

JK Lakshmipat University, Jaipur
Institute of Engineering & Technology
Minutes of sixth meeting of the Board of Studies
August 11, 2017

The Sixth Board of Studies meeting of institute of Engineering & Technology (IET) of JK Lakshmipat University (JKLU) was held on August 11, 2017 at 10:00 AM in IET- Amphitheater of the University. Prof. (Dr.) Anupam Kumar Singh, Director IET as chairman of BOS extended a warm welcome to all the members of the Board of Studies (BOS). While highlighting the objectives, Prof. Singh said that the major objectives of the meeting are to revise the course structure and syllabus and to evaluate the quality and contents of question papers and course files. The purpose behind these activities is to enhance knowledge and skills and thus acquire desired learning outcomes.

The following members were present in the meeting:

1. Prof. Dr. Ing. Anupam Kumar Singh, Chairman BOS
2. Dr. S.C. Bhaduri, Professor, JKLU Jaipur.
3. Dr. Pushpendra Singh, Associate Professor, JKLU Jaipur.
4. Dr Sonal Jain, Associate Professor, JKLU Jaipur.
5. Dr. S.S. Sengar, Associate Professor, JKLU Jaipur.
6. Dr. Murari Lal Gupta, Associate Professor, JKLU Jaipur.
7. Dr Sandeep Kumar Tomar, Associate Professor, JKLU Jaipur.
8. Dr Umesh Gupta, Associate Professor, JKLU Jaipur.
9. Dr Vipin Kumar Jain, Associate Professor, JKLU Jaipur.
10. Dr. Kavita Choudhary, Associate Professor, JKLU Jaipur.
11. Dr. S. Taruna, Associate Professor, JKLU Jaipur.
12. Dr. Dambarudhar Seth, Associate Professor, JKLU Jaipur.
13. Dr. Devika Kataria, Associate Professor, JKLU Jaipur.
14. Dr. Kedar Sharma, Associate Professor, JKLU Jaipur.
15. Dr Neha Sharma, Assistant Professor, JKLU Jaipur.
16. Dr. Alok Kumar, Assistant Professor, JKLU Jaipur.
17. Dr. Jitendra Kumar Singh, Assistant Professor, JKLU Jaipur.
18. Dr. Navneet Kumar, Assistant Professor, JKLU Jaipur.
19. Dr. Priyaranjan Sharma, Assistant Professor, JKLU Jaipur.
20. Dr. Sudhansu Ranjan Das, Assistant Professor, JKLU Jaipur.
21. Dr. Srinivasan V., Assistant Professor, JKLU Jaipur.
22. Dr. Ashish Tripathy, Assistant Professor, JKLU Jaipur.
23. Prof. Ram Kumar Agrawal, Assistant Professor, JKLU Jaipur.
24. Prof. Jagdish Prasad Sharma, Assistant Professor, JKLU Jaipur.
25. Prof. Hanuman Prasad Agrawal, Assistant Professor, JKLU.
26. Prof. Devendra Bhavasar, Assistant Professor, JKLU Jaipur.
27. Prof. Shrinivas Rathod , Assistant Professor, JKLU Jaipur.

28. Prof. Divanshu Jain, Assistant Professor, JKLJ Jaipur.
29. Dr Sahanawaz Khan, Assistant Professor, JKLJ Jaipur.
30. Dr Richa Sharma, Assistant Professor, JKLJ Jaipur.
31. Dr Jaya Gupta, Assistant Professor, JKLJ Jaipur.
32. Dr. Poonam Vyas, Assistant Professor, JKLJ Jaipur.
33. Prof. Yogesh Rohilla, Assistant Professor, JKLJ Jaipur.
34. Prof Vinod Kumar Vishwakarma, Assistant Professor, JKLJ Jaipur.
35. Prof. Amit Kumar, Assistant Professor, JKLJ Jaipur.

External Experts

36. Dr. V. K. Choubey, Professor, Department of Electronics & Communication Engineering, BITS Pilani
37. Dr. Ashu Jain, Professor, IIT-Kanpur.
38. Dr. S.L. Soni, Professor, MNIT Jaipur.
39. Prof. Dr. A. K. Vyas, Professor, Department of Civil Engineering, MNIT Jaipur
40. Dr. Pramod Kumar Singh, Associate Professor, Department of Computer Science & Engineering, IITM Gwalior.
41. Dr. K. C. Jain, Professor and Head, Department of Mathematics, University of Rajasthan.
42. Dr. Nupur Tandon, Associate Professor, Department of Humanities, MNIT Jaipur.

The following external members requested leave of absence:

43. Dr R Mukhopadhyay, Director R&D CEO, HASETRI, Kankroli.
44. Prof. Dr. Ravindra Gudi, Professor, Department of Chemical Engineering, IIT Bombay, Mumbai.
45. Mr Khalid Kamal Hussain, Principal-Education & Research, Infosys Limited Jaipur.
46. Prof. Manoj Fauzdar, Professor, Department of Electrical Engineering, MNIT, Jaipur.
47. Mr. Satendra Singh, Head-strategy and manufacturing, Nokia Solutions & Network, Gurgaon
48. Dr. Sanjay Vashishtha, Managing Director, First Green Consulting Pvt. Ltd., Gurgaon
49. Mr. Krishna Yadav, Devi Construction, Jaipur
50. Mr. Kunwer Sachdev, Managing Director, Su-Kam Power Systems Ltd., Gurgaon
51. Dr. B.K. Sharma, Retd. Professor - Physics, University of Rajasthan.
52. Mr. Igor Palka, CEO, MMI Mumbai.
53. Dr. Y.C. Joshi, Assistant Professor - Chemistry

The Chairman BOS-IET and Director-IET briefed all the members about the proceedings of the meeting:

1. The program structure and course syllabus for batch 2018-2022 for B.Tech programs of various disciplines of engineering [Chemical Engineering (CHE), Civil Engineering (CE), Computer Science & Engineering (CSE), Electrical Engineering (EE), Mechanical Engineering (ME), Electronics & Communication Engineering (ECE), B. Tech CSE with specialization in [Big Data Analytics, Cloud Computing, Information Security and Mobile

Computing] and B. Tech (CSE and ECE) with specialization in (Enterprise IT in association with Red Hat) have been discussed.

2. The program structure and course syllabi for batch 2018-2020 for M. Tech programs of engineering in [Computer Science & Engineering (CSE), Power System, Thermal Engineering, Digital Communication Engineering and Health, Safety and Environmental Engineering] have been discussed.

After a joint session on agenda of the BOS, all members have proceeded for discussion on their respective course curricula. Initially representative of each Department of Engineering presented the Program Structure of concerned discipline. It was suggested to finish review before Academic Council meeting scheduled on 19 August 2017 (Saturday). Final observations, recommendations and suggestions for various programs from respective committees are listed below:

Programme: B. Tech in Chemical Engineering

Expert members present in the meeting:

1. Dr. Neha Sharma, Assistant Professor and Head, Department of Chemical Engineering, JKLU Jaipur
2. Dr. Jitendra Kumar Singh, Assistant Professor, Department of Chemical Engineering, JKLU Jaipur
3. Dr R Mukhopadhyay, Director R&D CEO, HASETRI, Kankroli sought leave of absence.
4. Prof. Dr. Ravindra Gudi, Professor, Department of Chemical Engineering, IIT Bombay, Mumbai sought of leave of absence.

The members approved the syllabus and content of the B. Tech program in chemical engineering. The following suggestions were made by members:

1. In semester V, courses Applied Thermodynamics (ME509), Strength of materials (ME306) and Geotechnical Engineering (CE508) should be removed from open electives-1. In places of these courses one new course Production and Operations Management (MBA205) should be added.
2. In semester VI, courses Production and Operations Management (MBA205), Refrigeration and Air-Conditioning (ME602) are removed form open electives-2 & 3. Two new courses Database Management Systems (CSE401) and Intellectual Property Rights (HS610) have been added.

Programme: B. Tech in Civil Engineering

Expert members present in the meeting:

1. Prof. Dr. Ing. Anupam Kumar Singh, Chairman BOS, JKL U Jaipur.
2. Dr. Kedar Sharma, Associate Professor, JKL U Jaipur.
3. Dr. Srinivas V., Assistant Professor, JKL U Jaipur.
4. Prof Vinod Kumar Vishwakarma Assistant Professor, JKL U Jaipur.
5. Prof. Amit Kumar, Assistant Professor, JKL U Jaipur.
6. Dr. Ashu Jain, Professor, Department of Civil Engineering, IIT-Kanpur.
7. Prof. Dr. A. K. Vyas, Professor, Department of Civil Engineering, MNIT Jaipur

The members approved the syllabus and content of the B. Tech program in civil engineering. The objectives of all the courses is to give an emphasis on applications, laboratory assignments, or case studies relevant in terms of job acquisition and also helping students preparing for competitive exams (GATE, IES etc.). The following suggestions were made by members:

1. Engineering Geology and Building Construction (CE 402) should be split in two parts i.e. Engineering Geology (CE307) and Building Material and Construction (CE308) with teaching scheme (2 0 2) 3 and (3 0 0) 3, respectively.
2. In general, Civil Engineering Material and Building Construction is a pre-requisite for Concrete Technology. Engineering Geology is the Pre-requisite to Soil Mechanics.
3. The course Surveying (CE308) has been shifted from semester III to semester IV with new course code CE402.
4. Intense Field Visit or Survey Camp after III semester can be removed from scheme.
5. Soil Mechanics is missing in the curriculum of 2017-2021. Soil Mechanics is the pre-requisite to Foundation Engineering, Earthquake Engineering and Transportation Engineering. Hence, Geotechnical Engineering – I (CE508) can be introduced as Soil Mechanics (CE508).
6. Geotechnical Engineering (CE508) of V semester can be renamed as Foundation Engineering (CE611) and introduce in place of sixth semester course named as Minor Project (CE610).
7. Lab syllabus of Geotechnical Engineering CE508 can be split in to two parts and incorporated in to Soil Mechanics (CE508) and Foundation Engineering (CE611) respectively.
8. Structural Analysis-I may be renamed as Mechanics of Solids as the syllabus aptly suites.
9. Structural Analysis - II can be written as Structural Analysis
10. The Rocks Mechanics (CE736) should be removed from the syllabus and there should be introduction of new course namely Geomechanics with course code CE741.
11. There is also suggestion from External BOS members that Class participation/ Additional continuous evaluation component should be of 20 marks instated of 10 marks.

Programme: B. Tech in Computer Science & Engineering

Expert members present in the meeting:

1. Dr Sonal Jain, Associate Professor and Head, JKL U Jaipur
2. Dr. Kavita Choudhary, Associate Professor, JKL U Jaipur.
3. Dr. S. Taruna, Associate Professor, JKL U Jaipur.
4. Dr. Alok Kumar, Assistant Professor, JKL U Jaipur.
5. Prof. Devendra Bhavasar, Assistant Professor, JKL U Jaipur
6. Dr. Pramod Kumar Singh, Associate Professor, Department of Computer Science & Engineering, IITM Gwalior
7. Mr Khalid Kamal Hussain, Principal-Education & Research, Infosys Limited Jaipur.

The members approved the syllabus and content of the B. Tech program in computer science & engineering. The following suggestions were made by members:

1. Course Engineering optimization (MA403) should be shifted in open elective in Sixth semester. A new course Scientific Computing CSE(406) (L T P) with teaching scheme (2 0 4) 4 credits should be offered in place of Engineering Optimization.
2. In place of Minor Project, Compiler Design should be offered. Minor Project is replaced keeping in view that Open Electives and Humanities courses cannot be replaced.
3. A New Course Principles of Compiler Design (CSE706)(L T P) with (3 0 2) 4 is introduced in Sem VII.
4. List of electives C and D namely DataBase Technologies and Programming Technologies have been renamed and Data Analytics with teaching scheme (3 0 0) and High Performance Computing with teaching scheme (3 1 0) have been introduced.

Programme: B. Tech in Electrical Engineering

Expert members present in the meeting:

1. Dr. Pushpandra Singh, Associate Professor and Head, JKL U, Jaipur.
2. Dr. Navneet Kumar, Assistant Professor, JKL U Jaipur.
3. Prof. Jagdish Prasad Sharma, Assistant Professor, JKL U Jaipur
4. Prof. H P Agarwal, Assistant Professor, JKL U Jaipur
5. Prof. Yogesh Rohilla, Assistant Professor, JKL U Jaipur
6. Prof. Manoj Fauzdar, Professor, Department of Electrical Engineering, MNIT, Jaipur sought leave of absence.
7. Mr. Kunwer Sachdev, Managing Director, Su-Kam Power Systems Ltd., Gurgaon sought leave of absence.

The members approved the syllabus and content of the B. Tech program in electrical engineering. The following suggestions were made by members:

1. In Course Electrical & Electronics Engineering (EE101), one tutorial should be added.
2. In semester III, Network Theory-I (EE301) experiment list should be updated with the use of MATLAB and Pspice software.
3. In semester III, experiments (5 and 6) of subject Network Theory-I (EE301) proposed to be performed in virtual lab course.
4. In semester III, One new topic "Introduction of Sensors and Actuators" should be added in Unit-V. Course Measurement & Instrumentation (EE303), Experiment No. 9 and 10 are should be performed in virtual lab course.
5. Energy sources (EE403) experiment list should be updated with the use of HOMER software.
6. One new course namely 'Internet of Things (ECE512)' with teaching scheme (3 1 2 0) proposed to be introduced as open elective-I.
7. In course Power System Analysis (EE601), experiments should be performed using MATLAB / Scilab and OpenDSS Softwares.
8. Experiment No. 9 and 10 of course name Power System Switchgear & Protection (EE602) are should be performed in virtual lab course.

Programme: B. Tech in Electronics & Communication Engineering

Expert members present in the meeting:

The following members were present during the meeting:

1. Dr. Sandeep Singh Sengar, Associate Professor and Head, , JKLU Jaipur
2. Dr. Dambarudhar Seth, Associate Professor, JKLU Jaipur.
3. Dr. Devika Kataria, Associate Professor, JKLU Jaipur.
4. Dr. Ashish Tripathy, Assistant Professor, JKLU Jaipur.
5. Prof Divanshu Jain, Assistant Professor, JKLU Jaipur
6. Prof (Dr.) V. K. Chaubey, Professor, Department of Electronics & Communication Engineering, BITS Pilani
7. Mr. Satendra Singh, Director & Manufacturing, Head India, Nokia Solutions & Network, Chennai sought leave of absence.

The members approved the syllabus and content of the B. Tech program in electronics & communication engineering. The following suggestions were made by members:

1. Minimum 20% of BTech Course Evaluation Component should be Open Book.
2. For the fabrication of ICs "Thin Film Vacuum Unit" should be installed in the Lab.
3. In course Internet of Things (ECE512), a tutorial class should be added.
4. In course Electronic Devices and Circuits (ECE301) a tutorial class should be added.
5. VHDL related experiments should be added in the Lab Session of "ECE306 Digital Electronics".
6. Syllabus for the course IC Technology (ECE734) should be revised completely.

7. It was also suggested that the following courses can be offered through MOOCs SWAYAM PLATFORM such as Optical Fiber Communication (ECE730), Information Theory & Coding (ECE733), Wireless Sensor Network (ECE738), Embedded Systems (ECE740), and Artificial Intelligence (CSE703).

Programme: B. Tech in Mechanical Engineering

Expert members present in the meeting:

1. Dr. Murari Lal Gupta, Associate Professor and Head, JKLU Jaipur.
2. Dr. S.C. Bhaduri, Professor, JKLU Jaipur.
3. Dr. Sudhansu Ranjan Das, Assistant Professor, JKLU Jaipur.
4. Prof. Ram Kumar Agrawal, Assistant Professor, JKLU Jaipur
5. Prof. Srinivas Rathod, Assistant Professor, JKLU Jaipur
6. Dr. Priyaranjan Sharma, Assistant Professor, JKLU Jaipur.
7. Dr. S.L. Soni, Professor, MNIT Jaipur.
8. Dr. Sanjay Vashishtha, Managing Director, First Green Consulting Pvt. Ltd., Gurgaon sought leave of absence.

The committee decided that there is no modification needed in the program structure of B. Tech Mechanical Engineering for the upcoming batch of 2018-22. However, the following suggestions were made regarding M. Tech program by members:

1. The constituted committee agreed to change the scheme of teaching from (L T P) to (L T P S).
2. The list of practical has been modified for the subjects
 - (i) Experimental methods in Thermal Engineering (MTME 104)
 - (ii) Thermal systems Simulation and Design (MTME 201)
3. A seminar component has been added in the subject Energy Management (MTME 202) and the practical component has been removed.

Programme: B.Tech.

Discipline: Common to all Programs

1. Course Calculus and Linear Algebra (MA 102) - Unit 2 is proposed to be revised with adding 'Differential equations of first order and first degree'. It is also proposed to replace the content of integral calculus as 'Applications in finding area, surface and volume using multiple integral'. Unit 3 is also proposed to be revised by removing 'Curvature, Torsion and unit Bi-normal vector' and Unit 5 is proposed to be revised by removing 'Vector spaces and Subspaces, Bases and Dimensions, Coordinates and Linear Transformation' viewing the length of syllabus.
2. Course Differential Equations and Complex Analysis (MA 202) - It is proposed to remove 'Differential equations of first order and first degree' from Unit 1 as shifted to unit 1 of MA102. Unit 5 is proposed to be modified by replacing 'Sequences and

- Series' by 'Functions of complex variables and its derivatives, Analytic functions, Conformal mapping'.
3. Course Computer based Numerical and Statistical Techniques (MA 302) - It is proposed to add 'Solutions of difference equations' in Unit 2. It is also recommended to introduce 'Exponential probability distribution' in Unit 3 and to remove 'critical and acceptance regions' from Unit 5. 'Fitting of the data using various distributions using software' may be introduced in lab component of the course.
 4. Course Code: MA 405- In Unit 5, 'Optimization in Mechanical, Civil and Chemical Engineering' is proposed to be renamed as 'Problem Solving in Engineering'.
 5. The committee suggested offering open electives for the courses 'Abstract Algebra', 'Complex Analysis', 'Random Variable and Stochastic Processes' and 'Data Analysis using R'.
 6. The members deliberated upon the new offerings for the students as M. Tech programmes offered by Department of Mathematics in collaboration with other Engineering departments. The due consent was made on offering module based 'Industrial Engineering and Operations Research'.
 7. In Self-Development and Behavioral skills (HS303) following changes were made:
 - Along with professional etiquette professional ethics should be taught in unit I
 - Speaking Skills (Persuasion, information and entertainment) should be included in unit-V.
 8. Self-Development and Report Writing (HS402), Course title should be "Self - Development and Technical Writing" instead of "Self-Development and Report Writing" .
 9. In course Engineering Physics (PH101), three units named "Coherence, Interference and Optical Technology", "Diffraction", and "Polarization" are replaced with "Photo conductivity and Photovoltaic", "Dielectric properties of materials and Energy storage systems", "Science and Technology of thin films"
 10. The Unit "Laser and Fibre Optics is added with content "Spatial Coherence, Temporal coherence, Coherence length, Coherence time and 'Q'factor for light".
 11. Applications of each unit towards Engineering and Technology are mentioned. Practical: Following 04 experiments are removed from the course Engineering Physics (PH101).
 - I. To determine the wave length of sodium light by Newton's Ring
 - II. To determine the dispersive power of material of a Prism for Violet Red and Yellow colours of Mercury light with the help of a spectrometer.
 - III. To convert a Galvanometer in to an ammeter of range 1.5/3 amp and calibrate it.
 - IV. To convert a Galvanometer in to a Volt of range 1.5/3 volt and calibrate it.

Practical: Following 06 experiments are added in the course Engineering Physics (PH101),

- I. To study the variation of thermo electro magnetic force of iron-copper thermo couple with temperature.

- II. To determine the ferromagnetic constants retentivity, coercivity, permeability and susceptibility by tracing I-H Curve using CRO.
- III. To determine the hall coefficient of a given specimen by studying Hall effect phenomenon and calculate charge carrier density, mobility and electrical resistivity.
- IV. To study the characteristics of solar cell and determine the efficiency of solar cell at different incidence angle.
- V. To study the temperature variation of resistivity using four probe method and determine the band gap of a given semiconductor.
- VI. To determine the dielectric constant of a given solid.

Y. Rohilla

Prof Yogesh Rohilla

BOS Member, IET

Richa Sharma

Dr Richa Sharma

BOS Member, IET

Anupam K Singh
18/08/17

Prof Dr-Ing Anupam K Singh
Chairman, BOS in IET

Based on the suggestions given by various stakeholders, program-wise following courses have been introduced. The details of these courses are given below.

COURSES INTRODUCED

Program Name	Batch	Code	Subject Name	Credits	Year	Semester	Core/ Elective
B Tech CE	2015-19	CE627	Earthquake Engineering	3	3	6	Elective
B Tech CE	2015-19	CE623	Rural Water Supply and Sanitation	4	3	6	Elective
B Tech CE	2015-19	HS603	Technology Management	2	3	6	Elective
B Tech CE	2016-20	CE408	Building Planning & Drawing	4	2	4	Core
B Tech CE	2016-20	HS402	Self-Development and Report Writing	2	2	4	Core
B Tech CE	2016-20	SUR401	Surveying Field Visit	2	2	4	Core
B Tech CE	2017-21	LA203	Creativity and Design Thinking	2	1	2	Core
B Tech CE	2017-21	LA204	Introduction to Critical Thinking	1	1	2	Core
B Tech CHE	2015-19	HS604	Critical Interpretation of Literature and Cinema	2	3	6	Elective
B Tech CSE	2015-19	CSE611	Minor Project	2	3	6	Core
B Tech CSE	2016-20	CSESP401	Information Management Basics	5	2	4	Core
B Tech CSE	2017-21	CSESP201	Software Foundation and Programming (With C++)	4	1	2	Core
B Tech ECE	2015-19	ECE631	Project	3	3	6	Core
B Tech EE	2015-19	EE604	Advanced Control System	3	3	6	Core
B Tech EE	2015-19	EE605	Microprocessors	4	3	6	Core
B Tech EE	2016-20	EE402	Network Theory-II	3	2	4	Core
B Tech ME	2015-19	ME606	Renewable Energy Technology	4	3	6	Core
B Tech ME	2016-20	ME411	Mechanical Measurements	4	2	4	Core

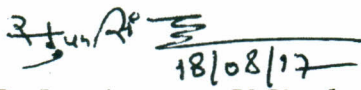
COURSES DROPPED

Program Name	Batch	Code	Subject Name	Credits	Year	Semester	Core/ Elective
B Tech CE	2016-20	CE607	Design of RCC Structure	4	3	6	Core
B Tech CE	2016-20	CE611	Transportation Engineering-II	4	3	6	Core
B Tech CE	2016-20	CE623	Rural Water Supply and Sanitation	4	3	6	Elective
B Tech CE	2016-20	CE627	Earthquake Engineering	3	3	6	Elective
B Tech CE	2016-20	HS603	Technology Management	2	3	6	Elective
B Tech CE	2017-21	CE407	Environmental Engineering-I	4	2	4	Core
B Tech CE	2017-21	CE408	Building Planning & Drawing	4	2	4	Core
B Tech CE	2017-21	HS401	Principles of Economics	3	2	4	Core
B Tech CE	2017-21	HS402	Self-Development and Report Writing	2	2	4	Core

B Tech CE	2017-21	SUR401	Surveying Field Visit	2	2	4	Core
B Tech CE	2018-22	CH101	Engineering Chemistry	5	1	2	Core
B Tech CE	2018-22	CSE202	Object Oriented Programming	4	1	2	Core
B Tech CE	2018-22	LA203	Creativity and Design Thinking	2	1	2	Core
B Tech CE	2018-22	LA204	Introduction to Critical Thinking	1	1	2	Core
B Tech CE	2018-22	MA202	Differential Equations and Complex Analysis	4	1	2	Core
B Tech CE	2018-22	ME201	Engineering Mechanics	4	1	2	Core
B Tech CHE	2016-20	CHE604	Transport Phenomena	4	3	6	Core
B Tech CHE	2016-20	CHE621	Process Design Decisions	4	3	6	Elective
B Tech CHE	2017-21	CHE404	Chemical Reaction Engineering-I	5	2	4	Core
B Tech CHE	2017-21	CHE407	Mass Transfer Operations-I	4	2	4	Core
B Tech CHE	2017-21	HS401	Principles of Economics	3	2	4	Core
B Tech CHE	2017-21	HS402	Self-Development and Report Writing	2	2	4	Core
B Tech CSE	2016-20	CSE601	Distributed Systems	5	3	6	Core
B Tech CSE	2016-20	CSE603	Compiler Design	4	3	6	Core
B Tech CSE	2016-20	CSE610	Foundations of Computer Graphics	4	3	6	Core
B Tech CSE	2016-20	CSE611	Minor Project	2	3	6	Core
B Tech CSE	2016-20	CSE621	Information Security	3	3	6	Elective
B Tech CSE	2016-20	HS603	Technology Management	2	3	6	Elective
B Tech CSE	2017-21	HS401	Principles of Economics	3	2	4	Core
B Tech CSE	2017-21	HS402	Self-Development and Report Writing	2	2	4	Core
B Tech CSE	2018-22	CSE202	Object Oriented Programming	4	1	2	Core
B Tech CSE	2018-22	CSESP201	Software Foundation and Programming (With C++)	4	1	2	Core
B Tech CSE	2018-22	LA203	Creativity and Design Thinking	2	1	2	Core
B Tech CSE	2018-22	LA204	Introduction to Critical Thinking	1	1	2	Core
B Tech CSE	2018-22	MA202	Differential Equations and Complex Analysis	4	1	2	Core
B Tech CSE	2018-22	ME201	Engineering Mechanics	4	1	2	Core
B Tech CSE	2018-22	PH101	Engineering Physics	5	1	2	Core
B Tech ECE	2016-20	ECE601	Microwave Engineering-II	4	3	6	Core
B Tech ECE	2016-20	ECE602	Digital Communication	4	3	6	Core
B Tech ECE	2016-20	ECE605	Wireless Communication	3	3	6	Core
B Tech ECE	2016-20	ECE629	Power Electronics	3	3	6	Elective
B Tech ECE	2017-21	ECE401	Analog Electronics	5	2	4	Core

B Tech ECE	2017-21	ECE408	Engineering Signals & Systems	5	2	4	Core
B Tech ECE	2017-21	HS401	Principles of Economics	3	2	4	Core
B Tech ECE	2017-21	HS402	Self-Development and Report Writing	2	2	4	Core
B Tech ECE	2018-22	CM101	Elements of Engineering	4	1	2	Core
B Tech ECE	2018-22	CSE202	Object Oriented Programming	4	1	2	Core
B Tech ECE	2018-22	EE101	Electrical & Electronics Engineering	4	1	2	Core
B Tech ECE	2018-22	LA203	Creativity and Design Thinking	2	1	2	Core
B Tech ECE	2018-22	LA204	Introduction to Critical Thinking	1	1	2	Core
B Tech ECE	2018-22	MA202	Differential Equations and Complex Analysis	4	1	2	Core
B Tech ECE	2018-22	PH101	Engineering Physics	5	1	2	Core
B Tech EE	2016-20	EE601	Non-Conventional Energy Sources	4	3	6	Core
B Tech EE	2016-20	EE604	Advanced Control System	3	3	6	Core
B Tech EE	2016-20	EE605	Microprocessors	4	3	6	Core
B Tech EE	2016-20	EE622	Restructured Power System	3	3	6	Elective
B Tech EE	2016-20	HS603	Technology Management	3	3	6	Elective
B Tech EE	2017-21	EE401	Electrical Machine-II	4	2	4	Core
B Tech EE	2017-21	EE402	Network Theory-II	3	2	4	Core
B Tech EE	2017-21	HS401	Principles of Economics	3	2	4	Core
B Tech EE	2017-21	HS402	Self-Development and Report Writing	2	2	4	Core
B Tech EE	2018-22	CM101	Elements of Engineering	4	1	2	Core
B Tech EE	2018-22	CSE202	Object Oriented Programming	4	1	2	Core
B Tech EE	2018-22	EE101	Electrical & Electronics Engineering	4	1	2	Core
B Tech EE	2018-22	LA204	Introduction to Critical Thinking	1	1	2	Core
B Tech EE	2018-22	MA202	Differential Equations and Complex Analysis	4	1	2	Core
B Tech EE	2018-22	PH101	Engineering Physics	5	1	2	Core
B Tech ME	2016-20	ME605	Mechanical Vibrations & Control	4	3	6	Core
B Tech ME	2016-20	ME606	Renewable Energy Technology	4	3	6	Core
B Tech ME	2016-20	ME622	Non-Conventional Machining Processes	3	3	6	Elective
B Tech ME	2017-21	HS401	Principles of Economics	3	2	4	Core
B Tech ME	2017-21	HS402	Self-Development and Report Writing	2	2	4	Core
B Tech ME	2017-21	ME408	Heat Transfer	5	2	4	Core
B Tech ME	2018-22	CH101	Engineering Chemistry	5	1	2	Core
B Tech ME	2018-22	CSE202	Object Oriented Programming	4	1	2	Core
B Tech ME	2018-22	LA203	Creativity and Design Thinking	2	1	2	Core

B Tech ME	2018-22	LA204	Introduction to Critical Thinking	1	1	2	Core
B Tech ME	2018-22	MA202	Differential Equations and Complex Analysis	4	1	2	Core
B Tech ME	2018-22	ME201	Engineering Mechanics	4	1	2	Core


18/08/17
Prof Dr-Ing Anupam K Singh
Chairman, BOS in IET