UPES

UNIVERSITY OF PETROLEUM & ENERGY STUDIES

Internal Quality Assurance Cell

Minutes of Meeting
No. IQAC/04/JUN/2018-19
(14th June 2019, 10:00 am to 1:00 pm)
Venue: Energy House Ground Floor Board Room, UPES

Date: 14.06.2019

Members present:

Sr. No.	IQAC Members
1	Dr. Deependra Kumar Jha - Vice Chancellor – Chairperson
2	Dr. Kamal Bansal, Dean - Academic Development & Innovation
3	Dr. Suresh Kumar, Dean, School of Engineering
4	Dr. Manish Prateek, Dean, School of Computer Science & Engineering
5	Ms. Manisha Mohan, Dean, School of Design
6	Dr. Deepankar Chakrabarti, Acting Dean, School of Business
7	Dr. Jitendra Kumar Pandey, Associate Dean-Research & Development
8	Dr. Ajit Kumar Nigam, Director, Associate Dean – Incubation
9	Dr. Akshay Malhotra, Associate Director, Product Development
10	Ms. Monika Jain, Director - Human Resources
11	Mr. Ravindra Yatagiri, Vice President-HBO, Online Learning
12	Mr. Manish Madaan, Deputy Director, Career Services
13	Dr. Veena Dutta, Registrar
14	Dr. Amitabh Bhattacharya - Controller of Examination
15	Dr. Ranjan Sinha Thakur - Chief Librarian
16	Dr. Ajay Kumar, Professor, Mechanical Engineering
17	Dr. Sanjeev Kumar, Professor & Associate Dean - Applied Sciences - School of Engineering
18	Dr. Vijay Parthasarthy, Associate Professor, Chemical Engineering
19	Dr. Ashish Karn, Assistant Professor-SG, School of Engineering
20	Dr. Kiran Kumar Ravulakollu, Associate Professor, School of Computer Science & Engineering
21	Dr. Deepshikha Bhargava, Professor, School of Computer Science & Engineering
22	Dr. Rajeev Tiwari, Assistant Professor-Sr. Scale, School of Engineering
23	Dr. S K Pokhriyal, Professor, School of Business
24	Dr. Sheetal Khanka, Associate Professor, School of Business
	Dr. Vijay Kumar Singh, Professor, School of Law

25	Mr. Manas Ranjan Mishra, Assistant Design Fellow, School of Design
26	Uday Kunwar, B.Tech (CSE) – O&GI, Existing Student
27	Sharad Walia, B.Tech - Mechanical, Existing Student
28	Krishnakant Gupta, B.Des (PD), Existing Student
29	Apalka Bareja, BBA.LLB (Hons), Existing Student
30	Mr. Rasik Bhatia, MBA (LSCM), Alumnus
31	Dr. V J Byra Reddy, Director – IQAC
32	Dr. A. P. Semwal, Deputy Registrar, Convenor

Special Invitees:

| 1 | Dr. Pankaj Kumar Sharma, Head – Planning and Monitoring, SOE |

Leave of absence was granted to the following members:

1	Dr. Tabrez Ahmad, Dean, School of Law
2	Shubhangi Saxena, MBA (AVM), Existing Student
3	Mr. Aviral Rawat, B.Tech - Mechatronics, Alumnus
4	Mr. Abhishek Bagaria, M.Des (ID), Alumnus
5	Ms. Meenakshi Agnihotri, B.Tech (CSE) - O&GI, Alumnus
6	Dr. Anshu Nanoti, Chief Scientist, Head, Separation Processes Division & Conversion and Catalysis Division, Indian Institute of Petroleum, Dehradun
7	Ms. Monica Rani, LLM Energy Laws, Alumnus
8	Mr. Vinod Kumar Taneja, Sr. Technical Director & Scientist F, National Informatics Centre, Dehradun
9	Mr. Adarsh Srivastava, Location Head (R&D) (Auto Divison) Mahindra Rise, Haridwar
10	Dr. Ashutosh Mishra, Sr. Scientific Officer, Uttarakhand State Council for Science and Technology, Vigyan Dham, Vigyan Sadan Block, Dehradun
11	Dr. Manoj Kumar Sharma, OSD, Delhi Technological University, (East Delhi Campus) New Delhi

At the outset Dr. Deependra Kumar Jha, Vice Chancellor & Chairman IQAC welcomed the IQAC Members. Thereafter, ascertaining the quorum, Director IQAC briefed about the agenda items and were taken up for further discussion:

Item 1.1: Road Map for NIRF 2020 and beyond - Parameter comparative wise analysis and Recommendations

- The Registrar and IQAC member Dr. Veena Dutta presented and proposed a roadmap to NIRF 2020. The observations of parameter-wise comparison of UPES data with competitor Higher

Educational Institutions' data were presented with proposed recommendations. The following five parameters were compared:

- Teaching Learning and Resources- 30% weightage
- Research and Professional Practise- 30% weightage
- Graduation Outcome- 20% weightage
- Outreach and Inclusivity- 10% weightage
- Perception- 10% weightage

- Discussions were undertaken on each parameter and actionable points recommended:

- Teaching Learning and Resources

    - Faculty Student Ratio (FSR): Improvement in FSR targeted, from 1:21 at present to 1: 18 in next two years.
        - Recruitment of faculty (25 Nos) till December 2019, Another 180 till July 2020 including International and Research faculty
        - Recruitment of International Faculty (30 Nos) : 15 by 31st December 2019 and another 15 by 31st March 2020
    - All new faculty to be hired to be PhD.
    - Faculty with higher experience to be hired
    - Faculty who have enrolled for PhD for more than 3 years present in the system (45 Nos), need to be motivated to complete their PhD program
    - Research Faculty to be recruited (25 Nos)
    - Raising of number of Full time PhD students
    - PhD program in Physics, Chemistry and Mathematics to be announced with other disciplines.

    Research and Professional Practice

    - Number of publications per faculty: Faculty members not active in research for last two years, to be motivated. On an average 1.5 publication per faculty in 2019 to 2 per faculty in 2020.
    - DRFs (25 Nos) to be recruited and to work with Research Faculty
    - UG/ PG students to be appointed as Research Assistants across all schools. To be attached to Research Faculty
    - Combined metric for Quality publication: For NIRF the data on quality of publication is derived from https://vidwan.inflibnet.ac.in. Registration of faculty on same to be made mandatory requirement. Improve cross-citation wherever possible. Deans to drive registration aggressively
    - Patents: 15 Patents to be published from now till December 2019. 100 Patents to be published in 2020.
    - Research Funding and Consultancy Projects: 1 Crore research funding targeted from now till December 2019. 100 lakhs every quarter in 2020
    - To explore the opportunity for Inter organization consultancy projects.

- Graduation Outcome:

- Improvement is needed in the Median Salary of the graduates. Median Salary (4% weightage), for 2019 is 4 Lac overall. It needs to be taken to 4.5 Lac in 2020 and 5 Lac in 2021.
- Graduating students selected for higher studies (8% weightage)- Support to students through EDGE is expected to improve selection for higher studies. Record of students selected for higher studies needs to be maintained by Alumni Office/ SRE. Stroger connect with Alumni will help in capturing the required data.
- PhD students graduation process to be accelerated. Semester Fees to be charged even after 3 years, in case where the student has not completed the submission. This is to curb laid back attitude of PhD scholars

- Outreach and Inclusivity:

  - 5% students to be International: 750 full time international students, 250 exchange students incoming and outgoing respectively
  - Gender ratio to be raised from 75:25 to 60: 40
  - Scholarship to girl student

- Perception

  - Strong presence on Social Media and You Tube.
  - Improvement in internal communication to eliminate the communication gap in UPES.
  - Improvement in university website
  - Publication of Quarterly Magazine "Expression" to all external stakeholders like Employers and Research Investors, Academic Peers etc. by mid of October 2019.
  - Seasons greeting in January with updates to be sent to all above stakeholder.

Item 1.2: Alignment to OBE: Course Files and Faculty Feedback Questionnaire

- Outcome based education system has its fulcrum around observable, measurable outcomes focusing on result oriented skill development of the students. The use of assessments, opportunities, classroom engagement and experiences to achieve goals is significant.
- The university is striving towards the implementation of OBE across all the schools. In this view, there is a strong necessity to change the formats of 'course files' and 'faculty feedback questionnaire' that are most important tools for implementing and assessing OBE.

- Dr. Pankaj Kumar Sharma, Head – Planning and Monitoring, SOE, presented on significance of Outcome-based Education in current educational system and proposed alignment of 'Course Files' and 'faculty feedback form/questionnaire' to OBE. Discussion followed on the proposed new formats and the following actionable points emerged:

- Course plan format aligning with Outcome Based Education (OBE)

The existing course file covers all the necessary components of academic delivery (eg. Course plan, mapping of POs and PSOs vs COs), assessment methodology, content delivery plan, etc) which is covering the partial part of OBE, but is not much focused towards the outcomes of particular course.

For full implementation of OBE, the following are to be included in 'Course file'

- Target of a course
- Level of achievement of course
- Macro level content delivery
- Micro level session delivery mapped with COs
- Periodic monitoring of delivery plan having a check on COs achievement
- CO-wise attainment of individual component of evaluation

The following improvisations are proposed

- Planning and action taken of target and level of achievements obtained from different assessment tools.
- Given provision to the faculty members to give their own guidelines to students for a particular course.
- Introduced a matrix, which states the planning of assessment tools for each CO of the course.
- Faculty member can easily identify the adherence to a planned session for content delivery and mapping CO & its assessment.
- Faculty members can easily plan their activities for the action points addressed against each CO of each assessment tool.
- Format for remedial classes is provided, where faculty can easily check the progress of slow learner by conducting remedial classes and extra assignments/ tests.

Faculty feedback Questionnaire aligning with OBE:

- Questionnaire should capture all ingredients of the previous 33 questions of the feedback form in a simplified yet effective format.
- Questions should be self -explanatory
- Questions to be specific, varied and relevant covering all aspects of teaching learning process.
- Rating system should be measurable and well defined
- The analysis based on these defined measurable parameters would be easy to comprehend for the receiver of the feedback clearly identifying areas where they are performing well or need to improvise. Post feedback analysis in such cases would also be easy to capture.

Item 1.3: Implementation of Coursera

- UPES has been instrumental in incorporating content from Coursera, with in its teaching and learning process. Dr. Akshay Malhotra, Associate Director, Product Development, presented the various features of Coursera and possibilities of aligning it with the course content delivery, assessment and certification process at UPES.

- Deliberations were held in following actionable points emerged:
  - Coursera Courses could be used in following ways:
    - As Open Electives for all the students to be offered exclusively via Coursera courses
    - As basket of minor/specialization courses

- As part of existing courses in course grid

Item 1.4: Internationalization focus

Keeping Internationalization as a focus, IQAC ascertained the level of internationalization in each of the schools and advised the schools to explore opportunities with higher education institutions across the globe.
- Particularly, School of Law was advised to explore the possibilities of collaboration with ULaw.
- In context of the same, the following actionable points were proposed:

  - Mapping of ULaw LLB course with UPES LLB course was proposed
  - Working out common law courses such as public law in Indian context
  - Study abroad opportunities for students
  - Offering joint LLM program with Ulaw
  - Co-delivery of LLM Program and MSc in Legal Technology
  - Co-design of new LLM program in Corporate Law with e
  - new LLM in Corporate Law with elements of Indian Law
  - Online delivery of Ulaw modules at UPES

Item 1.5: Faculty Quality Enrichment: Recruitment of International Faculty

- Ms. Monika Jain, Director-HR, presented various initiatives proposed to improve faculty quality at schools. It was suggested to focus on increasing the number of international faculty. To encourage faculty members to provide referrals for international faculty, HR proposed modified Employee Referral Policy – Thrice as Nice, with incremented referral amount.

Item 1.6 Examination Challenges & Proposed Reforms

The following points were discussed under this agenda item:

Mid Semester Examination
   i. Mid-semester examination to be conducted in a progressive and innovative way to ensure outcome based learning

ii. To be conducted at School/Department/Individual Faculty level along with scheduled classes with prior approval of Deans

iii. Planning & Monitoring Department to check the feasibility of conducting Mid Semester Examination with classes and revert to Deans within a week

iv. Respective Deans to constitute a Committee for planning and execution of Mid Sem Examination

v. Responsibility of Mid Sem Examination stands with Dean of respective School

vi. Pattern of examination will be decided by Dean/HOD/Individual Faculty Minimum 10% examination shall be conducted in innovative mode by each School

vii. Planning and Monitoring department will ensure the schedule of classes along with Mid Semester Examination
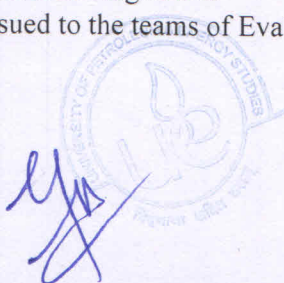
QP & Moderation

i. QP request for Dec End Sem Examination will be sent in September 1st week and submission to be closed by 30th September. Likewise QP request for May End Semester Examination to be ensured in February 1st week and submission to be closed by 28th February

ii. ii. As per UGC norms, submission of 2 sets of QPs is mandatory for End semester examination

iii. iii. External paper setters names to be provided by Dean for end semester QPs/Jury

iv. iv. The CoE shall select External Experts in consultation with Registrar/VC

v. Substantial part of Question Papers should be prepared by external faculty

vi. Provision of 'Undertaking' regarding confidentiality of QPs is to be made live in online submission process. A meeting will be scheduled by Dean to educate the faculty

vii. Deans to include External Experts in Moderation Committee

viii. Both sets of QPs need to be moderated by the Moderation Committee

Structure of Governance of Examination

i. One Centre Superintendent will be deputed for end semester examination for each campus

ii. Two or more Assistant Superintendents under Centre Superintendent will be supported by Block/ Floor Superintendents

iii. Duties and responsibilities to be defined followed by training on the subject

iv. A separate Help Desk with proctors and Academic administrators to be established to deal with students I Cards and other queries

v. Control Rooms will be out of bound for students

vi. Use of Mobile phone is restricted during the invigilation duty. Use of Laptops, book/newspaper are completely prohibited during invigilation

vii. All Faculty members must sign an undertaking before proceeding for invigilation on daily basis

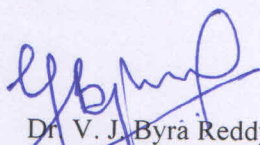viii. Planning & Monitoring Department to be involved for active participation

Centralized Evaluation

- To be planned in continuation with Examination
- A Centre Evaluation Superintendent assisted by Assistant Evaluation Superintendents-(Domain/Department wise) will be nominated
- There will be respective room coordinators for Evaluation Rooms which will have multiple Evaluators and Checkers depending on capacity of room under every Assistant Evaluation Superintendent
- Answer sheets are segregated and packed course code, course name and semester wise in packs of 30/45/60 in Answer sheets receiving rooms
- Packed bundles are to be issued to the teams of Evaluators & Checker in identified Evaluation Rooms

- Faculty checks the answer sheets - Second level support system (Checkers -Lab Staff) to check and return to faculty for uploading marks through Faculty Support System
- Mid term marks are uploaded after two weeks of Mid Term Examination and locked
- Only Internal and End Semester marks are uploaded into SAP from unique ID of faculty followed by punching of Grades
- A print of same duly signed Evaluator. Checker and Examination Committee is submitted to SRE for records
- To be planned in class rooms/Mac for Dec. 2019 end semester examination
- Faculty (including vising faculty)to sign an undertaking that Answer sheets are not to be taken outside of campus
- The evaluated answer sheet can be shown to students after uploading the end semester marks
- SRE to schedule a meeting with Assistant Director IT for implementation of Faculty Support System
- Examination Calendar will be published after the Deans approval
- Course Grid duly signed by Deans and Associate. Dean Planning & Monitoring has to be finalized and circulated not later than 15 days of starting of session
- Date Sheets are to be published before 1 month of examination schedule
- Debarred list will be extracted through SAP/received from Schools 72 hours prior of examination schedule. For exceptional cases, deviation may be submitted to SRE before 48 hours' with prior approval
- Dean will take consent of Centre Superintendent for approval of faculty leave during the examination and evaluation
- Requisition of Data Table/graphs has to be given by paper setter in advance to SRE before Moderation of QPs, where table etc. are required
- Flying Squad - To be constituted independent of Controller of Examination by Registrar and will put up daily report to Registrar
- The End semester examination must be scheduled for online course and LABs as well
- Improvement & Supplementary Examination-
- Students can appear in maximum four courses including improvement in one Exam Cycle
- Student can appear for maximum four courses in Summer school
- 40% attendance would be mandatory for attendance-debarred criteria during a semester to earn eligibility for summer school
- A warning letter to be issued for Invigilation lapse/changing of marks after result declaration
- A separate meeting will be scheduled to review Directed Reading Process
- All students applications related to examinations and related provisions to Deans, COE, Registrar, VC to be routed through Student Facilitation Centre.

There being no other item, the meeting ended with the vote of thanks to the chair.

Dr V. J. Byra Reddy
Director IQAC

Dr. Deependra Kumar Jha
Vice Chancellor & Chairman IQAC