

Following are some of the innovative methods of teaching that are initiated and implemented by the EEE faculty for improving the Teaching - Learning - Process.

1. Learning with technology involving YouTube videos
2. Collaborative Learning
3. Flipped Class Room
4. Peer Group Learning
5. Product/ Project Based Learning
6. Experiential Learning
7. Teaching through Industrial Visits, Field trips
8. Lecture through Animated Video
9. Through Demonstration of Models
10. Teaching through Google class Room (Cloud)
11. Case Study
12. Through Seminar, Training Program etc..

Availability of teaching learning material for peer review and critique–Videos and PPT’S

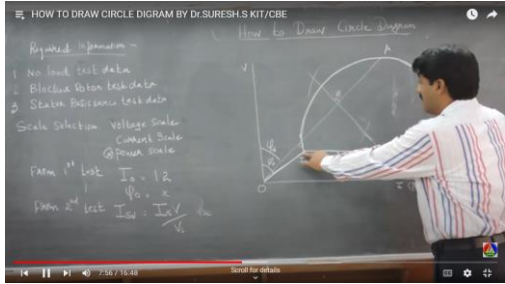
(Samples)

S.No	Name of the Faculty	Name of the Subject	Topic	Resource Link
1.	Dr.S.Suresh	Electrical Machines	Equivalent Ckt. No Load & Blocked Rotor test in 3 phase Induction motor	https://www.youtube.com/watch?v=4A16IGB3pQs
			Load Test on single phase Transformer (Testing of transformer)	https://www.youtube.com/watch?v=eVg-JuQx64k
			Load Test on single phase Transformer (Transformer testing)- Part 2	https://www.youtube.com/watch?v=PzuMnI1A1Xo
			Sumpner’s” Test in Transformer	https://www.youtube.com/watch?v=JcN6GjWs2xk
			PF & ASA Method Regulation of 3 Phase Alternator	https://www.youtube.com/watch?v=1C_AGz-hFQQ
			V& Inverted V Curve of Synchronous Motor	https://www.youtube.com/watch?v=bBQwri774Ok
			Inductance of Transmission Line	https://www.youtube.com/watch?v=iOe9zFfOl0
			Transformer Theory at a Glance (Ideal,NoLoad, Load Conditions)	https://www.youtube.com/watch?v=g436nVYdR3M
			How to Draw Circle Diagram	https://www.youtube.com/watch?v=fIEb2qZ5BK8
			Parallel Operation of Alternators	https://www.youtube.com/watch?v=V_Ob_qp8pRQ
			Phasor diagram of loaded alternator at Lagging power factor	https://www.youtube.com/watch?v=4Rm1wLdgi34
			Emf Method- Regulation of Alternator at Leading Power factor	https://www.youtube.com/watch?v=mpxjGeKcQil&p=ygUSc3VyZXNoIHNIZXR0YXJhbWVfu

			Emf Method-Regulation of Alternator At Leading Power factor	https://www.youtube.com/watch?v=mpxjGeKcQiI
			Emf Method-Regulation Of Alternator For Alternator At Unity Power factor	https://www.youtube.com/watch?v=nWk2GVcwCFA
2	Dr.S.Suresh	Power System	Structure of Power System Network And Few Ideas	https://www.youtube.com/watch?v=cJ15-vsMXvU&list=PLDXV6nGAUpTbqkRXCqwu0wLJCsyAXNvJO&index=8
3	Dr.Lal Raja Singh	Electrical Machines	Induced EMF	https://www.youtube.com/watch?v=MHZhiMo8WNE
4	Dr.R.Mythili	Electronic Devices and Circuits	MOS Transistor Current Equation	https://www.youtube.com/watch?v=7LyIAasUsfE
5	Ms.S.Rathinamala	Special Electrical Machines	Permanent Magnet Brushless DC Motor	http://www.slideshare.net/srmrithi/permanent-magnet-brushless-dc-motors-ppt
6	Ms.S.Rathinamala	Power Plant Engineering	Types of Hydropower Turbine	https://www.slideshare.net/secret/BaSor2avQ2JRKf
7	Mr.K.Pradheep	Circuit Theory	Kirchhoff's Law	https://www.youtube.com/watch?v=qPqQ4gRhZLM

8	Mr.G.Jayabaskaran	Circuit Theory	Mesh Current Analysis	https://www.youtube.com/watch?v=w1AsZxhUJ_k&t=32s
9	Mr.G.Jayabaskaran	Dc Machines and Transformers	Load Test on DC Series Motor	https://www.youtube.com/watch?v=x0DNMtUS03s
		Dc Machines and Transformers	Speed Control of DC Shunt Motor	https://www.youtube.com/watch?v=DS0ldgW3VmU
		Dc Machines and Transformers	Speed Control of DC Motor using Three Phase Rectifier	https://www.youtube.com/watch?v=wXiaf_LvOOc
		Dc Machines and Transformers	EMF Equation of Transformer	https://www.youtube.com/watch?v=BB9LdDZDkBc
10	Mr.G.Jayabaskaran	AC Machines	Speed Control of Three Phase Induction Motor Using PWM Inverter	https://www.youtube.com/watch?v=T4-huA8sLvA
11	Mr.G.Jayabaskaran	Solid State Drives	An Introduction to Electric Drives	https://www.youtube.com/watch?v=FekICfYcjQE
12	Dr.Lal Raja Singh	Dc Machines and Transformers	Output Equation of Single Phase Transformer	https://drive.google.com/file/d/1Ix_F_2RjzUCEF_92hh8y1-H116l0ugF3T/view?usp=share_link
13	Dr.Lal Raja Singh	Design of Electrical Machines	Design of Transformers Introduction	https://drive.google.com/file/d/1Ix_F_2RjzUCEF_92hh8y1-H116l0ugF3T/view?usp=share_link
14	Ms.S.Rathinamala	Power Electronics	Single phase full bridge inverter	https://drive.google.com/file/d/1h3MQ_uwy9R8AF6QuU7Mk-a6pf2LOQ8mr/view?usp=drivesdk

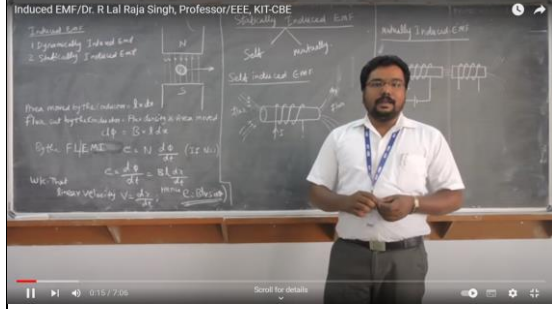
15	Dr. M. P. Mohandass	Microprocessor and Microcontroller	Classification of 8085 Instruction set- Arithmetic Instruction	https://drive.google.com/file/d/1qjjsY55h9kngtvpvX27vVjPmlbbRaaBz/view?usp=share_link
16	Dr.K.Dinesh Kumar	Electrical Machines	Load test on DC Shunt motor	https://drive.google.com/drive/folders/1TpK96tZZRUUpukYnBrc_qUAgtZLN7GqD?usp=sharing
17	Ms. S. Chandrakala	Electromagnetic Field	Electric Field Intensity due to infinite line charge	https://drive.google.com/file/d/1BAECTbrO5YjEmrc_CKIwi5cGdXIEv12/view?usp=share_link
18	Mr. R. Thamizharasan	Power System	Fundamentals of speed governing mechanism	https://drive.google.com/file/d/1Ez_OXkzCcWQOJ-sMwPizZ3KnJL4Ey73L/view?usp=sharing
19	Mr. K. Satheeshkumar	Renewable Energy Sources	Working of 100W Solar PV System and Effect of Shadowing	https://drive.google.com/file/d/1abaDS1vZXzj6FkIM2ECalbJezipEfXan/view?usp=share_link

Name of the Faculty & Courses	Type of Innovation in Teaching & Learning Method	Template
<p>Topic: Circle Diagram</p> <p>Subject : Electrical Machines</p> <p>Dr. S.Suresh</p>	<p>Learning with technology involving YouTube</p>	 <p>https://www.youtube.com/watch?v=fIEb2qZ5BK8</p>

Topic: Induced EMF

Subject : Electrical Machines

Dr.Lal Raja Singh



<https://www.youtube.com/watch?v=MHZhiMo8WNE>

Topic: Realization of Monolithic ICs

Subject: Linear Integrated Circuits and applications

Dr.R.Mythli

Collaborative Learning



Topic : Digital Wattmeter

Subject : Measurements and Instrumentation

Mr.R.Thamizharasan

Flipped Classroom







Topic : Computer Programming for Main dimension of DC Machines



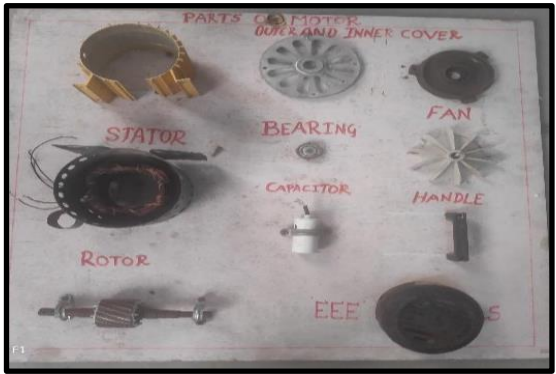
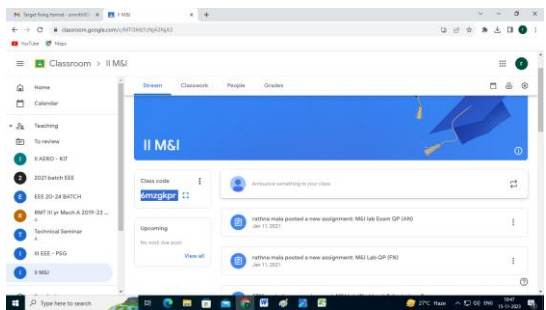
Subject : Design of Electrical Machines



Dr.R.Lal Raja Singh

Peer Group Learning



<p>Subject : Introduction to Microprocessor and Micro controller</p> <p>Ms.S.Karthika</p>	<p>Project Based Learning</p>	
<p>Topic : Four Quadrant chopper</p> <p>Subject : Power Electronics</p> <p>Dr.S.Rathinama la</p>	<p>Experiential Learning</p>	
<p>Topic : Load Test on Single phase induction Motor</p> <p>Subject : Rotating Machines and Transformers</p> <p>Mr.T.Barathkuma r</p>		
<p>Topic : Transformers</p> <p>Subject : DC Machines and Transformers</p> <p>Dr.S.Suresh</p>	<p>Teaching through Industrial Visits, Field trips</p>	

<p>Topic: Solar Power Plant</p> <p>Dr.S.Rathinamala</p>		
<p>Topic : Electromagnetic induction</p> <p>Subject : DC Machines and Transformers</p> <p>Dr.R.Lal Raja Singh</p>	<p>Lecture through Animated Video</p>	
<p>Topic : Parts of Single Phase Induction Motor</p> <p>Subject : Basic Electrical and Electronics Engineering</p> <p>Mr.K.Pradheep</p>	<p>Through Demonstration of Models</p>	
<p>Subject: Measurements and Instrumentation</p> <p>Dr. S.Rathinamala</p>	<p>Teaching through Google class Room (Cloud)</p>	 <p>Class Code: 6mzqkpr</p>

<p>Subject: Power Electronics</p> <p>Dr. S.Rathinamala</p>	<p>Online Quiz</p>	
<p>Subject : Electronic Devices and Integrated Circuits</p> <p>Dr. R.Mythili</p>		
<p>Topic: Design of Electric Vehicle</p> <p>Subject: Electric Vehicle</p> <p>Dr. K.Satheeshkumar</p>	<p>Case study</p>	
<p>Topic: Super Department Stores MBO Programme</p> <p>Subject : Principles of Management and Professional Ethics</p> <p>Ms.S.Chandrakala</p>		

Through Seminar, Training Program etc..

A One day workshop for students was conducted on “Basic Electrical Trouble Hands –on Practice” on 15.06.2023 for 1st year EEE students. Ms.S.Chandrakala, Asst. Professor was the coordinator. Mr. R. Gowtham from Hapec Solutions, Coimbatore, acted as resource persons for this Training Programme.



A “Three-days Hands on Training on END TO END E-VEHICLE DESIGN” for was organized by EEE department on 20 & 21-03-2023. 68 students participated in the **Training**. Dr. S.Rathinamala, Associate Professor was the coordinator of the **Training**. A team consisting of 4 persons headed by Mr. M. Parthiban, from Caliber Embedded Technologies India Pvt. Ltd., acted as resource persons for the workshop.



A seminar on “ENERGY CONSERVATION OPPORTUNITIES IN DOMESTIC SECTOR” Organised by Organised by EEE Department on on 14-12-2022. Dr. R.Lal Raja Singh Professor was the coordinator of the programme. Dr. G. Murganath, Professor & Head / EEE, Ahalia School of Engineering and Technology, Kerala, acted as resource person for this seminar.



A seminar on ELECTRIC VEHICLES AND DRONES- ENGINEERING” Organised by EEE Department on 01-11-2022. Mr.T.Barathkumar, Assistant Professor was the coordinator of the programme. Mr. D. Vinay from CADFEM India, acted as resource person for this seminar.

