

Malla Reddy Engineering College (AUTONOMOUS)

(An Autonomous Institution approved by UGC and affiliated to JNTUH Hyderabad Accredited by NAAC with 'A' Gra Accredited by NBA of AICTE & Recipient of World Bank Assistance under TEQIP Phase - II, S.C.1.1)

ORDER

Date: 15/05/2017

The EEE UG - Board of Studies for the Academic Year 2017-18 have been reconstituted as per the UGC guidelines.

.S. No	Name of the Member	Designation & Official Address	Subject Specialization	Contact No.	E-mait	Category
1	Dr.S. Sudhakara Reddy	Principal,MREC(A)	Mechanical Engineering	9348161125	principal@mrec.ac.in	Special Invitee
2.	Dr.S. Arumugum	Professor & Head, Dept. of EEE	Power Systems	9789722286	arumugams1958@yahoo .com	Chairman- Bos
3	Dr.M.SuryaKalavat hi	Professor,EEE JNTUH	Power Systems	9440763393	munagala12@jntuh.ac.in	University Nominee
4	Dr.G.Yesuratnam	Professor, EEE,OU	Power Systems	9963905932	ratnamgy2003@gmail.co m	Subject Experi Member (External)
5	Dr.K.Siva Kumar	Assistant Professor,IIT HYD	Power Electronics	9494750750	ksiva@iith.ac.in	Subject Expert Member (External)
6	Dr.M.Mohan Rao	Deputy General Manager (GSG & HVE)	Power Systems	9441286642	mmrao@bhel.in	Industry Expert
7	Dr.M.Maheswari	Professor & Head, Dept. of EEE	Power Systems	9791913588	eeehod@mrec.ac.in	Faculty (Member)
8	Dr. N.Rajeswaran	Professor & Dean of EEE MREC(A)	Applied Electronics	7382211597	rajeswarann@gmail.com	Faculty (Member)
9	Dr.M.Lakshmi Swarupa	Professor & Dean(R&D) Dept of EEE MREC(A)	Control Systems	9849732190	swarupamailadi@gmail. com	Faculty (Member)
10	Mr.T.Sanjeeva Rao	Associate Professor Dept. of EEE	Power Systems	9701002366	Sanjeev707@gmail.com	Faculty (Member)
11	Mr.V.Naresh	Production & Quality manager Translite Energy Ltd, Hyd	Power Systems	8099222534	vnaraysh@gmail.com	Alumni

Dr. S. Sudhakara Reddy Principal

PRINCIPAL Maila Reddy Engineering College (Autoremous) Maisamn'ictual Dhelapally us in Konstation Section 500 100

Email : principal@mrec.a

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MALLA REDDY ENGINEERING COLLEGE (Autonomous) Maisammaguda, Dhulapally (Post via Kompally), Secunderabad-500-100. Department of Electrical and Electronics Engineering

Date: 23-06-2017

The 8th Board of Studies meeting for EEE(UG)- B.Tech (EEE) was conducted on 23-06-2017 at 2.00 PM in the conference hall. The following members were present.

S. No	Nome of the NA	Designation & Official Address	Designation in the Board	Signature
1	Dr. S. Sudhakara Reddy	Principal, MREC(A)	Special Invitee	t
2	Dr.S.Arumugam	Professor, Dept of EEE, MREC(A)	Chairman- BOS	Stroomet
3	Dr. M.Surya Kalavathi	Professor, EEE, JNTUH	University Nominee	n. Suy balant
	Dr.G.Yesuratnam	Professor, EEE,OU	Subject Expert	egy
5	Dr. K.Siva kumar	Assistant Professor, IIT Hyderabad.	Subject Expert	K. But
6	Dr.M.Mohan Rao	Deputy General Manager, R&D (GIS & HVE)	Industry Expert	runl
7	Dr. N.Rajeswaran	Professor & Dean, Dept of EEE, MREC(A)	Faculty Member	NONDI
8	Dr.M.Maheswari	Professor & Head, Dept. of EEE	Faculty Member	mania
9	Dr. M.Lakshmi Swarupa	Professor & Dean(R&D), Dept of EEE, MREC(A)	Faculty Member	Q-1
0	Mr.T.Sanjeeva Rao	Assoc. Professor, Dept of EEE, MREC(A)	Faculty Member	Jun -
I	Mr.V.Naresh	Production & Quality Manager Translite Energy Ltd, Hyderabad.	Alumni	- ABSENT ->



Stormaki Chairman EELPG), BOS Reddy Engineering College [Automonaux] intraducts Chicapathy

MALLA REDDY ENGINEERING COLLEGE (Autonomous) HYDERABAD

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Ref.: Lr.No: MREC (A)/EEE/BOS/UG/2017-18

Date: 23-06-2017

MINUTES OF THE MEETING HELD ON 23rd June, 2017

The Eighth Board of Studies for Electrical & Electronics Engineering (UG) branch was convened on 23rd June 2017 at Malla Reddy Engineering College at 10:30AM.

The Chairman (BOS) has given a warm welcome to the members of board of studies.

Agenda 1: Reviewed the Syllabus and Course structure for the I, II, III and IV B.Tech Degree course in EEE for the autonomous batch (MR17-CBCS).

. Chairman has explained about the course structure for MR 17 regulations and highlighted the following points.

- Total credit for each semester has made as 24 and Overall credits for eight semesters are made to 192.
- Basic Electrical and Electronics Engineering course has offered to all branches. It is offered for non circuit branches in I semester and for circuit branches in II semester.
- Electrical Circuit Analysis and Synthesis has shifted from II semester to III semester and the syllabus also revised in such a way that it would be the continuation of Basic Electrical and Electronics Engineering.
- Electrical Measurements and Instrumentation course has shifted from VI semester to IV semester because it doesn't require any prerequisite.
- Power Transmission System has shifted from V semester to IV semester to meet the prerequisite of Power System Analysis in V semester and because of this control system has shifted from IV semester to V semester.
- Linear and Digital IC Applications has made as compulsory course from professional elective to impart its importance to students regarding their mini project and project work.
- In Professional Elective I, PLC & SCADA was one of the course and it has made into two subject as Programmable Logic Controllers and Applications and Supervisory Control and Data Acquisition (SCADA). Programmable Logic Controllers and Applications is offered as professional elective – I in V semester and SCADA is offered as professional elective – II in VII semester.
- In VI semester, Power system Operation and Control has shifted from VII semester to VI semester and OOPS through JAVA has introduced as one of the course in professional elective II to satisfy the placements requirements on the forthcoming semester.
- Open electives are offered from VI semester onwards instead offering all the three in VIII semester.
- Utilization of Electrical Energy has made as compulsory course from professional elective in VII semester and Solid state drives has introduced newly. PRIACIPAL COLLES.
- In VIII Semester Electrical Estimation and Costing has introduced as one of the course in professional elective - VI.
 Maisammacuda, Dhulapaly.
- > The open electives offered by the department are control systems, Energy and conservation and Energy storage systems.

After the presentation of course structure for MR 17 has over, the members has given the following suggestions,

- University Nominee, Dr.Surya Kalavathi has appreciated for implementing common course structure for circuit branches and non circuit branches in I and II semesters.
- Subject expert, Dr.K.Sivakumar has suggested to have one hour duration for each period instead of 50 minutes and also it will help us to distribute the hours equally to all modules for a subject.
- Industry expert, Dr. Mohan Rao has suggested that energy storage system may be offered as one of the professional elective for EEE students with some modifications in the content. He explained that the energy storage systems will become a big developing area within ten years and this course will help the students to compete them in that field. He also suggested that the same content can be included in Utilization of electrical energy also.
- Industry expert, Dr. Mohan Rao has suggested to include reference book entitled Gas Insulated Substations by Dr.M.S.Naidu, IK International Publishers.
- Subject expert, Dr.K.Sivakumar has suggested to modify microprocessor title into some new processors like Aurdino or Rasperry PI in modules IV and V of Electrical Drives and Microprocessors and Apllied Electrical and Electronics Engineering. Also Electrical safety and earthing can be added as one of the module in the above subject.
- Subject expert, Dr.G.Yesurathnam has suggested the subject "Safety and Earthing" can be offered as open elective for other branches.
- Subject expert, Dr.G.Yesurathnam has suggested to add speed control of Induction motor experiment in Mine Electrical Laboratory.
- The Chairman put the discussion on necessity of both differential equation approach and Laplace transform approach for transient analysis in Electrical Circuits and Synthesis. The members replied that it is not mandatory and any one methodology is enough to solve the equation and it can be modified.
- Subject expert, Dr.G.Yesurathnam has suggested to include the following contents in Electrical Measurements and Instrumentation subject
 - Module II: High resistance loss of charge method, Megger, Wagner's Earthing device
 - Module II: Interchange the sequence as De-sauty's bridge, Schering Bridge, LV & HV, Wein's bridge.
 - Module III: Interchange DC and AC topics
 - Module V: Split into two paragraphs
- Subject expert, Dr.K.Sivakumar has suggested to shift the topic "power stages" from Module I to Module II for better continuity.

Industry expert, Dr. Mohan Rao has suggested to include the topic "Permanent magnet machines" in AC Machines in the further revision.

- University Nominee, Dr.Surya Kalavathi has suggested to modify title of Module I as "Introduction to PLC" and Module II title also suitably.
- Also she suggested to change the titles of the Module I, II and V appropriately in Electrical Power Quality Subject.
- Subject expert, Dr.K.Sivakumar suggested to change the name of the experiments suitably in Solid state Drive Lab

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> The remaining modification of syllabus has accepted by the members. Key



Agenda 2: Suggestion and approval of Open Source Software for suitable lab experiments

> The board has given the approval for usage of open source software like scilab instead of MATLAB and Multisim instead of PSPICE for conducting the laboratory experiments.

Agenda 3: Suggestion and approval of panel for Paper setters, Evaluators for both theory and practical examinations.

Discussed the pattern of selection of paper setters and examiners for both theory and laboratory courses for UG programme under the autonomous scheme.

The chairman has thanked all the members for their participation and valuable suggestions in consolidating and finalizing the syllabus as per the agenda.

As there were no other points, the meeting concluded at 1.30PM.

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Electrical and Electronics Engineering

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	suggestions		
Year	ear Semester Name of the Subject		Modifications Suggested
		Power Generation and Distribution	MODULE II: Hydroelectric Power Stations and Turbines Hydroelectric Power Stations: Elements of hydro electric power station – Types - Concept of pumped storage plants - Storage requirements, mass curve (explanation only) estimation of power developed from a given catchment area - Heads and efficiencies.Hydraulic Turbines: Classification of turbines, impulse and reaction turbines, Pelton wheel, Francis turbine and Kaplan turbine - Working proportions, work done, efficiencies, hydraulic design - Draft tube theory - Functions and efficiency.
II	11	Power Transmission Systems	MODULE I: General Concepts Introduction to distribution systems, Load modeling and characteristics. Load factor, Coincidence factor, Contribution factor and Loss factor - Relationship between the Load factor and loss factor. Classification of loads (Residential, Commercial, Agricultural and Industrial) and their characteristics

The Structure and Syllabus for B.Tech MR17 batch have been approved with the following

After formulation of scheme of Instructions, the BOS members reviewed and approved new courses.

The following subjects are introduced for the academic year 2017-18 (MR17).

Subject Code	Subject Name	1
70222	Solid state drives lab	
70236	Electrical Estimation and Costing	
70240	Energy Storage Systems	ین این میکور میکور این این میرون میکور میکرد در ایر این میکور میکور این از وی میکور این این از ایران میکور میکوک کو این میکور میکور این این این میکور میکرد در ایر این میکور میکور این از وی میکوک این این این این این این این این ا



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TEQIP Phase - II, S.C 1,1 Institution

Date: 15/05/2017

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The EEE - EPS Board-of-Studies for the Academic Year 2017-18 have been reconstituted as per the UGC guidelines.

Phone: 040-64634231

S. No	Name of the Member	Designation & Official Address	Subject Specialization	Contact No.	E-mail	Category
1	Dr. S. Sudhakara Reddy	Principal, MREC(A)	Mechanical Engineering	9348161125	in	Special Invitee
2	Dr.S.Arumugam	Professor , Dept of EEE, MREC(A)	Power Systems	9789722286	SPHERAL COMPACE ON NO.	Chairman - BoS
3	Dr. M.Surya Kalavathi	Professor, EEE,JNTUH	Power Systems	9440432277	munagala12@jntuh .ac.in	University Nominee
4	Dr.G.Yesuratnam	Professor, EEE,OU	Power Systems	9963905932	ratnamgy2003@gm ail.com	Subject Expert Member (External)
5	Dr. K.Siva kumar	Assistant Professor, IIT Hyderabad.	Power Electronics	9494750750	ksiva@iith.ac.in	Subject Expert Member (External)
6	Dr.M.Mohan Rao	Deputy General Manager, R&D (GIS & HVE)	Power Systems	9441286642	mmrao@bhelrnd.co .in	Industry Expert
7	Dr.M.Maheswari	Professor & Head, Dept. of EEE	Power Systems	9791913588	eeehod@mrec.ac.in	Faculty (Member)
8	Dr. N.Rajeswaran	Professor & Dean, Dept of EEE, MREC(A)	Applied Electronics	9489677467	, rajeswarann@gmai 1.com	Faculty (Member)
9	Dr. M.Lakshmi Swarupa	Professor & Dean(R&D), Dept of EEE, MREC(A)	Control Systems	984973219) swarupamalladi@g mail.com	Faculty (Member
10	Mr.T.Sanjeeva Rao	Assoc. Professor, Dept of EEE, MREC(A)	Power Systems	970100236	6 sanjeev707@gmail com	. Faculty (Member
11	Mr.V.Naresh	Production & Quality Manager Translite Energy Ltd, Hyderabad.	Power Systems	809922253	4 vnaraysh@gmail.c m	o Alumni

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MALLA REDDY ENGINEERING COLLEGE (Autonomous) Maisammaguda, Dhulapally (Post via Kompally), Secunderabad-500 100. Department of Electrical and Electronics Engineering

Date: 23-06-2017

The 8th Board of Studies meeting for EEE(PG) - M.Tech (EPS) was conducted on 23-06-2017 at 2.00 PM in the conference hall. The following members were present

S. No	Name of the Member	Designation & Official Address	Designation in the Board	Signature
1	Dr. S. Sudhakara Reddy	Principal, MREC(A)	Special Invitee	A
2	Dr.S.Arumugam	Professor, Dept of EEE, MREC(A)	Chairman- BOS	Stroombu
3	Dr. M.Surya Kalavathi	Professor, EEE, JNTUH	University Nominee	n. Sul balant
	Dr.G.Yesuratnam	Professor, EEE,OU	Subject Expert	em
5	Dr. K.Siva kumar	Assistant Professor, IIT Hyderabad.	Subject Expert	K. Burt.
6	Dr.M.Mohan Rao	Deputy General Manager, R&D (GIS & HVE)	Industry Expert	MUL
7	Dr. N.Rajeswaran	Professor & Dean, Dept of EEE, MREC(A)	Faculty Member	NOWPU
8	Dr.M.Maheswari	Professor & Head, Dept. of EEE	Faculty Member	mania
9	Dr. M.Lakshmi Swarupa	Professor & Dean(R&D), Dept of EEE, MREC(A)	Faculty Member	Cont
.0	Mr.T.Sanjeeva Rao	Assoc. Professor, Dept of EEE, MREC(A)	Faculty Member	- Joseph
]]	Mr.V.Naresh	Production & Quality Manager Translite Energy Ltd, Hyderabad.	Alumni	+ ABSENT ->

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Chairman EEE(PG) - BOS Maila Reddy Engineering Colle (Autonomous) Maisammaguda, Dhulapally, Cost Via Kompaily), Sec'bad-500

Year	Semester	Name of the Subject	Modifications Suggested
1	I	P <mark>ower Quality</mark>	MODULE II: Transient Over voltages Sources of transient over voltages: Capacitor switching - magnification of capacitor switchingtransients - lightning - ferro resonance and other switching transients; Devices for over Harmonic distortion: Voltage and current distortion - harmonic indices - harmonic sourcesfrom commercial and industrial loads.voltageprotection: Surge arresters and transient voltage surge suppressors – isolation transformers – lowpass filters - low impedance power conditioners – utility surge arresters, utility system Lightningprotection : shielding, line arresters - low side surges – cable protection and scout arresterscheme. MODULE III: Fundamentals Of Harmonics Locating harmonic sources - system response characteristics: resonance MODULE IV: Applied Harmonics, Wiring And Grounding Effects of harmonic distortion - harmonic distortion evaluation, principles for controlling harmonics - devices for controlling harmonic distortion – inter harmonics caused by inductionfurnaces - IEEI standard 519-1992 – over view of IEC standards on harmonics – reasons forgrounding – typical wiring and grounding problems – isolated ground – summary o wiring and grounding solutions.
I	-T	Power Systems Simulation Lab	1. Develop PSPICE Program for Transient response of RLC Circuit To an input(i) pulse (ii) step and (iii) Sinusoidalsignals. 2. Develop PSPICE Program for Analysis of Three PhaseCircuit representing the generator transmission line and load .plot three phase currents and neutral current.

The Structure and Syllabus for M.Tech MR17 batch have been approved with the following suggestions

After formulation of scheme of Instructions, the BOS members reviewed and approved new courses.

The following subjects are introduced for the academic year 2017-18 (MR17).

Subject Code		Subject Name		
72421	Digital Control Systems			
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AGENDA:

- Discussion and approval of the scheme and Syllabus of M.Tech. EPS (CBCS) for MR17 Regulations (for Batches starting from Academic Year 2017-18 onswards). 2 Suggestion and approval of Open Source Software for suitable lab experiments.
- 3 Suggestion and approval of panel for Paper setters, Evaluators for both theory and practical 4 Delegation of power to the Chairman, BOS for inclusion and exclusion of any item as per the
- 5 Approval of any other item with the permission of the Chairman.

The chairman has thanked all the members for their participation and valuable suggestions in consolidating and finalizing the syllabus as per the agenda.

As there were no other points, the meeting concluded at 1.30PM.

man (B.O.S)



Electrical and Electronics Engineering

Launder Malla Reddy Engineering College (Autonomous) Maisammaguda, Dhulapally, (Post Via Kompally), Sec'bad-500 10*