GEETHANJALI COLLEGE OF ENGINEERING AND TECHNOLOGY

(UGC AUTONOMOUS)

Cheeryal (V), Keesara (M), Medchal Dist – 501 301, Telangana

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Board Of Studies

Minutes of Meeting

Date: 31/10/2020

Venue: Online using Google Meet.

Time: 10:30 am -12:30 pm

Agenda:

1. Approval of previous minutes of meeting held on 02-07-2019.
2. Approval of AR20 regulation program structures of B.Tech(CSE), B.Tech(CSE-AIML), B.Tech(CSE-DS), B.Tech(CSE-CS), B.Tech(CSE-IoT) upto final year
3. Approval of AR20 regulation Syllabus upto II year II Sem of B.Tech (CSE), B.Tech(CSE-AIML), B.Tech(CSE-DS), B.Tech(CSE-CS), B.Tech(CSE-IoT)
4. Approval of service courses to other branches for B.Tech AR20
5. Approval of AR16 and AR18, AR18 and AR20, and AR16 and AR20 equivalent courses
6. Approval of program structure and syllabus of M.Tech(CSE) AR20
7. Mandatory courses for AR18

Members Present:

1. **Dr. G. Vijaya Kumari**, Professor & Director, JHUB, JNTUH.
2. **Dr. S. Bapi Raju**, Professor, ~~HCU~~. IIIT H
3. **Dr. N. Arvind**, Assistant Professor, IITH.
4. **Mr. M. Goutham**, Senior Director, Oracle, Hyderabad.
5. **Mr. Kumar Mynampati**, Associate Vice-President, Infosys
6. **Dr. S. Udaya Kumar**, Principal, GCET
7. **Dr. V. Madhusudhan Rao**, Professor and Dean of School of CSIT, GCET
8. **Dr. A. Sree Lakshmi**, Professor and Head CSE, GCET
9. **Dr. K. Srinivas**, Professor and Head IT, GCET
10. **Dr. B. V. Swathi**, Professor, GCET
11. **Dr. Ch. Ramesh Babu**, Professor, GCET
12. **Dr. Ramakanta Mohanty**, Professor, GCET
13. **Dr. G. Somasekhar**, Associate Professor, GCET

14. **Mr. K. Kamakshaiah**, Associate Professor, GCET
15. **Dr. A. Hari Prasad Reddy**, Associate Professor, GCET
16. **Dr. Rajesh Srivastava**, Associate Professor, GCET
17. **Dr. Puja S. Prasad**, Associate Professor, GCET
18. **Mr. M. Srinivas**, Associate Professor, GCET
19. **Mr. D. Venkateswarlu**, Associate Professor, GCET
20. **Ms. M. Ashwini**, Associate Professor, GCET
21. **Mr. M. Raja Krishna Kumar**, Associate Professor, GCET
22. **Mr. V. Shivanarayana Reddy**, Associate Professor, GCET
23. **Ms. C. Esther Varma**, Associate Professor, GCET
24. **Mr. A. Hare Krishna**, Associate Professor, GCET

Minutes of Meeting

1. **Approval of previous minutes of meeting held on 02-07-2019**
   - Minutes of meeting of BoS meeting held on 02-07-2019, read and approved.
2. **Approval of AR20 regulation program structures of B.Tech(CSE), B.Tech(CSE-AIML), B.Tech(CSE-DS), B.Tech(CSE-CS), B.Tech(CSE-IoT) upto final year**
   - Principal sir, highlighted the basic differences between AR18 and AR20, as given below:
     - Introduction of five courses on English Communication
     - Introduction of "Design Thinking" course

     These initiatives are appreciated by all the BoS members and Mr. Kumar Mynampati sir, also said that this will help in bridging the gap between academia and industry.
   - **B.Tech(CSE)**
     - I Year to IV Year program structure is discussed and approved.
   - **B.Tech(CSE-AIML)**
     - I Year to IV Year program structure is discussed and approved.
   - **B.Tech(CSE-DS)**
     - I Year to IV Year program structure is discussed and approved.
   - **B.Tech(CSE-CS)**
     - I Year to IV Year program structure is discussed and approved.
     - BoS members suggested to include "Statistics for Machine Learning" theory and laboratory to B.Tech.(CSE-CS) also.
   - **B.Tech(CSE-IoT)**
     - I Year to IV Year program structure is discussed and approved.

3. **Approval of AR20 regulation Syllabus up to II year II Sem of AR20 B.Tech(CSE), B.Tech(CSE-AIML), B.Tech(CSE-DS), B.Tech(CSE-CS), B.Tech(CSE-IoT) of AR20**

- **B.Tech(CSE)**
  - I Year I semester:
    - Syllabus for "Programming for Problem Solving-I" discussed and approved. Programming for problem solving-I syllabus of AR20 is same as AR18 with moving of String concepts to Programming for problem solving-II.
    - Syllabus for "Programming for Problem Solving-I Lab" discussed and approved. Programs related to Strings in AR18 are moved to Programming for problem solving-II Lab in AR20.
  - I Year II semester:
    - Syllabus for "Programming for Problem Solving-II " discussed and approved. There is no change from AR18 to AR20 except inclusion of Strings concepts.
    - Syllabus for "Programming for Problem Solving-II Lab" discussed and approved. There is no change in this syllabus from AR18 to AR20 regulation except inclusion of programs on Strings.
    - Syllabus for "Discrete Mathematics" discussed and approved. There is no change in this syllabus from AR18 to AR20 regulation.
  - II Year I semester:
    - Syllabus for "Data Structures" discussed and approved. There is no change in this syllabus from AR18 to AR20 regulation.
    - Syllabus for "Data Structures Lab" discussed and approved. There is no change in this syllabus from AR18 to AR20 regulation.
    - Syllabus for "Object Oriented Programming" discussed and approved. Informed to BoS that Applet concepts are removed in AR20 regulation as they are not supported by latest Java development Kit and Browsers. Remaining syllabus contents are same as AR18 regulation.
    - Syllabus for "Object Oriented Programming Lab" discussed and approved. Applet programs are replaced with AWT and Swings from AR18 to AR20 regulation.
    - Syllabus for "Database Management Systems" discussed and approved. There is no change in this syllabus from AR18 to AR20 regulation.
    - Syllabus for "Database Management Systems Lab" discussed and approved. There is no change in this syllabus from AR18 to AR20 regulation.
  - II Year II semester:

- Syllabus for "Design and Analysis of Algorithms" discussed and approved. Concepts of AND/OR graphs and Game trees are removed from AR18 to AR20 as these concepts are included in Artificial Intelligence course
- Syllabus for "Design and Analysis of Algorithms Lab" discussed and approved. 15 programs in AR18 are reduced to 13 programs in AR20 without compromising on the different algorithm design techniques to enable lab syllabus completion in stipulated schedule.
- Syllabus for "Computer Organization and Assembly Language Programming" discussed and approved. Concepts related to control unit design, pipelining and Vector processing are included in AR20.
- Syllabus for "Operating Systems" discussed and approved. There is no change in this syllabus from AR18 to AR20 regulation.
- Syllabus for "Operating Systems and Assembly Language Programming Lab" discussed and approved. Operating Systems Lab and Computer Organization and Assembly Language Programming Lab of AR18 are combined in AR20.
- Syllabus for "Web Technologies" discussed and approved. There is no change in this syllabus from AR18 to AR20 regulation.
- Syllabus for "Web Technologies Lab" discussed and approved. There is no change in this syllabus from AR18 to AR20 regulation.
- Syllabus for "Theory of Computation" discussed and approved. There is no change in this syllabus from AR1s8 to AR20 regulation.
- Syllabus for "Design Thinking" discussed and approved. This is the new course introduced in AR20 for improving problem solving skills of students. BoS members suggested not to conduct assessment for this course as a question answer type but to design proper rubrics for the assessment. Principal sir explained that the design thinking assessment will not be in the form of question paper but it is designed as a project course where students identify real world problems doing some field trips and design solutions for the identified problems. This will be completely activity based learning.

- **B.Tech(CSE-AIML)**
  - Syllabus for B.Tech (CSE-AIML) upto II year II Sem is same as that of B.Tech (CSE) except for the course "Theory of Computation".
- **B.Tech(CSE-DS)**
  - Syllabus for B.Tech (CSE-DS) upto II year II Sem is same as that of B.Tech (CSE) except for the course "Theory of Computation".
- **B.Tech(CSE-CS)**

- Syllabus for B.Tech (CSE-CS) upto II year II Sem is same as that of B.Tech (CSE) except for two courses namely "Mathematical Foundations for Cryptography and Security" and "Theory of Computation".
- BoS members suggested to include "Statistics for Machine Learning" theory and laboratory to B.Tech.(CSE-CS) also.

- **B.Tech(CSE-IoT)**
  - Syllabus for B.Tech (CSE-DS) upto II year II Sem is same as that of B.Tech (CSE) except for two courses namely "Smart Sensors and Instrumentation" and "Theory of Computation".

4. **Approval of Service courses to other branches for B.Tech AR20**
   - Service subjects offered to other departments were discussed and approved with suggestion to introduce new programming languages.
   - Object Oriented Programming course in B.Tech CSE is also offered as service course for B.Tech ECE in II year II Sem.
   - Open Electives (Web programming, Knowledge Management and Database Systems) offered by CSE department to other branches were discussed and approved.

5. **Approval of AR16 and AR18, AR18 and AR20, and AR16 and AR20 equivalent courses**
   - List of equivalent courses from AR 16 to AR18 are discussed and approved
   - List of equivalent courses from AR 18 to AR20 are discussed and approved
   - List of equivalent courses from AR 16 to AR20 are discussed and approved
6. **Approval of Program structure and syllabus of M.Tech(CSE) AR20**
   - M.Tech(CSE) AR20 syllabus is same as that of JNTUH R19 with only change in open electives. Open electives for AR20 are same as AR18.
   - BoS members enquired the students eligible for M.Tech (CSE), if it includes other branches then the basic courses are also to be included. B.Tech(CSE/IT/ Electronics & Computer Engineering/ IT & Computer Science and Systems) are eligible for M.Tech(CSE).
7. **Mandatory courses for AR18 as indicated by JNTUH**
   - JNTUH has recently issued a circular to offer Artificial Intelligence and Cyber Security courses as Mandatory courses for all branches. These courses are included as mandatory courses under AR18 regulation as well as AR20 regulation with the same syllabus as given by JNTUH.

- **Suggestions by external BoS members**
  - To introduce course on Entrepreneurship as an extension of Design Thinking. Entrepreneurship is included as an Open Elective in IV year.

- Combining the courses may dilute the courses as the course itself is vast.
- Cloud computing can be made as mandatory subject as most of the organizations are moving their operations to cloud.
- Digital Technologies can be offered as an elective.
- Mathematics courses not to be compromised as done in cyber security specialization
- Keep more focus on foundation core subjects like OS,DBMS which can be taught in 2 semester in depth
- Core subjects should be not be compromised with specialized courses
- Not to reduce the number of experiments in laboratories when two laboratories are combined, instead, asked to mention minimum number of experiments students need to perform to successfully complete the course
- Focus on Program Learning Outcomes and Program Specific Outcomes for each specialization
- Associate the emerging technologies to MOOCs or online courses for enhancing its effectiveness
- Design Thinking Assessments to be properly planned