



NEHRU COLLEGE OF ENGINEERING AND RESEARCH CENTRE

(AUTONOMOUS INSTITUTION)

PAMPADY, THIRUVILWAMALA, THRISSUR DT., KERALA - 680588

NBA ACCREDITED PROGRAMMES - B.TECH CSE, B.TECH MTR | NAAC RE-ACCREDITED WITH 'A' GRADE
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MINUTES OF THE INTERNAL QUALITY ASSURANCE CELL 37th IQAC MEETING AC.YR. 2023-24

Agenda-

1. Discussion on action points arising out of the previous meeting
2. Granting of Academic Autonomy, NCERC - prospective plan
3. Scheme for UG, PG programs autonomous college -NCERC
4. Team syllabus discussion with subject experts
5. Concluding remarks
6. Any other matter with the permission of the chair.

Seminar Hall , Aryabhata

Date:26th March 2024

Time - 10.00 AM

IQAC Members

- | | |
|--|---|
| 1. Prof. (Dr.) Karibasappa Kwadiki,-Chairperson IQAC | 11. Ms. Malavika S Madhavan -Member Student |
| 2. Dr.Sobha Manakkal-Director IQAC | 12. Dr. Deepa A-Member Internal |
| 3. Mr. Vysak Valsan -Cordinator IQAC | 13. Ms. Silja Varghese - Member Internal |
| 4. Mr. M.Srinivas-Management Representative | 14. Mr. Alex K - Member Internal |
| 5. Mr. R.Ambikadas-Senior Administrative Officer | 15. Mr. Rakesh K -Member Internal |



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6. Ms. Vini Unnikrishnan-Local Society Representative	16. Mr. Rakesh P R -Member Internal
7. Ms. Dincy George -Alumni Representative	17. Ms. Neethu M--Member Internal
8. Dr.Rahul Sateesh -Professional Body Representative	18. Mr.Maheswaran K-Member Internal
9. Mr.Nandakumar R -Industry Representative	19. Ms.Anooja B -Member Internal
10. Mr.Santhosh K-Parent Representative	20. Ms. Anitha P -Member Internal
<u>Special invitees</u>	
1. Dr.Radhakrishnan-Advisor -NGIK	6. Dr Krishna Kumar T PProf. & HOD, Dept. of MBA
2. Dr. Mredhula L ,Prof & HOD, Dept. of ECE	7. Dr. Sudheer S Marar Prof. & HOD, Dept. of MCA
3. Dr.D. Vijayakumar, Prof. & HOD, Dept. of Mechatronics	8. Ms. .Silja Varghese, HoD in charge – Dept. of CSE
4. Dr. Appadurai M, Asso. Prof. & HOD(i/c), Dept. of ME	9. Prof Sajitha , HoD in charge – Dept. of CSE (AI & ML)
5. Dr Jalaja K, Prof. & HOD Department of Applied Science	10. Mr. Gopinathan C Placement Officer
<u>Subject Experts</u>	
Name and designation	Domain of expertise



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1. Mr. Vidyasagan P Rtd. Vice President Engineering, MultiTech Software Systems., Rtd. Director, Ericsson India	Electrical & Electronics Engineering
2. Dr Anand R , Assistant Professor,ECE,Amrita School of Engineering, Coimbatore	Electronics & Communication
3. Mr. Vishnukumar V Chief Officer, Embedded Systems & IoT,V-Guard Industries Ltd., Cochin	Computer Science & Artificial Intelligence
4. Mr. Sreejith K R&D Engineer-Luminar Technolab, Cochin	Computer Application
5. Mr.Jimmy J Nalappat ,Retd.AGM, HR & Vigilance, ITI Ltd, Palakkad	Business Applications
6. Mr. Karthikeyan Thiyagarajan ,Deputy Manager Quality,Orbinox India Pvt. Ltd.,Coimbatore, Tamil Nadu.	Mechanical Engineering
The meeting began at 10.30 a.m... Principal welcomed all the members of IQAC He directed Dr. Sobha Manakkal, Director IQAC to go ahead with the proceedings	
<p>Director IQAC started the presentation by listing the action taken report (ATR) of previous meeting. The minutes and ATR of previous meeting was passed. New members and special invitees were introduced. The main agenda for the meeting was 'Fine tuning of curricula and syllabi for autonomous college, NCERC</p>	



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Principal NCERC announced that the Institution has been granted autonomy for ten years as per clause 7.5 of the UGC (Conferment of Autonomous Status Upon Colleges and Measures for Maintenance of Standards in Autonomous Colleges) Regulations, 2023. He briefed on the prospective plan of the Institution to implement a learning curriculum most suitable for Industry with support from experts from Industry and in compliance with NEP 2020. The meeting was announced to be dispersed for the morning session for each department to have separate detailed discussion on syllabus with subject experts from Industry.

The following are the major discussion outcome reported by departments.

Sl.no	Item	Action by	Target date
1.	<p>Subject Expert for CSE department Ms.Dincy George Senior Consultant, Deloitte Systems, Bangalore gave the following suggestion</p> <ol style="list-style-type: none">Include Standard programming guide lines in different programming languagesInclude more industry based problem statements as experiments in practical sessions for programming languages	<p>CSE department</p> <ol style="list-style-type: none">Standard programming guide lines included in the syllabusIncluded one practical session for software project development	<p>As needed- Implementation shall be subject to approval from BoS</p>



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	<p>Subject Expert for CSE department Mr. Vishnu Kumar V Chief Officer, Embedded Systems & IoT, V-Guard Industries Ltd, Cochin gave the following suggestion</p> <ol style="list-style-type: none">i. Include basic microcontroller conceptsii. Include more topics based on neural networks	<ol style="list-style-type: none">i. Included 8051 microcontrollerii. Included deep learning subjects	



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2.	<p>Subject Expert for EEE department Mr. Vidyasagan P.,Rtd. Director, Ericsson India gave the following suggestion</p> <ol style="list-style-type: none">Emphasis on basics of Electrical Engineering must be ensured in framing the syllabusSimulation exercises / realization of micro projects for core engineering subjects need to implemented to enable them to have hand-on experienceKits shall be replaced with convention breadboard and connecting wires to have a better understanding of circuit design and debugging	EEE department	
	<p>Subject Expert for EEE department Dr.Rahul Sateesh, Department of Artificial Intelligence, Amrita School of Artificial Intelligence, Coimbatore(IQAC member) gave the following suggestion</p> <ol style="list-style-type: none">Special Electrical Machines including robotics , drone autonomous vehicle to be included in the syllabusElectrical Measurements to be included as a core	EEE department	As needed- Implementation shall be subject to approval from BoS



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	<p>subject as it is a basic essential in Industry</p> <p>iii. Concept of Bring Your Device (BYD) ,where each student having his own kit of breadboard, arduino boards, lab components to be introduced which will help them to realize their circuit ideas even beyond class hours.</p>		
3.	<p>Subject Expert for ECE department Mr. Vidyasagaran P.,Rtd. Director, Ericsson India and Dr. Anand R, Assistant Professor, ECE, Amrita School of Engineering, Coimbatore gave the following suggestion</p> <p>i. Implementation of Circuit Simulation, utilizing Physical Hardware within Electronics Circuits and Network Theory tutorials</p> <p>ii. In Signals and Systems and Digital Signal Processing, assignments, integration of simulation exercises utilizing Python and MATLAB, alongside the incorporation of TMS hardware kits within DSP studies</p> <p>iii. Integration of FPGA programming into the Digital</p>	ECE department	As needed- Implementation shall be subject to approval from BoS



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	<p>System Design lab, emphasizing familiarity with industry-standard concepts such as TTL, fan-in, and fan-out</p> <ul style="list-style-type: none">iv. In the Linear Integrated Circuits Lab, provision of opportunities for each student to interface with op-amp circuits using a single power supply, while also gaining proficiency in current driver circuits, mirror circuits, etcv. Expansion of Microcontroller studies to encompass modern controllers within the syllabus, with a particular emphasis on peripherals and interrupts.vi. Introduction of Python-based simulations in Principles of Communication coursework.vii. In Control Systems, inclusion of activities involving the construction and implementation of PID controllers.viii. To combine Electromagnetic Field Theory and Antenna theory as a single course		
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4.	<p>Subject Expert for ME/MTR departments Mr. Karthikeyan Thiyagarajan ,Deputy Manager Quality,Orbinox India Pvt. Ltd.,Coimbatore, Tamil Nadu gave the following suggestion</p> <ol style="list-style-type: none">The syllabus must be in line with the current Industry neededThe syllabus should be framed with new technologies which is used in industriesSpecialized subjects like industry management , Quality concepts and Operation research can be included in the syllabusMechatronics engineering can be included with sensors and pneumatic concepts.For Mechanical engineering instrumentation concepts can be included	ME/MTR departments	As needed- Implementation shall be subject to approval from BoS
5.	<p>Mr. Sreejith K,R&D Engineer, Luminar Technolab, Cochin gave the following suggestion</p> <ol style="list-style-type: none">Domain Expertise Workshop shall include Aptitude Test Questions & HR Round Mock-ups -Industry	MCA dept. wih support from Industry	As needed- Implementation shall be subject to approval from BoS



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	<p>can help the department to develop modules in Aptitude/HR sessions</p> <p>ii. Linked In profiles shall be initiated for ALL students which needs to be updated by the projects/activities during the MCA program Industry can aid to provide samples and also evaluate the Professional Profile of the students</p> <p>iii. Add-on Training of 20-30hr duration shall be offered during Sem4 beginning, organized combine by Industry and Institute Industry shall train the Faculty to lead basic sessions through Train-the-Trainer programs and directly lead the core-sessions to student groups</p> <p>iv. The MCA with SPECIALISATION is definitely a novel concept, and should choose the courses and content accordingly Industry can contribute towards the intellect structure and applications of the course contents</p>		
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6.	<p>Mr.Jimmy J Nalappat, Retd.AGM, HR & Vigilance, ITI Ltd, Palakkad gave the following suggestion</p> <ol style="list-style-type: none">Ethics concepts need to included in Business Environment paper not in Business Communication as 3 Modules with Business Environment and 2 Modules with Ethics.Application aspects needs to be concentrated more as practical component and to be implemented.In Finance Papers especially Financial Engineering electives, it was suggested to add/update new conceptsadapt the reality aspects of management through industry exposure.Inclusion of Recruitment and selection, retention, deferred payment, stock options, and retention bonus as compensation connected with IT Industry for Organizational Behavior Paper.Few modules in Human Resource Planning and Training and Development needs to interchanged	MBA Department	As needed- Implementation shall be subject to approval from BoS
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	<p>vii. concentrate on recent trends and few statutory compliance such as PF Act, Bonus and Gratuity.</p> <p>viii. include some more disruptions in Industry 4.0 paper.</p>		
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Further to department level syllabus discussion, the IQAC members and subject experts assembled to have the concluding remarks. The subject experts appreciated the effort done by departments in drafting advanced syllabus and ensured continued support to Institution for implementation of academic autonomy.

MEETING CONCLUDED WITH THE THANKS GIVING FROM IQAC COORDINATOR

DIRECTOR IQAC ,NCERC



Sauvasappa
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