



**PRAGATI ENGINEERING COLLEGE**  
(Autonomous)



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	
2	Dr.Ch.Sai Babu, Professor, UECK, JNTUK, Kakinada.	
3	Dr. P.Mallikarjuna Rao, Professor of EE, UCE, Andhra University	
4	Sri.V.Mohan Raj Kumar, Assistant Vice President-Electrical, Reliance Infrastructure Limited. Samalkot Power Station.	
5	Sri.B.Pradeep Raj Vardhan, Site Engineer, L& T Ltd Cyber towers, Quadrant-2 Hi-Tech City, Hyderabad 500081	
6	Dr. G. Naresh, Prof in EEE Dept.	
7	Mrs. P. Vijaya Prasuna, Assoc. Prof. in EEE Dept.	
8	Sri. S. M. Shariff, Assoc. Prof. in EEE Dept.	
9	Mr. I. Murali Krishna, Asst. Prof. in EEE Dept.	
10	Mr. I. Srinu, Asst. Prof. in EEE Dept.	



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**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.

*C. S. D. U.*

*Prof. Anshu Kumar*  
10/12/16

*B. Pradyumn Kumar*

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**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.	B. Tech	Network Theory -I ✓	I-II EEE
2.		Electrical and Mechanical Technology ✓	I-II ECE
3.		Basic Electrical and Electronics Engineering ✓	I-II ME
4.	M. Tech	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 –I Modern Control Theory ✓ Power Quality ✓ Optimization Techniques ✓	I-I PE&ED
9.		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

*C. S. Reddy*

B. Philip Raju Vadekar *Im*

*Pa*

*Prof. J. S. Reddy*



6	Mr. I. Prudhvi Kumar Raju	Asst. Professor	IK
7	Mr. S. Ashok Reddy	Asst. Professor	AR
8	Ms. A. Durga Bhavani	Asst. Professor	AB
9	Mr. D. Krishna Chaitanya	Asst. Professor	DKC
10	Mr. A.J.P. Varma	Asst. Professor	AV
11	Mr. P. Krishna Chaitanya	Asst. Professor	PKC
12	Mrs. K. Sandhya Rani	Asst. Professor	SKSR
13	Ms. K. Geetha	Asst. Professor	KG
14	Mr. M. Rama Krishna	Asst. Professor	MRK
15	Mr. M.N.V.V. Brahmam	Asst. Professor	MNVV
16	Mr. K. Murali Krishna	Asst. Professor	KMK
17	Mr. M. Veera Chandra Kumar	Asst. Professor	MVK
18	Mr. G. Bhavanarayana	Asst. Professor	GB
19	Ms.M. Manga Lakshmi	Asst. Professor	ML
20	Mr. K. Srinivasu	Asst. Professor	KS
21	Mrs. V. Ramya	Asst. Professor	VR

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



*Dr. K. Sathyanarayana*  
 Dr.K.Sathyanarayana

HOD-EEE & Chairman- BOS

*Ca. S. D. C.*

*B. Prudhvi Kumar Raju*

*AR AB DKC AV PKC SKSR KG MRK MNVV KMK MVK GB ML KS VR*

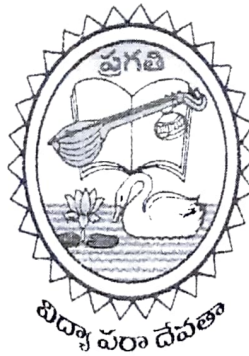
# COURSE STRUCTURE AND SYLLABUS

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  
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I Year – I Semester

S. No.	Subject Code	Subjects	L	T	P	C
1	16BH1T01	English-I	3	1	--	3
2	16BH1T03	Mathematics- I	3	1	--	3
3	16BH1T12	Applied Chemistry	3	1	--	3
4	16ME1T01	Engineering Mechanics	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
<b>Total Credits</b>						<b>24</b>

I Year – II Semester

S.No	Subject Code	Subjects	L	T	P	C
1	16BH2T02	English-II	3	1	--	3
2	16BH2T04	Mathematics-II (Mathematical Methods)	3	1	--	3
3	16BH2T06	Mathematics-III	3	1	--	3
4	16BH2T10	Applied Physics	3	1	--	3
5	16EE2T01	Network Theory-I	3	1	--	3
6	16ME2T02	Engineering Drawing	3	1	--	3
7	16BH2L02	English-Communication Skills Lab-II	--	-	3	2
8	16BH2L03	Engineering/Applied Physics Lab	--	-	3	2
9	16BH2L04	Engineering/Applied Physics-Virtual Lab-Assignments	--	-	2	--
10	16ME2L01	Engineering Workshop & IT Workshop	--	-	3	2
<b>Total Credits</b>						<b>24</b>





PRAGATI ENGINEERING COLLEGE : SURAMPALEM  
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II Year – I Semester

S. No.	Subject Code	Subjects	L	T	P	C
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	16BH3T14	Managerial Economics & Financial Analysis	3	1	--	3
7	16EE3L01	Networks Lab	--	--	3	2
8	16ME3L03	Thermal and Hydro Lab	--	--	3	2
<b>Total Credits</b>						<b>22</b>

II Year – II Semester

S. No.	Subject Code	Subjects	L	T	P	C
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
<b>Total Credits</b>						<b>22</b>



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III Year – I Semester

S. No.	Subject Code	Subjects	L	T	P	C
1	16EE5T13	Power Systems-II	3	1	--	3
2	16EE5T14	Electrical Measurements	3	1	--	3
3	16EE5T15	Power Electronics	3	1	--	3
4	16EE5T16	Signals and Systems	3	1	--	3
5	16CS5T12	Data Structures	3	1	--	3
6	16EE5L06	Electrical Machines-II Lab	--	--	3	2
7	16EE5L07	Control Systems Lab	--	--	3	2
8	16CS5L06	Data Structures Lab	--	--	3	2
9	16BH5T16	IPR & Patents	--	2	--	-
10	16EE5M01	MOOCS	--	2	--	-
<b>Total Credits</b>						<b>21</b>

III Year – II Semester

S. No.	Subject Code	Subjects	L	T	P	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
5	16EE6E01	<b>Open Elective</b> 1. Neural Networks and Fuzzy Logic	3	1	--	3
	16EE6E02	2. Energy Audit, Conservation & Management				
	16EC6E05	3.VLSI Design				
	16ME6E01	4.Robotics				
	16CS6E03	5. Unix and Shell Programming				
	16IT6E03	6. OOPS Through JAVA				
6	16EE6L08	Power Electronics Lab	--	--	3	2
7	16EE6L09	Electrical Measurements Lab	--	--	3	2
8	16EE6P01	Mini Project/Term Paper	--	--	3	2
9	16BH6T17	Professional Ethics & Human Values	--	2	-	-
<b>Total Credits</b>						<b>21</b>

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IV Year – I Semester

S.N o.	Subject Code	Subjects	L	T	P	C
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	1	--	3
4	16EE7T23	Power System Protection	3	1	--	3
5	16EE7D01	<b>Elective-I:</b> 1.Electrical Machine Modeling and Analysis	3	1	--	3
	16EE7D02	2.Advanced Control Systems				
	16EE7D03	3.Industrial Automation and Control				
	16EE7D04	4.Instrumentation				
6	16EE7D05	<b>Elective-II:</b> 1. Electric Power Quality	3	1	--	3
	16EE7D06	2.Special Electrical Machines				
	16ME7D07	3. Optimization Techniques				
7	16EE7L10	Power Systems and Simulation Lab	--	--	3	2
8	16EC7L08	Microprocessors & Microcontrollers Lab	--	--	3	2
<b>Total Credits</b>						<b>22</b>

IV Year – II Semester

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

*[Handwritten signatures and initials]*