



ACADEMIC COUNCIL MEETING

NO.	AC/026/NOVEMBER/2016	VENUE:	RAUNAQ HALL (FIRST FLOOR) PHD HOUSE 4/2 SIRI INSTITUTIONAL AREA AUGUST KRANTI MARG, NEW DELHI 110 016
DATE:	SATURDAY, 19 NOVEMBER 2016	TIME:	11.00 A.M.

EXTRACT OF MINUTES

[Extract from Approved Minute of Academic Council Meeting held on November 19, 2016]

Item 26.4: **CONSIDER AND APPROVE INTRODUCTION OF PROPOSED NEW PROGRAMMES TO BE OFFERED FROM THE ACADEMIC SESSION 2017**

For College of Engineering Studies, a detailed presentation on the Semester-wise course content for the following proposed new academic programmes were made by Associate Dean Dr. Suresh Kumar for M.Tech Programs; Associate Dean (CIT) Dr. Manish Prateek for B.Tech CSE Programs and for Design programs, Director, SoDS Dr. S. Ghoshal

New Programs

1. M.Tech (Thermal Engineering)
2. M.Tech (Machine Design)
3. B.Tech (Computer Science & Engineering) with specialization in DevOps in collaboration with Xebia
4. B.Tech (Computer Science & Engineering) with specialization in Data Sciences in collaboration with Xebia
5. M.Tech Thermal Engineering
6. M.Tech Design Engineering
7. M.Des (Interaction Design)

After deliberation, the Council approved the semester wise course content of the above mentioned new programmes effective Academic Session 2017 with following suggestions:

- M.Tech Thermal Engineering – a course on cryogenic engine, Material Science to be included in order to provide exposure to students.
- M.Tech Machine Design – CAD Course should be introduced in Semester I followed by rigorous training on CAD to students, which is essential and will be helpful for their industry acceptance.

College of Legal Studies – A brief presentation was made by Director Dr. Tabrez Ahmad on the following new programs:

- BSc., LL.B(Hons) with specialization in IPR/Environment Law/Agriculture Law/ Pharma/Health Law/Forensic Law

After deliberation, the Council approved this new programme effective Academic Session 2017 with following suggestions:

- Introduction of courses in the areas of Project/Contract management, E-commerce, M-Commerce and Defense Management from legal point of view.
- Introduce programme/course in Commercialization of IPR.
- “Environmental Law” to be given due importance as it deserves as it is a thrust area and need of today’s world.





ACADEMIC COUNCIL MEETING

NO.	AC/027/MAY/2017	VENUE:	RAUNAQ HALL (FIRST FLOOR) PHD HOUSE 4/2 SIRI INSTITUTIONAL AREA AUGUST KRANTI MARG, NEW DELHI 110 016
DATE:	SATURDAY, 20 MAY 2017	TIME:	11.00 A.M.

EXTRACT OF MINUTES

[Extract from Approved Minute of Academic Council Meeting held on May 20, 2017]

Item 27.3: CONSIDER AND APPROVE RECOMMENDATIONS OF THE BOARD OF STUDIES OF THE CONSTITUENT COLLEGES WITH RESPECT TO CHANGES IN COURSE SYLLABI BEING PROPOSED FOR EXISTING AND NEW PROGRAMMES AND NPTEL CERTIFICATION COURSES AS VALUE ADDED COURSES WITH EFFECTIVE FROM **ACADEMIC SESSION 2017**

Vice Chancellor informed the Academic Council that UPES is a registered member of NPTEL. Through NPTEL, students will be encouraged to register for value added courses which are online leading to certification.

For College of Engineering Studies, a detailed presentation on the Semester-wise course content for the following proposed new academic programmes and existing programs were made by Director (CIT) Dr. Manish Prateek for B.Tech CSE Programs; Director, School of Engineering, Dr. Suresh Kumar for M.Tech Programs; and for Design programs, Director, SoDS Dr. S. Ghoshal

New Program

1. Bachelor of Computer Application (BCA)
2. B.Tech (Computer Science & Engineering with specialization in DevOps) in academic collaboration with Xebia
3. B.Tech (Computer Science & Engineering with specialization in Big Data) in academic collaboration with Xebia
4. M.Tech (Thermal Engineering)
5. M.Tech (Machine Design)
6. M.Des (Interaction Design)

Existing Program

1. B.Tech (Chemical Engineering with Specialization in Refining & Petrochemicals)
2. B.Tech (Applied Petroleum Engineering with Specialization in Gas Stream)
3. B.Tech (Mechatronics Engineering)
4. B.Tech (Mechanical Engineering)
5. B.Tech (Fire & Safety Engineering)
6. M.Tech (Renewable Energy Engineering)
7. M.Tech (Structural Engineering)
8. M.Tech (Computation Fluid Dynamics)
9. M.Tech (Aerospace Engineering with specialization in UAV)
10. M.Tech (Computer Science & Engineering)
11. M.Tech (Petroleum Engineering)
12. M.Tech (Automation & Robotics Engineering)



13. M.Tech (Pipeline Engineering)
14. M.Tech (Chemical Engineering with specialization in Process Design Engineering)
15. B. Tech Computer Science & Engineering (Informatics) with a provision to offer specialization in either Telecom Informatics, Manufacturing Informatics, Healthcare Informatics in third year
16. B.Tech (Computer Science & Engineering with Specialization in Cyber Security and Forensics)
17. B.Tech (Computer Science & Engineering with Specialization in Graphics & Gaming)
18. B.Tech (Computer Science & Engineering with Specialization in Healthcare Informatics)
19. B.Tech (Computer Science & Engineering with Specialization in Manufacturing Informatics)
20. B.Tech (Computer Science & Engineering with Specialization in IoT & Smart Cities)
21. B.Tech (Computer Science & Engineering with Specialization in Mobile Computing)
22. B.Tech (Computer Science & Engineering with Specialization in Cloud Computing & Virtualization Technology)
23. B.Tech (Computer Science & Engineering with Specialization in IT infrastructure)
24. B.Tech (Computer Science & Engineering with Specialization in Mainframe Technology)
25. B.Tech (Computer Science & Engineering with Specialization in Business Analytics & Optimization)
26. B.Tech (Computer Science & Engineering with Specialization in Banking, Finance Services & Insurance)
27. B.Tech (Computer Science & Engineering with Specialization in E-Commerce, Retail & Automation)
28. B.Tech (Computer Science & Engineering with Specialization in Open source & Standards)

Re-Nomenclated Program Effective Session 2017

1. B. Des. (Digital Design) instead of BFA (Digital Arts)
2. B.Tech (Electronics & Communication Engineering) instead of B.Tech (Electronics Engineering).

After deliberation, the Council approved the semester wise course content of the above mentioned new, existing and re-nomenclated programmes effective Academic Session 2017 with following suggestions:

- Introduction of E-Waste Management as individual course
- General Course on History of Management to be included in the basket of Open Electives
- Electrical Mobility to be included in the basket of Open Electives at M.Tech Level
- Technological & Ideation Combination projects for Post Graduate Students of M.Tech/M.Des level; wherein students of engineering discipline and design are awarded a joint project.

The Council further taking note of the approval granted for the Intake, Eligibility and Admission Criteria for the Academic Session 2017, suggested that taking into consideration for the demand in newer technologies, approved increase in intake capacity for the **two programs** offered in **academic collaboration with Xebia** from **30 seats each** to **60 seats each**.

The council appreciated the initiative of participative learning through NPTEL certification course as per the guidelines by UGC. After due deliberations the council approved NPTEL certification courses (listed in **Appendix -1**) and students' enrollments in those courses and advised to encourage the faculty members as mentors for the enrolled students. The council also advised to consider these NPTEL courses as a part of value-added courses and advised for the award of extra credits.

For College of Management & Economics Studies, a detailed presentation on the Semester-wise course content for the following proposed new academic programmes and existing programs was made by Director, Dr. Dayanand Pandey



New Programs

1. BBA (Accounting & Information Systems)
2. BA (Hons.) (Economics) with Specialization in Energy Economics

Existing Programs

1. BBA (Digital Marketing)
2. BBA (Media Management)
3. BBA (Financial Analysis & Services)
4. BBA (Human Resource/Finance/Marketing/Operations Management)
5. BBA (E-Business)
6. MBA (Oil & Gas)
7. MBA (Energy Trading)
8. MBA (Aviation Management)
9. MBA (Logistics & Supply Chain Management)
10. MBA (Power Management)
11. MBA (Urban Infrastructure and Smart Cities)
12. MBA (International Business)
13. MA (Economics) with specialization in Energy Economics
14. MBA (Port & Shipping Management)
15. MBA (Business Analytics)
16. MBA (Human Resource/Finance/Marketing/Operations Management)
17. Ph.D (Economics & IB)
18. Ph.D (General Management)
19. Ph.D (Transportation Management)
20. Ph.D (Energy Management)

After deliberation, the Council approved the semester wise course content of the above mentioned new and existing programmes effective Academic Session 2017 with following suggestions:

- Innovative Project should be formulated with specific reference to Urban Infrastructure & Smart Cities Students
- On one of the changes proposed in LSCM i.e. change from "Demand Planning and Procurement Management" to "Demand Planning & Forecasting", it was suggested not to remove procurement Management from the curriculum.
- While discussing revisions made in the curriculum of MBA PM, the Council wanted to know the relevance and details of course "Power Pricing, PPA & International Contract Management". Similarly, in MBA IB programme, it was suggested to rename the nomenclature of course "Economics of Management Decisions".

College of Legal Studies – A brief presentation was made by Director Dr. Tabrez Ahmad on the existing programs:

1. B.Com., LL.B. (Hons) with Specialization in Taxation Law
2. BBA, LL.B. (Hons) with Specialization in Corporate Law/Banking, Insurance and Finance/ International Trade and Investment Law
3. BA, LLB (Hons) with Specialization in Energy Laws/Criminal Law/Labor Law/Constitution Law
4. B.Tech (Computer Science & Engineering), LLB (Hons) with Specialization in Cyber Law/IPR
5. LLM (Energy Law/Business Law/International Economic Law/Law & Technology)

After deliberation, the Council approved the semester wise course content of the above mentioned programmes effective Academic Session 2017 with following suggestions:

- Legal aspects to be looked into the Course content on Contract Management



- ✚ Mandatory Project to be introduced for Contract Management which is multidimensional on Tech/Legal/Management aspects
- ✚ In order to make the B.Com, LLB Honors with emphasis on Taxation Law more relevant and market oriented, the council suggested for the Introduction of GST, the content of which may be presented in the next Academic Council Meeting for changes retrospectively

Based on the presentations made by the respective College Heads, the Council approved the addition/deletion/shifting of courses for load balancing and introduction of new programs.

The Council while approving the above, suggested that the University may propose a policy for credit transfer of online certification courses undertaken by the students through NPTEL and noted that while College of Engineering students have started enrolling for these courses efforts should be made by College of Management & Economic Studies and College of Legal Studies to introduce these courses.

Further the Council while appreciating the University's Robust FRC process suggested recruiting Faculty to deliver high end topics. Due weightage be given to Professionals with industry experience.



College of Engineering Studies

NPTEL Certification Courses

Introduction to Airplane Performance	Basic electrical circuits
Aircraft Maintenance	Basics of Fluorescence Spectroscopy
Bioenergy	Biology for engineers and other non-biologists
Energy Efficiency, Acoustics and Daylighting in Building	Sustainable Engineering Concepts and Life Cycle Analysis
Electronics Waste Management - Issues and Challenges	Estimation for Wireless Communications: MIMO-OFDM Cellular and Sensor Networks
Digital Image Processing of Remote Sensing Data	Introduction to Modern Application Development
Digital Elevation Models and Applications	Design and analysis of algorithms
Introduction to Mineral Processing	Design for internet of things
Waste to Energy Conversion	Developing Soft Skills and Personality
Multiphase Flows	Biomedical nanotechnology
Social Networks	Corporate social responsibility
Decision modeling	Fluid dynamics and turbomachines
Cryptography and Network Security	Foundation of computational fluid dynamics
Wireless Ad Hoc and Sensor Networks	Fundamentals of Database Systems
Problem Solving Through Programming in C	Theory of Computation
Real Time Operating System	Geotechnical engineering laboratory
Data Mining	Health research fundamentals
Gender justice and workplace security	Introduction To Cryptology
Information Security - IV	Introduction to Data Analytics
Data Science for Engineers	Introduction to evolutionary dynamics
Power System Engineering	Introduction to Machine Learning
MATLAB Programming for Numerical Computation	Trace and ultra-trace analysis of metals using atomic absorption spectrometry
How the Brain Creates Mind	Introduction to operating systems
Introduction to Composites	Introduction to Programming in C
Advanced Fluid Mechanics	Introduction to Psychology
Modelling and Simulation of Dynamic Systems	Advances in UHV Transmission and Distribution
Heat Treatment and Surface Hardening -I	Introduction to research
Risk and Reliability of Offshore Structures	Laws of thermodynamics
Introduction to R Software	Literature for competitive exams
An Introduction to Information Theory	Manufacturing of Composites
Analog circuits	Marketing research and analysis
Numerical methods	Microwave integrated circuits
Outcome based pedagogic principles for effective teaching	Modelling and simulation of discrete event system
Optimal control	Nonlinear programming



Object oriented analysis and design	Refrigeration And Air-conditioner
Phase equilibrium thermodynamics	Reinforced Concrete Road Bridges
Photonic integrated circuits	Technical english for engineers
Principles of Communication Systems: Part - II	Introduction to Modern Application Development
Programming in C++	Unit operations of particulate matter
Programming, data structures and algorithms using python	Programming, Data Structure and Algorithms Using Python
Project planning and control	

Professional Software Training (PST)

Hands on Experience on MATLAB	MATLAB and Simulink for engineers
Hands on Experience on Origin 9.0	PLC Training
.Net Programming	Simsci Pipe Phase Simulation Software
Mobile App Development using Android	DNV - PHAST and ALOHA Software
Java Programming	Hands on Experience on FDS and FLUENT
Python Programming	CFD - Ansys Meshing and Fluent
Linux Operating System	Hands on Experience on COMSOL
R Programming	Hands on Experience on CMG Software
PHP & MYSQL	Hands on Experience on SOLID WORKS
C/ C++ Programming	Hands on Experience on ADAMS
DBMS & ADBMS (Oracle)	Hands on Experience on CATIA
Hands on Experience on Xilinx ISE Software (VHDL Design)	Hands on Experience on Networking, Packet Tracer, NS2
Hands on Experience on ANSYS HFSS	Hands on Experience on PROSIM
Real time sensory data acquisition and broadcasting with IoT (Internet of Things)	Artificial Intelligence in Electrical and Electronics Engineering (AIEEE)
Raspberry pi for Sensors, Actuators and Computing	Hands on Experience on Blender and OpenGL
Statistics for Engineers	

College of Management Studies

Indian Politics	Modern History
World Geography	World History
Indian Geography	Indian Economy
Ancient History	Science and Technology
Medieval History	French
Environment and Sustainable Development	Realities of War and Securing Peace (rio+24)
International Affairs and Relations	

