1 March 2018

To
Faculty-IET,

Prof. Siddhartan Govindasamy from Olin College of Engineering, USA will be visiting JKLU from 6th March to 13th March 2018.

The University has organised a Training Program on planning and implementing Project Based Learning on 7-8 March 2018. This will be a hands on workshop and a great opportunity to learn from someone who has architected one of the most innovative courses at Olin College for engineering undergrads.

In preparation for this program, please prepare a half page write-up on any one course you are likely to teach in next academic year where you would like to use Project based learning. This is a terrific opportunity for each of us to learn from one of leading experts in the area and I hope you will make the most of it.

Agenda

Day 1		6th March 2018 TUESDAY		
Start time	**End time**	**Topic**	**Venue**	**Facilitator / Lead**
	0710	Landing in Jaipur		Dr Kavita Choudhary
0715	0815	Reaching Campus		Dr Yugal Nauhria
0815	1000	Settling Down & Breakfast	MDC	
1000	1030	Meeting with VC Dr R L Raina	VC Office	Mr Asheesh Gupta
1030	1200	One on one Meetings with 5 Faculty Members	MDC Training Room 1	Dr Kavita Choudhary
1200	1300	2 Focus Groups with Students (5/6 per group)	MDC Training Room 1	Dr Yugal Nauhria
1300	1400	Lunch		
1400	1600	Campus Tour		Dr Anupan Singh
1600	1630	Tea break		
1630	1730	Introduction to Olin College of Engineering Insights on Experiential/Project Based Learning	IM Amphitheatre	Dr R L Raina
1730	1800	Question & Answer Session	IM Amphitheatre	Dr R L Raina
2030	2130	Dinner	MDC Dinning Hall	Mr Asheesh Gupta

Day 2	7th March 2018 WEDNUSDAY			
Start time	End time	Topic	Location	Facilitator / Lead
0800	0900	Networking Breakfast - Before Start of FDP	MDC Dinning Hall	
900	1100	Session 1	MDC Training Room 1	Dr Siddartan Govindasamy
1100	1120	Tea Break		
1120	1330	Session 2	MDC Training Room 1	Dr Siddartan Govindasamy
1330	1430	Lunch		
1430	1615	Session 3	MDC Training Room 1	Dr Siddartan Govindasamy
1615	1630	Tea Break		
1630	1830	Session 4	MDC Training Room 1	Dr Siddartan Govindasamy
1830	1930	Reflection on Day - 1	MDC Training Room 1	Dr Siddartan Govindasamy
1930	2000	Break		
2000	2100	Dinner	MDC Dinning Hall	Dr R L Raina

Day 3	8th March 2018 THURSDAY			
Start time	End time	Topic	Location	Facilitator / Lead
0800	0900	Breakfast	MDC Dinning Hall	FDP Participants
900	1100	Session 5	MDC Training Room 1	Dr Siddartan Govindasamy
1100	1120	Tea Break		
1120	1330	Session 6	MDC Training Room 1	Dr Siddartan Govindasamy
1330	1430	Lunch		
1430	1530	Reflection on Day - 2 Concluding Remarks	MDC Training Room 1	Dr Siddartan Govindasamy
1530	1600	Tea Break		
1600	1700	Press - One on One Discussion	Board Room	Dr R L Raina & Mr Asheesh Gupta
1700	2000	Open Time		
2000	2100	Dinner	MDC Dinning Hall	Mr Asheesh Gupta

Day 4	9th March 2018 FRIDAY			
Start time	End time	Topic	Location	Facilitator / Lead
0800	0900	Breakfast	MDC Dinning Hall	Mr Asheesh Gupta
900	1100	Course Planning Session - Course 1(Calculus & LinearAlgebra, Mechanical/Electrical Workshop) & Course 2 (Statistics & Data Analytics using Python)	MDC Training Room 1	Dr Anupam Singh

1100	1120	Tea Break		
1120	1330	Course Planning Session - Course 1(Calculus & LinearAlgebra, Mechanical/Electrical Workshop) & Course 2 (Statistics & Data Analytics using Python)	MDC Training Room 1	Dr Anupam Singh
1330	1430	Lunch		
1430	1630	Course Planning Session - Course 1(Calculus & LinearAlgebra, Mechanical/Electrical Workshop) & Course 2 (Statistics & Data Analytics using Python)	MDC Training Room 1	Dr Anupam Singh
1630	1700	Tea Break		
1700	1900	Course Planning for the 1st Year - YACHT Model	MDC Training Room 1	Dr Anupam Singh
1900	2000	Open Time		
2000	2100	Dinner	JKLU Mess	Mr Asheesh Gupta

Day 5		10th March 2018 SATURDAY		
Start time	**End time**	**Topic**	**Location**	**Facilitator / Lead**
0800	0900	Breakfast	MDC Dinning Hall	Mr Asheesh Gupta
900	1100	Course 3 - Outline & Story boarding	MDC Training Room 1	Dr Anupam Singh
1100	1120	Tea Break		
1120	1330	Course 4 - Outline & Story boarding	MDC Training Room 1	Dr Anupam Singh
1330	1430	Lunch		
1430	1630	Course 5 - Outline & Story boarding	MDC Training Room 1	Dr Anupam Singh
1630	1700	Tea Break		
1700	1900	Course 6 - Outline & Story boarding	MDC Training Room 1	Dr Anupam Singh
1900	2000	Open Time		
2000	2100	Dinner	MDC Dinning Hall	Dr R L Raina

Day 7		12th March 2018 MONDAY		
Start time	**End time**	**Topic**	**Location**	**Facilitator / Lead**
0800	0900	Breakfast	MDC Dinning Hall	Mr Asheesh Gupta
900	1100	Course7 - Outline & Story boarding	MDC Training Room 1	Dr Anupam Singh
1100	1120	Tea Break		
1120	1330	Course 8 - Outline & Story boarding	MDC Training Room 1	Dr Anupam Singh
1330	1430	Lunch		
1430	1530	Address to students of JKLU	IM Amphitheatre	Mr Asheesh Gupta
1530	1600	Open Discussion	IM Amphitheatre	Mr Asheesh Gupta

1600	1630	Tea Break		
1630	1830	Reflection on Course Curiculum for 1st year Review Candence finalization for all 8 courses	MDC Training Room 1	Dr Kavita Choudhary/Dr Yugal Nauhria
1830	1900	Concluding Remarks	MDC Training Room 2	Dr R L Raina
1900	2000	Open Time		
2000	2100	Dinner	MDC Dinning Hall	Dr R L Raina

With kind regards,

Kavita

Dr. Kavita Choudhary,
Chairperson - IQAC

JKLAKSHMIPAT UNIVERSITY JAIPUR

13 March 2018

To

Faculty-IET,

It has been a very absorbing and stimulating last week for all us in learning and applying the new project based pedagogy to three core courses of 1st year engineering curriculum.

I would like to thank Prof. Siddhartan Govindasamy for being an excellent facilitator in initiating our journey of redesigning our engineering course curriculum at par with the global best practices. Prof. Siddhartan has very kindly agreed to continue to be our mentor and facilitate us in our journey to develop the detailed course files for these courses.

Prof. Anupam Singh, Director-IET shall be the overall project champion and guide for this program. I am enclosing the review cadence details for your reference. Our aim as a team is to build the new curriculum course files with all details documents latest by 31st May, 2018.Please feel free to reach out to me for any clarifications.

Review cadence with Dr. Anupam Singh

Date	Time		Venue	Agenda
20th March, 2018	14:00	18:00	MDC Faculty Lounge	Progress Review Course Wise Closure of Actions Points from last time
3rd April, 2018	14:00	18:00		
20th April, 2018	14:00	18:00		
7th May, 2018	14:00	18:00		
21st May, 2018	14:00	18:00		

Review cadence with Dr. Siddhartan

Date	Time		Venue
21st March, 2018	9:00	10:00	MDC Faculty Lounge
6th April, 2018	9:00	10:00	
23rd April, 2018	9:00	10:00	
11th May, 2018	9:00	10:00	
24th May, 2018	9:00	10:00	

Course Details
1st Semester
Course -1 : **Calculus in Action** - Project Leader Dr Anupam Singh , Team Members- Dr Rajlakshmi Nayak, Dr Jaya Gupta, Mr. Priyansh Singh
Course -2 : **Prototyping and Design** - Project Leader Mr. Amarish Dubey, Team Members - Dr Priyaranjan Sharma, Mr. Aditya Joshi
2nd Semester
Course - 1 : **Computation Data Analysis** - Project Leader Dr Sonal Jain, Team Members - Dr Umesh Gupta, Dr Kavita Choudhary

Review Agenda for Review with Prof. Siddhartan
Pre-Read for Each Review to be Shared 2 days in advance
1. 15 minutes for each Course Review
2. Status Report - Activities Completed in the last 15 days, Plan for next fortnight
3. Links - Share links to course materials prepared on Google Drive with Prof. Siddhartan (Materials, Photos, Videos)
4. Last 15 minutes for Open Questions (Questions to go along with the pre-read 2 days in advance)

NOTE: For all reviews, please ensure we reach the venue 10 minutes before the review.

With kind regards,

Kavita

Dr. Kavita Choudhary,
Chairperson – IQAC

JK LAKSHMIPAT UNIVERSITY JAIPUR

6 April 2018

Review with Prof. Siddhartan on 6th April, 2018

Design and Prototyping

1. Reduction in text heavy stuff from lecture-1. Capture the detailing on the website or handout. Focus on what is design about? Class room exercises.
2. How much presentation vs discussion in classes need to happen? Initial context can be in slides. Combine it with reading material and class room exercises.
3. Open questions to students - On design understanding. Have more meaningful discussions.
4. Set up of the First Class - Should focus much on discussion plus some activity.
5. Renaming - Lectures to Sessions.
6. Project Details - Add timelines

Calculus for Engineers

1. Good progress on experiment. Predict the distance where the ball will reach.
2. Project Statement - Students need to design a spring mass system to hit a target at a specific distance.
3. Have less details in project description and have students evolve themselves.
4. For Assignment 5 - Limit the lecture part and do lot of learning offline through readings and videos. Students can come back with doubts next class.

Computational Data Analysis

1. Rather than putting numbers directly in the matrices include some applications. Students should derive value out of it.

Overall Comments

1. Very good overall progress on the 3 courses. Focus should be on problems where students need to set it up themselves.
2. Giving a high level framing in the class, follow it up some readings and assignments to make the classroom experience more active for the students.

Kavita

Dr. Kavita Choudhary
Chairperson (IQAC)

JK LAKSHMIPAT UNIVERSITY JAIPUR

11 April 2018

Review dated 11 April 2018: Project based Learning

General Observation – If students attained the level of "Minimum Viable Product" then it is suggested to assume it as successful completion of project.

S.N.	Faculty Lead / Faculty Support	Course	Semester	Observations
1	Dr. Kavita Choudhary	Object Oriented Programming using Java	III – CSE IBM	• Amount of work done in evaluation rubric need to be clarified.
2	Dr. Umesh Gupta	Computer based Numerical and Statistical Techniques	III Sem (All Streams)	• Project 1 should include physical application area. • Redefine Project 2, No.3. • Projects to be mapped with Course Goals and must be functional product.
3	Vishakha Meena	Strength of Material	III – CV & ME	• This semester, scope of projects carries no analysis. • In evaluation scheme, project 1 & 2 need clarification as per their weightage of marks.
4	Dr. Ashis Tripathy	Digital Signal Processing	V – ECE	• In student feedback table, include few open ended questions, like, "Anything else, or, any other suggestion". • Syllabus is huge. Need a thought. • In project definition include real examples, like, bird speech / sound/ voice.
5	Dr. Devika Kataria	Microprocessor & Interfacing	V – ECE & CSE	• Redefine course objectives considering "Students will be able to". • Rephrase the project definition by putting a constraint on open-endedness (like home automation project

				is open-ended). Make project definition more specific. • Computer Architecture course is pre-requisite to this course. Noted that few students have not studied in previous semester.
6	Dr. Kedar Sharma	Hydrology and Water Resources	V – CV	• Include "modelling & analysis" component meant for projects in the syllabus. • Revise "Mid Term presentation" & "Final Project submission" component in the evaluation scheme. • Test the working of moisture content sensor beforehand.
7	Dr. S Taruna / Prof. Devendra Bhavsar	Computer Networks	V – CSE & ECE	*Due to paucity of time, content could not be presented. However, comment would be sought in next internal review and updated files will be uploaded accordingly.
8	Dr. Alok kumar / Dr. Sonal Jain	Machine Learning	VII – CSE	*Due to paucity of time, content could not be presented. However, comment would be sought in next internal review and updated files will be uploaded accordingly.
9	Prof HP Agarwal	Electrical Drive and Control	VII – EE	*Due to paucity of time, content could not be presented. However, comment would be sought in next internal review and updated files will be uploaded accordingly.
10	Dr. Devika Kataria / Dr. Vipin Jain	Elements of Electrical & Electronics Engineering	II Sem (All Streams)	*Due to paucity of time, content could not be presented. However, comment would be sought in next internal review and updated files will be uploaded accordingly.
11	Dr. Shahnawaj Khan / Prof. Amit Kumar	Environmental Studies	I Sem (All Streams)	*Due to paucity of time, content could not be presented. However, comment would be sought in next internal review and updated files will be uploaded accordingly.

Kavita

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JK LAKSHMIPAT UNIVERSITY JAIPUR

21 April 2018

Progress reviewed on 20 April, 2018 moderated by Dr. Anupam Kumar Singh, Director - IET.

1. Calculus for engineers:

Progress:

Target Date	Specification
20 March 2018	Course file (1st Draft)
03 April 2018	Theoretical analysis Problem statements
20 April 2018	Prototype 1
07 May 2018	Course content Reference materials for students/ Handouts Prototype 2, Prototype 3
21 May 2018	Assignments (1, 2, 3, 4, 5) + Detailed Course content

- Highlighted portions are achieved.
- 1st-week session planned with slides (for faculty reference only)
- Framed the course delivery and handouts to be provided in detail week-wise

2. Computational Data Analysis

Progress:

Previous Review	Current Preview	Forthcoming Review
1. Pre-Course Survey updated. 2. The content of week - 3 & week - 4 updated for students. 3. Python related contents are documented using Jupyter Notebook (Anaconda) to enable students with hands-on experience together with theoretical learning. 4. Application oriented practice questions on Linear Algebra are added.	1. The content till week-6 is updated. 2. Core Python is finished and resource material is ready in the form of Jupyter Notebook. 3. Python based assignment - JKLU Directory.	1. Will cover till week-8. 2. Assignments and Mini Project -1 based on Linear algebra and Statistics using python will be ready. 3. One Project including all the concepts of Python would be designed which will be used as a base project in the class.

3. Design and Prototyping

- The content of the course till week 6 are ready.
- Design and functionality of the studio has been finalized.
- Summer course is being floated for the designing of studio.

Note: In this review, two more courses from II Sem (I year) for academic session 2018-2019 are also taken into consideration. For below courses, course file, evaluation scheme and project list will be shown on Monday.

a. Environmental Studies - Dr. Shahnawaj Khan, Dr. Jitendra Singh, Prof. Vinod Vishwakarma
b. Elements of Electrical & Electronics Engineering - Dr. Devika Kataria, Dr. Vipin Jain, Prof. Narayan Sahoo.

Kavita

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JK LAKSHMIPAT UNIVERSITY JAIPUR

23 April 2018

Review with Prof. Siddhartan dated 23 April 2018: Project based Learning

Elements of Electrical & Electronic Engineering (II Sem)

1. Module-I: Paraphrasing is required while defining the course goals (course goals should talk about "doing something" rather than a touch of "absorbing the course")
2. Module-I: Theory and Project should go hand-in-hand (simultaneously). No need to specify 50% Theory and 50% Project.
3. Module-I: Change in Project Definition - Passive filter design using R, L and C component. It's implementation on bread-board using signal generator/ noise signal.
4. Module-II: It is suggested to include microprocessor through out in Module-II rather than gate logic.

Calculus for Engineers (I Sem)

1. Inclusion of Physical activity during first lecture is suggested.
2. Problem Statement of Project-2 needs clarity on project goal.
3. In assignment, provide only description and remove diagrams. Initially student should visualize themselves. It is expected from student that they will reach to specific design/diagram by their own; on which they can be evaluated (one of the parameter).

Computational Data Analysis (II Sem)

1. Inclusion of real time applications in assignment and projects.
2. Include Cumulative Distribution Function before Probabilistic Distribution Function.
3. It is suggested to use smart art for representation of Steps mentioned in test of hypothesis. Graphical representation of content leads to deep impact.

Design & Prototype (I Sem)

1. Designing Course: Lecture Slides are too much theoretical.
2. Designing Course: Include various physical activities/ case-studies to the extent possible.

Environmental Studies (II Sem)

1. Due to paucity of time, course will be discussed in forthcoming review.

Concluding Remarks by Prof. Siddhartan

Assignments / Projects required to be connected to useful / real world application to the maximum extent possible. Provision of "Recapitulation of key points" after certain number of lectures for respective course.

Kavita

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Chairperson (IQAC)

JK LAKSHMIPAT UNIVERSITY JAIPUR

9 May 2018

Review with Prof. Siddhartan dated 9 May, 2018 for II, III, & IV year courses

Machine Learning (CSE-VII Sem)

1. The project definition should be of student interest.
2. The whole course is carrying Titanic project throughout, please ensure student feedback on frequent basis and might be some changes / addition of few things required in between.
3. In case of standard text books, directly forward links to the students.

Computer Networks (CSE, ECE - V Sem)

1. Syllabus is too heavy. Otherwise learning goals will not have met. Give focus to major topics in the course plan.
2. For student projects, it is advisable to make group of 2-3, rather than 4-5.
3. In case of Assignments, kindly do paraphrasing.

Industrial Drive & Electrical Vehicles (EE-VIII Sem)

1. It is advisable to connect project definition to some pre-existing system/ application for more tangible outcomes.
2. Instead of putting all Multiple choice questions in Quiz, it should contain some open ended questions.
3. There is again a wide scope of introducing real life examples other than Tesla, in area of Electric car & electric green system during the course teaching.

General Observation

1. During the course teaching, emphasize more on important n relevant topics only, which are mapped with learning goals of respective course. Prioritize weight-age of each topic beforehand.
2. Project definition should be of student interest and relevant to future applications.

Kavita

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Chairperson (IQAC)

JK LAKSHMIPAT UNIVERSITY JAIPUR

11 May 2018

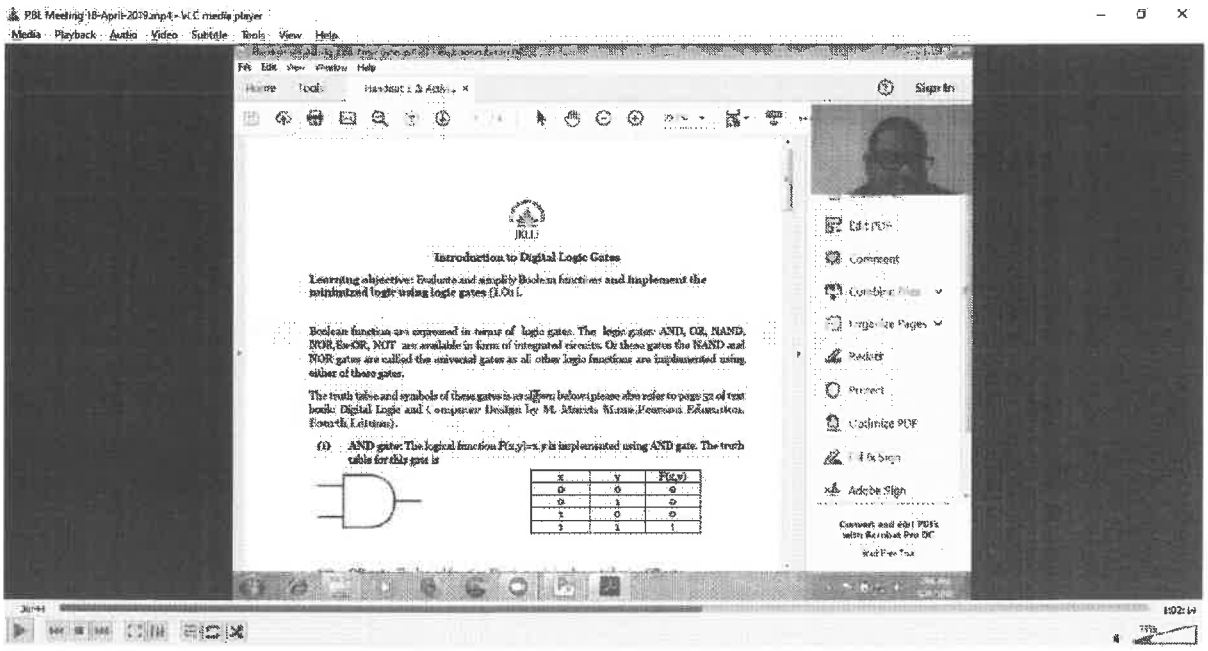
Review dated 11 May, 2018 with Prof. Siddhartan

Design & Prototype

1. Design - Design portion need lots of improvement. Clarity is not there what material will be taken up in the class, if prepared handouts would be given to the students.
2. Prototype - Prototype material is ok. It is suggested to provide instructions for Auto CAD either in the form of pre-class assignment or handout.

Calculus for Engineers

1. Example should be made more connected towards applications. "Car suspension system" type of examples can be included for DE learning.
2. Some video links can be included in handout. More applying problems may be included in the integral calculus.
3. More validation / testing is required for project prototypes. Experimental Validation of Project Canon need to be presented.
4. Course content prepared by Priyansh was not discussed, will be taken up in next review.



Elements of Electrical & Electronic Engineering

1. Evaluation scheme require modification.
2. Incorporate mathematical calculation where ever required.
3. Inclusion of real time examples.

4. Field visit for Thin Film portion is ok.

Computational Data Analysis

1. Progress is ok.

Kavita

Dr. Kavita Choudhary
Chairperson (IQAC)

31 May 2018

To,
Faculty – IET

With continuous efforts from all of you, we have been able to make significant progress on the newly introduced 1st year year engineering courses. Let us keep the momentum going to finalize all these course files.

Enclosing review dates with Prof. Siddhartan for 1st Year Engineering Courses in June/July 2018 for your reference.

REVIEW CADENCE - NEW ENGINEERING COURSE STRUCTURE FOR 1st YEAR

Review Dates with Dr Anupam Singh

Date	Time		Venue	Agenda
12th June, 2018	14:00	17:00	IET Conference Room	Progress Review Course Wise Closure of Actions Points from last time
25th June, 2018	14:00	17:00		
9th July, 2018	14:00	17:00		

Review Dates with Prof Siddhartan Govindasamy

Date	Time		Venue	Agenda
14th June, 2018	9:00	10:00	Board Room	As per details mentioned below
28th June, 2018	9:00	10:00		
16th July, 2018	9:00	10:00		

Course Details

1st Semester

Course -1 : **Calculus for Engineers** - Project Leader Dr Anupam Singh , Team Members- Dr Rajlakshmi Nayak, Dr Jaya Gupta, Mr. Priyansh Singh

Course -2 : **Design and Prototyping** - Project Leader Mr. Amarish Dubey, Team Members - Dr Priyaranjan Sharma, Mr. Aditya Joshi

2nd Semester

Course - 1 : **Computation Data Analysis** - Project Leader Dr Sonal Jain, Team Members - Dr Umesh Gupta, Dr Kavita Choudhary

Course -2 : **Elements of Electrical and Electronics Engineering** - Project Leader Dr Devika Kataria, Team Members - Dr Vipin Jain, Mr. Narayan Sahoo

Review Agenda for Review with Prof. Siddhartan

Pre-Read for Each Review to be Shared 2 days in advance

1. 15 minutes for each Course Review

2. Status Report - Activities Completed in the last 15 days, Plan for next fortnight
3. Links - Share links to course materials prepared on Google Drive with Prof. Siddhartan (Materials, Photos, Videos)
4. Last 15 minutes for Open Questions (Questions to go along with the pre-read 2 days in advance)

Kavita

D. Kavita Choudhary
Chairperson (IQAC)

JK LAKSHMIPAT UNIVERSITY JAIPUR

14 June 2018

Review dated 14 June 2018 by Prof. Siddhartan

Design & Prototype (I Sem) (Present Faculty Member - Aditya Joshi & Dr. Amarish Dubey)

1. Incorporation of Olin Experience in Prototype part is appreciated.

Calculus for Engineers (I Sem) (Present Faculty Member - Dr. Rajlaxmi)

1. Identification of In-class activity is required at the earliest by Monday. Proactive approach is required.
2. Coracle Design - decide fabrication time versus analysis time.

Elements of Electrical & Electronic Engineering (II Sem) (Present Faculty Member - Dr. Devika Kataria)

1. Handouts prepared are a bit difficult for beginner students. Provide more examples.
2. Modification is needed in assignment - combine few questions as suggested.

General Remark - Certain points are needed to take care like - Balanced flexibility for students in any course, and orientation of new students (2018 batch) on aspects of Project based Learning because they were coming from school mode of teaching.

Kavita

Dr. Kavita Choudhary
Chairperson (IQAC)

JK LAKSHMIPAT UNIVERSITY JAIPUR

4 July 2018

To,
Faculty – IET

Till now four sessions are completed in NINJAs training. The training is for two I Sem courses - Design & Prototype and Calculus for Engineers. Sharing pictures of simulation class as well as few pics of Devika Kataria's session. Looking very engaging and fascinating activities. Lots of learning and happening sessions are in pipeline. Will share more details for continuing sessions.

Session 1: Creating Inclusive Learning Environment
Learning: Build an understanding of how explicitly being inclusive as an instructor is important for all leaning environment including tools for communicating, teaching, learning and thinking.
Faculty : Kavita Choudhary

Session 2: Course Specifics
Learning: Design & Prototype - Class Activities, pre-class, post-class and understanding of Projects.
Faculty: Aditya Joshi

Session 3: Course Specifics
Learning: Simulation of 1st class for "Design and Prototype Course"
Faculty: Aditya Joshi, Priyaranjan Sharma, Kavita Choudhary, and Devika Kataria

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Session 4: Fun and Functional Activities for Developing Student Team Mindset
Learning: Student ability to work in groups, develop their ability to form and effectively contribute to stable, adaptive, and high-performing teams in pursuit of creating value.
Faculty: Devika Kataria

Kavita

Dr. Kavita Choudhary
Chairperson (IQAC)

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