New Academic Paradigm 2017-18

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Highlights About Course Curriculum

- Aptitude, Reasoning and Communication Skills – (1^{st} to 6^{th} Sem)
- Technical Skills Development (3^{rd} to 5^{th} Sem : 1 Paper)
- Industrial Training
- MOOC Courses (Approx. 20 Credit under CBCS)
- Add On: Certification courses
- Incorporation of Advanced Subjects like Cloud Computing, Development of Android Apps, Big Data etc.

Teaching Methodology

Following Teaching Methodology will be adopted from upcoming session:-

- Student Interactive Session (SIS)
- Student Seminar (SS)
- Project Based Learning (PBL)
- Problem based Learning
- Case Study
- Group Discussion (Spot GD and Focused GD)
- Online Expert Lectures (Spoken Tutorial)
- On-line discussion forum (with Google Handouts)
- Mooc course

Implementation of Teaching Methodology in Coming Semester

1. To implement PBL every department of FET make a group of 5-6 students and allot one project to each group with one teacher as group mentor. Two hour on Saturday will be allotted for this activity.
2. 4 Assignments in each semester per subject in which One to two questions will be based on ‘Problem Based Learning’ approach.
3. 1 student seminar for each subject will be conducted whose report is submitted in HOD office
4. One SIS will be made compulsory for each batch of all department of FET
5. Every teacher will schedule one class in a month for GD.
6. Every department will organize a camp/ Industrial Visit in a semester.

Assessment Pattern

S.N	Mode	Marks	Converted Marks
Internal Assessment			
1	Saturday Assessment (3 assessment for each subject)	50 marks each i.e 150 marks for each subject	150/10 = 15 marks
2	Mid Term Exam	50 marks	50/5 = 10 marks
3	Attendance	5	5 marks
4	GD/ Seminar/SIS/ Assignment	15	20 marks
	Total marks		50 marks
External Assessment			
1	End Term Examination	50	50
	Total		50 marks
Total 100 marks examination will be conducted including internal and external assessment			

Internal Assessment Pattern

Every Saturday will be engaged as assessment day of every subject under SGTU which involve the following points:-

1. MCQ’s related to technical Subject (40%)
2. MCQ’s/ Short Answer type questions related to reasoning and General Aptitude (30%)
3. Long Answer questions related Technical subjects (30%)

End Term Examination Assessment Pattern

Final exam will be conducted as per curriculum at the end of semester in which question paper need to be designed in following pattern:-

1. Part A total question 23
2. Part B total question 50
3. Total 73 question need to be prepared for 180 min. (3hr)

S.N	Types of question and total number of questions	Total time in minutes
	Part A (Descriptive)	
1	Long Essay - 1	20
2	Short notes- 5	20
3	Definitions / Concepts- 5	10
4	Discriminatory/ Differential Questions -5	20
5	Problem based questions -2	20
6	Interpretation questions- 2	15
	Part B (objective)	
7	Single response question- 20	20
8	True/ False - 5	5
9	Assertion- Reasoning -5	10
10	Multiple response question - 5	10
11	Text numerical question -5	10
12	Matching type - 5	10
13	Sequencing - 5	10
	Total 73 questions	**180 Minutes**

Projects Going on in FET

1. IOT based Garbage Monitoring System
2. IOT Based Air and Noise Pollution Monitoring
3. Modification of Existing Building into Green Building
4. Base Isolation System
5. Robotic Injective Vital
6. Integrated Drunk and Drive Prevention System
7. Efficient Engine runs on blends of diesel and producer gas
8. Short Animation Film
9. Wireless Charger cum Power Bank and a Wireless Music Player
10. Intelligent Burglar Alarm System
11. Secure Campus using RFID
12. Grievances Redressal System
13. Performance Evaluation System
14. Secure Mailing System- Guided by Ms. Reenu Batra
15. E-Darji
16. Online Assessment System
17. IOT Based Railway Track System

Research Papers-2017

1. Rambir Joon, Manveen chadda, “Energy optimization in WSN using protocols” IJCSE-communicated.
2. “Optimization of Steganography on Audio wave by embedding the minimum and maximum message in various layers and spy analysis” This research Paper was Published in Ajay Kumar Garg Engineering College International Journal of Technology (AKGECIJT), Volume 8, No. 1, January-June 2017, pp. 28-31; ISSN Print: 0975-9514 and ISSN Online: 0975-9514.
3. V. Kannojiya, S. Kumar, M. Kanwar, S.K. Mohapatra, "Simulation of Erosion Wear in Slurry Pipe Line Using CFD", Applied Mechanics and Materials, Vol. 852, pp. 459-465, 2016.
4. V. Kannojiya, M. Deshwal and D.Deshwal, “Numerical Investigation of Solid Particle Erosion in Pipe Elbow”, Materials Today♣ Proceedings, Elsevier, 2017 (Accepted).
5. V. Kannojiya and S. Kumar “Computational Modeling of Erosion Wear due to Slurry Flow through a Standard Pipe Bend: Effect♣ of Bend Angle, Orientation, Diameter and Slurry Velocity”, Advances in Material Science and Engineering, 2017 (Accepted).
6. Y.P. Chandra, A. Singh, J.P. Kesari, V. Kannojiya, “Solar energy a path to India's prosperity" Journal of The Institution of♣ Engineers (India): Series C, 2017. (Minor Revision).
7. V. Kannojiya, R. Sharma, R. Gaur, A. Jangra, P. Rao and P. Prajapati, “Experimental Investigation of Temperature Distribution♣ along the Length of Uniform Area Fin for Forced and Free Convection”. Applied Mechanics and Materials. (Accepted).
8. V. Kannojiya, “Numerical analysis of erosion wear for turbulent multiphase slurry flow of bottom ash-water in slurry pipe”,♣ Tribology: Material, Surface and Interfaces, Taylor & Francis (Communicated).
9. V. Kannojiya, R.Gaur and P. Yadav “Experimental and Computational based Performance Analysis of Co-Current and Counter♣ Flow Heat Exchanger”. Heat Transfer Engineering, Taylor and Francis (Communicated).
10. Rajesh Kr. Porwal, Monika and Vinod Yadava,” Experimental Modelling of Electrical Discharge Micromachining”, In: Proceedings of the IVth International Conference on Production and Industrial Engineering (CPIE-2016).
11. Monika, Rjesh K. Porwal and Dinesh Deshwal, “Analysis of process parameters in Wire EDM with H13 hot die hard steel using Taguchi method”, ICQPROM, 2017

Research Papers

1. Preeti Garg, Shweta Sharma“Offloading Approach in mobile cloud computing”, in IJESMR, ISSN 2349-6193, in March 2017, Vol 4 issue 3.
2. Preeti Garg,Shweta “Image Enhancement Techniques Based On Histogram Equalization”, in IJESMR, ISSN 2349-6193, in March 2017, Vol 4 issue 3.
3. Ms. Satnam kaur, “IMAGE ENHANCEMENT TECHNIQUES BASED ON HISTOGRAM EQUALIZATION”, In IJESMR, ISSN 2349-6193 in March, 2017.
4. Ms. Satnam kaur, “OFFLOADING APPROACH IN MOBILE CLOUD COMPUTING”, In IJESMR, ISSN 2349-6193 in March, 2017.
5. Ritu Sindhu, Naresh Kumar, “Mobile Ad Hoc Networking (MANET): Performance Evaluation & Analysis of Routing Protocols”, National Seminar on Emerging Trends in Cloud Computing and Big Data Analytics (ETCCBDA)-2017,organised by Maharishi Dayanand University, Rohtak, Haryana, on 6th Mar,2017.
6. Naresh Kumar, Dr.Ritu Sindhu, Sunita Rani, “Performance Testing & Comparative Analysis if Different Arithmetic Adder Blocks”, National Seminar on Emerging Trends in Cloud Computing and Big Data Analytics (ETCCBDA)-2017,organised by Maharishi Dayanand University, Rohtak, Haryana, on 6th Mar,2017.
7. Ashutosh Kumar, Raman Kapoor, Manjari Garg, Vikram Kumar, Rajendra Singh, Direct Evidence of Barrier Inhomogeneities using Nanoscopic Electrical Characterizations, Nanotechnology, vol. 28 (26), art. no 26LT02, 2017
8. C. S. Pathak, R. Kapoor, J. P. Singh and R. Singh, Investigation of the effect of organic solvents on the electrical characteristics of PEDOT:PSS/p-Si heterojunction diodes, Thin Solid Films, vol.6, 2017, pp. 115-121.
9. Naresh Kumar©, Sunita Rani(1st), Amrita Kaul, “Face Recognition Techniques With Performance And Comparison”, International Journal of Current Engineering And Scientific Research (IJCESR), Vol. 4, Issue-7, pp 56-60, 2017, ISSN: 2393-8374, eISSN: 2394-0697.
10. Naresh Kumar©, Sunita Rani (1st), Rashmi Chawla, “Design & Performance Analysis of 16 Bit RAM Using QCA Technology”, International Journal of Current Engineering And Scientific Research (IJCESR), Vol. 4, Issue-6, pp 69-76, 2017, ISSN: 2393-8374, eISSN: 2394-0697.
11. Naresh Kumar©, Mittarpal, Priyanka Anand, Sunita, “Realization of Flip Flops Using LabVIEW and MATLAB”, I.J. Education and Management Engineering, 2017-04-09, 1, pp. 1-12, DOI: 10.5815/ijeme.2017.04.12
12. Naresh Kumar©, Mittarpal , Sunita Rani, “Realization of Digital Circuits Systems Using Embedded Function on MATLAB” International Journal of Engineering and Technology (IJET), Vol. 9, Issue No 2, PP. 1267-1279, Apr-May 2017, ISSN: 2319-8613, eISSN: 0975-4024, DOI: 10.21817/ijet/2017/v9i2/170902122.

Activities Planned in Upcoming Semster

1. Industrial Visit
2. Internship/Survey Camp
3. FDP through NITTTR
4. Expert Talk
5. Tech Fest
6. Workshop
7. Conference

Thanks