UPES

UNIVERSITY OF PETROLEUM & ENERGY STUDIES

Internal Quality Assurance Cell

Minutes of Meeting
No. IQAC/04/JUN/2017-18
(28th June 2018, 11:00 am to 1:00 pm)
Venue: Energy House Ground Floor Board Room, UPES

Date: 29.06.2018

Members Present:

Sr. No.	Members
1	Dr. Deependra Kumar Jha - Vice Chancellor – Chairperson
2	Dr. Manish Prateek, Director, School of Computer Science & Engineering
3	Dr. R.K. Chopra, Professor representative of Dr. Tabrez Ahmad, Director, School of Law
4	Dr. Manisha Mohan, Director, School of Design
5	Dr. Deepankar Chakrabarti, Associate Dean - PG (SoB)
6	Dr. Prashant S Rawat, Associate Dean -Innovation,
7	Dr. S K Banerjee, Sr Professor & Associate Dean, Academic Planning & Monitoring
8	Dr. Jitendra Kumar Pandey, Associate Dean-Research & Development
9	Dr. Ajit Kumar Nigam, Associate Dean, Incubation
10	Mr. Ravindra Yatagiri, Vice President-HBO, Online Learning
11	Mr. Nitin K Agarwal, VP-HR representative of Ms. Monika Jain, Director – HR
12	Mr. Anubhav Sharma representative of Ms. Alka Madhan, Director, Corporate Relations and Career Services
13	Dr. Amitabh Bhattacharya - Controller of Examination
14	Ms. Deepa Verma, Registrar
15	Dr. Ranjan Sinha Thakur - Chief Librarian
16	Dr. Ajay Kumar, Sr. Associate Professor, Mechanical Engineering
17	Dr. Pankar Kumar, Sr. Associate Professor, Chemistry
18	Dr. Vijay Parthasarthy, Associate Professor, Chemical Engineering
19	Dr. Neelu Ahuja, Sr. Associate Professor, SoCSE
20	Dr. Neeraj Anand, Professor, SoB
21	Dr. Atul Razdan, Associate Dean - UG (SoB)
22	Ms. Shruti Reddy, Sr. Lecturer, rept. of Dr. Mamta Rana, Associate Professor, SoL
23	Dr. Vijay Kr. Singh, Professor, SoL rept. of Dr. Radheshyam Prasad, Associate Professor
24	Surajit Mondal, M.Tech. (Energy Systems with spl. Renewable Energy), Alumnus
25	Dr. Atul Kumar Gupta, Associate Professor & Head, Department of Chemistry, Department of Chemistry, SGRR (PG) College, Dehradun

| 26 | Dr. Kamal Bansal - Director - IQAC & Dean - Academic Development & Innovation |
| 27 | Dr. A. P. Semwal, Assistant Registrar (SG), Convener |

Special Invitee:

1	Dr. R. Gowri, Professor, SoE
2	Brig. Sukpreet Singh Dhillon, Director(Administration)
3	Mr. Sohan Bhagat, Sr. Manager (TA)

Leave of absence was granted to the following members:

Sr. No.	IQAC Members
1	Dr. Suresh Kumar, Director, School of Engineering
2	Dr. V J Byra Reddy, Associate Dean – QA&A
3	Dr. Durgansh Sharma, Associate Professor, SoCSE
4	Dr. Thipendra P. Singh, Associate Professor, SoCSE
5	Anish Singh, B.Tech – APE-UP, Existing Student
6	Pragya Sood, B.Tech - CSE, Existing Student
7	Vertika Saxena, B.Des, Existing Student
8	Arjun Das, MBA (AVM), Existing Student
9	Dipti Khatri, BALLB (Hons), Existing Student
10	Varnita Varma, M.Tech (Robotics), Alumnus
11	Sanka Rama Venkata Siva Prasanna, M.Tech.(Pipeline Engineering), Alumnus
12	Mr. Sanjay Mittal, Director (Operations), Power Transmission Corporation of Uttarakhand Limited (PITCL), Dehradun
13	Mr. Vikas Matta, Manufacturing Head - Hero Motocorp Ltd., Haridwar Plant, Haridwar
14	Dr. Nirmal Kumar Upreti, Scientist – G, Wood Seasoning Discipline, Forest Products Division, Forest Research Institute (FRI), Dehradun

At the outset, Dr. Deependra Kumar Jha, Chairman IQAC welcomed the Members. Thereafter ascertaining the quorum Dr. Kamal Bansal, Director IQAC, briefed all agenda items going to be covered in the meeting and were taken up for further discussion:

Item 4.1: **Updates on IQAC initiatives/achievements during the academic year 2017-18**

As a recap and to apprise the members of IQAC about the achievements/initiatives taken during the academic year 2017-18, criterion wise presentation were given, the details are as follows:

a): **Curriculum Aspects:**

i) **Implementing Outcome Based Education (OBE) and adoption of AICTE model curriculum for Engineering Programmes**

Dr. Vijay Parthasarthy informed the house that OBE has been implemented all across the University. In his presentation, he covered the following:

- Program Outcomes (POs) - Implemented for all Program across all schools

- Program Specific Outcomes (PSOs) - Finalized for all Program and incorporated
- Course Outcomes (COs) - Framed for all courses and incorporated in all Course Plans
- Correlation between COs, POs and PSOs - Included in all Course Plans
- Assessment of COs - All question papers will be correlated with COs

Responding to his presentation, IQAC has suggested the following actionable points:

i) Familiarization workshop(s) on practices of OBE to be done for both faculty members and students.

ii) OBE should be included in the induction program for new faculty members join UPES.

iii) Display boards to be put in place on Vision, Mission, POs and PSOs.

iv) Model question papers indicating COs to be put in Library for students information.

Dr. Vijay further apprised the house about Implementation of AICTE curriculum in SoE and SoCS. The house appreciated the same on prompt action taken by UPES in this regard.

ii)   Enhancing students learning through Online/Blended learning – Steps taken

Dr. Ajay Kumar, updated the house about the status on Online/Blended learning, he covered the following:

a) Students Enrollments in Blackboard(a learning management system).
b) Faculty members enrolled
c) Course implemented in Blackboard
d) Faculty participation in Professional Development Programs
e) Inclusion of new courses like Human Values & Ethics where delivery is through Online/Blended platform.

Following important actionable points were originated during the discussion:

a) Familiarization workshop to be conducted on Blackboard.
b) Faculty members where the usages are low to be identified and in case of any doubts to be clarified.
c) July 2018 onwards it is to be implemented and practiced by all faculty members covering all the students.
d) Scope of HBO implementation in School of Law to be explored.

b)   Teaching – Learning & Evaluation:

i)   Update on Internal audit conducted on quality of question papers and evaluation of answer-scripts

Dr. Bansal, Director IQAC informed the members that in the month of February 2018 IQAC conducted an internal audit to assess quality of question papers and quality of evaluation of answersrcipts. The key observations/concerns of audit were as follows:

a) Practicing Bloom's Taxonomy for Question Paper setting amongst faculty members
b) Practicing COs mapping in QP and allotting weightages.
c) Scope of improvement in formatting, language, marks distribution etc.

While discussing the key observations the following actionable points were suggested by IQAC:

a) Guidelines on setting of question paper and evaluating answerscripts to be framed and communicated to faculty members.
b) Tutorial on practicing Bloom's Taxonomy and QP/COs mapping to be conducted.
c) For the awareness of the faculty members workshop on Examination Regulation/changes thereof to be conducted.

ii) Reform in students' progression policy

Thereafter, for the information of house Dr. Kamal Bansal briefed about the reforms have been introduced in academic regulations w.e.f. July 2018, as listed below:

a) Progression policy
b) Passing criteria
c) Change in capping rule
d) Summer school policy
e) Award of medals policy

IQAC appreciated the above changed/reforms done in Academic Regulation.

c) Research Innovations and Extension:

i) Reforming R&D and related policies – Status as of now

Dr. Jitendra Kumar Pandey, Head – R&D made presentation on the initiatives taken in academic year 2017-18 in context to the following:

a) Synchronization – Micro level alignment of processes with minimum steps
b) Research framework and
c) Enhancing quality of research

The members suggested to list out Dos and Don'ts of research practices and to be put on R&D website.

Dr. Deependra Kumar Jha, Hon. VC informed the house that as per new SOP all the research proposals/papers going for submission/publication will be routed through R&D Department. A committee of research coordinators will be constituted to take care of this activity. The committee will check for plagiarism and other quality aspects of research proposals/papers going outside UPES. Though, the house agreed that the sole responsibility of research proposal/publication lies with author only.

It was also suggested that UPES should identify existing testing laboratories that can be opened for other institutes or individuals to carry out their research work. UPES should also explore new labs that can be installed for the said purpose.

Members suggested to review the main research areas listed in the presentation.

d) Infrastructure and Learning Resources

i) Initiatives taken during the year w.r.t. Infrastructure, IT and Library resource

Brig. S.S. Dhillon, Director Administration apprised the house about the initiatives taken during the year that are listed below:

Infrastructure: Initiatives

1. Water Saving & Conservations
   - Water Aerators installations in both of the Campuses, accruing approx. 40% of the Tap water savings.
   - Installation of water flow meters for better monitoring & control of water consumption.
   - Water Benchmarking per capita / person to plan & meet the long terms requirements.
   - UPES having "Zero Discharge Policy" under which 100% of used water is taken to the STP, treated & used for the horticulture.
   - RO modified to reduce water wastage.

2. Energy (Electricity) Saving & Conservations
   - LED retrofitting in phased manner at both Campuses for energy savings.
   - As on date 14.89 % of total lighting requirements is being met by LED only.
   - Installation of timer switches for street lights.
   - Power Factor is being maintained near Unity (0.99 – 1.0) for removing losses
   - Running of one transformers on low loads during winters so as to remove NO low load losses
   - As a UPES Policy only 3 Star & above rated equipment to be procured
   - IR Sensors installation in few wash rooms for the energy savings
   - Maintained the EnPI (Energy Performance Index) for UPES below 50

3. Environment
   - Construction of 6 Rain Water Harvesting Pits for ground water recharge.
   - Installation of Piezometer dedicated to UPES to monitor the Ground water level in the area.
   - Installation of water filtration plant at water tank No 2.
   - Installation of water meters on water extraction & supply for close monitoring.
   - Monitoring & control of the Sound Level (Procured dB level meter for In – House monitoring)
   - Reduction of plastic use within the campus.

4. In House testing through accredited NABL certified Lab
   - Drinking Water
   - STP water
   - Bore well water quality testing is done 'In house' by NABL certified Lab

5. F & B (Health Food)
   - Monitoring of calorific value of food served in hostel messes & food courts.
   - Reduction of use of oil & salt in phased manner.
   - Increase of health food menu like sprouts, full wheat flour pizzas, fruit salad etc.

Information Technology: Initiatives

1. Mobile Application for Prospects launched.
   - This application addresses the need of the enrollments team, and provides a comprehensive information about the university. The prospective applicants have the facility of filling up their application forms on the mobile app. Payment gateway integration on the app allows for the Application form payment.
   - Mobile Application for Students to be launched in July.
   - This application takes care of the students need within the campus and will have the profile of the student, the academic performance details, Time Table and attendance etc.,
2. Network and Security Initiatives
   - Cisco security suite deployed for end points and peripheral security.
   - Cisco Amp has been deployed on all clients. This is a cloud based end point protection solution by Cisco. Cisco Umbrella has been deployed for DNS filtering and provides for the peripheral security. This is also a cloud based solution from Cisco.
   - Cisco vulnerability assessment tool deployed for Servers.
   - Nessus has been deployed for the vulnerability assessment of the servers. This is also a Cisco tool to monitor the security vulnerability of the servers ensuring proactive security against threats.
   - Cisco Email Security deployed : This is a Security solution deployed on out email server.

Library: Initiatives

- RFID Enabled security system with Self-check KIOSK for issue /return / reservation of books at Bidholi Library & Law Library.
- Digital Library facility
- Seating capacity in library increased from 400 to 896.
- Separate discussion room for students & Reading Room for Faculty and Research Scholars at Bidholi.
- Migrated from LibSys ILMS to robust Open source ILMS KOHA.
- 24x 7 hours access to the library WebOPAC, renewal facility of books, access to Remote access to E-Resources, Automated alert mail for returning books, reservation etc.
- Extended Library Hours & facilities – Bidholi Library & Law Library
- Digitization of Thesis and Dissertations & Document Scanning service for Library users
- Uploading of awarded thesis in Shodh Ganga INFLIBNET Repository since November 2017
- Implemented Open Journal System (OJS).
- EBSCO Discovery Service for single window Federated Search facility
- Document Delivery and Inter Library Loan Service through DELNET membership.
- CCTV surveillance system installed at all library.
- Borrowing facility for faculty members has been increased from 30 days to 6 months
- Borrowing facility for PG students has been increased from 4 books for 14 days to 5 books for 20 days with two time renewal facility since January 2018
- All enrolled research scholars are getting access to all e-resources from outside the campus.
- No of E-Database has been increased to 42
- No of E-Books has been increased to 61624 titles (Perpetual and subscribed model)
- No of E-Journals has been increased to 23303

- To enhance awareness among the students, faculty members and researchers on the latest books available, every year library organizes Annual Book Exhibition program at the campus
- Since 2014, Organised Three National Level Workshop for the Library Professionals including one 5 days workshop in June 2017 in collaboration with Ministry of Culture, Govt of India.
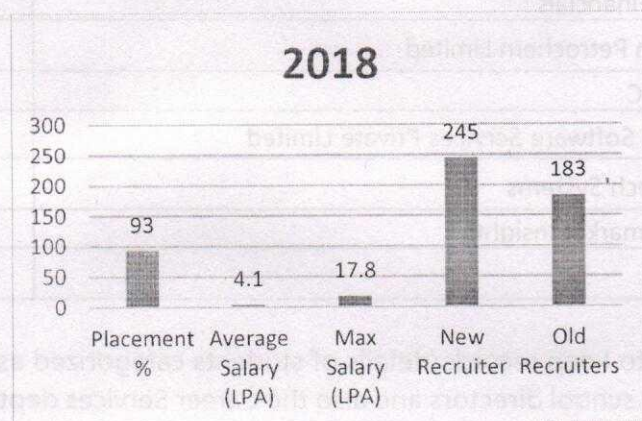
The following actionable points suggested by IQAC:

a) Photo sensors may be put with street lights for auto on-off sensing dawn and dusk. To look into it, a committee including members from SoCS and Department of Electrical and Electronics to be constituted. Students can be involved in this project.

b) Dr. Atul Kumar Gupta, an external member suggested UPES to go for Green Campus. He also informed the house that some of corporate houses like Tata and others are also giving support in developing the Green Campus.

c) Dr. Prashant Rawat informed the house about an App available to manage students information system. Dr. Prashant will coordinate with IT to take it further, if feasible.

d) For the information of faculty members, Library to publish Library Usages data at regular intervals.

e) **Student Support & Progression**

i) **Highlights on Students' placements**

The following highlights were presented to IQAC by Mr. Anubhav Sharma, Assistant Director (Career Services): The snapshots are shown below:

	SOE	SOCS	SOD	SOB	SOL
Eligible	809	492	33	474	108
Placed	706	489	33	454	103
Percentage	87	99.00	100.00	96.00	95.00

Main/Bulk recruiters 2018

Bulk Recruiters (Contributes 39% of the total placement)	# of students Hired
LTI	245
Capital Via	47
IBM	39
KPIT	29
Reliance Industries Limited	26
Infosys	23
Moglix	23
Shell India	22
Mindcrest	20
Balajee Infratech	19
HCL Technologies	19
Interra IT	19
L&T Tech Services	18
CGI Information Systems & Management	17
Geojit Financials	16
Nandan Petrochem Limited	16
L&T ECC	15
Singsys Software Services Private Limited	15
Cybertech Systems	14
Global market Insights	14
Total	656

IQAC suggested to keep records/details of students categorized as ineligible for placement. The is to be discussed among school directors and also the Career Services dept., Alumni Dept., & SRE will sit together and find the mechanism to track the actual status of these said ineligible students.

f) Governance, Leadership and Management

i) **Faculty & Staff recruitments – new initiatives taken**
ii) **Update on reforms of various HR policies**

Mr. Nitin Agarwal, VP-HR made presentation on the initiatives taken in academic year 2017-18, the same is follows:

- Internal Recruitment

  - First time ever internal job postings done to invite applications for open positions at Associate Professor or Professor level.

-   Structured Panel interviews involving SMEs, Directors under the leadership of Vice Chancellor followed similar to external recruitment.

    -   16 such movements took place

-   Digital Recruitment

    -   Continued focus on digital recruitment using LinkedIn, Naukri and Facebook.

Further, he apprised the house about the following key updates on HR policies:

-   Policy harmonization & benchmarking best practices

    -   External Consultant has submitted their recommendations to the steering committee. Final drafting is in process for obtaining necessary approvals.

-   Customized Talent Development initiates are in progress :

    -   Pragati (Intervention for High Potential Leaders) – 2 modules concluded; module 3 has been planned in July 2018; coaching and Action Learning Projects getting firmed up

    -   Unnati (Intervention for Leadership team) – Module 2 completed in June 2018.

    -   Shikhar (Intervention for mid level Hipos - journey from being a manager to being a leader) – Nominations received

    -   Urja (Need based training programs) - WIP

    -   Setu (A program focused towards women empowerment and development)- WIP

-   Employee Engagement Plan – to kick off

The house appreciated the above initiatives taken by HR department.

Item 4.2: Chalking out plan of action for next academic year 2018-19

The proposed action plan for academic year 2018-19 was presented in IQAC. Dr. Bansal, Director IQAC initiated the discussion on each proposed item and sought consent of IQAC to take it further for next year. The chalked out criterion wise action item are as follows:

1. Curricular Aspects:

    i)   Review existing feedback mechanism from various stakeholders and its relevance for curriculum enrichment.
    ii) To implement OBE across all programmes of University.

2. Teaching Learning & Evaluation
    i)   Technological intervention to enhance student learning i.e. simulation, animation, VR/AR
    ii) Reviewing students' experience on blended/online learning and strengthening it further.
    iii) Identifying and implementing Innovative ways of Internal Assessment/Mid semester exams to analyze critical thinking.
    iv) To identify special skills to be imparted among UPES students.

3. Research, Innovations an Extension

i)   To look at the possibilities of getting Govt. funding for Innovation center like Atal Innovation Mission.

ii)   To review the process of project proposal & research paper submission.

iii)   To identify the focus areas and strategic plan for enhancing consultancy and outreach efforts.

iv)   To look at the possibilities and efficacy of focused extension activities in line with priorities of state government.

v)   To look at the possibilities of displaying some of students' work being used at different physical location in campus (Solar Tree, Solar Powered Mobile & Laptop charger stations and Battery operated bicycles and sitting benches etc.).

4. Infrastructure and Learning Resources

i)   Review and upgrade existing technology support for student life cycle management i.e. time tabling, attendance, online registration, fee payment, communication, exam, evaluation.

ii)   Review and upgrade existing IT infrastructure

iii)   Review the utilization of e-books, journals, magazines etc. and plan for next year requirements

5. Student Support and Progression

i)   To review feasibility & relevance of coaching i.e. providing professional support to students for CAT/GRE/GATE coaching.

ii)   To plan out yearly working schedule for enhancing alumni engagement.

iii)   Explore the relevance of school/batch specific alumni engagement plan.

6. Governance, Leadership and Management

i)   To workout leadership development plan at different levels.

ii)   To identify faculty development program and reviewing existing faculty development plan like CAFÉ

iii)   To review various academic and administrative systems and processes to enhance autonomy at appropriate level.

The IQAC appreciated and approved the above action plan for next academic year 2018-19. Also, while discussing the next year plan of action, the following actionable points emerged:

a) On Mid term/Interanal assessment – Directors of respective schools to chalk out the means and ways to strengthen Mid term/Internal assessment. It is suggested that SOP and rubrics for assessment to be published/communicated to faculty and students, at the earliest.

b) HR round table/Domain specific meets to be reviewed. School Directors need to participate in reviewing the same.

c) It was discussed and agreed that technology integration is an integral part of enhanced teaching learning process. Virtual and Augmented reality is one of the upcoming technological intervention which can be used for the same. In order to explore the possibilities of implementing the same and thereof submission of a plan/proposal is expected, a task force to be constituted under the Chairmanship of Dr. Manish Prateek who will submit the proposal in due course of time.

d) At least one virtual lab should get started by the end of coming semester and more in subsequent semesters.

e) UPES to work towards installing 3D printing lab.
f) Flags of Countries from where the students have joined UPES (directly or through exchange programs) may be placed/displayed at appropriate place inside the UPES campus.
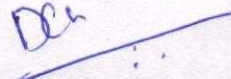
Item 4.3:   Thanking note to existing IQAC members

As it was 4th and last IQAC meeting of academic year 2017-18, Dr. Deependra Kumar Jha, Hon. Vice Chancellor and Chairman IQAC thanked all existing members of IQAC for their contribution made through their healthy participation in discussions and valuable suggestions in enhancing quality of education & research in UPES,.

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

Dr. Kamal Bansal
Dean (AD&I) & Director IQAC

Dr. Deependra Kumar Jha
Vice Chancellor & Chairman IQAC