

PRAGATI ENGINEERING COLLEGE (Autonomous)

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Department of Electrical and Electronics Engineering

Minutes of meeting of the Board of studies in EEE department held on 09.07.2016 and 10.07.2016 in the conference hall of EEE dept.

Members Present:

S. No.	Name	Signature
1	Dr. K. Satyanarayana, Professor, HOD-EEE, Vice-Principal, Chairman of BOS-EEE	Jul myarmup in
2	Dr.Ch.Sai Babu, Professor, UECK, JNTUK, Kakinada.	a.S.D.e
3	Dr. P.Mallikarjuna Rao, Professor of EE, UCE, Andhra University	mRont
4	Sri.V.Mohan Raj Kumar, Assistant Vice President-Electrical, Reliance Infrastructure Limited. Samalkot Power Station.	Jet were
5	Sri.B.Pradeep Raj Vardhan, Site Engineer, L& T Ltd Cyber towers.Quadrant-2 Hi-Tech City, Hyderabad 500081	5. Rad Pleje Vercom
6	Dr. G. Naresh, Prof in EEE Dept.	Q. Nares
7	Mrs. P. Vijaya Prasuna, Assoc. Prof. in EEE Dept.	G. Nares Poarcui
8	Sri. S. M. Shariff, Assoc. Prof. in EEE Dept.	S.m. while
9	Mr. I. Murali Krishna. Asst. Prof. in EEE Dept.	S.m. will J. Huroh Gett A. Sains
10	Mr. I. Srinu, Asst. Prof. in EEE Dept.	J. Sains



PRAGATI ENGINEERING COLLEGE (Autonomous)



Department of Electrical and Electronics Engineering

AGENDA:

- 1. Welcome Address by Chairman-BOS.
- 2. Discussion on proposed course structure of B. Tech & M.Tech and ratification of the same.
- 3. Discussion on proposed B. Tech First Year courses syllabi & M.Tech Subjects syllabi along with course objectives and course outcomes and ratification of the same.
- 4. Ratification of the proposed model papers for internal and external examinations of both theory and laboratory courses.
- 5. Finalization of names of reputed institutions for setting question paper and valuation of answer scripts.
- 6. Finalization of text books and reference books.
- 7. Any other item.

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PRAGATI ENGINEERING COLLEGE

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Department of Electrical and Electronics Engineering

Item No:1 Welcome Address by Chairman - Board of Studies

On behalf of Team EEE, I extend a warm welcome to you all for the first meeting of Board of studies. I deem it a privilege in welcoming the dignitaries for the Board of Studies - EEE Dept.

- Dr.Ch.Sai Babu, Professor, UECK, JNTUK, Kakinada.
- Dr. P.Mallikarjuna Rao, Professor of EEE, UCE, Andhra University.
- Sri.V.Mohan Raj Kumar, Assistant Vice President-Electrical, Reliance Infrastructure Limited, Samalkot Power Station.
- Sri.B..Pradeep Raj Vardhan, Site Engineer, L& T Metro, Hyderabad.
- Members presented from the department of EEE of PEC

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Year of Establishment	2002 (B. Tech), 2011(M. Tech)
AICTE Approval No	$F_{\rm No} 730.50.211(F)/FT/2001$
Duration of Programme	F. No. 730-50-311(E)/ET/2001
Bulation of Programme	04 Years (B. Tech) & 0 2 Years (M.Tech)
Sanctioned Intake	B. Tech : EEE 60 from 2002–03 to the year 2011-12
	120 from 2012-13 onwards
Affiliation	M. Tech (PE & ED): 18 from 2011 onwards
Anniation	Permanently affiliated to Jawaharlal Nehru Technological University,
	Kakinada
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- The Electrical and Electronics Engineering department of this college is started with the objective of giving best "Technical Education" to aspire power engineers. This department provides an environment where young minds can grow to their full potential and become strong, principled and committed citizens of the country.
- + This department faculty consists of highly experienced Professor, well qualified & dedicated Associate Professors and young & dynamic Assistant Professors who work with commitment to give their best to the young Engineers.

ACHIEVEMENTS OF THE DEPARTMENT

- Many students completed and are pursuing post graduate programs in premier institutes like IITs & NITs and INDIAN Universities. 0
- Alumni are placed in reputed organizations like Tata Motors, BARC, BHEL, L&T, IOCL, HCL etc.
- Good numbers of students won prizes in inter collegiate tournaments. 0

BEST PRACTICES

- Consistent Academic performance in End Examination Results.
- Placements and higher education are increasing year by year.
- Students involvement in Project Models.
- All the students are encouraged to present their innovative ideas.
- Releasing department News Letters in half yearly mode since 2007.
- Workshops organized in the latest areas of Electrical Engineering. •
- Students are encouraged to undergo industrial training and internships. ÷.
- Industrial visits provided once in a semester for students. *

FUTURE PLANS

- > To establish center of excellence in one or more thrust areas of Electrical Engineering.
- > To enter into MOUs with reputed academic and Industrial organizations.
- > To establish research oriented laboratories.
- > To achieve 90% and above result.
- To achieve 100% placements among eligible candidates through campus selections.

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PRAGATI ENGINEERING COLLEGE (Autonomous)



Department of Electrical and Electronics Engineering

RESOLUTIONS TAKEN:

1. Considered Item No. 2.

Resolved to ratify the proposed **course structure** for B.Tech and M. Tech programmes for all years and semesters.

The approved **course structures** are enclosed herewith. (Annexure-I for B.Tech and Annexure - II for M.Tech).

2. Considered Item No. 3.

Resolved to ratify the proposed syllabi of following **courses** of First year B. Tech and M. Tech Programmes along with course objectives and course outcomes.

S. No.	Name of the Programme	Name of the Course	Year and Semester
1.	0	Network Theory -1	I-II EEE
2.		Electrical and Mechanical Technology	I-II ECE
3.	B. Tech	Basic Electrical and Electronics Engineering	I-II ME
4.		Electrical Machine Modeling and Analysis -	I-I PE&ED
5.	-	Analysis of Power Electronic converter,	I-I PE&ED
6.	-	Electric Drives – I	I-I PE&ED
7.	-	Flexible AC Transmission Systems	I-I PE&ED
8.		Elective –1 Modern Control Theory / Power Quality / Optimization Techniques /	I-I PE&ED
9.	M. Tech	Elective – II Energy Auditing, Conversion and Management Artificial Intelligence Techniques HVDC Transmission	I-I PE&ED
10.		Systems Simulation lab	I-I PE&ED
11.		Switched Mode Power Conversion	I-II PE&ED
12.		Electric Drives –II	I-II PE&ED
13.	-	Digital Controllers	I-II PE&ED
14.		Custom Power devices	I-II PE&ED
15.		Elective – IV Renewable Energy Sources Reactive Power Compensation and Management	I-II PE&ED

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	Electrical Distribution Systems	
	Elective – IV	
	Smart Grid	
16.	Special Machines	I-II PE&ED
	Programmable Logic controllers and Applications	J-II FE&ED
17.	Power Converters and Drives lab	I-II PE&ED

The approved syllabi are enclosed herewith. (Annexure -III (a, b, c) for B.Tech and Annexure IV for M.Tech).

3. Considered Item No. 4.

Resolved to ratify the proposed **scheme of model papers** for Internal and external examinations (Theory & Lab) of both B. Tech and M. Tech programmes.

The approved scheme of model papers are enclosed herewith. (Annexure -V for B.Tech and Annexure - VI for M.Tech).

4. Considered Item No. 5.

Resolved to approve for setting of question papers and valuation of answer scripts by the reputed institutions including NIT's.

5. Considered Item No. 6.

Resolved to ratify the **text books and reference books** as mentioned in the Item No. 3.

Members suggested to incorporate some important web links or URL's in every subject as references. Accordingly their suggestions were implemented in every subject of B. Tech and M. Tech programmes.

- 6. Considered Item No. 7.
 - i. Resolved to conduct the BOS-meeting at least once in a year.
 - ii. Resolved to specify the subject codes for all courses in B. Tech and M. Tech programmes.
- iii. Resolved to fill the curricular gaps in JNTUK -R13 regulation (w.r.t letter sent to JNTUK) Other Faculty members attended from department of EEE

S. No.	Name of the Faculty	Designation
1	Mr. M. Balaji	Asst. Professor
2	Mrs.T.Himaja	Asst. Professor
3	Mr. N. Suneel Kumar	Asst. Professor
4	Mr. P. Sailesh Babu	Asst. Professor
5	Mrs. G. Durga Devi	Asst. Professor
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6	Mr. I. Prudhvi Kumar Raju	Asst. Professor
7	Mr. S. Ashok Reddy	Asst. Professor
8	Ms. A. Durga Bhavani	Asst. Professor
9	Mr. D. Krishna Chaitanya	Asst. Professor
10	Mr. A.J.P. Varma	Asst. Professor
11	Mr. P. Krishna Chaitanya	Asst. Professor
12	Mrs. K. Sandhya Rani	Asst. Professor
13	Ms. K. Geetha	Asst. Professor
14	Mr. M. Rama Krishna	Asst. Professor
15	Mr. M.N.V.V. Brahmam	Asst. Professor
16	Mr. K. Murali Krishna	Asst. Professor
17	Mr. M. Veera Chandra Kumar	Asst. Professor
18	Mr. G. Bhavanarayana	Asst. Professor
19	Ms.M. Manga Lakshmi	Asst. Professor
20	Mr. K. Srinivasu	Asst. Professor
21	Mrs. V. Ramya	Asst. Professor

Finally Chairman of BOS thanked all the members for their valuable inputs and active participation in the meeting.



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mmmun -10/07/16 Dr.K.Sathyanarayana

HOD-EEE & Chairman- BOS

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COURSE STRUCTURE AND SYLLABUS

For

B.Tech

ELECTRICAL AND ELECTRONICS ENGINEERING

(Applicable for batches admitted from 2016-17)



PRAGATI ENGINEERING COLLEGE (AUTONOMOUS)

Permanently Affiliated to JNTUK, Kakinada, Accredited by NAAC with "A" Grade Recognized by UGC 2(f) and 12(b) under UGC act, 1956 # 1-378, ADB Road, Surampalem – 533 437 Near Peddapuram, E.G.Dist, Andhra Pradesh



PRAGATI ENGINEERING COLLEGE : SURAMPALEM (Autonomous)

I Year – I Semester

S. No.	Subject Code	Subjects	L	Т	Р	C
1	16BH1T01	English–I	3	1		3
2		Mathematics- I	3	1		3
3	16BH1T12	Applied Chemistry	3	1		3
4	16ME1T01	A second s	3	1		3
5	16CS1T01	Computer Programming Using C	3	1		3
6	16BH1T13	Environmental Studies	3	1		3
7	16BH1L05	Engineering/Applied Chemistry Lab			3	2
8	16BH1L01	English-Communication Skills Lab -I			3	2
9	16CS1L10	C-Programming Lab			3	2
		Total Credits				24

I Year – II Semester

S.No	Subject Code	Subjects	L	T	Р	C
. 1	16BH2T02	English–II	3	1		3
2		Mathematics–II (Mathematical Methods)	3	1		3
3	16BH2T06	Mathematics-III	3	1		3
4	16BH2T10	Applied Physics	3	1		3
~		Network Theory-I	3	1		3
(Engineering Drawing	3	1		3
7		English-Communication Skills Lab-II		-	3	2
8	16BH2L03	Engineering/Applied Physics Lab		-	3	2
9		Engineering/Applied Physics–Virtual Lab- Assignments		-	2	
10		Engineering Workshop & IT Workshop		-	3	2
		Total Credits		-		24

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PRAGATI ENGINEERING COLLEGE : SURAMPALEM (Autonomous)

II Year – I Semester

S. No.	Subject Code	Subjects	L	Т	Р	С
1	16EE3T04	Network Theory -II	3	1		3
2	16EE3T05	Electrical Machines-I	3	1		3
3	16EE3T06	Electro Magnetic Fields	3	1		3
4	16EE3T07	Basic Electronics and Devices	3	1		3
5	16ME3T09	Thermal and Hydro Prime Movers	3	1		3
6		Managerial Economics & Financial Analysis	3	1		3
7		Networks Lab			3	2
8	16ME3L03	Thermal and Hydro Lab			3	2
		Total Credits				22

II Year – II Semester

S. No.	Subject Code	Subjects	L	Т	Р	С
1	16EE4T08	Electrical Machines-II	3	1		3
2	16EE4T09	Control Systems	3	1		3
3	16EE4T10	Power Systems-I	3	1		3
4	16EE4T11	Switching Theory and Logic Design	3	1		3
5	16EE4T12	Pulse and Digital Circuits	3	1		3
6	16BH4T15	Management Science	3	1		3
7	16EE4L04	Electrical Machines-I Lab			3	2
8	16EE4L05	Electronic Devices and Circuits Lab			3	2
		Total Credits				22

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III Year – I Semester

S. No.	Subject Code	Subjects	L	T	Р	C
1	16EE5T13	Power Systems-II	3	1		3
2		Electrical Measurements	3	1		3
3	16EE5T15	Power Electronics	3	1		3
4	16EE5T16	Signals and Systems	3	1		3
-		Data Structures	3	1		3
6	16EE5L06	Electrical Machines-II Lab			3	2
7	16EE5L07	Control Systems Lab			3	2
0		Data Structures Lab			3	2
9	16BH5T16	IPR & Patents		2		-
10	16EE5M01	MOOCS		2		-
		Total Credits				21

III Year – II Semester

S. No.	Subject Code	Subjects	L	Т	Р	C
1	16EE6T17	Power Electronic Controllers and Drives	3	1		3
2	16EE6T18	Power System Analysis	3	1		3
3	16EE6T19	Linear IC Applications	3	1		3
4	16EC6T20	Microprocessors & Microcontrollers	3	1		3
	16EE6E01	Open Elective 1. Neural Networks and Fuzzy Logic	3			
	16EE6E02	2. Energy Audit, Conservation & Management				
5	16EC6E05	3.VLSI Design		1		3
	16ME6E01	4.Robotics				
	16CS6E03	5. Unix and Shell Programming	_			
		6. OOPS Through JAVA	_			
6		Power Electronics Lab			3	2
7	16EE6L09	Electrical Measurements Lab			3	2
8		Mini Project/Term Paper			3	2
9		Professional Ethics & Human Values		2	-	
		Total Credits		-		21

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IV Year - I Semester

S.N 0.	Subject Code	Subjects	L	T	Р	С
1	16EE7T20	Utilization of Electrical Energy	3	1		3
2	16EE7T21	Renewable Energy Sources	3	1		3
3	16EE7T22	Power System Operation and Control	3	l		3
4	16EE7T23	Power System Protection	3	1		3
5	16EE7D01	Elective-I: 1.Electrical Machine Modeling and Analysis	3	1		
	16EE7D02	2.Advanced Control Systems				3
5	16EE7D03	3.Industrial Automation and Control				
	16EE7D04	4.Instrumentation				
6	16EE7D05	Elective-II: 1. Electric Power Quality	3	l		2
	16EE7D06	2. Special Electrical Machines				3
	16ME7D07	3. Optimization Techniques				
7	16EE7L10	Power Systems and Simulation Lab			3	2
8	16EC7L08	Microprocessors & Microcontrollers Lab			3	2
		Total Credits				22

IV Year – II Semester

S. No.	Subject Code	Subjects	L	Т	Р	С
1	16EE8T24	Digital Control Systems	3	1		3
2	16EE8T25	HVDC Transmission	3	1		3
3	16EE8T26	Electrical Distribution Systems	3	1		3
	16EE8D07	Elective–III: 1.High Voltage Engineering	3		-	3
4	16EE8D08	2.Flexible Alternating Current Transmission Systems		1		
	16EE8D09	3.Power System Deregulation				
5	16EE8S01	Seminar		3		2
6	16EE8P02	Project Work				10
		Total Credits				24

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