanmukheswara Babu Associate Professor Department of Civil Engineering GRIET, Bachupally, Hyderabad.	Member Board of Studies	 19/7/19
14	Mr T Srikanth Associate Professor Department of Civil Engineering GRIET, Bachupally, Hyderabad.	Member Board of Studies	 19/7/19
15	Dr R. Raman Goud Professor Department of Mechanical Engineering GRIET, Bachupally, Hyderabad.	Co-opted Member Board of Studies	 18/7/19
16	Mohammed Azharuddin	Member Board of Studies Alumni	 M. Azhar

**Item 1:** Syllabus subject to be approved by Academic Council is confirmed for B.Tech Civil Engineering (III & IV years)

**Item 2:** Subjects of BSC, ESC, HSMC and MC are confirmed by BOS of respective Departments.

**Item 3:** Evaluation Scheme suggested as per GR18 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**

**(Autonomous)**

**DEPARTMENT OF CIVIL ENGINEERING**

**Minutes of Meeting for Board of Studies**

The members of Board of Studies during the meeting held on 10<sup>th</sup> July 2019 in the Department of Civil Engineering, after having discussions thoroughly, drew the following recommendations for GR18. B Tech Civil Engineering Syllabus of III & IV year.

- Syllabus for all the courses was prepared as per recommendations by the AICTE.
- Foundation Engineering, Hydrology and Water resources Engineering, Design of Concrete Structures I and Transportation Engineering Lab are introduced as core courses in III year
- There are six professional electives starting from III yr I Sem and three open electives starting from III yr II sem.
- Four threads are recommended for professional electives as Structural Engineering, Geotechnical and Transportation Engineering, Environmental and Hydrology Engineering and Construction Technology & Management
- Masonry Structures, Industrial Structures, Earthquake Engineering, Reinforced concrete, Bridge Engineering are introduced in Structural Engineering thread to analyse different structures and apply design philosophies.
- Urban Transportation Planning, Rock Mechanics, Geometric Design of Highways, Traffic Engineering and Management are introduced in Transportation engineering thread to understand the knowledge on efficient, safe and convenient movement of people and goods.

- Environmental Impact Assessment and life cycle analysis, Open Channel flow, Surface Hydrology, Groundwater, Design of hydraulic structures/Irrigation Engineering, Physico-Chemical Processes for Water and Wastewater Treatment helps in the design and construction of water related structures such as bridges, dams, canals and other structures for irrigation purposes..
- Construction Equipment & Automation, Geographic Information Systems and Science, Engineering Materials for Sustainability, Construction Project Planning & Systems and Repairs & Rehabilitation of Structures are recommended in Construction Technology & Management to understand the discipline of overall planning, coordination and control of projects.



**Chairman, BoS**

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



## IV YEAR I SEMESTER

S.NO.	Course Code	COURSE	Hours			Total Hours	Total Credits	Int	Ext	Marks
			L	T	P					
1	GR18A4001	Estimation & Costing	3	1	0	4	4	30	70	100
2	GR18A4002	Project management & Entrepreneurship	3	0	0	3	3	30	70	100
3		Professional Elective III	3	0	0	3	3	30	70	100
4		Professional Elective IV	3	0	0	3	3	30	70	100
5		Open Elective II	3	0	0	3	3	30	70	100
6	GR18A4011	Computer Applications in Structural Engineering Lab	0	0	4	4	2	30	70	100
7	GR18A4061	Project work (Phase I)	0	0	12	12	6	30	70	100
<b>Total</b>			<b>15</b>	<b>1</b>	<b>16</b>	<b>32</b>	<b>24</b>	<b>210</b>	<b>490</b>	<b>700</b>

PROFESSIONAL ELECTIVE - 3		
S. No.	Course Code	COURSE
1.	GR18A4003	Industrial Structures
2.	GR18A4004	Geometric Design of Highways
3.	GR18A4005	Surface Hydrology
4.	GR18A4006	Engineering Materials for Sustainability

PROFESSIONAL ELECTIVE - 4		
S. No.	Course Code	COURSE
1.	GR18A4007	Earthquake Engineering
2.	GR18A4008	Traffic Engineering and Management
3.	GR18A4009	Groundwater
4.	GR18A4010	Geographic Information Systems and Science

## IV YEAR II SEMESTER

S.NO.	Course Code	COURSE	Hours			Total Hours	Total Credits	Int	Ext	Marks
			L	T	P					
1		Professional Elective V	3	0	0	3	3	30	70	100
2		Professional Elective VI	3	0	0	3	3	30	70	100
3		Open Elective III	3	0	0	3	3	30	70	100
4	GR18A4108	Project work (Phase II)	0	0	12	12	6	30	70	100
<b>Total</b>			<b>9</b>	<b>0</b>	<b>12</b>	<b>21</b>	<b>15</b>	<b>120</b>	<b>280</b>	<b>400</b>

PROFESSIONAL ELECTIVE - 5		
S. No.	Course Code	COURSE
1	GR18A4062	Prestressed Concrete
2	GR18A4063	Ground Improvement Techniques
3	GR18A4064	Design of Hydraulic Structures/Irrigation Engineering
4	GR18A4065	Construction Project Planning and Systems

PROFESSIONAL ELECTIVE – 6		
S. No.	Course Code	COURSE
1	GR18A4066	Bridge Engineering
2	GR18A4067	Pavement Design
3	GR18A4068	Physico-Chemical Processes for Water and Wastewater Treatment
4	GR18A4069	Repairs and Rehabilitation of Structures

### PROFESSIONAL ELECTIVES - 4 THREADS

S. No.	Structural Engineering	Geotechnical and Transportation Engineering	Environmental and Hydrology Engineering	Construction Technology & Management
1	Masonry Structures	Urban Transportation Planning	Environmental Impact Assessment and Life Cycle Analyses	Construction Equipment & Automation
2	Reinforced Concrete	Rock Mechanics	Open Channel flow	Concrete Technology
3	Industrial Structures	Geometric Design of Highways	Surface Hydrology	Engineering Materials for Sustainability
4	Earthquake Engineering	Traffic Engineering and Management	Groundwater	Geographic Information Systems and Science
5	Prestressed Concrete	Ground Improvement Techniques	Design of hydraulic structures/Irrigation Engineering	Construction Project Planning & Systems
6	Bridge Engineering	Pavement Design	Physico-Chemical Processes for Water and Wastewater Treatment	Repairs & Rehabilitation of Structures

### OPEN ELECTIVES – THREADS

S. No.	THREAD 1	THREAD 2
1	Soft Skills and Interpersonal Skills (GR18A3117)	CSE: 1. Principles of E-Commerce (GR18A3129) 2. Database Management Systems (GR18A2068) 3. Java Programming (GR18A2075)
2	Human Resource Development and Organizational Behaviour (GR18A3118)	IT: 1. Multimedia and Application Development (GR18A3123) 2. Web Programming (GR18A3057) 3. Operating Systems (GR18A2074)
3	Cyber Law and Ethics (GR18A3119)	EEE: 1. Embedded Systems (GR18A4102) 2. Control Systems (GR18A2032) 3. Artificial Intelligence Techniques (GR18A3016)
4	History of Science (GR18A3120)	ECE: 1. Artificial Neural Networks (GR18A3124) 2. Software Defined Radio and Cognitive Radio (GR18A3125) 3. Cloud Computing (GR18A3102)
5	Introduction to Art and Aesthetics (GR18A3121)	ME: 1. Operations Research (GR18A3126) 2. Automobile Engineering (GR18A3127) 3. Robotics (GR18A4079)
6	Economic Policies in India (GR18A3122)	CE: 1. Green Building Technology (GR18A3128) 2. Building Materials and Construction Planning (GR18A2007) 3. Introduction to Fluid Mechanics (GR18A2010)