



Gokaraju Rangaraju Institute of Engineering and Technology
(Autonomous)

GRIET/CSE/B05/1E/G/20-21

04 July 2020

Minutes of Meeting

For

I and II B.Tech Computer Science Engineering
(I and II Semesters)

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

Board of Studies

Held on

04 July 2020



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Autonomous Institute under JNTU Hyderabad)
Bachupally, Kukatpally, Hyderabad-500090

Minutes of meeting of the BOS for I and II B. Tech (I and II semesters) Computer Science and Engineering of Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous). Hyderabad, held on 04-07-2020 in the online mode at 2:00pm through Ciscowebox.

Members Present:

Dr.K.Madhavi
Professor & Head, CSE
GRIET, Hyderabad


Chairman

Dr.Gollapudi Ramesh Chandra
Professor, CSE Dept
Head R&C Cell,
VNRVJIET, Hyderabad


External Expert

Dr.Aruna Rao S L
Professor & Head, IT,
BVRITH College of Engineering for Women,
Hyderabad


External Expert

Dr.D.Ramesh
Professor , CSE Dept.
JNTUH CEJ


University Nominee

Mr.P.Mohan
Sr. Data Scientist, Tech Mahindra,
Hyderabad


Industry Expert

Gadige Sai Krishna
Automation Engineer
ADP, Hyderabad


Alumni

Abhishek Bhandwalkar
III B.Tech, CSE


Student Member

Dr.A.Sai Hanuman
Professor , CSE,
GRIET Hyderabad


Member

Dr.B.Sankara Babu
Professor , CSE,
GRIET Hyderabad

Member 

Dr. G. Karuna
Professor , CSE,
GRIET,Hyderabad


Member

Dr. G.R. Sakthidharan
Professor , CSE,
GRIET Hyderabad


Member


Dr. P. Chandra Sekhar Reddy
Professor , CSE,
GRIET Hyderabad


Member

Dr. G. Ramesh
Associate Professor , CSE,
GRIET Hyderabad


Member

- Item1. Approved Four years course structure of B. Tech CSE Program
- Item2. Syllabus for I and II year (I semester and II semester) B. Tech Computer Science and Engineering are verified and suggestions are approved.
- Item3. Also approved the syllabus from other department courses under BOS of CSE Department.
- Item4. Evaluation Scheme suggested as per GR20 to be adopted.
- Item5. Panel of Examiners are suggested.


Dr. K. MADHAVI
B.E, M.Tech, Ph.D
Professor and HOD
Computer Science and Engineering
Gokaraju Rangaraju Institute of Engineering and Technology
HYDERABAD-500 090.



Gokaraju Rangaraju Institute of Engineering and Technology
(Autonomous)

GRIET/CSE/B05/1E/G/20-21

04 July 2020

Minutes of Meeting

For

I and II B.Tech Computer Science Engineering
(CSBS)
(I and II Semesters)

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

Board of Studies

Held on
04 July 2020



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Autonomous Institute under JNTU Hyderabad)
Bachupally, Kukatpally, Hyderabad-500090

Minutes of meeting of the BOS for I and II B. Tech (I and IIsemesters) Computer Science and Engineering (CSBS) of Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous). Hyderabad, held on 04-07-2020 in the online mode at 3:30pm through CiscowebeX.

Members Present:

Dr.K.Madhavi
Professor & Head, CSE
GRIET,Hyderabad


Chairman

Dr.Gollapudi Ramesh Chandra
Professor, CSE Dept
Head R&C Cell,
VNRVJIET, Hyderabad


External Expert

Dr.Aruna Rao S L
Professor & Head, IT,
BVRITH College of Engineering for Women,
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Industry Expert

Gadige Sai Krishna
Automation Engineer
ADP, Hyderabad


Alumni

Abhishek Bhandwalkar
III B.Tech, CSE


Student Member

Dr.A.Sai Hanuman
Professor , CSE,
GRIET Hyderabad


Member

Dr.B.SankaraBabu
Professor , CSE,
GRIET Hyderabad

Member 

Dr. G. Karuna
Professor , CSE,
GRIET, Hyderabad


Member

Dr. G.R. Sakthidharan
Professor , CSE,
GRIET Hyderabad


Member

Dr.P.Chandra Sekhar Reddy
Professor , CSE,
GRIET Hyderabad


Member

Dr.G.Ramesh
Associate Professor , CSE,
GRIET Hyderabad


Member


Item1. The new branches in CSE for Computer Science Business Systems (CSBS) are approved and sanctioned for the academic year 2020-21.

Item2. Approved Four years course structure, I and II year (I semester and II semester) syllabus for B. Tech Computer Science and Engineering (CSBS) are verified and suggestions are Approved.

Item3. Also approved the syllabus from other department courses under BOS of CSE Department.

Item4. Evaluation Scheme suggested as per GR20 to be adopted.

Item5. Panel of Examiners are suggested.


Dr. K. MADHAVI
B.E, M.Tech, Ph.D
Professor and HOD
Computer Science and Engineering
Gokaraju Rangaraju Institute
HYDERABAD



Gokaraju Rangaraju Institute of Engineering and Technology
(Autonomous)

GRIET/CSE/B05/1E/G/20-21

04 July 2020

Minutes of Meeting

For

I and II B.Tech Computer Science Engineering

(AIML)

(I and II Semesters)

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

Board of Studies

Held on
04 July 2020



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Autonomous Institute under JNTU Hyderabad)

Bachupally, Kukatpally, Hyderabad-500090

Minutes of meeting of the BOS for I and II B. Tech (I and II semesters) Computer Science and Engineering (AIML) of Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous), Hyderabad, held on 04-07-2020 in the online mode at 3:00pm through Ciscowebex.

Members Present:

Dr.K.Madhavi
Professor & Head, CSE
GRIET,Hyderabad


Chairman

Dr.Gollapudi Ramesh Chandra
Professor, CSE Dept
Head R&C Cell,
VNRVJIET, Hyderabad


External Expert

Dr.Aruna Rao S L
Professor & Head, IT,
BVRITH College of Engineering for Women,
Hyderabad


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JNTUH CEJ


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Sr. Data Scientist, Tech Mahindra,
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Dr. A. Sai Hanuman
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Dr. B. Sankara Babu
Professor, CSE,
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Professor, CSE,
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GRIET Hyderabad


Member

Dr. P. Chandra Sekhar Reddy
Professor, CSE,
GRIET Hyderabad


Member

Dr. G. Ramesh
Associate Professor, CSE,
GRIET Hyderabad


Member

Item 1. The new branches in CSE for Artificial Intelligence and Machine Learning (AIML) are approved and sanctioned for the academic year 2020-21.

Item 2. Approved Four years course structure, I and II year (I semester and II semester) syllabus for B. Tech Computer Science and Engineering (AIML) are verified and suggestions are Approved.

Item 3. Also approved the syllabus from other department courses under BOS of CSE Department.

Item 4. Evaluation Scheme suggested as per GR20 to be adopted.

Item 5. Panel of Examiners are suggested.


Dr. K. MADHAVI
B.E, M.Tech, Ph.D
Professor and HOD
Computer Science and Engineering
Gokaraju Rangaraju Institute of Engineering
HYDERABAD



Gokaraju Rangaraju Institute of Engineering and Technology

(Autonomous)

GRIET/CSE/B05/1E/G/20-21

04 July 2020

Minutes of Meeting

For

I and II B.Tech Computer Science Engineering

(DS)

(I and II Semesters)

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

Board of Studies

Held on
04 July 2020



GOKARAJU RANGARAJU INSTITUTE OF ENGINEERING AND TECHNOLOGY
(Autonomous Institute under JNTU Hyderabad)
Bachupally, Kukatpally, Hyderabad-500090

Minutes of meeting of the BOS for I and II B. Tech (I and IIsemesters) Computer Science and Engineering (DS) of Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous). Hyderabad, held on 04-07-2020 in the online mode at 4:00pm through Ciscowebex.

Members Present:

Dr.K.Madhavi
Professor & Head, CSE
GRIET,Hyderabad


Chairman

Dr.Gollapudi Ramesh Chandra
Professor, CSE Dept
Head R&C Cell,
VNRVJMET, Hyderabad


External Expert

Dr.Aruna Rao S L
Professor & Head, IT,
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Professor , CSE,
GRIET Hyderabad


Member

Dr.P.Chandra Sekhar Reddy
Professor , CSE,
GRIET Hyderabad


Member

Dr.G.Ramesh
Associate Professor , CSE,
GRIET Hyderabad


Member


Item1. The new branches in CSE for Data Science (DS) are approved and sanctioned for the academic year 2020-21.

Item2. Approved Four years course structure, I and II year (I semester and II semester) syllabus for B. Tech Computer Science and Engineering (DS) are verified and suggestions are Approved.

Item3. Also approved the syllabus from other department courses under BOS of CSE Department.

Item4. Evaluation Scheme suggested as per GR20 to be adopted.

Item5. Panel of Examiners are suggested.


Dr. K. MADHAVI
B.E, M.Tech, Ph.D
Professor and HOD
Computer Science and Engineering
Gokaraju Rangaraju Institute of Engineering and Technology
HYDERABAD-500 090



Gokaraju Rangaraju Institute Of Engineering And Technology

(Autonomous)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Minutes of the Meeting- BoS

GRIET/CSE/BOS/1E/G/20-21

4 JULY 2020

BoS Online Meeting on GR20 Regulations

BoS Chair welcomed all the expert BoS members and briefed the GR20 B.Tech - Computer Science and Engineering, CSE (AIML), CSE (DS), CSE (CSBS) Course structure and Syllabus of B.Tech I & II years. To reduce industry institute gap, GR20 course provided Professional Electives with more choice from different streams of specializations. The new course structure is designed based on the inputs from University, Industry and Subject Matter experts suggestions.

S.No	Agenda	Resolution	By Whom
1	B. Tech(CSE) I-IV Course Structure	GR20 B.Tech(CSE) Course structure is satisfactory	JNTUH Expert, Expert Members
2	B. Tech(CSE) I-IV Syllabus	<p>Suggested to change:</p> <ul style="list-style-type: none">In Computer Organization, the operations and micro operations have to be clearly mentioned.In Java Programming, rearrange the topics of Unit 4 and Unit 5.In Design and Analysis of Algorithms, the asymptotic notations topic is suggested to be included in the data structures subject of I year II semester.	JNTUH Expert, Expert Members
3	B. Tech(DS) I-IV Course Structure	GR20 B.Tech(DS) Course structure is satisfactory	JNTUH Expert, Expert Members
4	B. Tech(DS) Syllabus	<p>Suggested to change:</p> <ul style="list-style-type: none">In Computer Organization, the operations and micro operations have to be clearly mentioned.In Java Programming, rearrange the topics of Unit 4 and Unit 5.	JNTUH Expert, Expert Members

		<ul style="list-style-type: none"> In Design and Analysis of Algorithms, the asymptotic notations topic is suggested to be included in the data structures subject of I year II semester. 	
5	B. Tech(AIML) I-IV Course Structure	GR20 B.Tech(AIML) Course structure is satisfactory	JNTUH Expert, Expert Members
6	B. Tech(AIML) Syllabus	<p>Suggested to change:</p> <ul style="list-style-type: none"> In Computer Organization, the operations and micro operations have to be clearly mentioned. In Java Programming, rearrange the topics of Unit 4 and Unit 5. In Design and Analysis of Algorithms, the asymptotic notations topic is suggested to be included in the data structures subject of I year II semester. 	JNTUH Expert, Expert Members
7	B.Tech(CSBS) I-IV Course Structure	GR20 B.Tech(CSBS) Course structure is satisfactory	Industry Experts.
8	B.Tech(CSBS) syllabus(Collaboration with TCS)	GR20 B.Tech(CSBS) syllabus approved .	Industry Experts.

BoS chair concluded that GR20 B.Tech I & II year syllabus will incorporate all the suggestions by Expert members.

Coordinator BoS

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Dr. K. MADHAVI
 B.E, M.Tech, Ph.D
 Professor and HOD
 Computer Science and
 Gokaraju Rangaraju
 BoS Chair



Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous)

Recommendations and comments for GR20 B.Tech(CSE) syllabus

- **Principles of E-Commerce:** It has to include
 - General Frauds
 - Fraud detections and mitigation plans
- **Business Analytics:**
 - Overall topics seem to be good, but need to have practical exposure to students.

Please find my observations in a few courses:

- **Object Oriented Programming in C++ (II Year I Semester):**
 - **Observation:** Comparative study of similar languages like C, C#, Java can be given as case study.
- **Probability and Statistics (II Year I Semester)**
Discrete Mathematics (II Year I Semester)
DBMS (II Year I Semester)
 - **Observations:** Advancements in Latest DBMS evolutions like BigData, Hadoop etc can be given with introduction
- **Computer Organization (II Year II Semester)**
Operating Systems (II Year II Semester)
Java Programming (II Year II Semester)
 - **Observation:** Can be added with latest framework changes in Java versions which uses Spring, Hibernate etc.
- **Design and Analysis of Algorithms (II Year II Semester)**
Python Programming (II Year II Semester)
Design Thinking (II Year II Semester)
Computer Networks (III Year I Semester)
Data warehousing and Data mining (III Year I Semester)
Observation: Exploring latest trending technologies providing Data warehousing should be given as mini projects.

Overall the courses are covering most of the theoretical aspects. I would suggest to increase the mini projects as much as possible with real time scenarios to elevate students analytical and design capabilities.

BY:

PavanKumar Reddy Parukola
Associate Consultant
Tata Consultancy Services Pvt. Ltd



Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous)

Recommendations and comments for GR20 B.Tech(CSE) syllabus

- Especially topics like "Cloud Computing" ,"Cyber Security" and "IOT" are very much intact with the current and future IT organisational requirements.
- However ,minor suggestions to consider for any forthcoming/future editions:
 1. Understand that "Project Management" is broadly covered. Please plan to elaborate and focus more on "Risk Management" as this is one of the key areas that is focussed in current IT industry with increased Digitisation.
 2. Understand that "Agile Methodologies" are included. Please plan to include "Spotify" and other models as well.
 3. If possible, plan to include "Corporate Social Responsibilities" as one of the topics to cover.

BY:

Kiranmai Reddy
Delivery Manager
Tata Consultancy Services(Australia-Sydney)



Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous)

Recommendations and comments for GR20 B.Tech(AI/ML)
syllabus

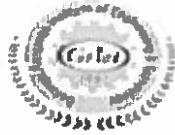
PROBABILITY AND STATISTICS:

- In Unit-I, include the topic Discrete and Continuous Random Variables.
- In Unit-II, include Conditional Probability, Baye's Theorem
- Unit-III can include the following:
 - Estimation of Parameters
 - F distribution for mean
 - Goodness of fit.
- In Unit-IV, include Student's (t) distribution, definition, properties, critical value of t, t-test for difference of mean.

BY:

**P.Mohan
Sr.Data Scientist
Tech Mahindra,
Hyderabad**

**&
Chief Advisor in Data Science & AI
IT Division,ESCI,Hyderabad.**



Gokaraju Rangaraju Institute of Engineering and Technology (Autonomous)

Recommendations and comments for GR20 B.Tech(DS) syllabus

PROBABILITY AND STATISTICS:

- Unit-I can include topics like Descriptive Statistics and Inferential Statistics, Measures of Spread .Also include Hands-on exercises with MS-Excel.
- In Unit-III, include Hands-on Exercises with MS-Excel Data Analysis Toolpak.
- In Unit-V include ARIMA.

DATAWAREHOUSING AND DATA MINING:

- In Unit-I include CRISP model of Data Mining.
- Include Data Marts in Unit-II
- Under Unit-III include Market Basket Analysis
- Under Unit-IV include Regression techniques too.

DATA VISUALIZATION:

- In Unit-I include topic 'The value of Visualization' and also include some tools like Tableau under the theme Design of Visualization applications.
- Visual analytics from Unit-I can be Included in Unit-III with following topics:
 1. Optimal visualization types
 2. Data Binning
 3. Table and field calculations
 4. Dashboard development
- Unit-IV can include activity/case study on creating visual analytics products.

MACHINE LEARNING:

- In Unit-I include the topic Use Cases of ML in Business.
- Under Unit-II, include Data preprocessing, Exploratory Data Analysis and Data Visualization.
- Under Classification Models in Unit-II,include Support Vector Classification-SVM.

- Also include Ensemble Methods-Bagging, Random Forest, Boosting
- Time Series Forecasting can also be included in Unit-II.
- In Unit-IV, under Unsupervised Learning, include Association Rules Mining-Market Basket Analysis.

BIG DATA ANALYTICS:

- In Unit-I, include
 - Characteristics and Challenges of Big Data
 - Pitfalls of traditional data processing
 - Hadoop's Big Data Solutions.
- Unit-II can begin with the topic 'Basic Concepts of a Distributed File System'
- Comparing Hive to traditional Databases-data types (primitive, complex- Hive Schema & Data storage, Managed vs External Tables)
- Apart from the modules mentioned in PIG under Unit-IV, also include Datatypes in PIG-scalar, complex Parallel processing.

NEURAL NETWORKS AND DEEP LEARNING:

- In Unit-II, include Types of neural network architectures.
- Under Single Layer Perceptron- include: Learning the weights of a single neuron, Error surface for a linear neuron.
- Under Unit-III, include: Activation and loss functions, Error functions, Back Propagation.
- Under Unit-V, include Long Short-Term Memory(LSTM).

DATA SCIENCE WITH R PROGRAMMING:

- In Unit 1, include R-Data Structures, R - Data Types, Introduction to R-Packages, Overview of CRAN.
- Under Unit 3, include Exploratory Data Analysis, Crosstabs.
- Also the contents of Unit 4 need to be included in Unit 3.
- Unit 4 can include Machine Learning concepts, Types of Machine Learning, Machine Learning with R.
- The concepts of Regression analysis, Classification techniques, Clustering, Association rules analysis, Practice and analysis with R mentioned under Unit 3 can be included in Unit 4.

STATISTICAL SIMULATION AND DATA ANALYSIS:

- Under Unit 1 include: Probability and Random Variables, Hypotheses, test statistics, significance level

NATURAL LANGUAGE PROCESSING:

- In Unit-I include Levels of language analysis, Semantics and Pragmatics.
- Under Unit-II include Unsmoothed N-grams. Under Syntactic Analysis include Treebanks.
- In Unit-V under Information Retrieval, include some applications like Machine Translation, Text Categorization and Summarization.

AUGMENTED REALITY AND VIRTUAL REALITY:

(Open Elective –III)

- Under Unit-I include Stereoscopic Vision, Immersive Reality Technologies and Applications.
- Unit-II can start with topics like VR systems and VR hardware

P.Mohan
Sr.Data Scientist
Tech Mahindra,
Hyderabad
&
Chief Advisor in Data Science & AI
IT Division,ESCI,Hyderabad.