

# ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES: TIRUPATI

(AUTONOMOUS)

FIRST: Minutes of the meeting of BOS

DATE: 10-08-2019

## AGENDA OF THE MEETING

- Welcoming the distinguished members of the Board of Studies for the BOS meeting by the Chairman, BOS – EEE.
- Review / Suggestions of the academic regulations for the B. Tech Programme.
- Review / Suggestions of the course structure of B.Tech Programme.
- Review / Suggestions of the academic regulations for the M. Tech-PS Programme.
- Review / Suggestions of the course structure of M.Tech-PS Programme.
- Review / Approval of the detailed B.Tech Syllabi for two years.
- Review / Approval of the detailed M.Tech-PS Syllabi for two years.
- Any other suggestions / advice to the department.
- Vote of thanks.

## **Members of BOS – EEE**

S.No.	Name of the Person	Designation	Position
01	Dr. C. Sasikala	Professor & HOD	Chairman
02	Dr. R. Murugesan	Associate Professor	Member
03	Mr. K. Balaji Nanda Kumar Reddy	Assistant Professor	Member
04	Mr. S. Nyamathulla	Assistant Professor	Member
05	Mr.C. Rajesh	Assistant Professor	Member
06	Dr.V.C.Veera Reddy	Professor, SPMVV Tirupati.	University nominated Academic Expert
07	Dr.M.Suryakalavathi	Professor & HOD JNTUCEH, Hyderabad	University nominated Subject Expert
08	Dr.G.V. Marutheswar Rao	Professor, SVUCE, SV University, Tirupati	University nominated Subject Expert
09	Mr.G.Krishnamurthy Naidu	Sr. General Manager-QA Amararaja Batteries Ltd, Tirupati.	Industry Representative
10	Mr.P.Parthasaradhi	Scientific Officer Department of Atomic Energy, Manuguru.	P.G Alumni

  
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Dept. of Electrical & Electronics Engg.  
Annamacharya Institute of Technology & Sciences  
TIRUPATI - 517 507

Members not attended:

### **MINUTES OF BOARD OF STUDIES MEETING**

The meeting was conducted in the Board room AITS on 10th August 2019 at 11.30 A.M. The Principal and the Chairman, BOS-EEE, extended a warm welcome to Dr.V.C.Veera Reddy, Professor, SPMVVTirupati, Dr.M.Suryakalavathi, Professor & HOD ,JNTUCEH, Hyderabad, Dr.G.V. Marutheswar Rao, Professor, SVUCE, SV University, Tirupati, Mr.G.Krishnamurthy Naidu, Sr. General Manager-QA Amara Raja Batteries Ltd, Tirupati, Mr. P. Parthasaradhi, Scientific Officer Department of Atomic Energy, Manuguru. and members of BOS.

- Chairman, BOS- EEE, Dr. C.Sasikala, briefed the committee about the agenda of the meeting.
- The BOS officially approved the UG (B.Tech) academic regulations and course structures of AK19, related to the following subjects for the academic year 2019-20.
- The BOS officially approved the PG (M.Tech-PS) academic regulations and course structures of AK19, related to the following subjects for the academic year 2019-20.
- The committee suggested that the students should be acquainted with MOOCs/ SWAYAM to enhance the learning abilities.
- The Panel proposed that the students should use AICTE, JNTUA referred books for references.



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Annamacharya Institute of Technology & Sciences  
TIRUPATI - 517 507



## ANNAMACHARYA INSTITUTE OF TECHNOLOGY AND SCIENCES, TIRUPATI

(Autonomous)

Course structure for Four Year Regular B.Tech. Degree Program

(Effective for the batches admitted from 2019-20)

## ELECTRICAL AND ELECTRONICS ENGINEERING (EEE)

## INDUCTION PROGRAM (3 weeks duration)

- ❖ Physical activity
- ❖ Creative Arts
- ❖ Universal Human Values
- ❖ Literary
- ❖ Proficiency Modules
- ❖ Lectures by Eminent People
- ❖ Visits to local Areas
- ❖ Familiarization to Dept./Branch & Innovations

## I B. Tech – I Semester

T B. Tech – I Semester										
S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
THEORY										
1	BS	19ABS9901	Algebra and Calculus	3	1	0	4	30	70	100
2	BS	19ABS9902	Applied Physics	3	0	0	3	30	70	100
3	ES	19AES0501	Problem Solving and Programming	3	1	0	4	30	70	100
4	HS	19AHS9901	Communicative English I	2	0	0	2	30	70	100
PRACTICAL										
5	LC	19ALC0201	Electrical and Electronics Engineering Workshop	0	0	2	1	30	70	100
6	BS	19ABS9907	Applied Physics Lab	0	0	3	1.5	30	70	100
7	ES	19AES0503	Problem Solving and Programming Lab	0	0	4	2	30	70	100
8	HS	19AHS9902	Communicative English I Lab	0	0	2	1	30	70	100
TOTAL							18.5	240	560	800

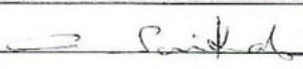
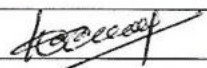
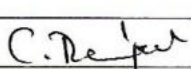
  
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 Dept. of Electrical & Electronics Engg.  
 Annamacharya Institute of Technology & Sciences  
 TIRUPATI - 517 507

S.NO	ROLE IN BOS	NAME	SIGNATURE
1	Chairman	Dr. C. Sasikala	C. Sasikala
2	Senior faculty members	Dr. R. Muragesan	
3		Dr. K. Balaji Nanda Kumar Reddy	
4		Shaik Nyamathulla	
5		C. Rajesh	C. Rajesh
6	External subject experts	Dr.M.Suryakalavathi	ABSENT
7		Dr.G.V.Marutheswar Rao	Connected from remote location
8	External academic expert	Dr. V. C. Veera Reddy	Connected from remote location
9	Representative (Industry)	Mr. G. Krishnamurthy Naidu	Connected from remote location
10	PG Alumnus	Mr. P. Parthasaradhi	Connected from remote location

### I B. Tech – II Semester

S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
THEORY										
1	ES	19AES0101	Basics of Civil and Mechanical Engineering	3	0	0	3	30	70	100
2	BS	19ABS9906	Differential Equations and Vector Calculus	3	1	0	4	30	70	100
3	BS	19ABS9904	Chemistry	3	0	0	3	30	70	100
4	ES	19AES0502	Data Structures	3	0	0	3	30	70	100
PRACTICAL										
5	LC	19ALC0301	Engineering Workshop	0	0	2	1	30	70	100
6	ES	19AES0301	Engineering Graphics Lab	1	0	4	3	30	70	100
7	ES	19AES0102	Basics of Civil and Mechanical Engineering Lab	0	0	3	1.5	30	70	100
8	BS	19ABS9909	Chemistry Lab	0	0	3	1.5	30	70	100
9	ES	19AES0504	Data Structures Lab	0	0	3	1.5	30	70	100
TOTAL							21.5	270	630	900

  
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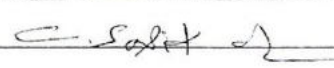
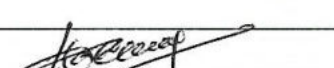
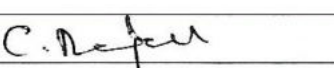
## II B. Tech - I Semester

S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		/CIE	SEE	Total
1	BS	19ABS9912	Transform Techniques and Complex Variables	3	0	0	3	30	70	100
2	HS	19AHS9903	Communicative English II	2	0	0	2	30	70	100
3	ES	19AES0505	Internet of Things (IoT)	2	0	0	2	30	70	100
4	PC	19APC0201	Electrical Circuit Analysis	3	0	0	3	30	70	100
5	PC	19APC0401	Electronic Devices and Circuits	3	0	0	3	30	70	100
6	PC	19APC0202	Engineering Electromagnetics	3	1	0	4	30	70	100
7	MC	19AMC9903	Environmental Studies	2	0	0	0	30	--	30
<b>PRACTICAL</b>										
8	HS	19AHS9904	Communicative English II Lab	0	0	2	1	30	70	100
9	ES	19AES0506	Internet of Things (IoT) Lab	0	0	2	1	30	70	100
10	PC	19APC0203	Electrical Circuit Analysis Lab	0	0	3	1.5	30	70	100
11	PC	19APC0404	Electronic Devices and Circuits Lab	0	0	2	1	30	70	100
<b>TOTAL</b>							<b>21.5</b>	<b>330</b>	<b>700</b>	<b>1030</b>



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3		Dr. K. Balaji Nanda Kumar Reddy	
4		Shaik Nyamathulla	
5		C. Rajesh	
6	External subject experts	Dr.M.Suryakalavathi	ABSENT
7		Dr.G.V.Marutheswar Rao	Connected from remote location
8	External academic expert	Dr. V. C. Veera Reddy	Connected from remote location
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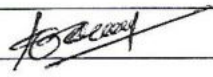
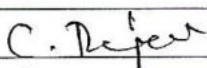
## II B. Tech - II Semester

S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	BS	19ABS9916	Numerical Methods and Probability	3	1	0	4	30	70	100
2	ES	19AES0509	Basics of Python Programming	2	0	0	2	30	70	100
3	ES	19AES0302	Design Thinking and Product Innovation	2	0	0	2	30	70	100
4	PC	19APC0204	Electrical Machines - I	3	1	0	4	30	70	100
5	PC	19APC0406	Analog Electronic Circuits	2	0	0	2	30	70	100
6	PC	19APC0408	Digital Electronic Circuits	2	0	0	2	30	70	100
7	MC	19AMC9901	Biology for Engineers	2	0	0	0	30	--	30
<b>PRACTICAL</b>										
8	PR	19APR0201	Socially Relevant Projects (15 hrs / semester)	0	0	0	0.5	50	--	50
9	PC	19APC0205	Electrical Machines - I Lab	0	0	3	1.5	30	70	100
10	ES	19AES0510	Basics of Python Programming Lab	0	0	2	1	30	70	100
11	ES	19AES0303	Design Thinking and Product Innovation Lab	0	0	2	1	30	70	100
12	PC	19APC0409	Analog and Digital Electronic Circuits Lab	0	0	3	1.5	30	70	100
<b>TOTAL</b>							<b>21.5</b>	<b>380</b>	<b>700</b>	<b>1080</b>



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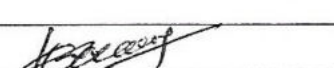
### III B. Tech - I Semester

S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	PC	19APC0206	Power Systems - I	3	0	0	3	30	70	100
2	PC	19APC0207	Electrical Machines - II	3	0	0	3	30	70	100
3	PC	19APC0208	Control Systems	3	0	0	3	30	70	100
4	PC	19APC0209	Power Electronics	3	0	0	3	30	70	100
5	PE	19APC0404	Signals and Systems	3	0	0	3	30	70	100
		19APC0425	Analog and Digital IC Applications							
		19APC0426	Linear System Analysis							
6	OE	19A0EMB01	Managerial Economics and Financial Analysis	3	0	0	3	30	70	100
		19APC0510	Computer Networks							
		19APC0412	Analog and Digital Communications							
7	MC	19AMC9902	Constitution of India	2	0	0	0	30	---	30
<b>PRACTICAL</b>										
8	PC	19APC0210	Electrical Machines - II Lab	0	0	2	1	30	70	100
9	PC	19APC0211	Control Systems Lab	0	0	2	1	30	70	100
10	PC	19APC0212	Power Electronics Lab	0	0	2	1	30	70	100
11	PR	19APR0202	Socially Relevant Projects (15 Hrs /Sem)	0	0	0	0.5	50	---	50
<b>TOTAL</b>							<b>21.5</b>	<b>350</b>	<b>630</b>	<b>980</b>



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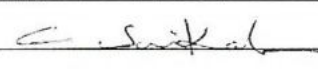
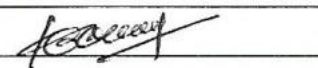
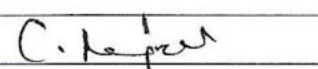
### III B. Tech - II Semester

S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	PC	19APC0213	Power Systems - II	3	0	0	3	30	70	100
2	PC	19APC0417	Microprocessors & Microcontrollers	3	0	0	3	30	70	100
3	PC	19APC0214	Electrical Measurements and Instrumentation	3	0	0	3	30	70	100
4	PC	19APC0215	Power System Analysis	3	0	0	3	30	70	100
5	OE	19A0E0201	Neural Networks & Fuzzy Logic	3	0	0	3	30	70	100
		19A0E9906	Mathematical Modeling							
		19A0E0511	Business Data Analytics							
6	HE	19AHE9902	Principles of Effective Public Speaking	3	0	0	3	30	70	100
		19AHE9907	Optics							
		19AHE9909	Quantum Mechanics							
7	MC	19AMC9904	Professional Ethics and Human values	2	0	0	0	30	--	30
<b>PRACTICAL</b>										
8	PC	19APC0216	Power Systems-II Lab	0	0	2	1	30	70	100
9	PC	19APC0420	Microprocessors & Microcontrollers Lab	0	0	2	1	30	70	100
10	PC	19APC0217	Electrical Measurements Lab	0	0	2	1	30	70	100
11	PR	19APR0203	Socially Relevant Projects (15 hrs / semester)	0	0	0	0.5	50	--	50
12	PR	19APR0204	Industrial Training/ Internship/ Research Projects in National Laboratories/Academic Institutions *	0	0	0	0	--	--	--
<b>TOTAL</b>							<b>21.5</b>	<b>350</b>	<b>630</b>	<b>980</b>



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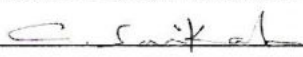

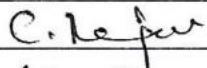
### IV B. Tech - I Semester

S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	PC	19APC0218	Switch Gear and Protection	3	0	0	3	30	70	100
2	PC	19APC0219	High Voltage Engineering	2	0	0	2	30	70	100
3	OE	19APE0411	Embedded Systems	3	0	0	3	30	70	100
		19APC0512	Data Base Management Systems							
		19APC0101	Strength of Materials-I							
4	PE	19APE0201	Electrical Distribution Systems	3	0	0	3	30	70	100
		19APE0202	Power Semi-conductor Drives							
		19APE0203	Advanced Control Systems							
5	PE	19APE0204	Power System Operation and Control	3	0	0	3	30	70	100
		19APE0205	Flexible AC Transmission Systems							
		19APC0418	Digital Signal Processing							
6	HE	19AHE9901	Technical Writing	3	0	0	3	30	70	100
		19AHE9903	Professional Communication							
		19AHE9904	Polymer Chemistry							
PRACTICAL										
7	PR	19APR0205	Project I	0	0	0	2	60	--	60
8	PR	19APR0206	Socially Relevant Projects (15 hrs / semester)	0	0	0	0.5	50	--	50
9	PR	19APR0207	Industrial Training/Internship/Research Projects in National Laboratories/Academic Institutions	0	0	0	1.5	50	--	50
TOTAL							21	340	420	760



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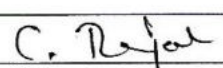
### IV B. Tech - II Semester

S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	OE	19A0E9903	Environmental Waste Management	3	0	0	3	30	70	100
		19APE0405	VLSI Design							
		19A0E0301	Management Sciences							
2	PE	19APE0206	Smart Grids	3	0	0	3	30	70	100
		19APE0207	Power Quality							
		19APE0208	Power System Dynamics and Control							
PRACTICAL										
3	PR	19APR0208	Technical Paper Presentation/Seminar	0	0	0	0	0	50	50
4	PR	19APR0209	Project II	3	0	0	7-1/2	60	140	200
TOTAL							13	120	330	450



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**ANNAMACHARYA INSTITUTE OF TECHNOLOGY AND SCIENCES, TIRUPATI**  
(AUTONOMOUS)

(Effective for the batches admitted in 2019-20)  
**ELECTRICAL AND ELECTRONICS ENGINEERING (EEE)**

10-08-2019

**INDUCTION PROGRAM (3 weeks duration)**

- ❖ Physical activity
- ❖ Creative Arts
- ❖ Universal Human Values
- ❖ Literary
- ❖ Proficiency Modules
- ❖ Lectures by Eminent People
- ❖ Visits to local Areas
- ❖ Familiarization to Dept./Branch & Innovations

**I B. Tech – I Semester**

S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
THEORY										
1	BS	19ABS9901	Algebra and Calculus	3	1	0	4	30	70	100
2	BS	19ABS9902	Applied Physics	3	0	0	3	30	70	100
3	ES	19AES0501	Problem Solving and Programming	3	1	0	4	30	70	100
4	HS	19AHS9901	Communicative English I	2	0	0	2	30	70	100
PRACTICAL										
5	LC	19ALC0201	Electrical and Electronics Engineering Workshop	0	0	2	1	30	70	100
6	BS	19ABS9907	Applied Physics Lab	0	0	3	1.5	30	70	100
7	ES	19AES0503	Problem Solving and Programming Lab	0	0	4 ③	2.0 ①.5	30	70	100
8	HS	19AHS9902	Communicative English I Lab	0	0	2	1	30	70	100
TOTAL							18 18.5	240	560	800

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Dept. of Electrical & Electronics Engg  
Annamacharya Institute of Technology & S  
TIRUPATI - 517 507

1) *[Signature]* 2) *[Signature]* 3) *[Signature]* 4) *[Signature]*

5) *[Signature]*

# I B. Tech – II Semester

S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
THEORY										
1	ES	19AES0101	Basics of Civil and Mechanical Engineering	3	0	0	3	30	70	100
2	BS	19ABS9906	Differential Equations and Vector Calculus	3	1	0	4	30	70	100
3	BS	19ABS9904	Chemistry	3	0	0	3	30	70	100
4	ES	19AES0502	Data Structures	3	0	0	3	30	70	100
PRACTICAL										
5	LC	19ALC0301	Engineering Workshop	0	0	2	1	30	70	100
6	ES	19AES0301	Engineering Graphics Lab	1	0	4	3	30	70	100
7	ES	19AES0102	Basics of Civil and Mechanical Engineering Lab	0	0	3	1.5	30	70	100
8	BS	19ABS9909	Chemistry Lab	0	0	3	1.5	30	70	100
9	ES	19AES0504	Data Structures Lab	0	0	3	1.5	30	70	100
TOTAL							21.5	270	630	900

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*Det 2) R. Raghav 3) R. Raghav 4) A. A. 5) C. R. Raghav*

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## II B. Tech - I Semester

S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	BS	19ABS9912	Transform Techniques and Complex Variables	3	0	0	3	30	70	100
2	BS	19ABS9918	Life Sciences for Engineers	2	0	0	2	30	70	100
3	ES	19AES0505	Internet of Things (IoT)	2	0	0	2	30	70	100
4	PC	19APC0201	Electrical Circuit Analysis	3	0	0	3	30	70	100
5	PC	19APC0401	Electronic Devices and Circuits	3	0	0	3	30	70	100
6	PC	19APC0202	Engineering Electromagnetics	3	1	0	4	30	70	100
7	MC	19AMC9901	Essence Of Indian Traditional Knowledge	3	0	0	0	30	--	30
<b>PRACTICAL</b>										
8	BS	19ABS9919	Life Sciences for Engineers Lab	0	0	2	1	30	70	100
9	ES	19AES0506	Internet of Things (IoT) Lab	0	0	2	1	30	70	100
10	PC	19APC0203	Electrical Circuit Analysis Lab	0	0	3	1.5	30	70	100
11	PC	19APC0404	Electronic Devices and Circuits Lab	0	0	2	1	30	70	100
<b>TOTAL</b>							<b>21.5</b>	<b>330</b>	<b>700</b>	<b>1030</b>





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Dept. of Electrical & Electronics Engg.  
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TIRUPATI - 517 507

1) dk

2) R. Srinivas

3) H. Srinivas

4) AG

5) C. Srinivas

## II B. Tech - II Semester

S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	BS	19ABS9916	Numerical Methods and Probability	3	1	0	4	30	70	100
2	HS	19AHS9903	Communicative English II	2	0	0	2	30	70	100
3	ES	19AES0302	Design Thinking and Product Innovation	2	0	0	2	30	70	100
4	PC	19APC0204	Electrical Machines - I	3	1	0	4	30	70	100
5	PC	19APC0406	Analog Electronic Circuits	2	0	0	2	30	70	100
6	PC	19APC0408	Digital Electronic Circuits	2	0	0	2	30	70	100
7	MC	19AMC9903	Environmental Studies	3	0	0	0	30	--	30
<b>PRACTICAL</b>										
8	PR	19APR0201	Socially Relevant Projects (15 hrs / semester)	0	0	0	0.5	50	--	50
9	PC	19APC0205	Electrical Machines - I Lab	0	0	3	1.5	30	70	100
10	HS	19AHS9904	Communicative English II Lab	0	0	2	1	30	70	100
11	ES	19AES0303	Design Thinking and Product Innovation Lab	0	0	2	1	30	70	100
12	PC	19APC0409	Analog and Digital Electronic Circuits Lab	0	0	3	1.5	30	70	100
<b>TOTAL</b>							<b>21.5</b>	<b>380</b>	<b>700</b>	<b>1080</b>



### III B. Tech - I Semester

S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	PC	19APC0206	Power Systems - I	3	0	0	3	30	70	100
2	PC	19APC0207	Electrical Machines - II	3	0	0	3	30	70	100
3	PC	19APC0208	Control Systems	3	0	0	3	30	70	100
4	PC	19APC0209	Power Electronics	3	0	0	3	30	70	100
5	PE	19APC0404	Signals and Systems	3	0	0	3	30	70	100
		19APC0425	Analog and Digital IC Applications							
		19APC0426	Linear System Analysis							
6	OE	19A0EMB01	Managerial Economics and Financial Analysis	3	0	0	3	30	70	100
		19APC0510	Computer Networks							
		19APC0412	Analog and Digital Communications							
7	MC	19AMC9902	Constitution of India	3	0	0	0	30	---	30
<b>PRACTICAL</b>										
8	PC	19APC0210	Electrical Machines - II Lab	0	0	2	1	30	70	100
9	PC	19APC0211	Control Systems Lab	0	0	2	1	30	70	100
10	PC	19APC0212	Power Electronics Lab	0	0	2	1	30	70	100
11	PR	19APR0202	Socially Relevant Projects (15 Hrs /Sem)	0	0	0	0.5	50	---	50
<b>TOTAL</b>							<b>21.5</b>	<b>350</b>	<b>630</b>	<b>980</b>

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Dept. of Electrical & Electronics Engg.  
Annamacharya Institute of Technology & Sciences  
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1) *[Signature]* 2) *[Signature]* 3) *[Signature]* 4) *[Signature]*

### III B. Tech - II Semester

S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	PC	19APC0213	Power Systems - II	3	0	0	3	30	70	100
2	PC	19APC0417	Microprocessors & Microcontrollers	3	0	0	3	30	70	100
3	PC	19APC0214	Electrical Measurements and Instrumentation	3	0	0	3	30	70	100
4	PC	19APC0215	Power System Analysis	3	0	0	3	30	70	100
5	OE	19A0E0201	Neural Networks & Fuzzy Logic	3	0	0	3	30	70	100
		19A0E9906	Mathematical Modeling							
		19A0E0511	Business Data Analytics							
6	HE	19AHE9902	Principles of Effective Public Speaking	3	0	0	3	30	70	100
		19AHE9907	Optics							
		19AHE9909	Quantum Mechanics							
7	MC	19AMC9904	Professional Ethics and Human values	3	0	0	0	30	--	30
<b>PRACTICAL</b>										
8	PC	19APC0216	Power Systems-II Lab	0	0	2	1	30	70	100
9	PC	19APC0420	Microprocessors & Microcontrollers Lab	0	0	2	1	30	70	100
10	PC	19APC0217	Electrical Measurements Lab	0	0	2	1	30	70	100
11	PR	19APR0203	Socially Relevant Projects (15 hrs / semester)	0	0	0	0.5	50	--	50
12	PR	----	Industrial Training/ Internship/ Research Projects in National Laboratories/Academic Institutions *	0	0	0	0	--	--	--
<b>TOTAL</b>							<b>21.5</b>	<b>350</b>	<b>630</b>	<b>980</b>

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5) C. Rajan  
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## IV B. Tech - I Semester

S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	PC	19APC0218	Switch Gear and Protection	3	0	0	3	30	70	100
2	PC	19APC0219	High Voltage Engineering	2	0	0	2	30	70	100
3	OE	19APE0411	Embedded Systems	3	0	0	3	30	70	100
		19APC0512	Data Base Management Systems							
		19APC0101	Strength of Materials-I							
4	PE	19APE0201	Electrical Distribution Systems	3	0	0	3	30	70	100
		19APE0202	Power Semi-conductor Drives							
		19APE0203	Advanced Control Systems							
5	PE	19APE0204	Power System Operation and Control	3	0	0	3	30	70	100
		19APE0205	Flexible AC Transmission Systems							
		19APC0418	Digital Signal Processing							
6	HE	19AHE9901	Technical Writing	3	0	0	3	30	70	100
		19AHE9903	Professional Communication							
		19AHE9904	Polymer Chemistry							
<b>PRACTICAL</b>										
<del>8</del>	<del>PR</del>	<del>19APR0204</del>	<del>Socially Relevant Projects (15 hrs / semester)</del>	<del>0</del>	<del>0</del>	<del>0</del>	<del>0.5</del>	<del>50</del>	<del>50</del>	<del>50</del>
9	PR	19APR0205	Industrial Training/Internship/Research Projects in National Laboratories/Academic Institutions	0	0	0	1.5 (2)	50	--	50
10	PR	19APR0206	Project I	0	0	0	2	60	--	60
<b>TOTAL</b>							21.5 21.0	340 290	420	760 710

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# IV B. Tech - II Semester

S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	OE	19A0E9903	Environmental Waste Management	3	0	0	3	30	70	100
		19APE0405	VLSI Design							
		19A0E0301	Management Sciences							
2	PE	19APE0206	Smart Grids	3	0	0	3	30	70	100
		19APE0207	Power Quality							
		19APE0208	Power System Dynamics and Control							
PRACTICAL										
3	PR	19APR0207	Technical Paper Presentation/Seminar	0	0	0	0	0	50	50
4	PR	19APR0208	Project II	3	0	0	7	60	140	200
TOTAL							13	120	330	450

(C.A.K. MURUGESWAR)

1) C.A. [Dr. C. Salikala]

2) R. Raju (Dr. R. Murugesan)

3) K. Balaji (K. Balaji, Nandakumar Reddy)

4) A. S. (S. Nyamathulla)

5) C. Raju (C. RAJESH)

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Annamacharya Institute of Technology & Sciences  
TIRUPATI - 517 507



**ANNAMACHARYA INSTITUTE OF TECHNOLOGY AND SCIENCES, TIRUPATI  
(AUTONOMOUS)**

**Minutes of Meeting BOS(UG&PG) of Electrical & Electronics  
Engineering Through Online Platform, dated 10-07-2020 at 3.30PM**

**Item 1:** The BOS Members of the Department of Electrical and Electronics Engineering.

**Resolution:** In Department of EEE, No changes in the BOS Members. The BOS Members list is showed below.

S.No	Name of the Person	Designation	Position
1	Dr. C. Sasikala	Professor & HOD	Chairman
2	Dr. R. Muragesan	Associate Professor	Member
3	Dr. K. Balaji Nanda Kumar Reddy	Assistant Professor	Member
4	Sheik Nyamathulla	Assistant Professor	Member
5	C. Rajesh	Assistant Professor	Member
6	Dr.M.Suryakalavathi	Professor of Electrical Engineering Department, JNTUCEH Kukatpally, HYD-85	University Nominated Subject Expert
7	Dr.G.V.Marutheswar Rao	Professor in EEE Dept., SVUCE, SV University, Tirupathi-517502, A.P.	University Nominated Subject Expert
8	Dr. V. C. Veera Reddy	Professor in EEE Dept., School of Engg&Technology, Sri Padmavathi Mahila ViswaVidyalayam, Tirupathi-517502	Academic Council Nominee
9	Mr. G. Krishnamurthy Naidu	Sr. General Manager-QA, Amararaja Batteries Ltd, Karakambadi, Tirupathi	Industry Representative
10	Mr. P. Parthasaradhi	Scientific officer/c, Department of Atomic Energy, Heavy Water Plant, Manuguru.	P.G.Alumni

**Item 2: Modifications and Approval of Course Structure for B. Tech (EEE)**

**Resolution:** Based on first year course structure followed in 2019-20, certain modifications in Second Year(I-Sem & II-Sem) of course structure of B.Tech are discussed and are approved and assumed tentative structures for rest of 3<sup>rd</sup> and 4<sup>th</sup> Year of B.Tech

**Item 3: To Approve the syllabus for II Year courses of B.Tech (EEE) for 2020-21**

Syllabus for the EEE Courses are already approved in the previous BOS (UG&PG)- EEE Meeting held on 10-08-2019.

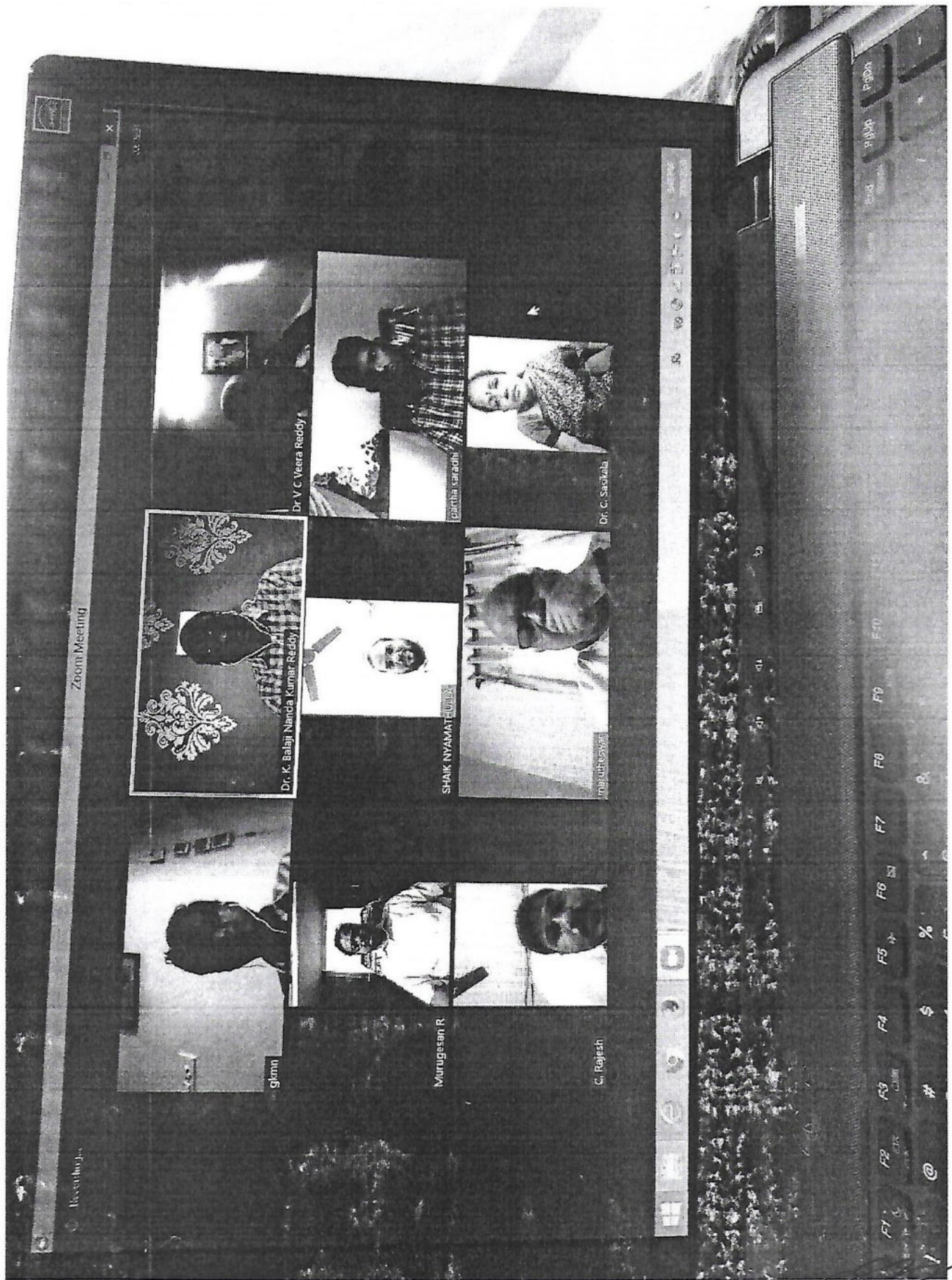
① D.Y.C. Sankar - af



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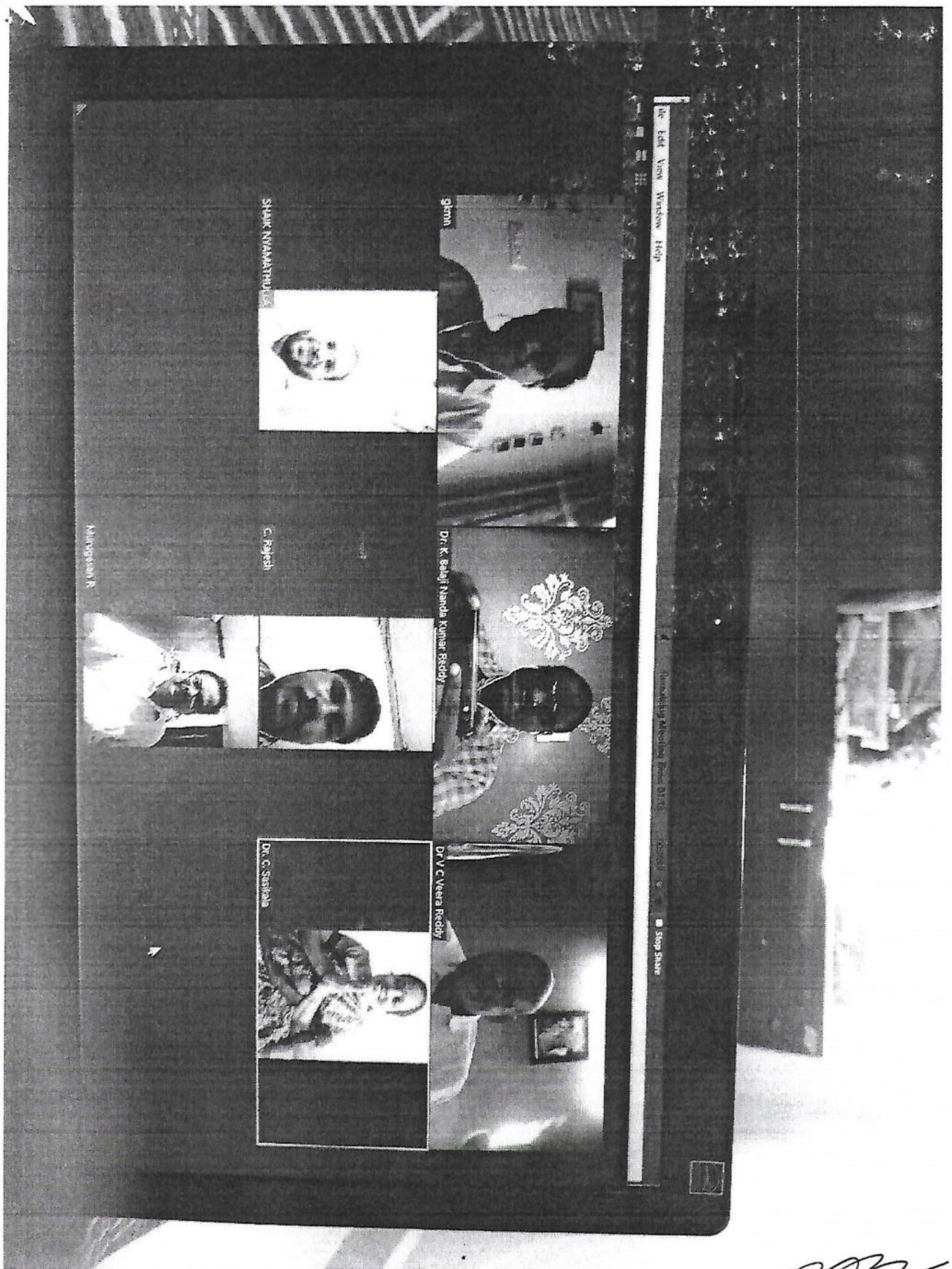
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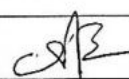
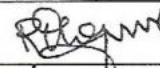

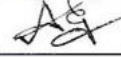


**Minutes of Meeting - BOS (UG)**  
**of**  
**Electrical and Electronics Engineering dated 12-11-2020 at 2.30PM**

**Meeting Agenda:-**

Based on APSCHE's Revised Academic Curriculum B.Tech Regular / Honers / Minor – In accordance with NEP – Mandatory to shift into New Curriculum as per APSCHE & JNTUA first year course structure (I-Sem & II –Sem) for 2020 admitted batch need to be approve from BOS Members.

➤ **The BOS Members of the Department of Electrical and Electronics Engineering.**

S.No	Name of the Person	Designation	Position	Signature
1	Dr. C. Sasikala	Professor & HOD	Chairman	
2	Dr. R. Murugesan	Associate Professor	Member	
3	Dr. K. Balaji Nanda Kumar Reddy	Assistant Professor	Member	
4	Shaik Nyamathulla	Assistant Professor	Member	
5	C. Rajesh	Assistant Professor	Member	
6	Dr.M.Suryakalavathi	Professor of Electrical Engineering Department, JNTUCEH Kukatpally, HYD-85	University Nominated Subject Expert	Conducted through online
7	Dr.G.V. Marutheswar Rao	Professor in EEE Dept., SVUCE, SV University, Tirupathi-517502, A.P	University Nominated Subject Expert	Conducted through online
8	Dr. V. C. Veera Reddy	Professor in EEE Dept., School of Engg. & Technology, Sri Padmavathi Mahila ViswaVidyalayam, Tirupathi-517502	Academic Council Nominee	Conducted through on line
9	Mr.G.Krishnamurthy Naidu	Sr. General Manager-QA, Amararaja Batteries Ltd, Karakambadi, Tirupathi	Industry Representative	Conducted through on line
10	Mr. P. Parthasaradhi	Scientific officer/c, Department of Atomic Energy, Heavy Water Plant, Manuguru.	P.G.Alumni	Conducted through on line

**Resolution: To Approve the syllabus for I Year courses of B.Tech (EEE) for 2020-21**

Approved and received their concern letters through mails from External BOS members for the first year course of B.Tech EEE (I-Sem & II-Sem) for 2020 admitted batch.

  
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**Minutes of Meeting - BOS(UG)**  
**of**  
**Electrical & Electronics Engineering dated 12-11-2020 at 2.30PM**

**Meeting Agenda :-**

Based on APSCHE's Revised Academic Curriculum B.Tech Regular / Honers / Minor – In accordance with NEP – Mandatory to shift into New Curriculum as per APSCHE & JNTUA first year course structure (I-Sem & II –Sem) for 2020 admitted batch need to be approve from BOS Members.

**Modified Course Structure**

AK20 Regulations

ANNAMACHARYA INSTITUTE OF TECHNOLOGY AND SCIENCES, TIRUPATI  
(AUTONOMOUS)

Course structure for Four Year Regular B.Tech. Degree Program

(Effective for the batches admitted from 2020-21)

ELECTRICAL AND ELECTRONICS ENGINEERING (EEE)

INDUCTION PROGRAM (3 weeks duration)

- ❖ Physical activity
- ❖ Creative Arts
- ❖ Universal Human Values
- ❖ Literary
- ❖ Proficiency Modules
- ❖ Lectures by Eminent People
- ❖ Visits to local Areas
- ❖ Familiarization to Dept./Branch & Innovations

**Semester I (First year)**

Sl. No.	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	Basic Science course	20ABS9901	Algebra and Calculus	3	0	0	3	30	70	100
2	Basic Science course	20ABS9902	Applied Physics	3	0	0	3	30	70	100
3	Humanities and Social science	20AHS9901	Communicative English	3	0	0	3	30	70	100
4	*Engineering Science Courses	20AES0304	Engineering Workshop Practice	1	0	4	3	30	70	100
5	Engineering Science Courses	20AES0501	Problem Solving and Programming	3	0	0	3	30	70	100
6	Humanities and Social science LAB	20AHS9902	Communicative English Lab	0	0	3	1.5	30	70	100
7	Basic Science course (LAB)	20ABS9907	Applied Physics Lab	0	0	3	1.5	30	70	100
8	Engineering Science Courses (LAB)	20AES0503	Problem Solving and Programming Lab	0	0	3	1.5	30	70	100
<b>Total credits</b>							<b>19.5</b>	<b>240</b>	<b>560</b>	<b>800</b>

  
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**Semester II (First year)**

Sl. No.	Category	Course Code	Course Title	Hours per week	Credits	Scheme of Examination (Max. Marks)					
				L	T	P	C	CIE	SEE	Total	
1	Basic Science courses	20ABS9906	Differential Equations and Vector Calculus	3	0	0	3	30	70	100	
2	Basic Science courses	20ABS9904	Chemistry	3	0	0	3	30	70	100	
3	Engineering Science Courses	20AES0101	Basics of Civil and Mechanical Engineering	3	0	0	3	30	70	100	
4	Engineering Science Courses	20AES0505	Internet of Things (IoT)	3	0	0	3	30	70	100	
5	Engineering Science Courses	20AES0301	Engineering Graphics	1	0	4	3	30	70	100	
6	Engineering Science Courses (LAB)	20AES0102	Basics of Civil and Mechanical Engineering Lab	0	0	3	1.5	30	70	100	
7	Basic Science course (LAB)	20ABS9909	Chemistry Lab	0	0	3	1.5	30	70	100	
8	Engineering Science Courses (LAB)	20AES0506	Internet of Things (IoT) Lab	0	0	3	1.5	30	70	100	
	Mandatory course (AICTE suggested)	20AMC9902	Constitution of India	2	0	0	0	30	-	30	
Total credits				19.5			270	560	830		

**Semester III (Second year)**

Sl. No.	Category	Course Code	Course Title	Hours per week	L	T	P	CIE	SEE	Total	Scheme of Examination (Max. Marks)
1	Basic Science courses	20ABS9912	Transform Techniques and Complex Variables	3	0	0	3	30	70	100	
2	Professional Core Course	20APC0201	Electrical Circuits-I	3	0	0	3	30	70	100	
3	Professional Core courses	20APC0401	Electronic devices and circuits	3	0	0	3	30	70	100	
4	Professional Core courses	20APC0202	Engineering Electromagnetics	3	0	0	3	30	70	100	
5	Professional Core courses	20APC0203	Electrical Machines-I	3	0	0	3	30	70	100	
6	Professional Core courses (LAB)	20APC0204	Electrical Circuits-I Lab	0	0	3	1.5	30	70	100	
7	Professional Core courses (LAB)	20APC0404	Electronic Devices and Circuits Lab	0	0	3	1.5	30	70	100	
8	Professional Core courses (LAB)	20APC0205	Electrical Machines-I Lab	0	0	3	1.5	30	70	100	
	Skill oriented course*			1	0	2	2	100		100	
	Mandatory course (AICTE suggested)	20AMC9903	Environmental Studies	2	0	0	0	30	--	30	
			Total credits				21.5	370	560	930	

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**Semester IV (Second year)**

S.No	Category	Code	Course Title	Hours			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	Engineering Science Courses	20AES0509	Basics of Python Programming	3	0	0	3	30	70	100
2	Basic Science Course /Prof core course	20APC0206	Electrical Circuits-II	3	0	0	3	30	70	100
3	Professional Core courses	20APC0207	Electrical Machines-II	3	0	0	3	30	70	100
4	Professional Core courses	20APC0208	Power Systems-I	3	0	0	3	30	70	100
5	Humanities and Social Sciences	20AHSMB01	Managerial Economics and financial analysis	3	0	0	3	30	70	100
6	Engineering Science Courses/Prof Core (Interdisciplinary) (LAB)	20AES0510	Basics of Python Programming Lab	0	0	3	1.5	30	70	100
7	Professional Core courses (LAB)	20APC0209	Electrical circuits-II Lab	0	0	3	1.5	30	70	100
8	Professional Core courses (LAB)	20APC0210	Electrical Machines-II Lab	0	0	3	1.5	30	70	100
	<b>Skill oriented course*</b>			<b>1</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>100</b>		<b>100</b>
<b>Total credits</b>							<b>21.5</b>	<b>340</b>	<b>560</b>	<b>900</b>
<b>Internship 2 Months (Mandatory) during summer vacation</b>										
	<b>Honors/Minor courses (The hours distribution can be 3-0-2 or 3-1-0 also)</b>			<b>4</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>30</b>	<b>70</b>	<b>100</b>

**Semester V (Third year)**

S No	Category	Code	Course Title	Hours			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	Professional Core courses	20APC0211	Power Systems-II	3	0	0	3	30	70	100
2	Professional Core courses	20APC0212	Power Electronics	3	0	0	3	30	70	100
3	Professional Core courses	20APC0213	Control Systems	3	0	0	3	30	70	100
4	Open Elective Course/Job oriented elective	20AOE0201	Neural Networks & Fuzzy Logic	2	0	2	3	30	70	100
			Computer Networks							
			Analog and Digital Communications							
5	Professional Elective courses	20APC0425	Analog and Digital IC Applications	3	0	0	3	30	70	100
			Signals and Systems							
			Linear System Analysis							
6	Professional Core courses Lab	20APC0214	Control Systems Lab	0	0	3	1.5	30	70	100



7	Professional Core courses Lab	20APC0215	Power Electronics Lab	0	0	3	1.5	30	70	100
	Skill advanced course/ soft skill course*			1	0	2	2	100		100
	Mandatory course (AICTE suggested)	20AMC9904	Professional Ethics and Human Values	2	0	0	0	30		30
Summer Internship 2 Months (Mandatory) after second year (to be evaluated during V semester)				0	0	0	1.5	50		50
Total credits							21.5	390	490	880
Honors/Minor courses (The hours distribution can be 3-0-2 or 3-1-0 also)				4	0	0	4	30	70	100

### Semester VI (Third year)

SNo	Category	Code	Course Title	Hours			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	Professional Core courses	20APC0216	Electrical Measurements and Instrumentation	3	1	0	3	30	70	100
2	Professional Core courses	20APC0217	Power System Analysis	3	0	0	3	30	70	100
3	Professional Core courses	20APC0417	Microprocessors and Microcontrollers	3	0	0	3	30	70	100
4	Professional Elective courses	20APE0201	Switch Gear and Protection	3	0	0	3	30	70	100
		20APE0202	Programmable Logic Controller & its Applications							
		20APE0203	Switched Mode Power Converters							
5	Open Elective Course/Job oriented elective	20AOE0202	Non Conventional Energy sources	2	0	2	3	30	70	100
			Mathematical Modeling							
			Business Data Analytics							
6	Professional Core courses Lab	20APC0219	Electrical Measurements Lab	0	0	3	1.5	30	70	100
7	Professional Core courses Lab	20APC0220	Power Systems and simulation Lab	0	0	3	1.5	30	70	100
8	Professional Core courses Lab	20APC0420	Microprocessors and Microcontrollers Lab	0	0	3	1.5	30	70	100
	Skill advanced course/ soft skill course*			1	0	2	2	100	--	100
	Mandatory course (AICTE)	20AMC9901	Biology for Engineers	2	0	0	0	30	--	30
Total credits							21.5	370	560	930
Honors/Minor courses (The hours distribution can be 3-0-2 or 3-1-0 also)				4	0	0	4	30	70	100
Industrial/Research Internship (Mandatory) 2 Months during summer vacation										



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Dept. of Electrical & Electronics Engg.  
 Annamacharya Institute of Technology & Sciences  
 TIRUPATI - 517 507

### Semester VII (Fourth year)

Sno	Category	Code	Course Title	Hours			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	Professional Elective courses	20APE0204	Electrical Distribution Systems	3	0	0	3	30	70	100
		20APE0205	Power Semiconductor Drives							
		20APE0206	Advanced Control Systems							
2	Professional Elective courses	20APE0207	Power Quality	3	0	0	3	30	70	100
		20APE0208	Power System Operation and Control							
			Digital Signal Processing							
3	Professional Elective courses	20APE0209	High Voltage Engineering	3	0	0	3	30	70	100
		20APE0210	Flexible AC Transmission Systems							
		20APE0211	Power System Dynamics and Control							
4	Open Elective Courses/ Job oriented elective	20APE0411	Embedded systems	2	0	2	3	30	70	100
			Data Base Management Systems							
		20AOE0203	Utilization of Electrical Energy							
5	Open Elective Courses/ Job oriented elective	20AOE0204	HVDC Transmission	2	0	2	3	30	70	100
			VLSI Design							
		20AOE0205	Smart Grid							
6.	*Humanities and Social Science Elective		Universal Human Values/Understanding Harmony	3	0	0	3	30	70	100
	Skill advanced course/ soft skill course*			1	0	2	2	100		100
Industrial/Research Internship 2 Months (Mandatory) after third year (to be evaluated during VII semester)				0	0	0	3	100		100
Total credits							23	380	420	800
Honors/Minor courses (The hours distribution can be 3-0-2 or 3-1-0 also)				4		0	4	30	70	100

### Semester VIII (Fourth Year)

Sl. No.	Category	Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
1	Major Project	20APR0201	Project Project work, seminar and internship in industry	0	0	0	12	60	140	200
INTERNSHIP (6 MONTHS)										
Total credits							12	60	140	200

  
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ANNAMACHARYA INSTITUTE OF TECHNOLOGY AND SCIENCES, TIRUPATI  
(Autonomous)  
ELECTRICAL AND ELECTRONICS ENGINEERING (EEE)

Date: 12.11.2020

Dear Sir / Madam

Sub: APSCHE's Revised Academic Curriculum B.Tech Regular / Honors / Minor – In accordance with NEP – Mandatory to shift into New Curriculum as per APSCHE & JNTUA – Your consent requested to start with the tentative I year course structure enclosed – Reg.

\*\*\*\*\*

APSCHE through "Engineering Curriculum Revision Committee" has come up with the Revised B.Tech curriculum in accordance with National Educational Policy, and gave the course structure template to fit various classes of courses by the University and autonomous colleges fulfilling the specified conditions in the Revised Academic curriculum.

Our Institution became autonomous in 2019 and developed 2019 regulations last year as through it's authentic bodies like Boards of studies, CAC etc. Recently BOS & CAC meetings were held to approve II year syllabus of 2019 regulations for 2019 admitted students. As it is mandatory for the Institution to shift to revised academic curriculum compelled by APSCHE, only I year course structure is now tentatively developed by the departments, by simply fitting the courses in the template, and the syllabus developed for courses developed / approved last year is simply followed.

I request you to give your account as BOS external member to start I year programme with the revised structure (for 2020 admitted batch), as we are running short of time and can't organize BOS again within short notice. All these things will be ratified in the next BOS being conducted after 3 months.



CHAIRMAN BOS

HEAD

Dept. of Electrical & Electronics Engg.  
Annamacharya Institute of Technology & Sciences  
TIRUPATI - 517 507



PRINCIPAL & CHAIRMAN

Combined BOS  
ANNAMACHARYA INSTITUTE OF  
TECHNOLOGY & SCIENCES  
VENKATAPURAM (VII.)  
RENIGUNTA (M), TIRUPATI-517 520



# ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES (AUTONOMOUS)

Approved by AICTE, New Delhi & Permanent Affiliation to JNTUA, Anantapuramu.

Recognized under sections 2(f) & 12(B) of UGC Act 1956.

Two B.Tech Programmes (ECE & CSE) Accredited by NBA-New Delhi

Accredited by NAAC-Bangalore & IEI Kolkata. A-Grade awarded by AP Knowledge Mission  
Venkatapuram (V), Karakambadi Road, Renigunta (M), Tirupati - 517 520

Minutes of the Meeting of the Board of Studies (UG & PG), Department of Electrical & Electronics Engineering was held at 2.30 pm on 28-09-2021, at Annamacharya Institute of Technology & Sciences-Tirupati.

## MEMBERS PRESENT:

S.No	Name of the Member & Position in BOS	
1	Dr.R.Murugesan	CHAIRMAN
2	Dr.M.Suryakalavathi	Member
3	Dr.V.C.Veera Reddy	Member
4	Dr.T.Gowri Manohar	Member
5	Dr.A.Senthilkumar	Member
6	Dr.P.Sarvanan	Member
7	Mr. Krishnamurthy Naidu Galla	Member
8	Dr.K.Balaji Nandakumar Reddy	Member
9	Dr.R.Kalyan	Member
10	Ms.Y.Vijayashambavi	Member

## The Following Agenda items were discussed and deliberated upon:

Item - 1: To discuss and finalize the Course Structure of AK19 & AK20 Regulations B.Tech course.

Dr. R.Murugesan, Head of the Department - EEE presented the Course Structures of B.Tech., AK 19 & AK 20 Regulations to be implemented w.e.f. 2021-2022.

Resolution: - After thorough discussions, the Board of studies of Department of EEE approved the Course Structures of B.Tech., AK 19 & AK 20 Regulations to be implemented w.e.f. 2021-2022. (Copy of Course Structure and syllabi is enclosed as Annexure-1 & 2).

  
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Annamacharya Institute of Technology & Sciences  
TIRUPATI - 517 507


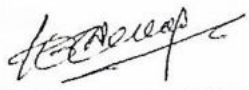
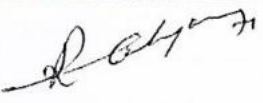
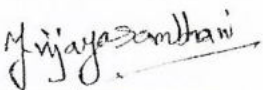


Item - 2: To discuss and finalize the syllabi of 3-1, 3-2 semesters of AK19 Regulations and Third, fourth semesters of AK 20 Regulations to be implemented from 2021-2022.

Resolution: - After thorough discussions, the Board of studies of Department of EEE approved the syllabi of 3-1, 3-2 semesters of AK19 Regulations and Third, fourth semesters of AK 20 Regulations to be implemented w.e.f. 2021-2022. (Copy of Course Structure and syllabi is enclosed as Annexure-1 & 2).

Item - 3: To prepare the panels of examiners and paper setters from external experts.

Panels of Paper setters and examiners were reviewed and approved.

Name	Signature
Dr.R.Murugesan	
Dr.K.Balaji Nandakumar Reddy	
Dr.R.Kalyan	
Ms.Y.Vijayashambavi	

  
**HEAD**  
Dept. of Electrical & Electronics Engg.  
Annamacharya Institute of Technology & Sciences  
TIRUPATI - 517 507



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Venkatapuram (V), Karakambadi Road, Renigunta (M), Tirupati - 517 520

Minutes of the Meeting of the Board of Studies (UG & PG), Department of Electrical & Electronics Engineering was held at 2.00 pm on 8-07-2022, at Annamacharya Institute of Technology & Sciences-Tirupati.

## MEMBERS PRESENT:

S.No	Name of the Member & Position in BOS	
1	Dr.R.Murugesan	CHAIRMAN
2	Dr.V.C.Veera Reddy	Member
3	Dr.T.Gowri Manohar	Member
4	Dr.A.Senthilkumar	Member
5	Dr.P.Sarvanan	Member
6	Mr. Krishnamurthy Naidu Galla	Member
7	Dr.K.Balaji Nandakumar Reddy	Member
8	Ms.Y.Vijayashambavi	Member

## The Following Agenda items were deliberated and agreed upon:

**Item - 1:** To deliberate and finalize the Course Structure pertaining to third and final year of AK20 Regulations B. Tech course.

Dr. R. Murugesan, Head of the Department - EEE presented the Course Structure of pertaining to third year and final year B.Tech., AK 20 Regulations to be implemented w.e.f. 2022-2023.

**Resolution:** - After thorough deliberations, the Board of studies of Department of EEE approved the Course Structures of B.Tech., AK 20 Regulations to be implemented w.e.f. 2022-2023 for third and final year duration. (Copy of Course Structure is enclosed as Annexure-1).

  
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Dept. of Electrical & Electronics Engg.  
Annamacharya Institute of Technology & Sciences  
TIRUPATI - 517 507



**Item - 2: To deliberate and finalize the syllabi of fifth and sixth 2 semesters of AK20 Regulations & 4-1, 4-2 semesters of AK 19 Regulations to be implemented from 2022-2023.**

**Resolution:** - After thorough deliberations, the Board of studies of Department of EEE approved the syllabi of fifth and sixth semesters of AK20 Regulations & 4-1 semester of AK 19 Regulations to be implemented from 2022-2023. (Copy of syllabi is enclosed as Annexure-2).

**Item - 3: To outline the guidelines for two MOOCS courses to be undertaken mandatorily by 4-2 students of AK19 Regulations and Sixth semester B. Tech students of AK20 Regulations.**

**Resolution:** - After thorough deliberations, the following guidelines were laid down for undertaking two MOOCS courses at 4-2 semester, B. Tech, AK19 Regulations students and Sixth semester of AK20 regulations students.

1. Two MOOC courses are introduced in AK19 curriculum of IV B. Tech II Semester (4-2 Semester) and in respect of AK20 B. Tech curriculum, one MOOC in Sixth semester of Third year & another MOOC in Seventh semester of B. Tech course are introduced. Students should compulsorily submit a pass certificate generated by NPTEL for verification and for award of credits. As understood, Certificate by NPTEL will be issued only when a registered students submit assignments regularly as per schedule given and get a minimum of 10 out of 25 marks; and obtain a minimum of 30 marks out of 75 marks in the end examination. (Both criteria must be met to be declared pass by NPTEL).
2. Out of two MOOC courses introduced, one MOOC shall be of Professional Elective (PE) and another shall be Open Elective (OE) category. Head of the department will announce options available on the NPTEL platform.
3. Students must select courses that have 3 credit weightages only, so as to fit into the existing credit scheme. Courses with minimum 8 weeks learning duration only shall be chosen for MOOC courses.
4. Marks or percentage obtained will be converted to grade points and will be reflected in the grade sheet (Marks Memo) pertaining to the respective semester.
5. Swayam NPTEL Courses will be notified on the platform before 1st November for January semester; and will be notified before 1st June for July semester. Accordingly, HOD shall issue notification/circular to the teachers connected and to the concerned students.

  
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Annamacharya Institute of Technology & Sciences  
TIRUPATI - 517 507

6. In case if the student fails/ absent for the MOOC courses in the regular examination he/she will be allowed to register for next supplementary examination in manual mode at the Institute as he may not be able to avail courses through MOOC platform within the stipulated time to clear the pending course during the next season.
7. The pattern of examination for manual mode in supplementary will be same as that of NPTEL question paper.
8. Examination fee paid for the 8th semester to the exam branch of the college is only for project work, internships and seminars. The exam fee payable for taking NPTEL online courses shall be borne by the students itself. Separate registration fee will be applicable for supplementary appearance of MOOC, in manual mode.
9. Teachers connected to the student group for guidance of MOOC shall also register for the course, go through the e-content in it to provide proper guidance to the students and also to get his 'mentor certificate'.
10. Registration facility - extension of dates if any shall be continuously monitored by the HOD & students.

**Item - 4: To review and revise codes of subjects offered to other Department students.**

The following list of subject codes were reviewed and the revision of codes was approved.

S.NO	REGULATIONS	BRANCH	YEAR	SEM	SUB.CODE	NAME OF THE SUBJECT
1	AK20	ECE	1	2	20AES0201	NETWORK THEORY
2	AK20	ECE	1	2	20AES0203	NETWORK THEORY LAB
3	AK20	CIVIL	1	2	20AES0202	BASICS OF ELECTRICAL & ELECTRONICS ENGINEERING
4	AK20	CIVIL	1	2	20AES0204	BASICS OF ELECTRICAL & ELECTRONICS ENGINEERING LAB
5	AK20	MECH	1	1	20AES0202	BASICS OF ELECTRICAL & ELECTRONICS ENGINEERING
6	AK20	MECH	1	1	20AES0204	BASICS OF ELECTRICAL & ELECTRONICS ENGINEERING LAB
7	AK20	CSE & CIC	2	1	20AES0205	BASICS OF ELECTRICAL & ELECTRONICS ENGINEERING
8	AK20	CSE & CIC	2	1	20AES0206	BASICS OF ELECTRICAL & ELECTRONICS ENGINEERING LAB
9	AK20	CSE, ECE, EEE	3	2	20APE0204	NEURAL NETWORKS AND FUZZY LOGIC
10	AK20	ECE	4	1	20AOE0202	PROGRAMMABLE LOGIC CONTROLLERS
11	AK20	ECE	3	2	20AOE0203	ELECTRICAL TECHNOLOGY

  
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Dept. of Electrical & Electronics Engg.  
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Item - 5: To deliberate and approve the list of courses offered by the Department that are to be undertaken for earning Honours and Minor Degree.

### HONOURS IN ELECTRICAL ENGINEERING

S.NO	SUB.CODE	COURSE NAME	L	T	P	CREDITS
1	20AHN0201	ADAPTIVE CONTROL SYSTEMS	3	1	0	4
2	20AHN0202	AC DRIVES	3	1	0	4
3	20AHN0203	HYBRID AND ELECTRIC VEHICLES	3	1	0	4
4	20AHN0204	POWER SYSTEM WIDE AREA MONITORING AND CONTROL	3	1	0	4
5	20AHN0205	RESTRUCTURED POWER SYSTEMS	3	1	0	4
		<b>TOTAL</b>				<b>20</b>

### MINOR DEGREE IN ELECTRICAL ENGINEERING

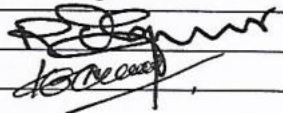
S.NO	SUB.CODE	COURSE NAME	L	T	P	CREDITS
1	20AMN0201	BASIC ELECTRICAL CIRCUITS	2	1	0	3
2	20AMN0202	AC MACHINES	2	1	0	3
3	20AMN0203	CONTROL SYSTEMS	2	1	0	3
4	20AMN0204	POWER SYSTEM ARCHITECTURE	3	0	0	3
5	20AMN0205	MEASUREMENTS & SENSORS	2	1	0	3
6	20AMN0206	MINOR DISCIPLINE PROJECT	-	-	-	5
		<b>TOTAL</b>				<b>20</b>

Item - 6: To Review and approve existing AK19 Course structure and syllabus of M.Tech - Power systems for continuance.

After review of contents of existing AK19 Course structure and syllabus of M.Tech - Power systems, it was approved for continuation.

Item - 7: To prepare the panels of examiners and paper setters from external experts.

Panels of Paper setters and examiners were reviewed and approved.

S.No	Name of the BOS Member	Signature
1	Dr.R.Murugesan	 Virtual presence (Attended through Zoom application)
2	Dr.K.Balaji Nandakumar Reddy	
3	Dr.V.C.Veera Reddy	
4	Dr.T.Gowri Manohar	
5	Dr.A.Senthilkumar	
6	Dr.P.Sarvanan	
7	Mr. Krishnamurthy Naidu Galla	
8	Ms.Y.Vijayashambavi	



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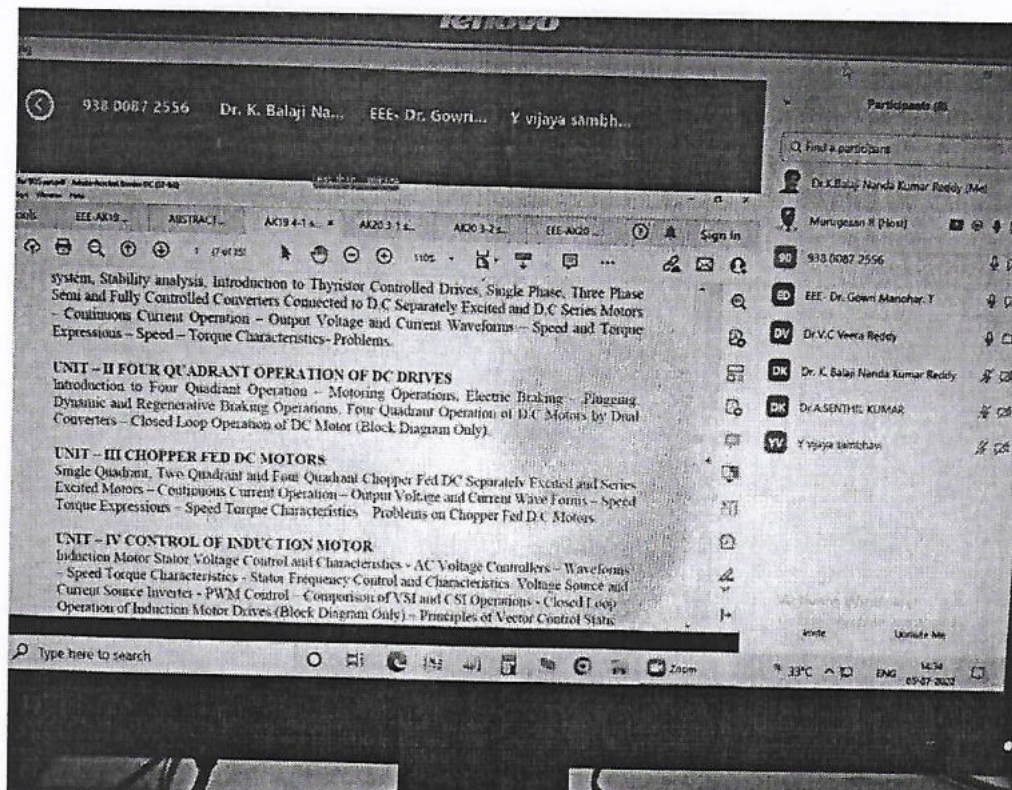
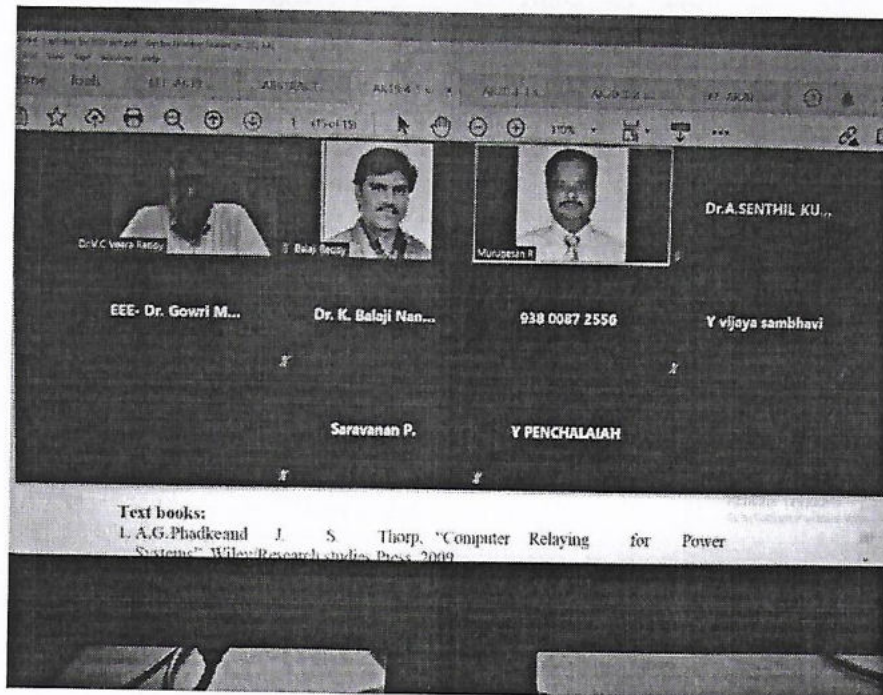
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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

SCREENSHOT IMAGES OF BOS MEETING HELD ON 5.7.22



*[Signature]*

Dept. of Electrical & Electronics Engg.  
Annamacharya Institute of Technology & Sciences  
TIRUPATI - 517 507

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