

KPR Institute of Engineering and Technology
(Autonomous)
Avinashi Road, Aranyik, Coimbatore - 642 407


DEPARTMENT OF CSE

3rd BOARD OF STUDIES MEETING

05.12.2020

December 2020

KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India



AGENDA


- Review of the minutes of the 2nd BOS meeting
- Industry Inputs on Curriculum & Syllabus
- Curriculum and Teaching Learning Best Practices
- Multidisciplinary Approach
- Curriculum and syllabi for UG Programme under Regulations 2019
- Open Electives
- Online Courses
- Entrepreneurship Track Courses
- Industrial Training and Internship
- Industry Oriented Courses(One Credit Courses)
- Value Added Courses
- Curriculum and syllabi for PG Programme under Regulations 2019
- Special Electives for Ph.D Course work
- Any other points.

KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India

WELCOME

Ms. Hema Gopal, Global Head IBM Centre of Excellence at TCS Vice President-TCS, Chennai.	UNIVERSITY NOMINEE
Dr. Kameshwar V Raghavan Associate Professor, Department of CSE and Automation, IISc, Bangalore.	ACADEMIC EXPERT
Dr.Senthil.R HOD, Department of Computational Intelligence, VIT, Vellore.	ACADEMIC EXPERT
Mr. Sivaramakrishnan Senthilthy, Vice President, Vertical Delivery Unit Head & Initiatives and Business Consulting, HCL Technologies, Infrastructure Division Chennai.	INDUSTRIAL EXPERT
Mr.V.Senthil Kumar, AI Innovation Head-Mitach CTO Engineering Team,TCS,Coimbatore	INDUSTRIAL EXPERT

KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India



VISION OF THE INSTITUTION


To become a premier institute of academic excellence by imparting technical, intellectual, and professional skills to students for meeting the diverse needs of the industry, society, the nation and the world at large.

KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India

WELCOME

Mr.Palanisamy.M Data Scientist I, Honeywell Technologies, Bangalore	INDUSTRY EXPERT
Mr.Mrithu Babu Govindarajulu, Co-Founder and CTO, Logic Research Lab, Software Research & Development, Kumthala Nagar, Thalassery	INDUSTRY EXPERT
Mr.Dinash Kumar.S.K, Project Lead, Lantmann Private Limited, Coimbatore.	INDUSTRY EXPERT
Mr.P.Anwin Ram, Software Engineer,(R&D), Honeywell Technologies Ltd, Chennai	ALUMNUS

KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India



MISSION OF THE INSTITUTION

- Commitment to offer value based education and enhancement of practical skills.
- Continuous assessment of teaching and learning process through scholarly activities.
- Enriching research and innovative activities in collaboration with industry and institute of repute.
- Ensuring the academic process to uphold culture, ethics and social responsibility.

KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India

VISION OF THE DEPARTMENT

To foster the students by providing learner centric teaching environment, continuous learning, research and development to become thriving professionals and entrepreneurs to excel in the field of computer science and contribute to the society.

KPRIET Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India. 7

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: An ability to identify and analyze data management system like data acquisition, big data so as to facilitate the students in solving problems using the techniques of data analytics.

PSO2: An ability to apply design and development principles of hardware and software in emerging technology environments like cloud computing and cyber forensics.

KPRIET Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India. 8

MISSION OF THE DEPARTMENT

- Providing value based education and contented learning experience to the students.
- Educating the students with the state of art technologies and cultivating their proficiency in analytical and designing skills.
- Enabling the students to achieve a successful career in Computer Science and Engineering or related fields to meet the changing needs of various stakeholders.
- Guiding the students in research by nurturing their interest in continuous learning towards serving the society and the country.

KPRIET Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India. 9

REVIEW ON 2nd BOS MEETING

SL. NO.	NAME OF THE EXPERT	SUGGESTIONS GIVEN	ACTION TAKEN
1	M. Prasad Chetal Vice President Global Head, E&T, Center of Excellence of TCS, Chennai	<ul style="list-style-type: none"> • Suggested to include Project Development, MCQs, Essential engineering, assurance and feasibility concepts in software engineering course. • Suggested that Graph theory and its applications may be included in Discrete Mathematics course. 	Implemented
2	H.K. Mahaveeran Vice President E&T, Supervisory, Chennai 2. V.K. Prasad Mahaveeran Solution Architect, TCS Chennai	<ul style="list-style-type: none"> • Recommended to include Scenario based Lab experiments of Cyber Security in the Lab courses. 	Implemented

KPRIET Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India. 11

PROGRAM EDUCATIONAL OBJECTIVE (PEOs)

PEO1 : Obtain knowledge in cutting edge technologies in the field of computer science, necessary to solve real time problems through value based education.

PEO2 : Possess skills for team building, leadership quality and ethical values necessary to function productively and professionally.

PEO3 : Develop Innovative ideas to establish themselves as professionals and entrepreneurs in computing industry.

PEO4 : Continue to learn new technologies through higher studies and research.

KPRIET Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India. 10

REVIEW ON 2nd BOS MEETING

SL. NO.	NAME OF THE EXPERT	SUGGESTIONS GIVEN	ACTION TAKEN
3	M. Prasad Mahaveeran Solution Architect, TCS Chennai	<ul style="list-style-type: none"> • Suggested to include the content of Assembly Language and Cross-Platform in Computer Architecture and Microprocessor course. 	Implemented
4	1. M. Prasad Chetal Vice President Global Head, E&T, Center of Excellence of TCS, Chennai. 2. V.K. Prasad Mahaveeran Solution Architect, TCS Chennai	<ul style="list-style-type: none"> • Suggested to introduce Database Systems in First year of DBMS course. 	Implemented

KPRIET Institute of Engineering and Technology, Coimbatore, Tamil Nadu, India. 12

MINUTES OF MEETING OF THIRD BOARD OF STUDIES

Meeting Date:	05.12.2020
Meeting Time:	10.00 AM to 1.00 AM
Meeting Location:	Online(Google Meet), KPR Institute of Engineering and Technology, Arasur, Coimbatore
Board of Studies Members Present:	<ol style="list-style-type: none"> 1. Dr.P.Thangaraj, Chairman BOS, Prof & Head, CSE, KPRIET 2. Ms.Hema Gopal, Vice – President ,(Global Head IBM Centre of Excellence at Tata Consultancy Services, Vice President at Tata Consultancy Services 3. Dr. Komondoor V. Raghavan, Associate Professor, IISC, Bangalore. 4. Dr.Sasikala.R,HOD, Department of Computational Intelligence, VIT, Vellore. 5. Mr.Sivaramakrishnan Senthatty, Vice President, Vertical Delivery Unit Head & Initiatives and Business Consulting, HCL Technologies, Infrastructure Division Chennai. 6. Mr.V.Senthil Kumar, AI Innovation Head-Hitech CTO, Engineering Team, TCS, Coimbatore. 7. Mr.Palanisamy.M, Data Scientist I, Honeywell Technologies, Bangalore 8. Mr.Hariprakash Govindarajalu, Co-Founder and CTO, Software Research & Development, Kumbakonam, Tamilnadu 9. Mr.P.Aswin Raam, Software Engineer, (ES(H&I), Hexaware Technologies Ltd, Chennai. 10. Dr.A.Balamurugan, Professor, Dept of CSE, KPRIET 11. Dr. D.Surendran, Dept of CSE, KPRIET 12. Dr. B.Gomathy, Dept of CSE, KPRIET 13. Dr. Vignesh V, Associate Professor, KPRIET 14. Dr. M.Siva Sangari, Assistant Professor (SI.G), KPRIET 15. Dr.A.Devipriya, , Assistant Professor (SI.G), KPRIET 16. Mr. P.Suresh, Assistant Professor (SI.G), KPRIET 17. Mr. S.Raguvaran, Assistant Professor (Sr.G), KPRIET 18. Mr. R.Sivaramakrishnan, Assistant Professor (Sr.G), KPRIET 19. Ms.K. Vidhya, Assistant Professor (Sr.G), KPRIET 20. Ms. R.H.Aswathy, , Assistant Professor (Sr.G), KPRIET 21. Mr.K. Kamaraj , Assistant Professor (Sr.G), KPRIET 22. Ms. Salomi M, Assistant Professor (Sr.G), KPRIET 23. Mr. V.Vijayaganth, Assistant Professor (Sr.G), KPRIET 24. Mr. S.Kharthikeyan, Assistant Professor (Sr.G), KPRIET 25. Mr. S.Srithar, Assistant Professor, KPRIET 26. Mr. NaveenKumar M, Assistant Professor, KPRIET 27. Mr. M.Premkumar, Assistant Professor, KPRIET 28. Ms. Geetha S K, Assistant Professor, KPRIET 29. Ms. NandhiniN, Assistant Professor, KPRIET 30. Ms. Sri Sathya K B, Assistant Professor, KPRIET 31. Ms. Kiruthika J K, Assistant Professor, KPRIET 32. Mr. Mohan M, Assistant Professor, KPRIET

Special Invitees:

1. Dr. M.Akila, Principal, KPRIET.
2. Dr. A. M. Natarajan, Chief Executive, KPRIET.
3. Mr.S. Aravind Iyer IV CSE A
4. Mr. N. Sujith IV CSE C
5. Ms.V.Archana IV CSE A
6. Ms.B.Kowsika IV CSE B

- Third Board of Studies Meeting started with a welcome address and presentation by Dr.P.Thangaraj, Professor & Head, Department of Computer Science & Engineering, KPRIET.
- HoD presented the curriculum and the syllabus of Regulations-2019 UG program from Fourth to Eighth Semester along with Professional and Open electives for the Department of Computer Science & Engineering to the members of Board of members.

Discussion Held and Decision Taken:

SEMESTER – IV

- Dr.R.Sasikala suggested that NOSQL database can be included as a separate elective. One credit NOSQL database can be offered as a lab course.
- Dr.R.Sasikala suggested that practical examples can be included in the DBMS lab.
- Dr.R.Sasikala and Mr.V.Senthil kumar suggested that applications and case studies to be included at the end of all units in all courses.
- Mr.V.Senthil Kumar suggested that operating system virtualization-Docker and LXC may be included in operating system course.

SEMESTER – V

- Mr.V.Senthil Kumar and Dr.R.Sasikla suggested that AI and ML can be offered as a separate course for better understanding of all the concepts.
- Dr. Komondoor V. Raghavan suggested that Web Technology syllabus can be reframed as per industry standards (Client side scripting, Server side scripting),the concepts can be replaced with latest technology like Thymeleaf, Spring Boot, PHP, etc.
- Dr. Komondoor V. Raghavan suggested that in web Technology lab, 1 to 3 experiments to be removed and 7 to10 - Applets based experiments can be replaced with latest technologies like CSS, Spring Boot,etc.
- Dr.R.Sasikala and Mr.M.Palanisamy suggested that Error and Flow control, ARP, RARP, Packet raiser, HTTPS, REST techniques can be included in Computer Networks syllabus.

Department of Computer Science and Engineering

KPR Institute of Engineering and Technology



- Mr.V.Senthil Kumar suggested that Python packages like R, NUMPY, TensorFlow implementation can be included as lab exercise instead of implementing more algorithms in machine learning lab course.
- Ms.Hemagopal recommended that half of the lab experiments can be converted as mini project. Also, industry case studies can be included as small unit in Machine Learning course syllabus.

SEMESTER – VI

- Dr. Komondoor V. Raghavan suggested that LLVM optimization tool can be included in compiler design course – Unit V.
- Mr.M.Palanisamy recommended that Compiler Design course can be offered immediately after the semester in which they completed TOC course.
- Mr.V.Senthil Kumar suggested that IBM cloud can be utilized by the students to analyze assets, private and public cloud.
- Mr.V.Senthil Kumar suggested that Concepts like Docker, Kubernetes, Apache, Spark can be included in Distributed and cloud computing syllabus.
- Mr.V.Senthil Kumar suggested that Docker can be offered as a one credit course. Also, security concepts to be focused in Unit-V.

SEMESTER – VII

- Dr. Komondoor V. Raghavan suggested that Software project management syllabus is purely theoretical and it can be modified by including the concepts like Agile, Devops, Microservices, GIT, Junit and integration tools.
- Mr.M.Palanisamy suggested a book titled “Software engineering”, KK. Agarwal, third edition, 2007 for referring real-time problems related to software project management.

Professional Elective

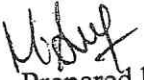
- Members appreciated stream based electives and GATE electives.
- Mr.Sivaramakrishnan Senthatty suggested that Edge and FOG computing syllabus can be divided into two different courses as FOG computing and Edge computing.
- Mr.Sivaramakrishnan Senthatty suggested that Social Network Analysis can be moved from Networks to Data science stream. Virtualization techniques course can be moved from Data Science to Networks stream.

PG Program

- Reviewed the curriculum and syllabus of PG program.
- Dr.R.Sasikla suggested to change the course name computer vision to machine vision.

Other Matters

- Ms.Hema Gopal recommended that value added courses can be included which should support students' employability.
- Ms.Hema Gopal suggested Virtual labs can be offered along with physical labs.
- Ms.Hema Gopal suggested Tableau courses to be introduced and faculty members can attend FDP in IIT through online courses for their knowledge enhancement.
- Mr.V.Senthil Kumar suggested that variety programming languages can be offered as an elective.
- Mr.V.Senthil Kumar suggested that Kali Linux can be included as one credit course.


Prepared by
Ms. M. Salomi
Dr.A.DeviPriya


Approved by
Dr P.Thangaraj
Chairman BOS