Grams: "TECHNOLOGY"
Email:registrar@jntuk.edu.in

Phone:Off: 0884 -2300900
Fax: 0884 -2300901

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
KAKINADA-533 003. ANDHRA PRADESH (India)
(Established by Andhra Pradesh Act No.30 of 2008)

Letter No. DAP/B1/ Boards of studies /2018-19 Date: 9.8.2018

Prof. V.V.Subba Rao,
B.Tech., M.E., Ph.D.
REGISTRAR

To
The Principal,
Amrita Sai Institute of Science & Technology,
Kanchikacherla(M),
Krishna District.

Sir,

Sub: JNTU Kakinada - Academic & Planning – Boards of studies to Amrita Sai Institute of Science & Technology, Kanchikacherla(M), Krishna District – Reg.

Ref: Note orders dated 8.8.2018 of the Hon'ble Vice-Chancellor i/c, JNTUK, Kakinada.

***

I am by the direction of the Hon'ble Vice-Chancellor JNTUK, Kakinada nominate the following as member for Boards of studies to Amrita Sai Institute of Science & Technology, Kanchikacherla(M), Krishna District for two academic years i.e. 2018-19 and 2019-20.

S.No	Department	Name of the Committee Member
1	Electrical & Electronics Engineering	Dr. S. Siva Nagaraju Professor, UCEK, JNTUK.
2	Electronics & Communication Engineering.	Dr. I. Santhi Prabha Professor, UCEK, JNTUK.
3	Mechanical Engineering.	Dr. B.Balakrishna, Professor, UCEK, JNTUK.
4	Civil Engineering.	Dr. K.V.S.G. Murali Krishna, Professor , UCEN, JNTUK.
5	Computer Science & Engineering.	Dr. K.Sahadevaiah Professor, UCEK, JNTUK.
6	MCA	Dr.A.Krishna Mohan Professor of CSE Department, UCEK, JNTUK
7	MBA	Dr.P.Vijay Kumar, Programme Director, School of Management Studies, JNTUK

Yours Sincerely,

REGISTRAR

Copy to above Members concerned.
Copy to the Secretary to the Vice-Chancellor, JNTU Kakinada.
Copy to the Director, Academics & Planning (DAP) JNTU Kakinada.

Amrita Sai Institute of Science and Technology
(Autonomous)

Accredited by NAAC with 'A' grade, Approved by AICTE, New Delhi;
Affiliated to JNTU, KAKINADA
Paritala, Krishna District – 521 180 (A. P.)
Ph No. 08662428399, www.amritasai.edu.in

Dt.21.08.2018

To

Dr. G Yesuratnam,
Professor,
Electrical Engineering Department,
Osmania University.

Dear Sir,

Sub: Amrita Sai Institute of Science and Technology – Autonomous –Invitation for BOS Meeting – Reg

Ref: 1. UGC Letter No.F. 22-1/2017/(AC) dated 10th July 2018.
2. JNTUK Letter. No.DAP/B1/Board of Studies/2018-19.

With reference to the above, we are very thankful to you for your acceptance and time for our common goal that to provide quality education to the engineering students.

In this regard...our academic council has approved your candidature as member of Board of studies, the orders copy has been forwarding to you by email.

I am also advert to your kind notice that the first board of studies meeting is scheduled on 27-08-2018. Please make yourself to convenient to attend first BOS meeting.

Any queries you can call us at anytime. We are happy to serve you sir.

This is for your information and kind consideration.

Thanking you

With regards

PRINCIPAL

PRINCIPAL
Amrita Sai Institute of Science & Technology
Amrita Sai Nagar, Paritala Road,
PARITALA (P.O.), Kanchikacherla(Mdl.),
Krishna Dt-521180, A.P. India.

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Ph No. 08662428399, www.amritasai.edu.in

Dt.21.08.2018

To

Dr. Chandrasekhar Yammani,
Asst Professor,
Electrical Engineering Department,
National Institute of Technology Warangal,
India-506004.

Dear Sir,

Sub: Amrita Sai Institute of Science and Technology – Autonomous – Invitation for BOS Meeting – Reg

Ref: 1. UGC Letter No.F. 22-1/2017/(AC) dated 10th July 2018.
2. JNTUK Letter. No.DAP/B1/Board of Studies/2018-19.

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Thanking you

With regards

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Paritala, Krishna District – 521 180 (A. P.)
Ph No. 08662428399, www.amritasai.edu.in

Dt.21.08.2018

To

Dr S Siva Nagaraju,
Professor,
Electrical & Electronics Engineering,
UCEK, JNTUK,
Kakinada,
Andhra Pradesh.

Dear Sir,

Sub: Amrita Sai Institute of Science and Technology – Autonomous – Invitation for Board of Studies Meeting – Reg

Ref: 1. UGC Letter No.F. 22-1/2017/(AC) dated 10th July 2018.
2. JNTUK Letter. No.DAP/B1/Board of Studies/2018-19.

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With regards

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PARITALA (P.O.),Kanchikacherla(Mdl.),

Amrita Sai Institute of Science and Technology
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Affiliated to JNTU, KAKINADA
Paritala, Krishna District – 521 180 (A. P.)
Ph No. 08662428399, www.amritasai.edu.in

Dt.11.08.2018

To

Dr S Siva Nagaraju,
Professor,
Electrical & Electronics Engineering,
UCEK, JNTUK,
Kakinada,
Andhra Pradesh.

Dear Sir,

Sub: Amrita Sai Institute of Science and Technology – Autonomous – Nomination of Board of Studies Member by JNTUK – Reg

Ref: 1. UGC Letter No.F. 22-1/2017/(AC) dated 10th July 2018.
2. JNTUK Letter. No.DAP/B1/Board of Studies/2018-19.

With reference to the above, you have been nominated as member for the Board of Studies for Electrical & Electronics Engineering Department in Amrita Sai Institute of Science and Technology Paritala under the autonomous system for a period of Two years starting from the academic year 2018-19.

In addition to the above the list/details of Board of Studies Members is attached to this letter. The meeting schedule will be informed to you in due course.

This is for your information and kind consideration.

Thanking you

With regards

PRINCIPAL

PRINCIPAL
Amrita Sai Institute of Science & Technolog
Amrita Sai Nagar,Paritala Road,
PARITALA (P.O.),Kanchikacherla(Mdl.
Krishna Dt-521180,A.P.India.

List of Enclosures:

1. List/Details of BoS Members

Amrita Sai Institute of Science and Technology
(Autonomous)

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Paritala, Krishna District – 521 180 (A. P.)
Ph No. 08662428399, www.amritasai.edu.in

Dt.11.08.2018

To

Dr. Chandrasekhar Yammani,
Asst Professor,
Electrical Engineering Department,
National Institute of Technology Warangal,
India-506004.

Dear Sir,

Sub: Amrita Sai Institute of Science and Technology – Autonomous – Nomination of Board of Studies Member – Reg

Ref: 1. UGC Letter No.F. 22-1/2017/(AC) dated 10th July 2018.
2. JNTUK Letter. No.DAP/B1/Board of Studies/2018-19.

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Amrita Sai Institute of Science & Technology
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Krishna Dt-521180, A.P. India.

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1. List/Details of BoS Members

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AFFILIATED TO JNTU, KAKINADA
PARITALA, KRISHNA DISTRICT – 521 180 (A. P.)
PH NO. 08662428399, www.amritasai.edu.in

Dt.11.08.2018

To

Dr. G Yesuratnam,
Professor,
Electrical Engineering Department,
Osmania University.

Dear Sir,

Sub: Amrita Sai Institute of Science and Technology – Autonomous – Nomination of Board of Studies Member – Reg

Ref: 1. UGC Letter No.F. 22-1/2017/(AC) dated 10th July 2018.
2. JNTUK Letter. No.DAP/B1/Board of Studies/2018-19.

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Thanking you

With regards

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Krishna Dt-521180, A.P. India.

List of Enclosures:

1. List/Details of BoS Members

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Ph No. 08662428399, www.amritasai.edu.in

Dt.11.08.2018

To

Sri L Jagadesh Kumar,
Senior Officer (Section Incharge)
KEC International Ltd.

Dear Sir,

Sub: Amrita Sai Institute of Science and Technology – Autonomous – Nomination of Board of Studies Member – Reg

Ref: 1. UGC Letter No.F. 22-1/2017/(AC) dated 10th July 2018.
2. JNTUK Letter. No.DAP/B1/Board of Studies/2018-19.

With reference to the above, you have been nominated as member for the Board of Studies for Electrical & Electronics Engineering Department in Amrita Sai Institute of Science and Technology Paritala under the autonomous system for a period of Two years starting from the academic year 2018-19.

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This is for your information and kind consideration.

Thanking you

With regards

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Sai Institute of Science & Technology
Sai Nagar, Paritala Road,
ALA (P.O.), Kanchikacherla(Mdl.),
Krishna Dt-521180, A.P. India.

List of Enclosures:

1. List/Details of BoS Members

Gmail

AMRITASAI EEE <asisteeehod@gmail.com>

BoS member - Request - Regarding

Chandrasekhar Y <chandrayammani@nitw.ac.in> Fri, Aug 10, 2018 at 12:03 PM
To: AMRITASAI EEE <asisteeehod@gmail.com>

Dear Ch Chinna Veeraiah, Head, Department of EEE, ASIST,

Thank you for your mail.

I am happy to accept to act as a member of the department board of studies, Department of EEE, ASIST.

Please let me know the further actions required from my end.

Best Regards,
Dr. Chandrasekhar Yammani

Best Regards,

Dr. Chandrasekhar Yammani
Erasmus Mundus Post-Doc Fellow,
Asst.Professor,
Electrical Engineering Department,
National Institute of Technology Warangal,
India-506004.
Ph: +91-8332969290

On Fri, Aug 10, 2018 at 11:47 AM, AMRITASAI EEE <asisteeehod@gmail.com> wrote:

Dear Sir,

Good morning!

Greetings form Amrita Sai Institute of Science & Technology, Paritala. Recently ASIST has got Autonomous status.

As per UGC norms, every department must form a Board of Studies. In this regard, I am, Ch Chinna Veeraiah, Head, Department of EEE requesting You for Your acceptance for being the member in Department Board of Studies. Please accept our request and kindly acknowledge your acceptance.

Thanking you,

Yours Faithfully,

Ch Chinna Veeraiah
HOD EEE
9912676555

Gmail

AMRITASAI EEE <asisteeehod@gmail.com>

BoS member - Request - Regarding

3 messages

AMRITASAI EEE <asisteeehod@gmail.com> Fri, Aug 10, 2018 at 11:46 AM
To: ratnamgy2003@gmail.com

Dear Sir,

Good morning!

Greetings form Amrita Sai Institute of Science & Technology, Paritala. Recently ASIST has got Autonomous status.

As per UGC norms, every department must form a Board of Studies. In this regard, I am, Ch Chinna Veeraiah, Head, Department of EEE requesting You for Your acceptance for being the member in Department Board of Studies. Please accept our request and kindly acknowledge your acceptance.

Thanking you,

Yours Faithfully,

Ch Chinna Veeraiah
HOD EEE
9912676555

Yesuratnam Guduri <ratnamgy2003@gmail.com> Fri, Aug 10, 2018 at 12:26 PM
To: AMRITASAI EEE <asisteeehod@gmail.com>

Sir,

I am herewith conveying my acceptance as a member of Board of studies.

With regards,
Dr. G.Yesuratnam
Professor of EED
Osmania university
[Quoted text hidden]
--

With Regards,
****

Dr. G. Yesuratnam

M.Tech. (RECW), Ph.D (IISc.).

Professor

Department of Electrical Engineering
University College of Engineering (A)
Osmania University, Hyderabad-500 007

Gmail

AMRITASAI EEE <asisteeehod@gmail.com>

BoS member - Request - Regarding

jagadesh.lagadapati <jagadesh.lagadapati@gmail.com> Fri, Aug 10, 2018 at 12:53 PM
To: AMRITASAI EEE <asisteeehod@gmail.com>

DEAR SIR,
I am accepting your request as a BOS member in your organisation.

thanks & regards
L.jagadesh kumar
Senior officer (section incharge)
KEC international ltd
9494446608.

Sent from my Samsung Galaxy smartphone.

-------- Original message --------
From: AMRITASAI EEE <asisteeehod@gmail.com>
Date: 10/08/2018 11:52 (GMT+05:30)
To: jagadesh.lagadapati@gmail.com
Subject: BoS member - Request - Regarding

Dear Sir,

Good morning!

Greetings form Amrita Sai Institute of Science & Technology, Paritala. Recently ASIST has got Autonomous status.

As per UGC norms, every department must form a Board of Studies. In this regard I am, Ch Chinna Veeraiah, Head, Department of EEE requesting You for Your acceptance for being the industry expert member in Department Board of Studies. Please accept our request and kindly acknowledge your acceptance.

Thanking you,

Yours Faithfully,

Ch Chinna Veeraiah
HOD EEE
9912676555

Gmail

AMRITASAI EEE <asisteeehod@gmail.com>

BoS member - Request - Regarding

kuncham sateesh kumar <sateeshkuncham@gmail.com> Fri, Aug 10, 2018 at 12:41 PM
To: AMRITASAI EEE <asisteeehod@gmail.com>

Respected Sir,

I accepted your request to be a Post Graduate Alumni member for EED AMRITA SAI INSTITUTE OF SCIENCE & TECHNLOGY.

On Fri, Aug 10, 2018 at 11:50 AM, AMRITASAI EEE <asisteeehod@gmail.com> wrote:

Dear Sateesh kumar,

Good morning!

Greetings form Amrita Sai Institute of Science & Technology, Paritala. Recently ASIST has got Autonomous status.

As per UGC norms, every department must form a Board of Studies. In this regard I am, Ch Chinna Veeraiah, Head, Department of EEE requesting You for Your acceptance for being the Post Graduate Alumni member in Department Board of Studies. Please accept our request and kindly acknowledge your acceptance.

Thanking you,

Ch Chinna Veeraiah
HOD EEE
9912676555

--
With best regards
Sateesh Kumar.K
Ph.D Scholar,
Dept. of Electrical and Electronics Engineering ,
NIT Warangal,

AMRITA SAI INSTITUTE OF SCIENCE & TECHNOLOGY
(AUTONOMOUS)
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www.amritasai.edu.in, Phone: 0866 2428399.

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Paritala,

Dt: 25-08-2018.

Circular

This is in form to all the members of Board of studies that to attend the first BOS meeting on 27-08-2018 at 10:00AM in Electrical & Electronics Engineering office.

Agenda:

1. Introducing Members to the Board.
2. Preparation of Course Structure and syllabus for various courses keeping in view of objectives of college.
3. To prepare the panel of examiners for the Electrical & Electronics Engineering.
4. Suggesting methodologies for teaching and evaluation.
5. Suggestions of research activities carried out in the department.
6. Suggestions or coordination of extension activities in the department.

EEE HOD

HEAD OF THE DEPARTMENT
Electrical & Electronics Engineering
Amrita Sai Institute of Science and Technology
Paritala (PO), Kanchikacherla (MD), Krishna (Dt.

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www.amritasai.edu.in, 0866 2428399

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Board of Studies

Composition:

S. No	Name	Specialization	Category
1	Sri. Ch Chinna Veeraiah, Assistant Professor	Power Electronics	HOD (Chairman)
2	Sri. S M Rahman, Associate Professor	Electrical Power Engineering	Entire Faculty
3	Sri. A Gopi, Assistant Professor	Power Electronics	
4	Smt T Suhasini, Assistant Professor	Power Electronics	
5	Sri. M Srinu, Assistant Professor	Power Electronics	
6	Smt B Jyotsna, Assistant Professor	VLSI	
7	Sri. P Venkateswara Rao, Assistant Professor	Power Systems	
8	Ms. L Sai Vani, Assistant Professor	Power Electronics	
9	Smt Md Shameem, Assistant Professor	Power Electronics	
10	Sri P Ankamma Rao, Assistant Professor	Power Electronics	
11	Sri T Anji babu, Assistant Professor	Power Electronics	
12	Sri M Sree Pradeep, Assistant Professor	Power Systems	
13	Sri J Janakiram, Assistant Professor	Power Systems	
14	Ms P Revathi, Assistant Professor	Power Electronics	
15	Sri K Sabarinadh, Assistant Professor	Power Electronics	
16	Sri D Pavan Kumar Associate Professor	Physics	
17	Dr S Vijaya Vardini Professor	Chemistry	
18	Smt Sd Ashrath Parveena, Assistant Professor	English	
19	Sri E Taraka Ramudu Associate Professor	Mathematics	
20	Dr. Y Chandra Sekhar, Asst Professor, Dept of EEE, NIT, Warangal	EEE	Subject Expert from Academia
21	Dr. G Yesuratnam, Professor of EED, Osmania University.	EEE	Subject Expert from Academia
22	Sri L Jagadeesh, Senior Officer (Section Incharge) KEC International limited.	EEE	Subject Expert from Industry
23	Dr S Sivanagaraju, Professor, Dept of EEE, University College of Engineering,Kakinada, JNTUK	EEE	One Expert from Parent University nominated by Vice Chancellor
24	Sri. K Satish Kumar Ph.D Scholor, NIT, Warangal	EEE	One Meritorious Post Graduate nominated by Principal

Term : The term of the nominated members shall be two years.
Meetings : The Board of Studies will meet at least twice a year.
Functions : The Board of Studies of a Department in the college shall:

a. Prepare syllabi for various courses keeping in view the objectives of the college, interest of the stakeholders and national requirement for consideration and approval of the Academic Council
b. Suggest methodologies for innovative teaching and evaluation techniques
c. Suggest panel of names to the Academic Council for appointment of examiners
d. Coordinate research, teaching, extension and other academic activities in the department/college.

PRINCIPAL
Amrita Sai Institute of Science & Technology
Amrita Sai Nagar, Paritala, Krishna Dist.
PARITALA (P.O.), Kanchikacherla (T.)

PRINCIPAL
(Dr M SASIDHAR)

and briefed about the agenda to be discussed. The following agenda were placed by the Chairman and decisions were taken after detailed deliberations:

The Agenda for the meeting

1. Introducing Members to the Board.
2. Preparation of course structure and syllabus for various courses keeping in view of objectives of college.
3. To prepare the panel of examiners for the Electrical & Electronics Engineering.
4. Suggesting methodologies for teaching and evaluation.
5. Suggestions of research activities carried out in the department.
6. Suggestions or coordination of extension activities in the department.

Agenda 1: Introducing Members to the Board

Resolution: The Chairman cordially inviting all the members to the first meeting of Electrical & Electronics Engineering Board of Studies.

The chairman of the Board also describes briefly about the Institution, promoters and their motive, establishment of the department, vision and mission of institution and departments, as well as organizing structure. The chairman then appeals the board and initiates the discussion on agenda points.

Agenda 2: Preparation of syllabus for various courses keeping in view of objectives of college.

The Chairman appraised the members about the Autonomous for four year course Electrical & Electronics Engineering and two year course Power Electronics. Accordingly, a draft syllabus of the first four semesters for B.Tech and first two semesters for M.Tech was presented and placed before the board for their opinion and approval.

Resolution: The BOS went through the syllabus and discussed in length about various aspects of the syllabus. After incorporation of the changes suggested by the members of BoS, the first four semesters for B.Tech and First two semesters for M. Tech was approved.

Attachment: Annexure-I

Agenda–3: To prepare the panel of examiners for the Electrical & Electronics Engineering.

The Chairman presented the proposed panel of examiners pertaining to I to VIII semester Electrical & Electronics Engineering and I to II semester Power Electronics examination 2018-2019.

Resolution: After incorporating of certain changes suggested by the members, the panel of examiners was approved.

Attachment: Annexure-II

27/8 27/08

AMRITA SAI INSTITUTE OF SCIENCE & TECHNOLOGY
(AUTONOMOUS)
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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Proceedings of the 1st meeting of Board of Studies in Electrical & Electronics Engineering, held on 27-08-2018 at 10:00 AM in the Department of Electrical & Electronics Engineering Office, Amrita Sai Institute of Science & Technology, Paritala

S. No	Member	Signature	S. No	Member	Signature
1	**Sri. Ch Chinna Veeraiah,** Assistant Professor & Head Department of EEE, ASIST, Paritala		2	**Dr S Sivanagaraju,** Professor, Dept of EEE, University College of Engineering, JNTUK ,Kakinada,	
3	**Dr. Y Chandra Sekhar,** Asst Professor, Dept of EEE, National Institute of Technology, Warangal.		4	**Dr. G Yesuratnam,** Professor of EED, Osmania University. Hyderabad	
5	**Sri I. Jagadeesh,** Senior Officer (Section Incharge) KEC International limited.		6	**Sri. K Satish Kumar** Ph.D Scholor, National Institute of Technology, Warangal.	
7	**Sri. S M Rahman,** Associate Professor Department of EEE, ASIST, Paritala		8	**Sri. A Gopi,** Assistant Professor Department of EEE, ASIST, Paritala	
9	**Smt T Suhasini,** Assistant Professor Department of EEE, ASIST, Paritala		10	**Sri. M Srinu,** Assistant Professor Department of EEE, ASIST, Paritala	
11	**Smt B Jyotsna,** Assistant Professor Department of EEE, ASIST, Paritala		12	**Sri. P Venkateswara Rao,** Assistant Professor Department of EEE, ASIST, Paritala	
13	**Ms. L Sai Vani,** Assistant Professor Department of EEE, ASIST, Paritala		14	**Smt Md Shameem,** Assistant Professor Department of EEE, ASIST, Paritala	
15	**Sri P Ankamma Rao,** Assistant Professor Department of EEE, ASIST, Paritala		16	**Sri T Anji babu,** Assistant Professor Department of EEE, ASIST, Paritala	
17	**Sri M Sree Pradeep,** Assistant Professor Department of EEE, ASIST, Paritala		18	**Sri J Janakiram,** Assistant Professor Department of EEE, ASIST, Paritala	
19	**Ms P Revathi,** Assistant Professor Department of EEE, ASIST, Paritala		20	**Sri K Sabarinadh,** Assistant Professor Department of EEE, ASIST, Paritala	
	Special Invitees				
21	**Sri E Taraka Ramudu,** Assoc Professor in Mathematics, Department of S&H, ASIST, Paritala		18	**Sri D Pavan Kumar,** Assoc Professor in Physics, Department of S&H, ASIST, Paritala	
19	**Smt Sd Ashrath Parveena,** Assistant Professor in English Department of S&H, ASIST, Paritala		20	**Dr S Vijaya Vardini,** Professor in Chemistry, Department of S&H, ASIST, Paritala	

At the outset, the Chairman, BOS in Electrical & Electronics Engineering, welcomed all members of Board of Studies and Special invitees present in 1st meeting of Board of Studies.

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Agenda 4: Suggesting methodologies for teaching and evaluation.

The Chairman presented the proposed methodologies for teaching and evaluation of Electrical & Electronics Engineering were placed before the board for their opinion and approval

Resolution: After incorporating of certain changes suggested by the members, methodologies for teaching and evaluation was approved.

Attachment: Annexure-III

Agenda 5: Suggestions of research activities carried out in the department.

The Chairman asked the board members for research activities carried out in the department. The board suggested following points to be implemented:

1. Conduct regular research orientation sessions to all faculty members and meritorious students to create awareness among them.
2. Encourage students and faculty to publish papers in reputed journals / conferences. It is also suggested that, to provide incentive for the faculty who published in reputed journals.

Agenda 6: Suggestions or coordination of extension activities in the department.

Dr. S Sivanagaraju, Professor, University College of Engineering, JNTUK, Expert Member of JNTUK briefed the members about the need of extension work and workshops which are to be conducted in the department. Dr. S Sivanagaraju also suggested,

- Conduct meeting to all faculty members and create awareness of workshops, and other activities.
- Conduct at least two workshops per semester on advanced technologies or latest trends.
- Conduct quizzes, seminars, gust lectures to improve or impart extra knowledge amongst the students and faculty.

There being no other matter, the meeting was concluded with a vote of thanks to the chair.

Sd/-

Ch Chinna Veeraiah,
Assistant professor & Head,
Chairman, BoS,
Department of EEE

27/8

27/08

Under Graduate Course Structure

For

ELECTRICAL & ELECTRONICS ENGINEERING

(Applicable for batches admitted from 2018-2019)

S No	Programme Code	Programme Name	Branch	No. of Sections	No. of Students	Page
1	02	B. Tech	Electrical & Electronics Engineering	02	120	1-3

Autonomous Regulations – R18

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B. Tech. Course Structure – Electrical & Electronics Engineering

I Semester

S. No	Subject Code	Subject	L	T	P	C
1	18BS1T1	English – I	3	1	--	3
2	18BS1T2	Mathematics - I	4	1	--	4
3	18BS1T3	Engineering Chemistry	3	1	--	3
4	18ME1T4	Engineering Mechanics	3	1	--	3
5	18CS1T5	C- Programming	3	1	--	3
6	18BS1T6	Environmental Studies	3	1	--	3
7	18BS1L1	English- Communication Skills Laboratory - I	--	--	3	1
9	18CS1L3	C-Programming Laboratory	--	--	3	1
		Total Credits	**21**			

II Semester

S. No	Subject Code	Subject	L	T	P	C
1	18BS2T1	English – II	3	--	--	2
2	18BS2T2	Mathematics – III	4	1	--	4
3	18HS2T3	Mathematics – II (Mathematical Methods)	3	1	--	3
4	18EE2T4	Electrical Circuit Analysis - I	3	1	--	3
5	18BS2T5	Engineering Physics	3	1	--	3
6	18ME2T6	Engineering Drawing	2	--	4	3
7	18BS2L1	English - Communication Skills Laboratory - II	--	--	3	1
8	18HS2L2	Applied / Engineering Physics Laboratory	--	--	3	1
9	18ME2L3	Engg.Workshop & IT Workshop	--	--	3	1
		Total Credits	**21**			

III Semester

S. No	Subject Code	Subject	L	T	P	C
1	18EE3T1	Electrical Circuit Analysis - II	3	1	--	3
2	18EE3T2	Electrical Machines-I	3	1	--	3
3	18EE3T3	Electronic Devices & Circuits	3	1	--	3
4	18EE3T4	Electro Magnetic Fields	3	1	--	3
5	18EE3T5	Thermal and Hydro Prime Movers	3	1	--	3
6	18EE3T6	Power Systems-I	3	--	--	2
7	18EE3L1	Thermal and Hydro Laboratory	--	--	3	1
8	18EE3L2	Electrical Circuits Laboratory	--	--	3	1
		Total Credits	**19**			

IV Semester

S. No	Subject Code	Subject	L	T	P	C
1	18EE4T1	Electrical Measurements	3	1	--	3
2	18EE4T2	Electrical Machines-II	3	1	--	3
3	18EE4T3	Switching Theory and Logic Design	3	1	--	3
4	18EE4T4	Control Systems	3	1	--	3
5	18EE4T5	Managerial Economics & Financial Analysis	3	--	--	2
6	18EE4T6	Power Systems -II	3	1	--	3
7	18EE4L1	Electrical Machines -I Laboratory	--	--	3	1
8	18EE4L2	Electronic Devices & Circuits Laboratory	--	--	3	1
		Total Credits	**19**			

Dr S Sivanagaraju, Professor, EEE, JNTUk	27/8	Sri L Jagadeesh, Senior Officer, KECIL.	
Dr G Yesuratnam, Professor, EED, OU.	27/08	Sri K Satish Kumar, Research Scholor, NIT	
Dr Y Chandra Sekhar, Asst Prof, NIT,Warangal		Sri Ch Chinna Veeraiah, Asst Prof & Head	

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Paritala,

Dt: 17-06-2019.

Circular

This is in form to all the members of Board of studies that to attend the second BOS meeting on 19-06-2019 at 10:00AM in Electrical & Electronics Engineering office.

Agenda:

1. Introducing Members to the Board.
2. Preparation of Course Structure and syllabus for various courses keeping in view of objectives of college.
3. To prepare the panel of examiners for the Electrical & Electronics Engineering.
4. Suggesting methodologies for teaching and evaluation.
5. Suggestions of research activities carried out in the department.
6. Suggestions or coordination of extension activities in the department.

EEE HOD

HEAD OF THE DEPARTMENT
Electrical & Electronics Engineering
Amrita Sai Institute of Science and Technology
Paritala (PO), Kanchikacharla (MD), Krishna (Dt)

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Proceedings of the 3rd meeting of Board of Studies in Electrical & Electronics Engineering, held on 19-06-2019 at 10:00 AM in the Department of Electrical & Electronics Engineering Office, Amrita Sai Institute of Science & Technology, Paritala

S. No	Member	Signature	S. No	Member	Signature
1	**Sri. Ch Chinna Veeraiah,** Assistant Professor & Head Department of EEE, ASIST, Paritala		2	**Dr S Sivanagaraju,** Professor, Dept of EEE, University College of Engineering, JNTUK ,Kakinada,	19/6/19
3	**Dr. Y Chandra Sekhar,** Asst Professor, Dept of EEE, National Institute of Technology, Warangal.		4	**Dr. G Yesuratnam,** Professor of EED, Osmania University. Hyderabad	19/06/19
5	**Sri L Jagadeesh,** Senior Officer (Section Incharge) KEC International limited.		6	**Sri. K Satish Kumar** Ph.D Scholor, National Institute of Technology, Warangal.	
7	**Dr S Vijaya lakshmi** Professor Department of EEE, ASIST, Paritala		8	**Sri. S M Rahman,** Associate Professor Department of EEE, ASIST, Paritala	19/6/19
9	**Sri. M Srinu,** Assistant Professor Department of EEE, ASIST, Paritala		10	**Sri. A Gopi,** Assistant Professor Department of EEE, ASIST, Paritala	
11	**Sri. P Venkateswara Rao,** Assistant Professor Department of EEE, ASIST, Paritala	P.V.R	12	**Smt B Jyotsna,** Assistant Professor Department of EEE, ASIST, Paritala	
13	**Smt T Suhasini,** Assistant Professor Department of EEE, ASIST, Paritala		14	**Smt V Srilatha,** Assistant Professor Department of EEE, ASIST, Paritala	
15	**Sri T Anji babu,** Assistant Professor Department of EEE, ASIST, Paritala		16	**Smt N Divya Prasanna Jyothi,** Assistant Professor Department of EEE, ASIST, Paritala	
17	**Sri K Sabarinadh,** Assistant Professor Department of EEE, ASIST, Paritala		18	**Sri P Ankamma Rao,** Assistant Professor Department of EEE, ASIST, Paritala	
19	**Sri M Sree Pradeep,** Assistant Professor Department of EEE, ASIST, Paritala		20	**Sri D Gangadhar Reddy,** Assistant Professor Department of EEE, ASIST, Paritala	GR
21	**Sri P Bala Subramanyam,** Assistant Professor Department of EEE, ASIST, Paritala		22	**Smt B Nagamani,** Assistant Professor Department of EEE, ASIST, Paritala	
23	**Sri P Venkateswara Rao,** Assistant Professor Department of EEE, ASIST, Paritala	P.V.Ra	24	**Sri Y Nageswara rao,** Assistant Professor Department of EEE, ASIST, Paritala	Y. Nags

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

At the outset, the Chairman, BOS in Electrical & Electronics Engineering, welcomed all members of Board of Studies and Special invitees present in 3rd meeting of Board of Studies, and briefed about the agenda to be discussed. The following agenda were placed by the Chairman and decisions were taken after detailed deliberations:

The Agenda for the meeting

1. Introducing Members to the Board.
2. Preparation of course structure and syllabus for various courses keeping in view of objectives of college.
3. To prepare the panel of examiners for the Electrical & Electronics Engineering.
4. Suggesting methodologies for teaching and evaluation.
5. Suggestions of research activities carried out in the department.
6. Suggestions or coordination of extension activities in the department.

Agenda 1: Introducing Members to the Board

Resolution: The Chairman cordially inviting all the members to the first meeting of Electrical & Electronics Engineering Board of Studies.

The chairman of the Board also describes briefly about the Institution, promoters and their motive, establishment of the department, vision and mission of institution and departments, as well as organizing structure. The chairman then appeals the board and initiates the discussion on agenda points.

Agenda 2: Preparation of syllabus for various courses keeping in view of objectives of college.

The Chairman appraised the members about the Autonomous for four year course Electrical & Electronics Engineering and two year course Power Electronics. Accordingly, a draft syllabus of the last four semesters for B.Tech and first two semesters for M.Tech was presented and placed before the board for their opinion and approval.

Resolution: The BOS went through the syllabus and discussed in length about various aspects of the syllabus. After incorporation of the changes suggested by the members of BoS, the last four semesters for B.Tech and First two semesters for M. Tech was approved.

Attachment: Annexure-I

Agenda–3: To prepare the panel of examiners for the Electrical & Electronics Engineering.

The Chairman presented the proposed panel of examiners pertaining to I to VIII semester Electrical & Electronics Engineering and I to II semester Power Electronics examination 2019-2020.

Resolution: After incorporating of certain changes suggested by the members, the panel of examiners was approved.

Attachment: Annexure-II

Agenda 4: Suggesting methodologies for teaching and evaluation.

The Chairman presented the proposed methodologies for teaching and evaluation of Electrical & Electronics Engineering were placed before the board for their opinion and approval

Resolution: After incorporating of certain changes suggested by the members, methodologies for teaching and evaluation was approved.

Attachment: Annexure-III

Agenda 5: Suggestions of research activities carried out in the department.

The Chairman asked the board members for research activities carried out in the department. The board suggested following points to be implemented:

1. Conduct regular research orientation sessions to all faculty members and meritorious students to create awareness among them.
2. Encourage students and faculty to publish papers in reputed journals / conferences. It is also suggested that, to provide incentive for the faculty who published in reputed journals.

Agenda 6: Suggestions or coordination of extension activities in the department.

Dr. S Sivanagaraju, Professor, University College of Engineering, JNTUK, Expert Member of JNTUK briefed the members about the need of extension work and workshops which are to be conducted in the department. Dr. S Sivanagaraju also suggested,

- Conduct meeting to all faculty members and create awareness of workshops, and other activities.
- Conduct at least two workshops per semester on advanced technologies or latest trends.
- Conduct quizzes, seminars, gust lectures to improve or impart extra knowledge amongst the students and faculty.

There being no other matter, the meeting was concluded with a vote of thanks to the chair.

Sd/-

Ch Chinna Veeraiah,
Assistant professor & Head,
Chairman, BoS,
Department of EEE

Under Graduate Course Structure

For

ELECTRICAL & ELECTRONICS ENGINEERING

(Applicable for batches admitted from 2018-2019)

S No	Programme Code	Programme Name	Branch	No. of Sections	No. of Students	Page
1	02	B. Tech	Electrical & Electronics Engineering	02	120	1-3

Autonomous Regulations – R18

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V Semester

S. No	Subject Code	Subject	L	T	P	C
1	18EE5T1	Management Science	3	--	--	2
2	18EE5T2	Power System Analysis	3	1	--	3
3	18EE5T3	Signals and Systems	3	1	--	3
4	18EE5T4	Pulse & Digital Circuits	3	1	--	3
5	18EE5T5	Power Electronics	3	1	--	3
6	18EE5L1	Electrical Machines-II Laboratory	--	--	3	**1**
7	18EE5L2	Control Systems & Simulation Laboratory	--	--	3	**1**
8	18EE5L3	Electrical Measurements Laboratory	--	--	3	**1**
9	18EE5T6	IPR & Patents	3	--	--	2
		Total Credits	**19**			

VI Semester

S. No	Subject Code	Subject	L	T	P	C
1	18EE6T1	Power Electronic Controllers & Drives	3	1	--	3
2	18EE6T2	Switchgear and Protection	3	1	--	3
3	18EE6T3	Micro Processors and Micro controllers	3	1	--	3
4	18EC6T4	Linear IC Applications	3	1	--	3
5	18EE6T5	Data Structures	3	1	--	3
6	18EE6T6	Open Elective	3	--	--	2
7	18EE6T7	Professional Ethics & Human Values	3	--	--	**0**
8	18EE6L1	Data Structures Laboratory	--	--	3	**1**
9	18EE6L2	Power Electronics & Simulation Laboratory	--	--	3	**1**
		Total Credits	**19**			

Dr S Sivanagaraju, Professor, EEE, JNTUk	19/6/2019	Sri L Jagadeesh, Senior Officer, KECIL.	
Dr G Yesuratnam, Professor, EED, OU.	19/06/19	Sri K Satish Kumar, Research Scholor, NIT	
Dr Y Chandra Sekhar, Asst Prof, NIT,Warangal		Sri Ch Chinna Veeraiah, Asst Prof & Head	

VII Semester

S. No	Subject Code	Subject	L	T	P	C
1	18EE7T1	Utilization of Electrical Energy	3	1	--	3
2	18EE7T2	OOPS Through JAVA	3	1	--	3
3	18EE7T3	Power System Operation & Control	3	1	--	3
4	18EE7T4	Renewable Energy Sources	3	--	--	2
5	18EE7T5	Elective – I	3	1	--	3
6	18EE7T6	Elective – II	3	1	--	3
7	18EE7L1	Microprocessors & Microcontrollers Laboratory	--	--	3	1
8	18EE7L2	Power Systems & Simulation Laboratory	--	--	3	1
		Total Credits	**19**			

VIII Semester

S. No	Course Code	Course	L	T	P	C
1	18EE8T1	Digital Control Systems	3	1	--	3
2	18EE8T2	HVDC Transmission & FACTS.	3	1	--	3
3	18EE8T3	Electrical Distribution Systems Planning & Automation	3	--	--	2
4	18EE8T4	Elective – III	3	1	--	3
5	18EE8S1	Seminar	--	2	--	2
6	18EE8P1	Project	--	--	--	10
		Total Credits	**23**			

Open Elective		Elective – I	
18EE5T5A	Unix and Shell Programming	18EE7T5A	Electrical Machine Modelling and Analysis
18EE5T5B	VLSI DESIGN	18EE7T5B	Advanced Control Systems
18EE5T5C	Neural Networks &Fuzzy Logic	18EE7T5C	Programmable Logic Controllers& Applications
18EE5T5D	Energy Audit and Conservation& Management	18EE7T5D	Instrumentation

Elective – II		Elective – III	
18EE7T6A	Optimization Techniques	18EE8T4A	High Voltage Engineering
18EE7T6B	Robotics	18EE8T4B	Power Quality
18EE7T6C	Special Electrical Machines	18EE8T4C	Power System Dregulations

L-Lecture; T-Tutorial; P-Practical; C-Credits;

Total Course Credits → 21+21+19+19+19+19+19+23 = 160

Dr S Sivanagaraju, Professor, EEE, JNTUk	19/6/2019	Sri L Jagadeesh, Senior Officer, KECIL.	
Dr G Yesuratnam, Professor, EED, OU.		Sri K Satish Kumar, Research Scholor, NIT	
Dr Y Chandra Sekhar, Asst Prof, NIT,Warangal		Sri Ch Chinna Veeraiah, Asst Prof & Head	

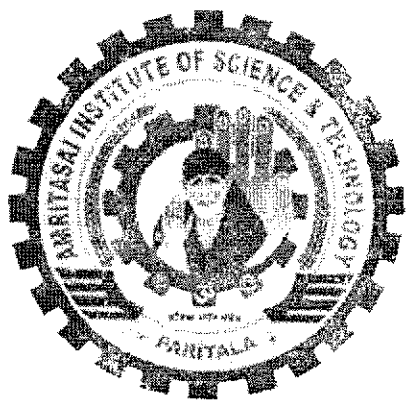
Post Graduate Course Structure

For

POWER ELECTRONICS

(Applicable for batches admitted from 2018-2019)

S No	Programme Code	Programme Name	Specialization	No. of Sections	No. of Students	Page
1	43	M. Tech	Power Electronics	01	18	4



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M. Tech. Course Structure – Power Electronics

I Semester

S. No	Course Code	Course	L	T	P	C
1	18PE1T1	Electrical Machine Modeling & Analysis	4	--	--	3
2	18PE1T2	Analysis of Power Electronic Converters	4	--	--	3
3	18PE1T3	Power Electronic Control of DC Drives	4	--	--	3
4	18PE1T4	Flexible AC Transmission Systems	4	--	--	3
5	18PE1T5A 18PE1T5B 18PE1T5C	Elective – I i. Modern Control Theory ii. Power Quality ii. Optimization Techniques	4	--	--	3
6	18PE1T6A 18PE1T6B 18PE1T6C	Elective – II i. Energy Auditing, Conservation and Management ii. Artificial Intelligence Techniques iii. HVDC Transmission	4	--	--	3
7	18PE1L1	Simulation Laboratory	--	--	4	2
		Total Credits	**20**			

II Semester

S. No	Course Code	Course	L	T	P	C
1	18PE2T1	Switched Mode Power Conversion	4	1	--	3
2	18PE2T2	Power Electronic Control of AC Drives	4	1	--	3
3	18PE2T3	Digital Controllers	4	1	--	3
4	18PE2T4	Custom Power devices	4	1	--	3
5	18PE2T5A 18PE2T5B 18PE2T5C	Elective – III i.Renewable Energy Systems ii. Reactive Power Compensation & Management iii. Electrical Distribution Systems	4	1	--	3
6	18PE2T6A 18PE2T6B 18PE2T6C	**Elective – IV** i. Smart Grid Technologies ii. Special Machines iii Programmable Logic Controllers & Applications	4	1	--	3
7	18PE2L1	Power Converters & Drives Laboratory	--	--	4	2
		Total Credits	**20**			

L-Lecture; T-Tutorial; P-Practical; C-Credits

Dr S Sivanagaraju, Professor, EEE, JNTUk		Sri L Jagadeesh, Senior Officer, KECIL.	
Dr G Yesuratnam, Professor, EED, OU.		Sri K Satish Kumar, Research Scholor, NIT	
Dr Y Chandra Sekhar, Asst Prof, NIT,Warangal		Sri Ch Chinna Veeraiah, Asst Prof & Head	

Under Graduate Course Structure

For

Electrical & Electronics Engineering

(Applicable for batches admitted from 2020-2021)

S No	Programme Code	Programme Name	Specialization	No. of Sections	No. of Students
1	02	B. Tech	Electrical & Electronics Engineering	01	60

Autonomous Regulations – AR20

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Proceedings of the 1rd meeting of Board of Studies in Electrical & Electronics Engineering, held on 02-01-2021 at 10:00 AM in the Department of Electrical & Electronics Engineering Office, Amrita Sai Institute of Science & Technology, Paritala

S.No	Member	Signature	S. No	Member	Signature
1	**Dr. V Sateesh,** Professor & Head Department of EEE, ASIST, Paritala		2	**Dr S Sivanagaraju,** Professor, Dept of EEE, University College of Engineering, JNTUK ,Kakinada,	
3	**Dr. Y Chandra Sekhar,** Asst Professor, Dept of EEE, National Institute of Technology, Warangal.		4	**Dr. G Yesuratnam,** Professor of EED, Osmania University. Hyderabad	
5	**Sri L Jagadeesh,** Senior Officer (Section Incharge) KEC International limited.		6	**Sri. K Satish Kumar** Ph.D Scholor, National Institute of Technology, Warangal.	
7	**Sri. Ch Chinna Veeraiah,** Associate Professor & Coordinator, Department of EEE, ASIST, Paritala		8	**Dr. S Sravan kumar,** Professor Department of EEE, ASIST, Paritala	
9	**Sri. S M Rahman,** Associate Professor Department of EEE, ASIST, Paritala		10	**Smt T Suhasini,** Assistant Professor Department of EEE, ASIST, Paritala	
11	**Smt V Srilatha,** Assistant Professor Department of EEE, ASIST, Paritala		12	**Sri P Ankamma Rao,** Assistant Professor Department of EEE, ASIST, Paritala	
13	**Sri P Venkateswara Rao,** Assistant Professor Department of EEE, ASIST, Paritala		14	**Sri K Sabarinadh,** Assistant Professor Department of EEE, ASIST, Paritala	
15	**Sri. B Gopi,** Assistant Professor Department of EEE, ASIST, Paritala		16	**Sri. A Prudhvi Krishna,** Assistant Professor Department of EEE, ASIST, Paritala	
17	**Sri. P Balasubramanyam,** Assistant Professor Department of EEE, ASIST, Paritala		18	**Sri. D Gangadhar Reddy,** Assistant Professor Department of EEE, ASIST, Paritala	
19	**Sri. K Srikanth,** Assistant Professor Department of EEE, ASIST, Paritala		20	**Sri. K Siva Shankar,** Assistant Professor Department of EEE, ASIST, Paritala	
21	**Sri. P Saicharan,** Assistant Professor Department of EEE, ASIST, Paritala		22	**Smt B Nagamani,** Assistant Professor Department of EEE, ASIST, Paritala	B. Nagamani
23	**Smt J Susmitha,** Assistant Professor Department of EEE, ASIST, Paritala		24	**Smt P Revathi,** Assistant Professor Department of EEE, ASIST, Paritala	

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Special Invitees					
25	**Smt P Durga Bhavani,** Assoc Professor in Mathematics, Department of S&H, ASIST, Paritala		26	**Sri D Pavan Kumar,** Assoc Professor in Physics, Department of S&H, ASIST, Paritala	
27	**Sri G Lova Krishna,** Assistant Professor in English Department of S&H, ASIST, Paritala		28	**Dr S Vijaya Vardini,** Professor in Chemistry, Department of S&H, ASIST, Paritala	

At the outset, the Chairman, BOS in Electrical & Electronics Engineering, welcomed all members of Board of Studies and Special invitees present in 1st meeting of Board of Studies, and briefed about the agenda to be discussed. The following agenda were placed by the Chairman and decisions were taken after detailed deliberations:

The Agenda for the meeting

1. Inviting Members to the Board.
2. Preparation of course structure & Syllabus for B.Tech & M.Tech Courses.
3. To prepare the panel of examiners for the Electrical & Electronics Engineering.
4. Suggesting methodologies for teaching and evaluation.
5. Suggestions of research activities carried out in the department.

Agenda 1: Inviting Members to the Board

Resolution: The Chairman cordially inviting all the members to the first meeting of Electrical & Electronics Engineering Board of Studies.

Agenda 2: Preparation of Course structure & Syllabus

The Chairman presented the course structure & syllabus for I & II year of both B.Tech & M.Tech courses placed before the board for their opinion.

Resolution: The BOS went through the course structure and discussed in length about various aspects of the course structure & syllabus. After the review all the BOS members suggest the modifications & approved the syllabus.

Agenda–3:To prepare the panel of examiners for the Electrical & Electronics Engineering.

The Chairman presented the proposed panel of examiners pertaining to I to VIII semester Electrical & Electronics Engineering and I to II semester Power Electronics examination 2020-2019.

Resolution: After incorporating of certain changes suggested by the members, the panel of examiners was approved.

Agenda 4: Suggesting methodologies for teaching and evaluation.

The Chairman presented the proposed methodologies for teaching and evaluation of Electrical & Electronics Engineering were placed before the board for their opinion and approval

Resolution: After incorporating of certain changes suggested by the members, methodologies for teaching and evaluation was approved.

Agenda 5: Suggestions of research activities carried out in the department.

The Chairman asked the board members for research activities carried out in the department. The board suggested following points to be implemented:

1. Conduct regular research orientation sessions to all faculty members and meritorious students to create awareness among them.
2. Encourage students and faculty to publish papers in reputed journals / conferences. It is also suggested that, to provide incentive for the faculty who published in reputed journals.

There being no other matter, the meeting was concluded with a vote of thanks to the chair.

Sd/-

V SATEESH,
Professor & Head,
Chairman, BOS,
Department of EEE

Amrita Sai Institute of Science and Technology
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Amrita Sai Nagar, Paritala, Krishna District, Andhra Pradesh – 521 180
www.amritasai.edu.in, 0866 2428399

DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Board of Studies

Composition:

S. No	Name	Specialization	Category
1	Dr. V Sateesh,Professor	Power Electronics	HOD (Chairman)
2	Sri. Ch Chinna Veeraiah, Associate Professor	Power Electronics	Coordinator
3	Dr. S Sravan Kumar,Professor	Power Electronics	
4	Sri. S M Rahman, Associate Professor	Electrical Power Engineering	
5	Smt T Suhasini, Assistant Professor	Power Electronics	
6	Smt V Srilatha, Assistant Professor	Power Electronics	
7	Sri. P Venkateswara Rao, Assistant Professor	Power Electronics	
8	Sri P Ankamma Rao, Assistant Professor	Power Electronics	
9	Sri K Sabarinadh, Assistant Professor	Power Electronics	
10	Sri. B Gopi, Assistant Professor	Power Electronics	
11	Sri. A Prudhvi Krishna, Assistant Professor	Power Electronics	
12	Sri. P Balasubramanyam, Assistant Professor	Power Electronics	
13	Sri. D Gangadhar Reddy, Assistant Professor	Power Electronics	
14	Sri. K Srikanth, Assistant Professor	Power Electronics	
15	Sri. K Siva Shankar, Assistant Professor	Power Electronics	
16	Sri. P Saicharan, Assistant Professor	Power Electronics	
17	Smt B Nagamani, Assistant Professor	Power Electronics	
18	Smt J Susmitha, Assistant Professor	Power Electronics	
19	Smt P Revathi, Assistant Professor	Power Electronics	
20	Sri D Pavan Kumar Associate Professor	Physics	
21	Dr S Vijaya Vardini Professor	Chemistry	
22	Smt G Lova Krishna, Assistant Professor	English	
23	Sri P Durga Bhavani Associate Professor	Mathematics	
24	Dr. Y Chandra Sekhar, Asst Professor, Dept of EEE, NIT, Warangal	EEE	Subject Expert from Academia
25	Dr. G Yesuratnam, Professor of EED, Osmania University.	EEE	Subject Expert from Academia
26	Sri L Jagadeesh, Senior Officer (Section Incharge) KEC International limited.	EEE	Subject Expert from Industry
27	Dr S Sivanagaraju, Professor, Dept of EEE, University College of Engineering,Kakinada, JNTUK	EEE	One Expert from Parent University nominated by Vice Chancellor
28	Sri. K Satish Kumar Ph.D Scholor, NIT, Warangal	EEE	One Meritorious Post Graduate nominated by Principal

Term : The term of the nominated members shall be two years.

Meetings : The Board of Studies will meet at least twice a year.

Functions : The Board of Studies of a Department in the college shall:

a. Prepare syllabi for various courses keeping in view the objectives of the college, interest of the stakeholders and national requirement for consideration and approval of the Academic Council

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(AUTONOMOUS)

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ACCREDITED BY NAAC WITH "A" GRADE

PARITALA(P), KANCHIKACHERLA(M), KRISHNA (D)–521 180(A. P.)

DEPARTMENT OF ELECTRICAL& ELECTRONICS ENGINEERING

COURSE STRUCTURE FOR AR20 REGULATION

I YEAR I SEMESTER:

SNO	SUB CODE	COURSE TITLE	CATEGORY	L	T	P	CREDITS
1	20BS1T1	Engineering Physics	BSC	3	0	0	3
2	20BS1T2	Ordinary Differential Equations & Calculus	BSC	3	0	0	3
3	20ES1T3	Electrical Circuit Analysis	ESC	3	0	0	3
4	20ES1T4	C Programming	ESC	3	0	0	3
5	20ES1T5	Engineering Graphics And Design	ESC	1	0	4	3
6	20BS1L1	Engineering/Applied Physics Lab	BSC	0	0	3	1.5
7	20ES1L2	C Programming Lab	ESC	0	0	3	1.5
8	20ES1L3	Engineering workshop & ITWS Lab	ESC	0	0	3	1.5
9	20MC1T6	Environmental Studies	MC	**2**	**0**	**0**	**0**
TOTAL CREDITS							**19.5**

I YEAR II SEMESTER:

S.NO	SUB CODE	COURSE TITLE	CATEGORY	L	T	P	CREDITS
1	20HS2T1	Communicative English-I	BSC	3	0	0	3
2	20BS2T2	Linear Algebra & Transformations	BSC	3	0	0	3
3	20BS2T3	Engineering Chemistry	ESC	3	0	0	3
4	20ES2T4	Python Programming	ESC	3	0	0	3
5	20ES2T5	Engineering Mechanics	ESC	3	0	0	3
6	20HS2L1	Communicative English Lab	BSC	0	0	3	1.5
7	20BS2L2	Engineering Chemistry Lab	ESC	0	0	3	1.5
8	20ES2L3	Python Lab	ESC	0	0	3	1.5
TOTAL CREDITS							**19.5**

Dr S Sivanagaraju, Professor, EEE, JNTUk		Sri L Jagadeesh, Senior Officer, KECIL.	
Dr G Yesuratnam, Professor, EED, OU.		Sri K Satish Kumar, Research Scholor, NIT	
Dr Y Chandra Sekhar, Asst Prof, NIT,Warangal		Dr V Sateesh, Prof & Head	

II YEAR I SEMESTER:

SNO	SUB CODE	COURSE TITLE	CATEGORY	L	T	P	CREDITS
1	20BS3T1	Numerical Methods & Complex Variables	BS	3	0	0	3
2	20EE3T2	Electrical Circuit Analysis - II	EE	3	0	0	3
3	20EE3T3	Electrical Machines-I	EE	3	0	0	3
4	20BE3T4	Electronic Devices & Circuits	EE	3	0	0	3
5	20EE3T5	Power Systems-I	EE	3	0	0	3
6	20EE3L1	Electrical Circuits Laboratory	EE	0	0	3	1.5
7	20EE3L2	Electrical Machines -I Laboratory	EE	0	0	3	1.5
8	20EE3L3	Electronic Devices & Circuits Laboratory	EE	0	0	3	1.5
9	20EE3T6A	Electrical Safety	SE	1	0	2	2
	20EE3T6B	Data Analytics-I					
	20EE3T6C	Cloud Computing-I					
	20EE3T6D	Web & Mobile Development-I					
	20EE3T6E	Cyber Security-I					
10	20EE3T7	Essence of Indian Traditional Knowledge	MC	2	0	0	0
	TOTAL CREDITS						**21.5**

II YEAR II SEMESTER:

SNO	SUBCODE	COURSE TITLE	CATEGORY	L	T	P	CREDITS
1	20EE4T1	Electromagnetic Fields	ES	3	0	0	3
2	20EE4T2	Control Systems	EE	3	0	0	3
3	20EE4T3	Power Systems-II	EE	3	0	0	3
4	20EE4T4	Electrical Machines-II	EE	3	0	0	3
5	20HS4T5	Communicative English-II	HS	3	0	0	3
6	20EE4L1	Communicative English-II Lab	ES LAB	0	0	3	1.5
7	20EE4L2	Electrical Machines-II Laboratory	EE LAB	0	0	3	1.5
8	20EE4L3	Control Systems Lab	EE LAB	0	0	3	1.5
9	20EE4T6A	Robotics And Humanoids	SE	**1**	**0**	**2**	**2**
	20EE4T6B	Data Analytics-II					
	20EE4T6C	Cloud Computing-II					
	20EE4T6D	Web & Mobile Development-II					
	20EE4T6E	Cyber Security-II					
		TOTAL CREDITS					**21.5**
Internship 2 Months (Mandatory) during summer vacation							

Dr S Sivanagaraju, Professor, EEE, JNTUk		Sri L Jagadeesh, Senior Officer, KECIL.	
Dr G Yesuratnam, Professor, EED, OU.		Sri K Satish Kumar, Research Scholor, NIT	
Dr Y Chandra Sekhar, Asst Prof, NIT,Warangal		Dr V Sateesh, Prof & Head	

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Paritala,
Dt: 24-06-2022.

Circular

This is in form to all the members of Board of studies that to attend the first BOS meeting on 25-06-2018 at 01:00PM in Electrical & Electronics Engineering office in online mode.

Link: https://meet.google.com/mbb-wdjt-jwu

Agenda:

1. Introducing Members to the Board.
2. Preparation of Course Structure and syllabus for various courses keeping in view of objectives of college.
3. To prepare the panel of examiners for the Electrical & Electronics Engineering.
4. Suggesting methodologies for teaching and evaluation.
5. Suggestions of research activities carried out in the department.
6. Suggestions or coordination of extension activities in the department.

EEE HOD

HEAD OF THE DEPARTMENT
Electrical & Electronics Engg.
Amrita Sai Institute of Science and T
Paritala (PO), Kanchikacherla (MD), K

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Board of Studies

Composition:

S. No	Name	Specialization	Category
1	Sri. Ch Chinna Veeraiah, Assoc Professor	Power Electronics	HOD (Chairman)
2	Sri Dr V Steesh, Professor	Power Electronics	Entire Faculty
3	Smt T Suhasini, Assistant Professor	Power Electronics	
4	Sri P Ankamma Rao, Assistant Professor	Power Electronics	
5	Sri K Sabarinadh, Assistant Professor	Power Electronics	
6	Sri. P Venkateswara Rao, Assistant Professor	Power Electronics	
7	Sri. B Gopi, Assistant Professor	Power Electronics	
8	Sri. A Prudhvi krishna, Assistant Professor	Power Electronics	
9	Sri. B.Thirumala rao, Assistant Professor	Power Systems	
10	Sri. M Deivasirvadam, Assistant Professor	Computer control	
11	Sri. S M Rahman, Associate Professor	Electrical Power Engineering	
12	Sri. M Srinu, Assistant Professor	Power Electronics	
13	Smt P Revathi, Assistant Professor	Power Electronics	
14	Sri. P Sai charan, Assistant Professor	Control systems	
15	Sri. K Siva shankar, Assistant Professor	Power Electronics	
16	Sri. P Bala subramanyam, Assistant Professor	Power Electronics	
17	Smt B Nagamani, Assistant Professor	Power Electronics	
18	Smt J Susmitha, Assistant Professor	Power Electronics	
19	Sri. B Naga seshu, Assistant Professor	Power Electronics	
20	Sri. D Gangadhar reddy, Assistant Professor	Power Electronics	
21	Sri. Ch Saidaiah, Assistant Professor	Power Electronics	
22	Sri. A Karunakar, Assistant Professor	Power Electronics	
23	Sri. R Kishore kumar, Assistant Professor	Power Electronics	
24	Sri. S Uday kumar, Assistant Professor	Power Electronics	
25	Sri. Sk Nazeer, Assistant Professor	Power Electronics	
26	Smt V Sravanthi, Assistant Professor	Power Electronics	
27	Smt M Vijitha, Assistant Professor	Power Electronics	
28	Smt V D Sudha rani, Assistant Professor	Power Electronics	
29	Ms V Mounika, Assistant Professor	Power Electronics	
30	Sri D Pavan Kumar Associate Professor	Physics	
31	Dr S Vijaya Vardini Professor	Chemistry	
32	Smt G Lova Krishna, Assistant Professor	English	
33	Smt P Durga Bhavani , Professor	Mathematics	
34	Dr. Y Chandra Sekhar, Asst Professor, Dept of EEE, NIT, Warangal	EEE	Subject Expert from Academia
35	Dr. Y Naveen, Asst Professor, Dept of EEE, IIT, Varanasi	EEE	Subject Expert from Academia
36	Dr. B Mangu, Professor of EEE, Osmania University.	EEE	Subject Expert from Academia
37	Sri L Jagadeesh, Senior Officer (Section Incharge) KEC International limited.	EEE	Subject Expert from Industry
38	Dr K Venkata Reddy, Professor, Dept of EEE, University College of Engineering ,Kakinada, CE,JNTUK	EEE	One Expert from Parent University nominated by Vice Chancellor
39	Sri. K Satish Kumar Ph.D Scholor, NIT, Warangal	EEE	One Meritorious Post Graduate nominated by Principal

Term : The term of the nominated members shall be two years.

Meetings : The Board of Studies will meet at least twice a year.

Functions : The Board of Studies of a Department in the college shall:

a. Prepare syllabi for various courses keeping in view the objectives of the college, interest of the stakeholders and national requirement for consideration and approval of the Academic Council
b. Suggest methodologies for innovative teaching and evaluation techniques
c. Suggest panel of names to the Academic Council for appointment of examiners
d. Coordinate research, teaching, extension and other academic activities in the department/college.

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Proceedings of the 3rd meeting of Board of Studies in Electrical & Electronics Engineering, held on 25-06-2022 at 01:00 pM in the Department of Electrical & Electronics Engineering Office, Amrita Sai Institute of Science & Technology, Paritala

S. No	Member	Signature	S. No	Member	Signature
1	**Sri. Ch Chinna Veeraiah,** Associate Professor & Head Department of EEE, ASIST, Paritala		2	**Dr K Venkata Reddy,** Professor,CE, Dept of EEE, University College of Engineering, JNTUK ,Kakinada,	
3	**Dr. Y Chandra Sekhar,** Asst Professor, Dept of EEE, National Institute of Technology, Warangal.		4	**Dr. Y Naveen,** Asst Professor, Dept of EEE, Indian Institute of Technology, Varanasi.	
5	**Dr. B Mangu,** Professor of EEE, Osmania University. Hyderabad		6	**Sri L Jagadeesh,** Senior Officer (Section Incharge) KEC International limited.	
7	**Sri. K Satish Kumar** Ph.D Scholor, National Institute of Technology, Warangal.		8	**Dr V Sateesh,** Professor Department of EEE, ASIST, Paritala	
9	**Smt T Suhasini,** Assistant Professor Department of EEE, ASIST, Paritala		10	**Sri. P Ankama Rao** Associate Professor Department of EEE, ASIST, Paritala	
11	**Sri K Sabarinadh,** Assistant Professor Department of EEE, ASIST, Paritala		12	**Sri. P Venkateswara Rao,** Assistant Professor Department of EEE, ASIST, Paritala	
13	**Sri. B Gopi,** Assistant Professor Department of EEE, ASIST, Paritala		14	**Sri. A Prudhvi Krishna,** Assistant Professor Department of EEE, ASIST, Paritala	
15	**Sri. B Thirumala Rao,** Assistant Professor Department of EEE, ASIST, Paritala		16	**Sri. M Deivasirvadam,** Assistant Professor Department of EEE, ASIST, Paritala	
17	**Sri. S M Rahman,** Associate Professor Department of EEE, ASIST, Paritala		18	**Sri. M Srinu,** Assistant Professor Department of EEE, ASIST, Paritala	
19	**Smt B Nagamani,** Assistant Professor Department of EEE, ASIST, Paritala		20	**Smt J Susmitha,** Assistant Professor Department of EEE, ASIST, Paritala	
21	**Ms. V Mounika,** Assistant Professor Department of EEE, ASIST, Paritala		22	**Smt V D Sudaha Rani,** Assistant Professor Department of EEE, ASIST, Paritala	
23	**Sri P Sai Charan,** Assistant Professor Department of EEE, ASIST, Paritala		24	**Sri K Siva shankar,** Assistant Professor Department of EEE, ASIST, Paritala	
25	**Sri P Bala subramanyam,** Assistant Professor Department of EEE, ASIST, Paritala		26	**Sri D Gangadhar Reddy,** Assistant Professor Department of EEE, ASIST, Paritala	

27	**Smt P Revathi,** Assistant Professor Department of EEE, ASIST, Paritala	P. Revathi	28	**Sri B Naga seshu,** Assistant Professor Department of EEE, ASIST, Paritala	B. Nagaseshu
29	**Sri Ch Saidaiah,** Assistant Professor Department of EEE, ASIST, Paritala		30	**Sri Sk Nazeer,** Assistant Professor Department of EEE, ASIST, Paritala	Sk. Nazeer
31	**Sri A Karunakar,** Assistant Professor Department of EEE, ASIST, Paritala		32	**Sri R Kishore Kumar,** Assistant Professor Department of EEE, ASIST, Paritala	R. Kishore
33	**Sri S Uday Kumar,** Assistant Professor Department of EEE, ASIST, Paritala	S. Uday Kumar	34	**Smt M Vijitha,** Assistant Professor Department of EEE, ASIST, Paritala	
Special Invitees					
21	**Smt P Durga Bhavani,** Professor in Mathematics, Department of S&H, ASIST, Paritala	PD Bhavani	18	**Sri D Pavan Kumar,** Assoc Professor in Physics, Department of S&H, ASIST, Paritala	
19	**Smt G Lova Krishna,** Assistant Professor in English Department of S&H, ASIST, Paritala		20	**Dr S Vijaya Vardini,** Professor in Chemistry, Department of S&H, ASIST, Paritala	

At the outset, the Chairman, BOS in Electrical & Electronics Engineering, welcomed all members of Board of Studies and Special invitees present in 3rd meeting of Board of Studies, and briefed about the agenda to be discussed. The following agenda were placed by the Chairman and decisions were taken after detailed deliberations:

The Agenda for the meeting

1. Introducing Members to the Board.
2. Preparation of course structure and syllabus for various courses keeping in view of objectives of college.
3. To prepare the panel of examiners for the Electrical & Electronics Engineering.
4. Suggesting methodologies for teaching and evaluation.
5. Suggestions of research activities carried out in the department.
6. Suggestions or coordination of extension activities in the department.

Agenda 1: Introducing Members to the Board

Resolution: The Chairman cordially inviting all the members to the first meeting of Electrical & Electronics Engineering Board of Studies.

The chairman of the Board also describes briefly about the Institution, promoters and their motive, establishment of the department, vision and mission of institution and departments, as well as organizing structure. The chairman then appeals the board and initiates the discussion on agenda points.

Agenda 2: Preparation of syllabus for various courses keeping in view of objectives of college.

The Chairman appraised the members about the Autonomous for four year course Electrical & Electronics Engineering and two year course Power Electronics. Accordingly, a draft syllabus of the first four semesters for B.Tech and first two semesters for M.Tech was presented and placed before the board for their opinion and approval.

Resolution: The BOS went through the syllabus and discussed in length about various aspects of the syllabus. After incorporation of the changes suggested by the members of BoS, the first four semesters for B.Tech and First two semesters for M. Tech was approved.

Attachment: Annexure-I

Agenda–3: To prepare the panel of examiners for the Electrical & Electronics Engineering.

The Chairman presented the proposed panel of examiners pertaining to I to VIII semester Electrical & Electronics Engineering and I to II semester Power Electronics examination 2018-2019.

Resolution: After incorporating of certain changes suggested by the members, the panel of examiners was approved.

Attachment: Annexure-II

Agenda 4: Suggesting methodologies for teaching and evaluation.

The Chairman presented the proposed methodologies for teaching and evaluation of Electrical & Electronics Engineering were placed before the board for their opinion and approval

Resolution: After incorporating of certain changes suggested by the members, methodologies for teaching and evaluation was approved.

Attachment: Annexure-III

Agenda 5: Suggestions of research activities carried out in the department.

The Chairman asked the board members for research activities carried out in the department. The board suggested following points to be implemented:

1. Conduct regular research orientation sessions to all faculty members and meritorious students to create awareness among them.
2. Encourage students and faculty to publish papers in reputed journals / conferences. It is also suggested that, to provide incentive for the faculty who published in reputed journals.

Agenda 6: Suggestions or coordination of extension activities in the department.

Dr. S Sivanagaraju, Professor, University College of Engineering, JNTUK, Expert Member of JNTUK briefed the members about the need of extension work and workshops which are to be conducted in the department. Dr. S Sivanagaraju also suggested,

- Conduct meeting to all faculty members and create awareness of workshops, and other activities.
- Conduct at least two workshops per semester on advanced technologies or latest trends.
- Conduct quizzes, seminars, gust lectures to improve or impart extra knowledge amongst the students and faculty.

There being no other matter, the meeting was concluded with a vote of thanks to the chair.

Sd/-

Ch Chinna Veeraiah,
Assistant professor & Head,
Chairman, BoS,
Department of EEE

Program Specific Objectives – EEE

PSO-1	Able to utilize the knowledge of high voltage engineering in collaboration with power systems in innovative, dynamic and challenging environment, for the research based team work.
PSO-2	To explore the scientific theories, ideas, methodologies and the new cutting edge technologies in renewable energy engineering, and use this erudition in their professional development and gain sufficient competence to solve the current and future energy problems universally.
PSO-3	To be able to utilize of technologies like PLC, PMC, process controllers, transducers and HMI and design, install, test , maintain power systems and industrial applications.

Program Educational Objectives – EEE

PEO-1	To provide students with the knowledge of Basic Sciences in general and Electrical and electronics Engineering in particular so as to acquire the necessary skills for analysis and synthesis of problems in generation, transmission and distribution.
PEO-2	To provide technical knowledge and skills to identify, comprehend and solve complex tasks in industry and research and inspire the students to become future researchers / scientists with innovative ideas.
PEO-3	To prepare the students for successful employment in various Industrial and Government organizations, both at the National and International level, with professional competence and ethical administrative acumen so as to handle critical situations and meet deadlines.

SYLLABUS STRUCTURE:

SNO	DESCRIPTION		NUMBER		CREDIT PER ONE	CREDITS	
01	THEORY	BASIC SCIENCE COURSES	05	36	03	15	105
02		HUMANITIES & SOCIAL SCIENCE COURSES	02		03	06	
03		ENGINEERING SCIENCE COURSES	06		03	18	
04		PROFESSIONAL CORE COURSES	13		03	39	
05		PROFESSIONAL ELECTIVES	05		03	15	
06		OPEN ELECTIVES/JOB ORIENTED ELECTIVES	04		03	12	
07		HUMANITIES & SOCIAL SCIENCE ELECTIVE	01		03	03	
08	PRACTICALS	HUMANITIES & SOCIAL SCIENCE LAB	01	17	1.5	1.5	25.5
19		BASIC SCIENCE COURSE LAB	02		1.5	03	
10		ENGINEERING SCIENCE COURSE LAB	04		1.5	06	
11		PROFESSIONAL CORE COURSE LAB	10		1.5	15	
12	INTERNSHIPS		02		1.5+3	4.5	
13	MANDATORY COURSES		04		0	0	
14	SKILL ORIENTED PROGRAMS		05		2	10	
15	MAJOR PROJECT/INTERNSHIP		01		12	12	
TOTAL			**65**			**160**	

GATE SYLLABUS:

ENGINEERING MATHEMATICS:

Linear Algebra: Matrix Algebra, Systems of linear equations, Eigen values, Eigenvectors.

Calculus: Mean value theorems, Theorems of integral calculus, Evaluation of definite and improper integrals, Partial Derivatives, Maxima and minima, Multiple integrals, Fourier series, Vector identities, Directional derivatives, Line integral, Surface integral, Volume integral, Stokes's theorem, Gauss's theorem, Divergence theorem, Green's theorem.

Differential equations: First order equations (linear and nonlinear), Higher order linear differential equations with constant coefficients, Method of variation of parameters, Cauchy's equation, Euler's equation, Initial and boundary value problems, Partial Differential Equations, Method of separation of variables.

Complex variables: Analytic functions, Cauchy's integral theorem, Cauchy's integral formula, Taylor series, Laurent series, Residue theorem, Solution integrals.

Probability and Statistics: Sampling theorems, Conditional probability, Mean, Median, Mode, Standard Deviation, Random variables, Discrete and Continuous distributions, Poisson distribution, Normal distribution, Binomial distribution, Correlation analysis, Regression analysis.

ELECTRIC CIRCUITS:

Network elements: ideal voltage and current sources, dependent sources, R, L, C, M elements; Network solution methods: KCL, KVL, Node and Mesh analysis; Network Theorems: Thevenin's, Norton's, Superposition and Maximum Power Transfer theorem; Transient response of dc and ac networks, sinusoidal steady-state analysis, resonance, two port networks, balanced three phase circuits, star-delta transformation, complex power and power factor in ac circuits.

ELECTROMAGNETIC FIELDS:

Coulomb's Law, Electric Field Intensity, Electric Flux Density, Gauss's Law, Divergence, Electric field and potential due to point, line, plane and spherical charge distributions, Effect of dielectric medium, Capacitance of simple configurations, Biot-Savart's law, Ampere's law,Curl, Faraday's law, Lorentz force, Inductance, Magnetomotive force, Reluctance, Magnetic circuits, Self and Mutual inductance of simple configurations.

SIGNALS AND SYSTEMS:

Representation of continuous and discrete time signals, shifting and scaling properties, linear time invariant and causal systems, Fourier series representation of continuous and discrete time periodic signals, sampling theorem, Applications of Fourier Transform for continuous and discrete time signals, Laplace Transform and Z transform. R.M.S. value, average value calculation for any general periodic waveform

ELECTRICAL MACHINES:

Single phase transformer: equivalent circuit, phasor diagram, open circuit and short circuit tests, regulation and efficiency; Three-phase transformers: connections, vector groups, parallel operation; Auto-transformer, Electromechanical energy conversion principles; DC machines: separately excited, series and shunt, motoring and generating mode of operation and their characteristics, speed control of dc motors; Three-phase induction machines: principle of operation, types, performance, torque-speed characteristics, no-load and blocked-rotor tests, equivalent circuit, starting and speed control; Operating principle of single-phase induction motors; Synchronous machines: cylindrical and salient pole machines, performance and characteristics, regulation and parallel operation of generators, starting of synchronous motors; Types of losses and efficiency calculations of electric machines

POWER SYSTEMS:

Basic concepts of electrical power generation, ac and dc transmission concepts, Models and performance of transmission lines and cables, Economic Load Dispatch (with and without considering transmission losses), Series and shunt compensation, Electric field distribution and insulators, Distribution systems, Per-unit quantities, Bus admittance matrix, Gauss- Seidel and Newton-Raphson load flow methods, Voltage and Frequency control, Power factor correction, Symmetrical components, Symmetrical and unsymmetrical fault analysis, Principles of over-

current, differential, directional and distance protection; Circuit breakers, System stability concepts, Equal area criterion.

CONTROL SYSTEMS:

Mathematical modeling and representation of systems, Feedback principle, transfer function, Block diagrams and Signal flow graphs, Transient and Steady-state analysis of linear time invariant systems, Stability analysis using Routh-Hurwitz and Nyquist criteria, Bode plots, Root loci, Lag, Lead and Lead-Lag compensators; P, PI and PID controllers; State space model, Solution of state equations of LTI systems

ELECTRICAL AND ELECTRONIC MEASUREMENTS:

Bridges and Potentiometers, Measurement of voltage, current, power, energy and power factor; Instrument transformers, Digital voltmeters and multimeters, Phase, Time and Frequency measurement; Oscilloscopes, Error analysis.

ANALOG AND DIGITAL ELECTRONICS:

Simple diode circuits: clipping, clamping, rectifiers; Amplifiers: biasing, equivalent circuit and frequency response; oscillators and feedback amplifiers; operational amplifiers: characteristics and applications; single stage active filters, Active Filters: Sallen Key, Butterwoth, VCOs and timers, combinatorial and sequential logic circuits, multiplexers, demultiplexers, Schmitt triggers, sample and hold circuits, A/D and D/A converters.

POWER ELECTRONICS:

Static V-I characteristics and firing/gating circuits for Thyristor, MOSFET, IGBT; DC to DC conversion: Buck, Boost and Buck-Boost Converters; Single and three-phase configuration of uncontrolled rectifiers; Voltage and Current commutated Thyristor based converters; Bidirectional ac to dc voltage source converters; Magnitude and Phase of line current harmonics for uncontrolled and thyristor based converters; Power factor and Distortion Factor of ac to dc converters; Single-phase and three-phase voltage and current source inverters, sinusoidal pulse width modulation.

III YEAR I SEMESTER:

SNO	SUB CODE	COURSE TITLE	CATEGORY	L	T	P	CREDITS
1	20EE5T1	Electrical Measurements & Instrumentation	PCC	3	0	0	3
2	20EE5T2	Pulse & Digital Circuits	PCC	3	0	0	3
3	20EE5T3	Power Electronics & Converters	PCC	3	0	0	3
4	20EE5T4	Open Elective-I	OEL	3	0	0	3
5	20EE5T5	Elective-I	PEL	3	0	0	3
6	20EE5L1	Electrical Measurements & Instrumentation Lab	PCL	0	0	3	1.5
7	20EE5L2	Power Electronics & Converters Lab	PCL	0	0	3	1.5
8	20EE5S1	Advanced English Communication Training	SOC	1	0	2	2
9	20EE5MC1	Constitution of India	MC	2	0	0	0
Summer Internship 4 weeks to 8 weeks (Mandatory) After Second Year (To Be Evaluated During V Semester)				0	0	0	1.5
TOTAL CREDITS							**21.5**

III YEAR II SEMESTER:

SNO	SUB CODE	COURSE TITLE	CATEGORY	L	T	P	CREDITS
1	20EE6T1	Micro Processor & Micro Controllers	PCC	3	0	0	3
2	20EE6T2	Linear And Digital Integrated Circuit Applications	PCC	3	0	0	3
3	20EE6T3	Power System Analysis	PCC	3	0	0	3
4	20EE6T4	Elective-II	PEL	3	0	0	3
5	20EE6T5	Open Elective-II	OEL	3	0	0	3
6	20EE6L1	Power Systems & Simulation Lab	PCL	0	0	3	1.5
7	20EE6L2	Micro Processor & Micro Controllers Lab	PCL	0	0	3	1.5
8	20EE6L3	Linear And Digital I C Applications Lab	PCL	0	0	3	1.5
9	20EE6S1	Coding & Technical Training	SOC	1	0	2	2
10	20EE6MC1	Research Methodology	MC	2	0	0	0
TOTAL CREDITS							**21.5**
Industrial/Research Internship (Mandatory) 4 weeks to 8 weeks During Summer Vacation							

Dr K Venkata Reddy, Professor, CE, JNTUk		Sri L Jagadeesh, Senior Officer, KECIL.	
Dr Y.Naveen Asst Prof, IIT,Varanasi		Dr Y Chandra Sekhar, Asst Prof, NIT,Warangal	
Dr B Mangu, Professor, EEE, OU.		Sri K Satish Kumar, Research Scholor, NIT	
Sri Ch Chinna Veeraiah, Assoc Prof & Head			

IV YEAR I SEMESTER:

SNO	SUB CODE	COURSE TITLE	CATEGORY	L	T	P	CREDITS
1	20EE7T1	ELECTIVE-III	PEL	3	0	0	3
2	20EE7T2	ELECTIVE-IV	PEL	3	0	0	3
3	20EE7T3	ELECTIVE-V	PEL	3	0	0	3
4	20EE7T4	OPEN ELECTIVE-III	OEL	3	0	0	3
5	20EE7T5	OPEN ELECTIVE-IV	OEL	3	0	0	3
6	20EE7T6	HUMANITIES AND SOCIAL SCIENCE ELECTIVE	HSL	3	0	0	3
7	20EE7S1	VERBAL, QUANTATIVE & REASONING TRAINING	SOC	1	0	2	2
Summer Internship 4 weeks to 8 weeks (Mandatory) After Third Year (To Be Evaluated During VII Semester)				0	0	0	3
TOTAL CREDITS							**23**

IV YEAR II SEMESTER:

SNO	SUB CODE	COURSE TITLE	CATEGORY	L	T	P	CREDITS
1	20EE8P1	MAJOR PROJECT	PROJECT	0	0	0	12
	TOTAL CREDITS						**12**

ELECTIVE-I:

- SIGNALS & SYSTEMS
- COMMUNICATION SYSTEMS
- COMPUTER NETWORKS
- INTERNET OF THINGS APPLICATIONS TO ELECTRICAL ENGINEERING
- VLSI DESIGN
- RENEWABLE ENERGY SOURCES
- ELECTRICAL ESTIMATION & COSTING

ELECTIVE-II:

- UTILIZATION OF ELECTRICAL ENERGY
- DATA BASE MANAGEMENT SYSTEMS
- ADVANCED CONTROL SYSTEMS
- ELECTRICAL MACHINE DESIGN
- HYBRID ELECTRIC VEHICLES
- OPTIMIZATION TECHNIQUES

ELECTIVE-III:

- OPERATING SYSTEMS
- NEURAL NETWORKS & FUZZY LOGIC
- HIGH VOLTAGE ENGINEERING
- ENERGY AUDITING, CONSERVATION & MANAGEMENT
- BATTERY MANAGEMENT SYSTEMS & CHARGING STATIONS

ELECTIVE-IV:

- ELECTRICAL DISTRIBUTION SYSTEMS PLANNING & AUTOMATION
- HVAC & DC TRANSMISSION
- FLEXIBLE ALATERNATING CURRENT TRANSMISSION SYSTEMS
- POWER QUALITY
- SMART GRID

- SPECIAL ELECTRICAL MACHINES

ELECTIVE-V:

- POWER SYSTEMS OPERATIONS & CONTROL
- SWITCHED MODE POWER CONVERTERS & SUPPLIES
- AI APPLICATIONS TO ELECTRICAL ENGINEERING
- SWITCH GEAR & PROTECTION

OPEN ELECTIVE-I:

OPEN ELECTIVE-II:

OPEN ELECTIVE-III:

OPEN ELECTIVE-IV:

HUMANITIES AND SOCIAL SCIENCE ELECTIVE

- 22HS7E1 – PROFESSIONAL ETHICS & HUMAN VALUES
- 22HS7E2 – UNDERSTANDING HARMONY
- 22HS7E3 – IPR & PATENTS
- 22HS7E4 – MANAGERIAL ECONOMICS & FINANCIAL ANALYSIS

Dr K Venkata Reddy, Professor, CE, JNTUk		Sri L Jagadeesh, Senior Officer, KECIL.	
Dr Y.Naveen Asst Prof, IIT,Varanasi		Dr Y Chandra Sekhar, Asst Prof, NIT,Warangal	
Dr B Mangu, Professor, EEE, OU.		Sri K Satish Kumar, Research Scholor, NIT	
Sri Ch Chinna Veeraiah, Assoc Prof & Head			

Post Graduate Course Structure

For

POWER ELECTRONICS

(Applicable for batches admitted from 2020-2021)

S No	Programme Code	Programme Name	Specialization	No. of Sections	No. of Students
1	43	M. Tech	Power Electronics	01	18

Autonomous Regulations – AR20

Amrita Sai Institute of Science & Technology

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Amrita Sai Nagar, Paritala, Krishna District Andhrapradesh – 521 180
www.amritasai.edu.in, 0866-2428399

M. Tech. Course Structure – Power Electronics

I Semester

S. No	Course Code	Course	L	T	P	C
1	20PE1T1	Electrical Machine Modeling & Analysis	4	--	--	3
2	20PE1T2	Analysis of Power Electronic Converters	4	--	--	3
3	20PE1T3A 20PE1T3B 20PE1T3C	Elective – I i. Modern Control Theory ii. Power Quality and Custom Power Devices iii. Programmable Logic Controllers & Applications	4	--	--	3
4	20PE1T4A 20PE1T4B 20PE1T4C	Elective – II i. Artificial Intelligence Techniques ii. Renewable Energy Technologies iii. HVDC Transmission and Flexible AC Transmission Systems	4	--	--	3
5	20PE1T5	Research Methodology and IPR	2	--	--	2
6	20PE1L1	Power Electronics Simulation Laboratory	--	--	4	2
7	20PE1L2	Power Converters Laboratory	--	--	4	2
8		Audit Course – 1	2	--	--	--
		Total Credits	**18**			

II Semester

S. No	Course Code	Course	L	T	P	C
1	20PE2T1	Switched Mode Power Conversion	4	1	--	3
2	20PE2T2	Power Electronic Control of Electrical Drives	4	1	--	3
3	20PE2T3A 20PE2T3B 20PE2T3C	Elective – III i. Control & Integration of Renewable Energy Systems ii. Hybrid Electric Vehicles iii. Digital Control Systems	4	1	--	3
4	20PE2T4A 20PE2T4B 20PE2T4C	Elective – IV i. Advanced Digital Signal Processing ii. Applications of Power Converters iii. Microcontrollers	4	1	--	3
5	20PE2L1	Electric Drives Simulation Laboratory	--	--	4	2
6	20PE2L2	Electric Drives Laboratory	--	--	4	2
7		Mini Project with Seminar	--	--	4	2
8		Audit Course – 2	2	--	--	--
		Total Credits	**18**			

Dr S Sivanagaraju, Professor, EEE, JNTUk		Sri L Jagadeesh, Senior Officer, KECIL.	
Dr G Yesuratnam, Professor, EED, OU.		Sri K Satish Kumar, Research Scholor, NIT	
Dr Y Chandra Sekhar, Asst Prof, NIT,Warangal		Dr V Sateesh, Prof & Head	

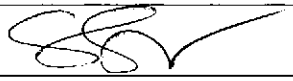
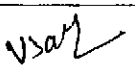
III Semester

S. No	Course Code	Course	L	T	P	C
1	20PE3T1A 20PE3T1B 20PE3T1C	Program Elective – V i. Digital Signal Processing Controlled Drives ii. Smart Grid Technologies iii. Modelling & Simulation of Power Electronic Systems	4	1	--	3
2	20PE3T2A 20PE3T2B 20PE3T2C	Open Elective i. Industrial Safety ii. Energy Audit, Conservation & Management iii. Composite Materials	4	1	--	3
3		Dissertation Phase - I (to be continued and evaluated next semester)	--	--	20	8
		Total Credits	**14**			

IV Semester

S. No	Course Code	Course	L	T	P	C
1		Dissertation Phase - II (continued from III semester)	--	--	32	10
		Total Credits	**10**			

L-Lecture; T-Tutorial; P-Practical; C-Credits

Dr S Sivanagaraju, Professor, EEE, JNTUk		Sri L Jagadeesh, Senior Officer, KECIL.	
Dr G Yesuratnam, Professor, EED, OU.		Sri K Satish Kumar, Research Scholor, NIT	
Dr Y Chandra Sekhar, Asst Prof, NIT,Warangal		Dr V Sateesh, Prof & Head	

UnderGraduate Course Structure

For

Electrical & Electronics Engineering

(Applicable for batches admitted from 2022-2023)

S No	Programme Code	Programme Name	Specialization	No. of Sections	No. of Students
1	02	B. Tech	Electrical & Electronics Engineering	01	30

Autonomous Regulations – AR22

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Outcome-Based Education – Dept of Electrical & Electronics Engineering

The following curriculum for B.Tech.EEE and M.Tech.Power Electronics programmes with regulations-R18 is conventional to outcome-basedteaching-learning process. In general, **TWELVE PROGRAMME OUTCOMES** (a-l) have been identified and the curriculum and syllabus have been structured in such a way such that each of the courses meets one or more of these outcomes. Student outcomes describe what students are expected to know and are able to do by the time of graduation. These relate to the skills, knowledge, and behaviour that students acquire as they progress through the program. Further, each course in the program spells out clear instructional objectives which are mapped to the student outcomes.

The Programme Outcomes:

a. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization for the solution of complex engineering problems.

b. **Problem analysis:**Identity, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

c. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and cultural, societal, and environmental considerations.

d. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data and synthesis of the information to provide valid conclusions.

e. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modellingof complex engineering activities, with an understanding of the limitations.

f. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

g. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

h. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

i. **Individual and teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

j. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with t h e-society at large, such as being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

k. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

l. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Objectives – EEE

PSO-1	Able to utilize the knowledge of high voltage engineering in collaboration with power systems in innovative, dynamic and challenging environment, for the research based team work.
PSO-2	To explore the scientific theories, ideas, methodologies and the new cutting edge technologies in renewable energy engineering, and use this erudition in their professional development and gain sufficient competence to solve the current and future energy problems universally.
PSO-3	To be able to utilize of technologies like PLC, PMC, process controllers, transducers and HMI and design, install, test , maintain power systems and industrial applications.

Program Educational Objectives – EEE

PEO-1	To provide students with the knowledge of Basic Sciences in general and Electrical and electronics Engineering in particular so as to acquire the necessary skills for analysis and synthesis of problems in generation, transmission and distribution.
PEO-2	To provide technical knowledge and skills to identify, comprehend and solve complex tasks in industry and research and inspire the students to become future researchers / scientists with innovative ideas.
PEO-3	To prepare the students for successful employment in various Industrial and Government organizations, both at the National and International level, with professional competence and ethical administrative acumen so as to handle critical situations and meet deadlines.

SYLLABUS STRUCTURE:

SNO	DESCRIPTION		NUMBER		CREDIT PER ONE	CREDITS	
01	THEORY	CORE SUBJECTS	26	35	3	78	105
02		CORE ELECTIVES	05		3	15	
03		OPEN ELECTIVES	04		3	12	
04	PRACTICALS		17		1.5	25.5	
05	INTERNSHIPS		02		1.5+3	4.5	
06	MANDATORY COURSES		04		0	0	
07	SKILL ORIENTED PROGRAMS		05		2	10	
08	UNIVERSAL HUMAN VALUES		01		3	3	
09	MAJOR PROJECT		01		12	12	
TOTAL			**65**			**160**	

GATE SYLLABUS:

ENGINEERING MATHEMATICS:

Linear Algebra: Matrix Algebra, Systems of linear equations, Eigenvalues, Eigenvectors.

Calculus: Mean value theorems, Theorems of integral calculus, Evaluation of definiteand improper integrals, Partial Derivatives, Maxima and minima, Multiple integrals,Fourier series, Vector identities, Directional derivatives, Line integral, Surface integral,Volume integral, Stokes's theorem, Gauss's theorem, Divergence theorem, Green'stheorem.

Differential equations: First order equations (linear and nonlinear), Higher order linear differential equations with constant coefficients, Method of variation of parameters, Cauchy's equation, Euler's equation, Initial and boundary value problems, Partial Differential Equations, Method of separation of variables.

Complex variables: Analytic functions, Cauchy's integral theorem, Cauchy's integral formula, Taylor series, Laurent series, Residue theorem, Solution integrals.

Probability and Statistics: Sampling theorems, Conditional probability, Mean, Median, Mode, Standard Deviation, Random variables, Discrete and Continuous distributions,Poisson distribution, Normal distribution, Binomial distribution, Correlation analysis,Regression analysis.

ELECTRIC CIRCUITS:

Network elements: ideal voltage and current sources, dependent sources, R, L, C, M elements; Network solution methods: KCL, KVL, Node and Mesh analysis; Network Theorems: Thevenin's, Norton's, Superposition and Maximum Power Transfer theorem; Transient response of dc and ac networks, sinusoidal steady-state analysis,resonance, two port networks, balanced three phase circuits, star-delta transformation, complex power and power
factor in ac circuits.

ELECTROMAGNETIC FIELDS:

Coulomb's Law, Electric Field Intensity, Electric Flux Density, Gauss's Law, Divergence, Electricfield and potential due to point, line, plane and spherical charge distributions, Effect ofdielectric medium, Capacitance of simple configurations, Biot-Savart's law, Ampere'slaw,Curl, Faraday's law, Lorentz force, Inductance, Magnetomotive force, Reluctance,Magnetic circuits, Self and Mutual inductance of simple configurations.

SIGNALS AND SYSTEMS:

Representation of continuous and discrete time signals, shifting and scaling properties,linear time invariant and causal systems, Fourier series representation of continuousand discrete time periodic signals, sampling theorem, Applications of Fourier Transformfor continuous and discrete time signals, Laplace Transform and Z transform. R.M.S.value, average value calculation for any general periodic waveform

ELECTRICAL MACHINES:

Single phase transformer: equivalent circuit, phasor diagram, open circuit and shortcircuit tests, regulation and efficiency; Three-phase transformers: connections, vectorgroups, parallel operation; Auto-transformer, Electromechanical energy conversionprinciples; DC machines: separately excited, series and shunt, motoring and generatingmode of operation and their characteristics, speed control of dc motors; Three-phaseinduction machines: principle of operation, types, performance, torque-speedcharacteristics, no-load and blocked-rotor tests, equivalent circuit, starting and speedcontrol; Operating principle of single-phase induction motors; Synchronous machines:cylindrical and salient pole machines, performance and characteristics, regulation andparallel operation of generators, starting of synchronous motors; Types of losses andefficiency calculations of electric machines

POWER SYSTEMS:

Basic concepts of electrical power generation, ac and dc transmission concepts, Modelsand performance of transmission lines and cables, Economic Load Dispatch (with andwithout considering transmission losses), Series and shunt compensation, Electric fielddistribution and insulators, Distribution systems, Per-unit quantities, Bus admittancematrix, Gauss- Seidel and Newton-Raphson load flow methods, Voltage and Frequencycontrol, Power factor correction, Symmetrical components, Symmetrical andunsymmetrical fault analysis, Principles of over-

current, differential, directional anddistance protection; Circuit breakers, System stability concepts, Equal area criterion.

CONTROL SYSTEMS:

Mathematical modeling and representation of systems, Feedback principle, transferfunction, Block diagrams and Signal flow graphs, Transient and Steady-state analysisof linear time invariant systems, Stability analysis using Routh-Hurwitz and Nyquistcriteria, Bode plots, Root loci, Lag, Lead and Lead-Lag compensators; P, PI and PID controllers; State space model, Solution of state equations of LTI systems

ELECTRICAL AND ELECTRONIC MEASUREMENTS:

Bridges and Potentiometers, Measurement of voltage, current, power, energy andpower factor; Instrument transformers, Digital voltmeters and multimeters, Phase, Timeand Frequency measurement; Oscilloscopes, Error analysis.

ANALOG AND DIGITAL ELECTRONICS:

Simple diode circuits: clipping, clamping, rectifiers; Amplifiers: biasing, equivalent circuitand frequency response; oscillators and feedback amplifiers; operational amplifiers:characteristics and applications; single stage active filters, Active Filters: Sallen Key,Butterwoth, VCOs and timers, combinatorial and sequential logic circuits, multiplexers,demultiplexers, Schmitt triggers, sample and hold circuits, A/D and D/A converters.

POWER ELECTRONICS:

Static V-I characteristics and firing/gating circuits for Thyristor, MOSFET, IGBT; DC toDC conversion: Buck, Boost and Buck-Boost Converters; Single and three-phaseconfiguration of uncontrolled rectifiers; Voltage and Current commutated Thyristorbased converters; Bidirectional ac to dc voltage source converters; Magnitude andPhase of line current harmonics for uncontrolled and thyristor based converters; Powerfactor and Distortion Factor of ac to dc converters; Single-phase and three-phasevoltage and current source inverters, sinusoidal pulse width modulation.

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Paritala,
Dt:07-01-2023.

Circular

This is inform to all the members of Board of studies that to attend the first BOS meeting on 09-01-2023 at 10:30AM in Electrical & Electronics Engineering office in online mode.

Agenda:

1. Introducing Members to the Board.
2. Preparation of Course Structure and syllabus for various courses keeping in view of objectives of college.
3. To prepare the panel of examiners for the Electrical & Electronics Engineering.
4. Suggesting methodologies for teaching and evaluation.
5. Suggestions of research activities carried out in the department.
6. Suggestions or coordination of extension activities in the department.

EEE HOD

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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Proceedings of the 2nd meeting of Board of Studies in Electrical & Electronics Engineering, held on 09-01-2023 at 10:30 AM in the Department of Electrical & Electronics Engineering Office through online mode, Amrita Sai Institute of Science & Technology, Paritala

S.No	Member	Signature	S.No	Member	Signature
1	**Sri. ChChinnaVeeraiah,** Assistant Professor & Head Department of EEE, ASIST, Paritala		2	**DrK Venkata Reddy,** Professor, Dept of EEE, University College of Engineering, JNTUK ,Kakinada	
3	**Dr. Y Chandra Sekhar,** Asst Professor, Dept of EEE, National Institute of Technology, Warangal.		4	**Dr. Y Naveen,** AsstProfessor, Dept of EEE, Indian Institute of Technology Varanasi.	
5	**Dr. B.Mangu,** Professor, Dept of EEE, Osmania University. Hyderabad		6	**Sri L Jagadeesh,** Senior Officer (Section Incharge) KEC International limited.	
7	**Sri. K Satish Kumar** Post-doc Scholor, IIT Delhi.		8	**Dr. V Sateesh,** Professor. Department of EEE, ASIST, Paritala	
9	**Smt T Suhasini,** Assistant Professor Department of EEE, ASIST, Paritala		10	**Sri P AnkammaRao,** Assistant Professor Department of EEE, ASIST, Paritala	
11	**Sri K Sabarinadh,** Assistant Professor Department of EEE, ASIST, Paritala		12	**Sri. BGopi,** Assistant Professor Department of EEE, ASIST, Paritala	
13	**Sri P VenkateswaraRao,** Assistant Professor Department of EEE, ASIST, Paritala		14	**Smt B Nagamani,** Assistant Professor Department of EEE, ASIST, Paritala	
15	**Ms N Ramya,** Assistant Professor Department of EEE, ASIST, Paritala		16	**SmtJ Susmitha,** Assistant Professor Department of EEE, ASIST, Paritala	
17	**Sri. S M Rahman,** Associate Professor Department of EEE, ASIST, Paritala		18	**SmtP Revathi,** Assistant Professor Department of EEE, ASIST, Paritala	
19	**Sri. P SaiCharan,** Assistant Professor Department of EEE, ASIST, Paritala		20	**Sri. B ThirumalaRao,** Assistant Professor Department of EEE, ASIST, Paritala	
21	**SmtV Srvanthi,** Assistant Professor Department of EEE, ASIST, Paritala		22	**Sri. K Siva shankar,** Assistant Professor Department of EEE, ASIST, Paritala	
23	**Sri.PBalasuramanyam,** Assistant Professor Department of EEE, ASIST, Paritala		24	**Sri. B Ngaseshu,** Assistant Professor Department of EEE, ASIST, Paritala	
25	**Sri. ChSaidaiah,** Assistant Professor Department of EEE, ASIST, Paritala		26	**Sri. SkNazeer,** Assistant Professor Department of EEE, ASIST, Paritala	

27	**Sri. A Karunakar,** Assistant Professor Department of EEE, ASIST, Paritala		28	**Sri. R Kishore Kumar,** Assistant Professor Department of EEE, ASIST, Paritala	
29	**Sri. S Uday Kumar,** Assistant Professor Department of EEE, ASIST, Paritala		30	**SmtM Vijitha,** Assistant Professor Department of EEE, ASIST, Paritala	
31	**SmtV D Sudha Rani,** Assistant Professor Department of EEE, ASIST, Paritala		32	**Ms V Mounika,** Assistant Professor Department of EEE, ASIST, Paritala	
Special Invitees					
21	**Smt P DurgaBhavani,** Assoc Professor in Mathematics, Department of S&H, ASIST, Paritala		18	**Sri D Pavan Kumar,** Assoc Professor in Physics, Department of S&H, ASIST, Paritala	
19	**Sri G Lova Krishna,** Assistant Professor in English Department of S&H, ASIST, Paritala		20	**Dr S VijayaVardini,** Professor in Chemistry, Department of S&H, ASIST, Paritala	

At the outset, the Chairman, BOS in Electrical & Electronics Engineering, welcomed all members of Board of Studies and Special invitees present in 2nd meeting of Board of Studies, and briefed about the agenda to be discussed. The following agenda were placed by the Chairman and decisions were taken after detailed deliberations:

The Agenda for the meeting

1. Inviting Members to the Board.
2. Preparation of syllabus for various courses keeping in view of objectives of college.
3. Review of course files for first semester.
4. To prepare the panel of examiners for the Electrical & Electronics Engineering.
5. Suggesting methodologies for teaching and evaluation.
6. Suggestions of research activities carried out in the department.

Agenda 1: Inviting Members to the Board

Resolution: The Chairman cordially inviting all the members to the second meeting of Electrical & Electronics Engineering Board of Studies.

Agenda 2: Preparation of syllabus for various courses keeping in view of objectives of college.

The Chairman appraised the members about the Autonomous for four year course Electrical & Electronics Engineering and two years course Power Electronics. Accordingly, a draft syllabus for the eight semesters for UG and three semesters for PG was presented and placed before the board for their opinion and approval.

Resolution: The BoS went through the syllabus and discussed in length about various aspects of the syllabus. After incorporation of the changes suggested by the members of BoS, the eight semesters for UG and three semesters for PG was approved.

Agenda 3: Review of course files for first semester

The Chairman appraised the members about the completion of first semester in autonomous structure. Accordingly all subjects course files of first semester was presented and placed before the board for their opinion.

Resolution: The BOS went through the course files and discussed in length about various aspects of the course flies. After the review all the BOS members expressed their happiness regarding the maintenance of the course files.

Agenda–4: To prepare the panel of examiners for the Electrical & Electronics Engineering.

The Chairman presented the proposed panel of examiners pertaining to I to VIII semester Electrical & Electronics Engineering and I to III semester Power Electronics examination 2022-2023.

Resolution: After incorporating of certain changes suggested by the members, the panel of examiners was approved.

Agenda 5: Suggesting methodologies for teaching and evaluation.

The Chairman presented the proposed methodologies for teaching and evaluation of Electrical & Electronics Engineering were placed before the board for their opinion and approval

Resolution: After incorporating of certain changes suggested by the members, methodologies for teaching and evaluation was approved.

Agenda 6: Suggestions of research activities carried out in the department.

The Chairman asked the board members for research activities carried out in the department. The board suggested following points to be implemented:

1. Conduct regular research orientation sessions to all faculty members and meritorious students to create awareness among them.
2. Encourage students and faculty to publish papers in reputed journals / conferences. It is also suggested that, to provide incentive for the faculty who published in reputed journals.

There being no other matter, the meeting was concluded with a vote of thanks to the chair.

Sd/-

ChChinnaVeeraiah,
Associateprofessor & Head,
Chairman, BoS,

AMRITA SAI INSTITUTE OF SCIENCE AND TECHNOLOGY
(AUTONOMOUS)

Approved by AICTE, New Delhi; Permanently Affiliated To JNTU, Kakinada
ACCREDITED BY NAAC WITH "A" GRADE
PARITALA(P), KANCHIKACHERLA(M), KRISHNA (D)–521 180(A. P.)

DEPARTMENT OF ELECTRICAL& ELECTRONICS ENGINEERING

COURSE STRUCTURE FOR AR22 REGULATION

I YEAR I SEMESTER:

SNO	SUB CODE	COURSE TITLE	CATEGORY	L	T	P	CREDITS
1	22HS1T1	Communicative English-I	HSMC	3	0	0	3
2	22BS1T2	Linear Algebra & Differential Equations	BSC	3	0	0	3
3	22HS1T3	Engineering Chemistry	BSC	3	0	0	3
4	22CS1T4	C Programming	ESC	3	0	0	3
5	22EE1T5	Basics of Engineering & Technology	ESC	3	0	0	3
6	22HS1L1	Communicative English Lab - I	HSMC	0	0	3	1.5
7	22HS1L2	Engineering Chemistry & ITWS Lab	BSC	0	0	3	1.5
8	22CS1L3	C Programming Lab	ESC	0	0	3	1.5
9	22MC1T6	Learning An Art Form	MC	**2**	**0**	**0**	**0**
TOTAL CREDITS							**19.5**

I YEAR II SEMESTER:

S.NO	SUB CODE	COURSE TITLE	CATEGORY	L	T	P	CREDITS
1	22HS2T1	Communicative English-II	HSMC	3	0	0	3
2	22BS2T2	Calculus And Transformations	BSC	3	0	0	3
3	22BS2T3	Engineering Physics	BSC	3	0	0	3
4	22CS2T4	Python Programming	ESC	3	0	0	3
5	22EC2T5	Introduction To IOT	ESC	3	0	0	3
6	22HS2L1	Communicative English Lab - II	HSMC	0	0	3	1.5
7	22BS2L2	Engineering Physics & EWS Lab	BSC	0	0	3	1.5
8	22CS2L3	Python Programming Lab	ESC	0	0	3	1.5
9	22MC2T6	Environmental Studies	MC	**2**	**0**	**0**	0
TOTAL CREDITS							**19.5**

Dr K Venkata Reddy, Professor, JNTUk		Sri L Jagadeesh, Senior Officer, KECIL.	
Dr Y.Naveen Asst Prof, IIT,Varanasi		Dr Y Chandra Sekhar, Asst Prof, NIT,Warangal	
Dr B Mangu, Professor, EEE, OU.		Sri K Satish Kumar, Research Scholor, NIT	
Sri ChChinnaVeeraiah, Assoc Prof & Head			

II YEAR I SEMESTER:

SNO	SUB CODE	COURSE TITLE	CATEGORY	L	T	P	C
1	22BS3T1	Numerical Methods and Complex Variables	BSC	3	0	0	3
2	22EE3T2	Electrical Circuits	PCC	3	0	0	3
3	22EE3T3	Electronic Devices & Circuits	PCC	3	0	0	3
4	22EE3T4	Electrical Machines	PCC	3	0	0	3
5	22EE3T5	Data Structures	PCC	3	0	0	3
6	22EE3L1	Electrical Circuits Lab	PCL	0	0	3	1.5
7	22EE3L2	Electronic Devices & Circuits Lab	PCL	0	0	3	1.5
8	22EE3L3	Electrical Machines Lab	PCL	0	0	3	1.5
9	22EE3S1	Advanced English Communication Testing	SOC	1	0	2	2
10	22EE3MC1	Indian Traditional Knowledge	MC	2	0	0	0
		TOTAL CREDITS					**21.5**

II YEAR II SEMESTER:

SNO	SUBCODE	COURSE TITLE	CATEGORY	L	T	P	C
1	22HS4T1	Probability and Statistics	ESC	3	0	0	3
2	22EE4T2	Control Systems	PCC	3	0	0	3
3	22EE4T3	Java Programming	PCC	3	0	0	3
4	22EE4T4	ComputerArchitecture and Organization	PCC	3	0	0	3
5	22HS4T5	Electromagnetic Fields	HSC	3	0	0	3
6	22EE4L1	Java Programming Lab	ESL	0	0	3	1.5
7	22EE4L2	IOT And Arduino Programming Lab	PCL	0	0	3	1.5
8	22EE4L3	Control Systems Lab	PCL	0	0	3	1.5
9	22EE4S1	Mini Project-I	SOC	1	0	2	2
10	22EE4MC1	Community service project	MC	2	0	0	0
		TOTAL CREDITS					**21.5**
INTERNSHIP 4 TO 8 WEEKS (MANDATORY) DURING SUMMER VACATION							

III YEAR I SEMESTER:

SNO	SUB CODE	COURSE TITLE	CATEGORY	L	T	P	C
1	22EE5T1	Power Electronics Converters	PCC	3	0	0	3
2	22EE5T2	Signals & Systems	PCC	3	0	0	3
3	22EE5T3	Electrical Measurements & Instrumentation	PCC	3	0	0	3
4	22EE5OE1	Open Elective-I	OEL/JOL	3	0	0	3
5	22EE5E1	Elective-I	PEL	3	0	0	3
6	22EE5L1	Electrical Measurements & Instrumentation Lab	PCL	0	0	3	1.5
7	22EE5L2	Power Electronics & Converters Lab	PCL	0	0	3	1.5
8	22EE5S1	Verbal, Quantative & Reasoning Testing	SOC	1	0	2	2
9	22EE5MC1	Constitution of India	MC	2	0	0	0
SUMMER INTERNSHIP 4 TO 8 WEEKS (MANDATORY) AFTER SECOND YEAR (TO BE EVALUATED DURING V SEMESTER)				0	0	0	1.5
TOTAL CREDITS							**21.5**

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Dr B Mangu, Professor, EEE, OU.		Sri K Satish Kumar, Research Scholor, NIT	
Sri ChChinnaVeeraiah, Assoc Prof & Head			

III YEAR II SEMESTER:

SNO	SUB CODE	COURSE TITLE	CATEGORY	L	T	P	C
1	22EE6T1	Linear And Digital Integrated Circuit Applications	PCC	3	0	0	3
2	22EE6T2	Power Systems	PCC	3	0	0	3
3	22EE6T3	Micro Processor & Micro Controllers	PCC	3	0	0	3
4	22EE6E1	Elective-II	PEL	3	0	0	3
5	22EE6OE1	Open Elective-II	OEL/JOL	3	0	0	3
6	22EE6L1	Power Systems & Simulation Lab	PCL	0	0	3	1.5
7	22EE6L2	Micro Processor & Micro Controllers Lab	PCL	0	0	3	1.5
8	22EE6L3	Linear And Digital IC Applications Lab	PCL	0	0	3	1.5
9	22EE6S1	Coding & Technical Training	SOC	1	0	2	2
		TOTAL CREDITS					**21.5**
INDUSTRIAL/RESEARCH INTERNSHIP (MANDATORY) 4 TO 8 WEEKS DURING SUMMER VACATION							

IV YEAR I SEMESTER:

SNO	SUB CODE	COURSE TITLE	CATEGORY	L	T	P	C
1	22EE7E1	Elective-III	PEL	3	0	0	3
2	22EE7E2	Elective-IV	PEL	3	0	0	3
3	22EE7E3	Elective-V	PEL	3	0	0	3
4	22EE7OE1	Open Elective-III	OEL/JOL	3	0	0	3
5	22EE7OE2	Open Elective-IV	OEL/JOL	3	0	0	3
6	22EE7T1	Universal Human Values	HSC	3	0	0	3
7	22EE7S1	Mini Project-II	SOC	1	0	2	2
	SUMMER INTERNSHIP 4 TO 8 WEEKS (MANDATORY) AFTER THIRD YEAR (TO BE EVALUATED DURING VII SEMESTER)			0	0	0	3
		TOTAL CREDITS					**23**

IV YEAR II SEMESTER:

SNO	SUB CODE	COURSE TITLE	CATEGORY	L	T	P	C
1	22EE8P1	MAJOR PROJECT	PROJECT	0	0	0	12
		TOTAL CREDITS					**12**

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Sri ChChinnaVeeraiah, Assoc Prof & Head			

PROFESSONAL ELECTIVES:

22EE5E1- PULSE & DIGITAL CIRCUITS
22EE5E2-ANALOG & DIGITAL COMMUNICATION
22EE5E3-SWITCHING THEORY & LOGIC DESIGN
22EE5E4-MICRO ELECTRONIC DEVICES & APPLICATIONS
22EE5E5-VLSI DESIGN
22EE6E1-UTILIZATION OF ELECTRICAL ENERGY
22EE6E2-SOLID STATE DEVICES
22EE6E3-ADVANCED CONTROL SYSTEMS
22EE6E4-ELECTRICAL MACHINE DESIGN
22EE6E5-HYBRID ELECTRIC VEHICLES
22EE7E1-INDUSTRIAL ROBOTICS
22EE7E2-NEURAL NETWORKS & FUZZY LOGIC
22EE7E3-HIGH VOLTAGE ENGINEERING
22EE7E4-ENERGY AUDITING, CONSERVATION & MANAGEMENT
22EE7E5-ELECTRICAL DISTRIBUTION SYSTEMS
22EE7E6-HVAC & DC TRANSMISSION
22EE7E7-FLEXIBLE ALATERNATING CURRENT TRANSMISSION SYSTEMS
22EE7E8-POWER QUALITY
22EE7E9-SMART GRID
22EE7E10-SPECIAL ELECTRICAL MACHINES
22EE7E11-POWER SYSTEMS OPERATIONS & CONTROL
22EE7E12-SWITCHED MODE POWER CONVERSION
22EE7E13-AI APPLICATIONS TO ELECTRICAL ENGINEERING
22EE7E14-SWITCH GEAR & PROTECTION
22EE7E15-EMBEDDED SYSTEM DESIGN

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Post Graduate Course Structure

For

POWER ELECTRONICS

(Applicable for batches admitted from 2022-2023)

S No	Programme Code	Programme Name	Specialization	No. of Sections	No. of Students	Page
1	43	M. Tech	Power Electronics	01	18	4

Autonomous Regulations – AR22

Amrita Sai Institute of Science & Technology

Approved by AICTE, New Delhi; Permanently Affiliated to JNTUK, Kakinada
ISO 9001:2015 Certified Institution; Accredited by NAAC with "A" grade
Recognized by UGC under 2(f) and 12(B) of UGC 1956 Act
Amrita Sai Nagar, Paritala, Krishna District Andhrapradesh – 521 180
www.amritasai.org.in, 0866-2428399

M. Tech. Course Structure – Power Electronics

I Semester

S. No	Course Code	Course	L	T	P	C
1	22PE1T1	Electrical Machine Modeling & Analysis	4	--	--	3
2	22PE1T2	Analysis of Power Electronic Converters	4	--	--	3
3	22PE1T3A 22PE1T3B 22PE1T3C	Elective – I i. Modern Control Theory ii. Power Quality and Custom Power Devices iii. Programmable Logic Controllers & Applications	4	--	--	3
4	22PE1T4A 22PE1T4B 22PE1T4C	Elective – II i. Artificial Intelligence Techniques ii. Renewable Energy Technologies iii. HVDC Transmission and Flexible AC Transmission Systems	4	--	--	3
5	22PE1T5	Research Methodology and IPR	2	--	--	2
6	22PE1L1	Power Electronics Simulation Laboratory	--	--	4	2
7	22PE1L2	Power Converters Laboratory	--	--	4	2
8		Audit Course – 1	2	--	--	--
		Total Credits	**18**			

II Semester

S. No	Course Code	Course	L	T	P	C
1	22PE2T1	Switched Mode Power Conversion	4	1	--	3
2	22PE2T2	Power Electronic Control of Electrical Drives	4	1	--	3
3	22PE2T3A 22PE2T3B 22PE2T3C	Elective – III i. Control & Integration of Renewable Energy Systems ii. Hybrid Electric Vehicles iii. Digital Control Systems	4	1	--	3
4	22PE2T4A 22PE2T4B 22PE2T4C	Elective – IV i. Advanced Digital Signal Processing ii. Applications of Power Converters iii. Microcontrollers	4	1	--	3
5	22PE2L1	Electric Drives Simulation Laboratory	--	--	4	2
6	22PE2L2	Electric Drives Laboratory	--	--	4	2
7		Mini Project with Seminar	--	--	4	2
8		Audit Course – 2	2	--	--	--
		Total Credits	**18**			

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Sri ChChinnaVeeraiah, Assoc Prof & Head			

III Semester

S. No	Course Code	Course	L	T	P	C
1	22PE3T1A 22PE3T1B 22PE3T1C	Program Elective – V i. Digital Signal Processing Controlled Drives ii. Smart Grid Technologies iii. Modelling & Simulation of Power Electronic Systems	4	1	--	3
2	22PE3T2A 22PE3T2B 22PE3T2C	Open Elective i. Industrial Safety ii. Energy Audit, Conservation & Management iii. Composite Materials	4	1	--	3
3		Dissertation Phase - I (to be continued and evaluated next semester)	--	--	20	8
		Total Credits	**14**			

IV Semester

S. No	Course Code	Course	L	T	P	C
1		Dissertation Phase - II (continued from III semester)	--	--	32	10
		Total Credits	**10**			

L-Lecture; T-Tutorial; P-Practical; C-Credits

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