# 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 Batteeries Ltd, Tirupati.	Industry Representative
10	Mr.P.Parthasaradhi	Scientific Officer Department of Atomic Energy,Manuguru.	P.G Alumni

#### 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 Amararaja Batteeries 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.

### 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

IB. Tech - I Semester

S.No	Category	ategory Course Code Course Title	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P	0	CIE	SEE	Total
		L	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
				T	OT.	AL	18.5	240	560	800

S.NO	ROLE IN BOS	NAME	SIGNATURE
1	Chairman	Dr. C. Sasikala	C, G&IXaC
2		Dr. R. Muragesan	
3	Conjor fooulty manch are	Dr. K. Balaji Nanda Kumar Reddy	Jerose .
4	Senior faculty members	Shaik Nyamathulla	40.5
5		C. Rajesh	C. Ze per
6	P 1 1	Dr.M.Suryakalavathi	ABSENT
7	External subject experts	Dr.G.V.Marutheswar Rao	Connectation senste Location
8	External academic expert	Dr. V. C. Veera Reddy	Connected from send local
9	Representative (Industry)	Mr. G. Krishnamurthy Naidu	Connected from sent la
10	PG Alumnus	Mr. P. Parthasaradhi	Connected from simely

IB. Tech - II Semester

S.No	Category	Course Code	Course Title		loui per weel		redits	Ex	cheme amina ax. Ma	tion
				L	T	P	C	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
				T	OT.	AL	21.5	270	630	900

S.NO	ROLE IN BOS	NAME	SIGNATURE
1	Chairman	Dr. C. Sasikala	- C · J - 1
2		Dr. R. Muragesan	1000
3	Sonion foculty we are house	Dr. K. Balaji Nanda Kumar Reddy	Joseph Joseph
4	Senior faculty members	Shaik Nyamathulla	
5		C. Rajesh	C. Ne feet
6	F	Dr.M.Suryakalavathi	ABSENT
7	External subject experts	Dr.G.V.Marutheswar Rao	Connected from surrote location
8	External academic expert	Dr. V. C. Veera Reddy	Cornected from legret location
9	Representative (Industry)	Mr. G. Krishnamurthy Naidu	Connected from senot location
10	PG Alumnus	Mr. P. Parthasaradhi	Consulted from surrelace

### II B. Tech - I Semester

S.No	Category	y Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	T	P	0	/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
			PRACTICAL		Allican de se			*		
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
		*		T	OTA	\L	21.5	330	700	1030

HEAD

S.NO	ROLE IN BOS	NAME	SIGNATURE
1	Chairman	Dr. C. Sasikala	C 5024 -1
2		Dr. R. Muragesan	7,4
3	Conjon fooults, manubana	Dr. K. Balaji Nanda Kumar Reddy	Hornes
4	Senior faculty members	Shaik Nyamathulla	
5		C. Rajesh	C. Repell
6	F	Dr.M.Suryakalavathi	ABSENT
7	External subject experts	Dr.G.V.Marutheswar Rao	Connected hom sumite locati
8	External academic expert	Dr. V. C. Veera Reddy	Connected from semote Cocat
9	Representative (Industry)	Mr. G. Krishnamurthy Naidu	Connected from senote Location
10	PG Alumnus	Mr. P. Parthasaradhi	Connected from samet Local

### II B. Tech - II Semester

S.No	Category	Category Course Code Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)			
				L	T	P	0	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
		<del></del>	PRACTICAL							
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
				T	OTA	AL	21.5	380	700	1080

HEAD

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

### III B. Tech - I Semester

S.No	Category	Course Code	Course Title	0.00	Hours er week		Credits	Ex	of tion rks)	
				L	T	P	170	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
		19APC0404	Signals and Systems							
5	PE	19APC0425	Analog and Digital IC Applications	3	0	0	3	30	70	100
		19APC0426	Linear System Analysis							
		19A0EMB01	Managerial Economics and Financial Analysis							
6	OE	19APC0510	Computer Networks	3	0	0	3	30	70	100
	3	19APC0412	Analog and Digital Communications							
7	MC	19AMC9902	Constitution of India	2	0	0	0	30		30
			PRACTICAL					X - Sex X - V		
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
				T	OTA	L	21.5	350	630	980

S.NO	ROLE IN BOS	NAME	SIGNATURE
1	Chairman	Dr. C. Sasikala	1 4 5 . 9 . 1
2		Dr. R. Muragesan	
3	Conion foculty manufacture	Dr. K. Balaji Nanda Kumar Reddy	Jesesent
4	Senior faculty members	Shaik Nyamathulla	150
5		C. Rajesh	C. Repert
6	F1-12-7	Dr.M.Suryakalavathi	ABSENT
7	External subject experts	Dr.G.V.Marutheswar Rao	Connected from sunde la commented from sunde la commented from sunde la commented from sunde la commente de commented from sunde la commente de commen
8	External academic expert	Dr. V. C. Veera Reddy	Connected from sunde la com
9	Representative (Industry)	Mr. G. Krishnamurthy Naidu	Connected from semme seems
10	PG Alumnus	Mr. P. Parthasaradhi	Converted from Some Leave

### III B. Tech - II Semester

S.No	Category	Course Code	rse Code Course Title Hours pe week		1.00		Credits	Scheme of Examination (Max. Marks)		
				L	T	P	0	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
		19A0E0201	Neural Networks & Fuzzy Logic							
5	OE	19A0E9906	Mathematical Modeling	3	0	0	3	30	70	100
		19A0E0511	Business Data Analytics							
3-9-9-08-9-07-0-00-0-1-07-0-0		Principles of Effective Public Speaking								
6	HE	19AHE9907	Optics	3	0	0	3	30	70	100
	-	19AHE9909	Quantum Mechanics							
7	MC	19AMC9904	Professional Ethics and Human values	2	0	0	0	30		30
			PRACTICAL							
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			
				Т	OT.	AL	21.5	350	630	980

HEAD

S.NO	ROLE IN BOS	NAME	SIGNATURE
1	Chairman	Dr. C. Sasikala	C . S . J . l
2		Dr. R. Muragesan	
3	Caning Caralt	Dr. K. Balaji Nanda Kumar Reddy	feacour
4	Senior faculty members	Shaik Nyamathulla	422
5		C. Rajesh	Chepul
6	P	Dr.M.Suryakalavathi	ABSENT
7	External subject experts	Dr.G.V.Marutheswar Rao	
8	External academic expert	Dr. V. C. Veera Reddy	Connected from semote Local
9	Representative (Industry)	Mr. G. Krishnamurthy Naidu	Connected from sample loc
10	PG Alumnus	Mr. P. Parthasaradhi	Connected from sumate 40

### IV B. Tech - I Semester

PC	S.No	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)			
PC						_	P				Total	
3 OE		PC	19APC0218	Switch Gear and Protection	3	0	0	3	30	70	100	
OE	2	PC	19APC0219	High Voltage Engineering	2	0	0	2	30	70	100	
19APC0101   Strength of Materials-1			19APE0411	Embedded Systems				2.7/10/14/2				
PE	3	OE	19APC0512	Data Base Management Systems	3	0	0	3	30	70	100	
PE			19APC0101									
19APE0203   Advanced Control Systems			19APE0201	Electrical Distribution Systems								
PE	4	PE	19APE0202	Power Semi-conductor Drives	3	0	0	3	30	70	100	
PE			19APE0203	Advanced Control Systems								
19APE0205   Flexible AC Transmission Systems   19APE0205   19APE0205   19APE0205   19APE0205   19APE0205   19APE0205   19APE0205   19APE0205   19APE0206   19APE0207   19APE	_	nn.	19APE0204					-				
19AHE9901   Technical Writing   19AHE9903   Professional Communication   3   0   0   3   30   70   10	5	PE	19APE0205	Flexible AC Transmission Systems	3	0	0	3	30	70	100	
19AHE9901   Technical Writing   19AHE9903   Professional Communication   3   0   0   3   30   70   10			19APC0418	Digital Signal Processing								
6         HE         19AHE9903   Professional Communication         3         0         0         3         30         70         10           PRACTICAL           7         PR         19APR0205   Project I         0         0         0         0         2         60          60           8         PR         19APR0206   Socially Relevant Projects (15 hrs / semester)         0         0         0         0         0.5         50          50           9         PR         19APR0207   Projects in National Laboratories/Academic Institutions         0         0         0         0         1.5         50          50			19AHE9901									
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         0.5         50          50           9         PR         19APR0207         Projects in National Laboratories/Academic Institutions         0         0         0         1.5         50          50	6	HE	19AHE9903		3	0	0	3	30	70	100	
7         PR         19APR0205         Project I         0         0         0         0         2         60          60           8         PR         19APR0206         Socially Relevant Projects (15 hrs / semester)         0         0         0         0         0.5         50          50           9         PR         19APR0207         Projects in National Laboratories/Academic Institutions         0         0         0         1.5         50          50			19AHE9904	Polymer Chemistry								
8 PR 19APR0206 Socially Relevant Projects (15 hrs / semester) 0 0 0 0.5 50 50 Industrial Training/Internship/Research  9 PR 19APR0207 Projects in National Laboratories/Academic Institutions				PRACTICAL	- Maria - 100			0				
9 PR 19APR0207 Semester) 0 0 0 0.5 50 50 National Laboratories/Academic Institutions	7	PR	19APR0205		0	0	0	(2)	60		60	
9 PR 19APR0207 Training/Internship/Research Projects in National Laboratories/Academic Institutions  O 0 0 1.5 50 50	8	PR	19APR0206		0	0	0	0.5	50	-	50	
	9	PR	19APR0207	Training/Internship/Research Projects in National Laboratories/Academic	0	0	0	1.5	50		50	
TOTAL 21 340 420 76				INSTITUTIONS		rom	AT	21	240	420	760	

S.NO	ROLE IN BOS	NAME	SIGNATURE
1	Chairman	Dr. C. Sasikala	C C X A
2		Dr. R. Muragesan	
3	Conion forcelts as and asset	Dr. K. Balaji Nanda Kumar Reddy	Jegocean
4	Senior faculty members	Shaik Nyamathulla	
5		C. Rajesh	C. Le pur
6	r., 1 1,	Dr.M.Suryakalavathi	ARSENT
7	External subject experts	Dr.G.V.Marutheswar Rao	Connected from semote location
8	External academic expert	Dr. V. C. Veera Reddy	Connected from semple Location
9	Representative (Industry)	Mr. G. Krishnamurthy Naidu	Connected from simple locati
10	PG Alumnus	Mr. P. Parthasaradhi	Connected from sente location

IV B. Tech - II Semester

S.No	Category	Course Code	Course Title		Hou er w	8000	Credits	Ex	scheme camina lax. Ma	tion
		Code		L	T	P	Ö	CIE	SEE	Total
		19A0E9903	Environmental Waste Management							
1	OE	19APE0405	VLSI Design	3	0	0	3	30	70	100
		19A0E0301	Management Sciences							
		19APE0206	Smart Grids							
2	PE	19APE0207	Power Quality	= 3	0	0	3	30	70	100
2	FL	19APE0208	Power System Dynamics and Control	3	U	U	3	30	70	100
			PRACTICAL		·					
3	PR	19APR0208	Technical Paper Presentation/Seminar	0	0	0	0	0	50	50
4	PR	19APR0209	Project II	3	0	0	7-14	-60	140	200
	•			7	TOT	AL	13	120	330	450

HEAD

S.NO	ROLE IN BOS	NAME	SIGNATURE
1	Chairman	Dr. C. Sasikala	C 5 2 1
2		Dr. R. Muragesan	)
3	Carian Garakan and	Dr. K. Balaji Nanda Kumar Reddy	hogeney.
4	Senior faculty members	Shaik Nyamathulla	100
5		C. Rajesh	C. Rejol
6	F . 1 1:	Dr.M.Suryakalavathi	ABSENT
7	External subject experts	Dr.G.V.Marutheswar Rao	Connected from senste Location Connected from senste Location connected from suncte Location
8	External academic expert	Dr. V. C. Veera Reddy	Connected from senate Location
9	Representative (Industry)	Mr. G. Krishnamurthy Naidu	connected from surrote Location
10	PG Alumnus	Mr. P. Parthasaradhi	Connected from sende lo cation

### 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

### IB. Tech - I Semester

S.No	Category	Category Course Code Course Title			Iou r we	10000	Credits	Ex	scheme camina Iax. Ma	tion
				L	T	P	0	CIE	SEE	Total
	To the state of th		THEORY		L			l		
.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					l		
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	3	2.0	N30	70	100
8	HS	19AHS9902	Communicative English I Lab	0	0	2	1	30	70	100
		, K 1		T	OT.	AL	18.5	240	560	800

au

HEAD

Dept. of Electrical & Electronics Engage

1)

2) 19 (2) 19 Ag

Annamacharya Institute of Technology & S

### IB. Tech - II Semester

S.No	Category	Course Code	Course Title	100000	lour r we	2000	Credits	Scheme of Examination (Max. Marks)		
				L	T	P		CIE	SEE	Total
			THEORY	1						
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
			PRĄCTICAL	1					L	
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
				T	OT.	AL	21.5	270	630	900

3) 100 (1) AG 5) (. h.fo

### II B. Tech - I Semester

S.No	Category	Category Course Code Course Title				rs eek	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	МС	19AMC9901	Essence Of Indian Traditional Knowledge	3	0	0	0	30		30	
			PRACTICAL	<u> </u>		1,				I	
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	
				T	OT	AL	21.5	330	700	1030	

### II B. Tech - II Semester

S.N	То	Category	Course Code	Course Title		Ioui r we	oan l	Credits	Scheme of Examination (Max. Marks)			
				M till	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	
		K		PRACTICAL							L	
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	0	HS	19AHS9904	Communicative English II Lab	0	0	2	1	30	70	100	
11	1	ES	19AES0303	Design Thinking and Product Innovation Lab	0	0	2	1	30	70	100	
12	2	PC	19APC0409	Analog and Digital Electronic Circuits Lab	0	0	3	1.5	30	70	100	
					T	OT.	AL	21.5	380	700	1080	

Don

2) Regurd 3) Homey

and

QUEAD.

### III B. Tech - I Semester

S.No	Category	Course Code	Course Title		Ioui r we		Credits	Ez	Scheme kamina Iax. Ma	tion	
				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	
-		19APC0404	Signals and Systems								
5	PE	19APC0425	Analog and Digital IC Applications	3	0	0	3	30	70	100	
		19APC0426	Linear System Analysis								
		19A0EMB01	Managerial Economics and Financial Analysis								
6	OE	19APC0510	Computer Networks	3	0	0	3	30	70	100	
		19APC0412	Analog and Digital Communications								
7	MC /	19AMC9902	Constitution of India	3	0	0	0	30		30	
· .			PRACTICAL	1		1		/ DY 1			
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	
		L		T	OT.	AL	21.5	350	630	980	

Dept. of Electrical & Electronics Engg.

Annuncharya Institute of Jechnology & Sciences

Till STATE 517 507

### III B. Tech - II Semester

S.No	Category	Course Code	Course Title	1000	Hours r week		Credits	Ex	Scheme kamina Iax. Ma	tion		
	grants, p.B		3001 2000 1.	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		
		19A0E0201	Neural Networks & Fuzzy Logic				,			(		
5	OE	19A0E9906	Mathematical Modeling	3	0	0	3	30	70	100		
		19A0E0511	Business Data Analytics									
		19AHE9902	Principles of Effective Public Speaking									
6	HE	19AHE9907	Optics	3	0	0	3	30	70	100		
		19AHE9909	Quantum Mechanics									
7	MC	19AMC9904	Professional Ethics and Human values	3	0	0	0	30		30		
48.5			PRACTICAL		L	l			L	1		
8	PC	19APC0216	Power Systems-II Lab	0	0	2	1	30	70	10(		
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					
	CIABII	1		T	OT.	AL	21.5	350	0 630 9			

Doli

2) REgum 3) Horaco 4) Ag

Annamacharya Institute of Technology & TIRUPATI - 517 507

IV B. Tech - I Semester

S.No	Category	Course Code Course Title Hours per week		\$76000V	Credits	Ex	Scheme of Examination (Max. Marks)			
				L	Т	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
<del>*</del>		19APE0411	Embedded Systems							
3	OE	19APC0512	Data Base Management Systems	3	0	0	3	30	70	100
		19APC0101	Strength of Materials-1					•		
		19APE0201	Electrical Distribution Systems							
4	PE	19APE0202	Power Semi-conductor Drives	3	0	0	3	30	70	100
		19APE0203	Advanced Control Systems							
		19APE0204	Power System Operation and Control							
5	PE	19APE0205	Flexible AC Transmission Systems	3	0	0	3	30	70	100
		19APC0418	Digital Signal Processing							
		19AHE9901	Technical Writing							
6	HE	19AHE9903	Professional Communication	3	0	0	3	30	70	100
		19AHE9904	Polymer Chemistry							
		L	PRACTICAL	1	1			_		
-&-	PR	19APR0204	Socially Relevant Projects (15 hrs / semester)	<b>a</b>	0	0	0.5	50		5A= -
9	PR	19APR0205	Industrial Training/Internship/Research Projects in National Laboratories/Academic Institutions	0	0	0	2	50	-	50
10	PR	19APR0206	Project I	0	0	0	2	60		60
	1	l	W &	1/	TO	ΓAL	21.5	340	420	760

Annamacharya Institute of Technology & St TIRUPATI - 517 507

### IV B. Tech - II Semester

S.No	Category	Course Code	Course Title		Houi er we	MODE:	Credits	Ex	cheme amina lax. Ma	tion
	F13 [6]			L	Т	P		CIE	SEE	Total
		19A0E9903	Environmental Waste Management			•		20	70	100
1	OE	19APE0405	VLSI Design	3	0	0	3	30	70	100
		19A0E0301	Management Sciences						3.5	
		19APE0206	Smart Grids				i i i i i i i i i i i i i i i i i i i			(
2	PE	19APE0207	Power Quality	3	0	0	3	30	70	100
		19APE0208	Power System Dynamics and Control							
			PRACTICAL				l	J		
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
				T	OT	AL	13	120	330	450

1) col Toric. Salikala]

2) Reason (K. Balej: Abandataman Redy)

4) Ag. (S. Nyamathulla)

3) (. Refor (C. RAJESH)

Dept. of Electrical & Electronics Engg.

Annamacharya Institute of Technology & Sciences TIRUPATI - 517 507

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

### Minutes of Metting 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

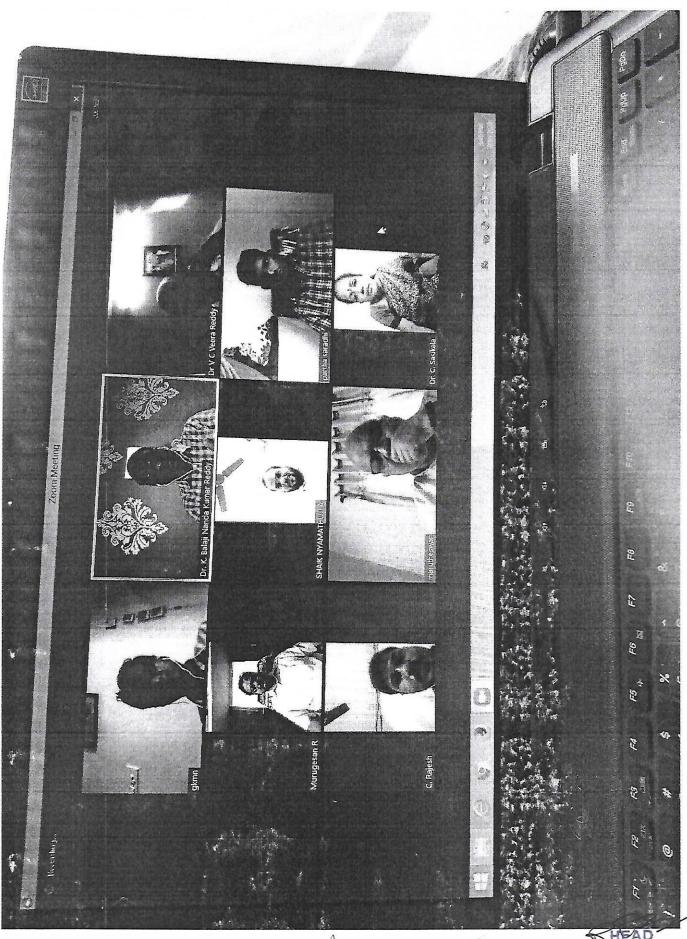
Item 2: Modifications and Approval of Course Structure for B. Tech (EEE)

<u>Resolution</u>: 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.

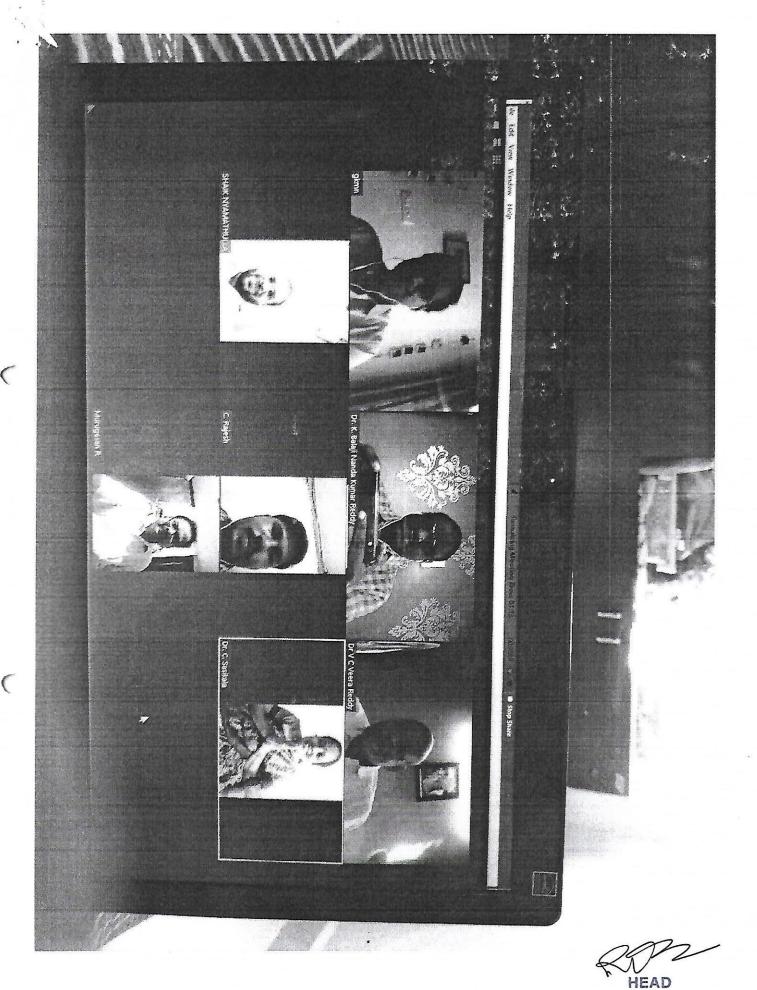
1 Dr. c. Squite (- - col



(

A 40 9/888

Dept. of Electrical & Electronics Engg.
namackarya Institute of Technology & Science
THRUPATI - 517 537



(d) 16EE

### 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 Curriculam 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	CA3_
2	Dr. R. Murugesan	Associate Professor	Member	Regund
3	Dr. K. Balaji Nanda Kumar Reddy	Assistant Professor	Member	10 Baccery
4	Shaik Nyamathulla	Assistant Professor	Member	AS
5	C. Rajesh	Assistant Professor	Member	
6	Dr.M.Suryakalavathi	Professor of Electrical Engineering Department, JNTUCEH Kukatpally, HYD-85	University Nominated Subject Expert	Conducte e through
7	Dr.G.V. Marutheswar Rao	Professor in EEE Dept., SVUCE,SV University, Tirupathi-517502,A.P	University Nominated Subject Expert	Conducte through
8	Dr. V. C. Veera Reddy	Professor in EEE Dept., School of Engg. & Technology, Sri Padmavathi Mahila ViswaVidyalayam, Tirupathi-517502	Academic Council Nominee	conducte through
9	Mr.G.Krishnamurthy Naidu	Sr. General Manager-QA, Amararaja Batteries Ltd, Karakambadi, Tirupathi	Industry Representative	conduction through
10	Mr. P. Parthasaradhi	Scientific officer/c, Department of Atomic Energy, Heavy Water Plant, Manuguru.	P.G.Alumni	conduct

### 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.

# 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 Curriculam 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

Samester I (First year)

S1. No.	Category	Course Code	Course Title	Hours per week			Credits	Scheme of Examination (Max. Marks)		
				L	Т	P	С	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
			Total credits				19.5	240	560	800

### Semester II (First year)

noit	omedo snims	Ex	Credits		nts b		Sourse Title	Course	Category	.oV
44-0-0-10-00	SEE		၁	ď	T	r			-	
100	02	30	ε	0	0	3	Differential Equations and Vector Calculus	50ABS9906	Basic Science courses	I
100	02	30	3	0	0	3	Chemistry	70∀B2990 <del>∜</del>	Basic Science courses	7
100	04	30	. E	0	0	ε	Basics of Civil and Mechanical Engineering	70AES0101	Engineering Science Courses	£
100	02	30	ε	0	0	ε	(ToI) egnidT to terretal	70YE20202	Engineering Science Courses	Ð
100	02	30	ε	₽	0	I	Engineering Graphics	70AES0301	Engineering Science Courses	9
100	02	30	g.I	ε	0	0	Basics of Civil and Mechanical Engineering Lab	X0AES0102	Engineering Science Courses (LAB)	9
100	02	30	1.5	3	0	0	Chemistry Lab	504BS9909	Basic Science course (LAB)	7
100	02	30	3.I	3	0	0	ds.J (ToI) agaidT to tənrətal	20AES0506	Engineering Science Courses (LAB)	8
30	-	30	0	0	0	7	Sonstitution of India	20AMC9902	Mandatory course (AICTE suggested)	
930	999	270	2.91	stib	al cre	toT	31.09778233			3.300840

### Semester III (Second year)

tion	heme mina x. Ma	Exs		ış	nes be		Course Title	Sourse Sode	Category	.oV
Тоға	зее	CIE		ď	T	т				
100	02	30	3	0	0	ε	bns eaupindoer mrotenerT eablairaV ariables	Z166SBY02	Basic Science courses	I
100	02	30	3	0	0	દ	I-stircal Circuits-I	20APC0201	Professional Core Course	7
100	02	30	3	0	0	3	Electronic devices and circuits	20APC0401	Professional Core courses	3
100	02	30	3	0	0	3	Engineering Electromagnetics	20APC0202	Professional Core courses	₽.
100	02	30	3	0	0	3	Electrical Machines-I	20APC0203	Professional Core courses	g
100	02	30	2°I	8	0	0	Electrical Circuits-I Lab	20APC0204	Professional Core courses (IAA)	9
100	02	30	3.I	3	0	0	Electronic Devices and Circuits Lab	20APC0404	Professional Core courses (LAB)	Z
100	02	30	G.I	ε	0	0	Electrical Machines-I Lab	20APC0205	Professional Core courses (BAJ)	8
001		100	7	7	0	I			Skill oriented course*	
30	_	30	0	0	0	7	Environmental Studies	20AMC9903	Mandatory course (AICTE suggested)	
930	999	320	2.12	El.	eti	cred	Total			



Dept. of Electrical & Electronics Engg.
Annumacharya Institute of Technology & Sciences
Annumacharya Institute of Technology & Sciences
Annumacharya Institute of Technology & Sciences
Annumacharya Institute of Technology

### Semester IV (Second year)

S.No	Category	Code	Course Title		Hou	rs	Credits	Exa	heme mina x. Ma	tion
				L	Т	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
	Skill oriented course*			1	0	2	2	100		100
	*			Tota	l cred	lits	21.5	340	560	900
	Inter	nship 2 Mont	hs (Mandatory) during summer	vacat	ion		L		L	
I	Honors/Minor courses (Th	e hours distri	bution can be 3-0-2 or 3-1-0 also)	4	0	0	4.	30	70	100

### Semester V (Third year)

S No	Category	Code	Course Title	Hours			Credits	Scheme of Examination (Max. Marks)		
	**************************************			L	Т	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
	Out That	20AOE0201	Neural Networks & Fuzzy Logic							
4	Open Elective Course/Job oriented		Computer Networks	2	0	2	3	30	70	100
	elective		Analog and Digital Communications							
	D ( 1 17)	20APC0425	Analog and Digital IC Applications				***************************************			
5	Professional Elective courses		Signals and Systems	3	0	0	3	30	70	100
	courses		Linear System Analysis							
6	Professional Core courses Lab	20APC0214	Control Systems Lab	0	0	3	1.5	30	70	100

	Honors/Minor courses (The	e hours distrib	oution can be 3-0-2 or 3-1-0 also)	4	0	0	4	30	70	100
				Tota	l cre	lits	21.5	390	490	880
Sum	mer Internship 2 Months (Manda	tory) after second semester	year (to be evaluated during V	0	0	0	1.5	50		50
	Mandatory course (AICTE suggested)	20/AIVIC9904	Professional Ethics and Human Values	2	0	0	0	30		30
	Skill advanced course/ soft skill course*			1	0	2	2	100		100
7	Professional Core courses Lab	20APC0215	Power Electronics Lab	0	0	3	1.5	30	70	100

Semester VI (Third year)

SNo	Category	Code	Course Title	Hours		Hours		Hours		Hours		Hours		Hours		Hours		Exa	heme mina x. Ma	tion
			-	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	20APE0201	Switch Gear and Protection	3	0	0	3													
	courses	20APE0202	Programmable Logic Controller & its Applications					30	70	100										
	•	20APE0203	Switched Mode Power Converters																	
5	Open Elective Course/Job	20AOE0202	Non Conventional Energy sources	2	0	2	3													
	oriented elective		Mathematical Modeling					30	70	100										
			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										
				Tota	l cre	dits	21.5	370	560	930										
	Honors/Minor courses (Th	e hours distr	ibution can be 3-0-2 or 3-1-0 also)	4	0	0	4	30	70	100										
	Indust	rial/Research	Internship (Mandatory) 2 Month	s du	ring	sum	mer v	vacati	on	1										

### Semester VII (Fourth year)

Sno	Category	Category Code Course Title			Hou	ırs	Credits	Scheme of Examination (Max. Marks)			
			•	L	Т	P		CIE	SEE	Total	
1		20APE0204	Electrical Distribution Systems								
	Professional Elective	20APE0205	Power Semiconductor Drives	3	0	0	3	30	70	100	
	courses	20APE0206	Advanced Control Systems								
2		20APE0207	Power Quality								
	Professional Elective courses	20APE0208	Power System Operation and Control	3	0	0	3	30	70	100	
			Digital Signal Processing								
3		20APE0209	High Voltage Engineering		`						
	Professional Elective	20APE0210	Flexible AC Transmission Systems	3	0	0	3	30	70	100	
	courses	20APE0211	Power System Dynamics and Control								
4	O FI .: C ./	20APE0411	Embedded systems	9					,		
	Open Elective Courses/ Job oriented elective		Data Base Management Systems	2	0	2	3	30	70	100	
	Job oriented elective	20AOE0203	Utilization of Electrical Energy								
5	0 5 4	20AOE0204	HVDC Transmission								
	Open Elective Courses/ Job oriented elective		VLSI Design	2	0	2	3	30	70	100	
	Job offertied elective	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	
ndus	trial/Research Internship 2 (to be evaluated			0	0	0	3	100		100	
			<u> </u>	Tota	l cre	dits	23	380	420	800	
Ho	nors/Minor courses (The l	nours distrib	ution can be 3-0-2 or 3-1-0 also)	4		0	4	30	70	100	

### Semester VIII (Fourth Year)

SI. No.	Category	Code	Course Title		Ho per v	urs veek	Credits	Exa	chemo amina ax. Ma	tion
		***		L	Т	P		CIE	SEE	Tota
1	Major Project	20APR0201	Project Project work, seminar and internship in industry	0	0	0	12	60	140	200
		_1	INTERNSHIP (6 MONTH	S)	!					1
			Total cre	edits			12	60	140	200



## 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 / Honers / Minor - In accordance with NEP - Mandatory to shift into New Curriculam 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. Armamacharya Institute of Technology & Science TIRUPATI - 517 507

PRINCIPAL & CHAIRMAN

Combined BOS

ANNAMACHARYA INSTITUTE OF
TECHNOLOGY & SCIENCES VENKATAPURAM (VIII.) 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 & Posit	ition 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).

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	RON
Dr.K.Balaji Nandakumar Reddy	ferrough &
Dr.R.Kalyan	204m
Ms.Y.Vijayashambavi	Minjaya Sambani

Dept. of Electrical & Electronics Engg. Annamacharya Institute of Technology & Sciences

TIRUPATI - 517 507



# 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 2.00 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).

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).
- 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.

- 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.
- 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 NGINEERING
4	AK20	CIVIL	1	2	20AES0204	BASICS OF ELECTRICAL &
						ELECTRONICS NGINEERING LAB
5	AK20	MECH	1	1	20AES0202	BASICS OF ELECTRICAL &
-		112011			ZUALSUZUZ	ELECTRONICS NGINEERING
6	AK20	MECH	1	1	20AES0204	BASICS OF ELECTRICAL &
		MEGH		1	ZUAE30Z04	ELECTRONICS NGINEERING LAB
7	AK20	CSE &	2	1	20 A E C 0 2 0 T	BASICS OF ELECTRICAL &
	TINZO	CIC		1	20AES0205	ELECTRONICS NGINEERING
8	AK20	CSE &	2	1	20450000	BASICS OF ELECTRICAL &
-	AKZU	CIC		1 .	20AES0206	ELECTRONICS NGINEERING LAB
9	AK20	CSE,	3	2	20400004	NEURAL NETWORKS AND
	AKZU	ECE, EEE	3	2	20APE0204	FUZZY LOGIC
10	AK20	ECE	_	4	2010П0000	PROGRAMMABLE LOGIC
10	ANZU	AK20   ECE   4   1	20A0E0202	CONTROLLERS		
11	AK20	ECE	3	2	20A0E0203	ELECTRICAL TECHNOLOGY

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
		TOTAL	1			20

### 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
		TOTAL	THE STATE OF THE S			20

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	Same.
2	Dr.K.Balaji Nandakumar Reddy	do Oceans
3	Dr.V.C.Veera Reddy	acco,
4	Dr.T.Gowri Manohar	
5	Dr.A.Senthilkumar	Virtual presence
6	Dr.P.Sarvanan	(Attended through
7	Mr. Krishnamurthy Naidu Galla	Zoom application)
8	Ms.Y.Vijayashambavi	

As created ,

HEAD

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

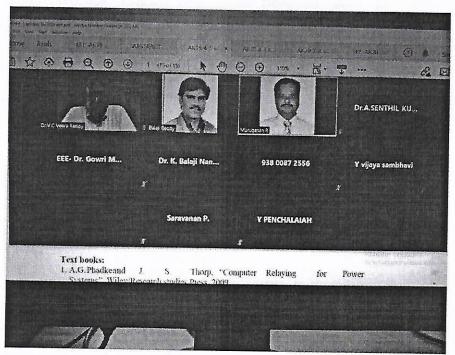
None, of Flactrical & Elabranics Sagga American despends of School of Authors The State of Son 1007

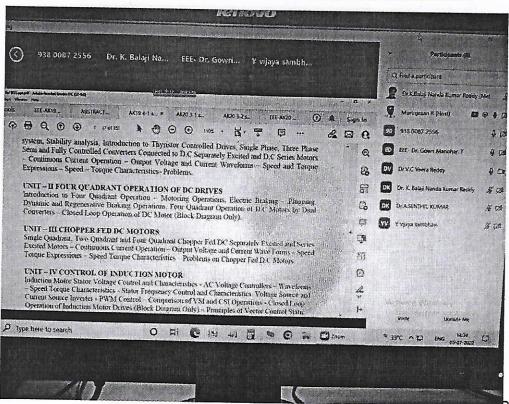
# ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES (AUTONOMOUS)

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

### DEPRTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

SCREESSHOT IMAGES OF BOS MEETING HELD ON 5.7.22





Dopt. of Electrical 2 Electronics Rapp.

American institute of lechnology & Schoures
Tiral Part - 217 507

for something the second