

Dr. Ambedkar Institute of Technology
Department of Electrical and Electronics Engineering

The NAAC documents enclosed are verified and approved.

Jayaramulu G
HOD
Dept of EEE
Department of Electrical and Electronics Engg.
Dr. Ambedkar Institute of Technology
Bengaluru-560056
5/11/22

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY
BANGALORE - 56

Date: 23.08.2010

Minutes of the 1st Academic Council meeting held on 21st August 2010 at 10.30 am in the Board room of Dr. AIT

Members Present

Sr No	Constitution	Nature	Name
1	The Principal of the College	Chairperson	Dr P.Martin Jebaraj
2	All the Heads of Department in the College	Members	Dr C.Nanjunda Swamy Dr B.M.Nandeeshalah Dr B.V.Sunangala Dr Meenakshi Dr Shivakumar Prof Siddaraju Dr Rajendra Prof Prabha Prof Manjunath.A.P. Dr K.L.Savitramma Dr V.Bheemaraju Dr Sooryanarayana Rao
3	Four teachers of the college representing different levels of teaching staff by rotation on the basis of seniority of service in the college, to be nominated by the Principal	Members	1) Dr Manjunath Hegde 2) Dr T.Sreenivasulu Reddy 3) Prof G.Devaraju 4) Smt. Leena <i>Vijayalakshmi Pahl</i>
4	Not less than four experts from outside the college representing such areas as Industry, R and D labs, Technical Education,	Members	1) Dr S. Seetharamu Additional Director CPRI, Bangalore 2) Dr G.R.Nagabhushana Former Chairman HVE, IISc, Bangalore 3) Mr Rajendra Prasad Vice President Electro Systems Associates Pvt Ltd, Bangalore 4) Mr B.N.Satyesh Senior Vice-president Tejas Network Ltd Bangalore

5	Three nominees of the University,	Members	1. Dr T.V. Govindaraju Principal Shirdi Sai Engg College 2. Dr H.R. Yashavanth Principal, SEACE Bangalore 3. Dr V.R. Manjunath Principal Sapthagiri College of Engg Bangalore
6	A faculty member, nominated by the Principal	Member Secretary	Dean (Academic) Dr B.V. Sumangala

Members Absent

1. Dr. G.R. Nagabhushana
2. Dr. Yeshovanth

Principal welcomed all the members of the committee and they were introduced. He explained about the constitution of the committee, tenure of the committee and the duties and responsibilities. He also explained about the courses of the institution going for autonomy and briefed about the various procedures followed to make the institution prepare for the implementation of academic autonomy.

Principal explained the various issues related to academic structure of autonomy at Dr. AIT with reference to the guidelines by VTU. The details of the deliberation made by experts are as follows:-

Agenda 1 :

Recommendations of guidelines to all UG programmes – Autonomy structure, a) Credit system, b) Grading system, c) Eligibility criteria etc.

The following resolutions were made by the committee and the regulations are recommended and was proposed to place in GOVERNING BODY for approval.

a. Credit System

The committee recommended the following credits structure based on VTU guidelines

- BE Degree Programme – Entry in I year
- 200 Credits
- BE Degree Programme – Entry in II year
- Lateral Entry
- 150 Credits (with bridge course – Mathematics)

b. Academic Calendar

The major events with the corresponding period for execution are:-

Main Semester (Odd)	: 19 Weeks
Recess	: 2 Weeks
Main Semester (Even)	: 19 Weeks
Recess	: 2 Weeks
Supplementary Semester	: 8 Weeks
Recess	: 2 Weeks
Total	: 52 Weeks.

Make-up examination after the Semester End Examinations (SEE) as per notification.

c. Evaluation Methodology

The evaluation consists of two components

1. Continuous Internal Evaluation – CIE for 50 Marks
2. End Semester Evaluation – SEE for 50 Marks – It is essential to obtain minimum requirement is 40 % in both CIE and SEE to qualify for appearing for examination and to get pass grade in a subject respectively.

d. Grading Methodology

The absolute grading system is adopted in our case. The various grades are generated based on the examination rules out of 100 and is shown in table. These grades are then converted to grade points and the SEPA is determined.

Level	Out-standing	Excellent	Very Good	Good	Average	Poor	Fail
Grade	S	A	B	C	D	E	F
Grade Points	10	09	08	07	05	04	00
Score (Marks) Range (%)	90-100	75-89	60-74	50-59	45-49	40-44	<40

- Grades
- W – Withdrawal of any course
 - I – Not writing SEE for a genuine reason
 - X – Scoring >80% in CIE but getting F (fail) grade in SEE

e. Eligibility Criteria

A student can carry 4 subjects at the end of any even semester which includes

- Failed subjects and
- 'Not Eligible' subjects to write SEE due to shortage of marks in CIE (< 20 marks) or shortage of attendance (< 85%)

Agenda 2. Recommendation of BOS committees for various Departments

The Board of Studies for all the 13 Departments were formed and placed in GB for approval

Agenda 3 : Recommendations for common BOE for I year

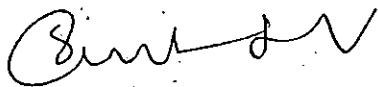
It was proposed to have a common Board of Examiners for I year.

Agenda 4 : Recommendations for all rules and regulations pertaining to Examination

After fully going through the document the examination rules and regulations are recommended by Academic Council

Agenda 5 : Any Other subject

Dr Govindaraju suggested to increase the minimum requirement for CIE for practicals.



DEAN (ACADEMIC)



Principal

Dr. Ambedkar Institute of Technology
Bangalore-560 056

SCHME OF TEACHING AND EXAMINATION from the AY 2018-19

B.E in Electrical and Electronics Engineering

Outcome Based Education (OBE) and Choice Based Credit System (CBCS)(Applicable to 2018-21 Batch)

I Semester

Sl. No	Course and Course Code		Course Title	Teaching Dept.	Board Paper Setting	Teaching Hours / Week			Examination				Credits
						Theory Lecture (L)	Tutorial (T)	Drawing/ Practical (P)	Duration in Hours	CIE Marks	SEE Marks	Total Marks	
1	BC	18MA11	Calculus and Linear Algebra	MA	Science	03	02	00	03	050	050	100	04
2	BC	18CH12	Engineering Chemistry	CH	Science	03	02	00	03	050	050	100	04
3	ES	18CS13	Programming for Problem Solving	CS	CS	02	02	00	03	050	050	100	03
4	ES	18EC14	Basic Electronics	EC/EI/TC	ECE	02	02	00	03	050	050	100	03
5	ES	18ME15	Elements of Mechanical Engineering	ME,IEM	ME	02	02	00	03	050	050	100	03
6	BC	18CHL16	Engineering Chemistry Laboratory	CH	Science	00	00	02	03	050	050	100	01
7	ES	18CS17	Computer Programming Laboratory	CS	CS	00	00	02	03	050	050	100	01
8	HS	18HS11/ 18HS12	English/Kannada	HS	HS	01	00	02	02	050	050	100	01

9	HS	18HS13	Career Development Skills	HS	HS	02	00	00	02	050	000	050	00
Total						15	10	06	25	450	400	850	20

Note: BC: Basic Course, ES: Engineering Science. HS: Humanities, ECE: Electronics and Communication Engineering, EI: Electronics and Instrumentation, TC: Telecommunication Engineering, ME: Mechanical Engineering, CS: Computer Science and Engineering, CHE: Chemistry, MAT: Mathematics

SCHEME OF TEACHING AND EXAMINATION from the AY 2018-19

B.E in Electrical and Electronics Engineering

Outcome Based Education (OBE) and Choice Based Credit System (CBCS)(Applicable to 2018 -21 Batch)

II Semester

Sl. No	Course and Course Code		Course Title	Teaching Dept.	Board Paper Setting	Teaching Hours / Week			Examination				Credits
						Theory Lecture (L)	Tutorial (T)	Drawing/ Practical (P)	Duration in Hours	CIE Marks	SEE Marks	Total Marks	
1	BC	18MA21	Differential Equations & Complex Variables	MA	Science	03	02	00	03	050	050	100	04
2	BC	18PH22	Engineering Physics	PH	Science	03	02	00	03	050	050	100	04
3	ES	18EE23	Basic Electrical Engineering	EE	EE	02	02	00	03	050	050	100	03
4	ES	18CV24	Civil Engineering and Mechanics	CV	CIV	02	02	00	03	050	050	100	03
5	ES	18MEL25	Computer Aided Engineering Drawing	ME,IEM	ME	02	00	02	03	050	050	100	03
6	BC	18PHL26	Engineering Physics Laboratory	PH	Science	00	00	02	03	050	050	100	01
7	ES	18EEL27	Basic Electrical Engineering Laboratory	EE	EE	00	00	02	03	050	050	100	01

8	HS	18HS21/ 18HS22	English/Kannada	HS	HS	01	00	02	02	050	050	100	01
9	HS	18HS23	Soft Skills	HS	HS	02	00	00	02	050	000	050	00
Total						15	08	08	25	450	400	850	20

Note: BC: Basic Course, ES: Engineering Science, HS: Humanities, EE: Electrical & Electronics Engineering, ME: Mechanical Engineering, CS: Computer Science and Engineering, PHY: Physics, CIV: Civil Engineering



DR. AMBEDKAR INSTITUTE OF TECHNOLOGY, BANGALORE
(An Autonomous Institution Affiliated To VTU, Belgaum)
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

III SEMESTER B.E, ACADEMIC YEAR (2019-20)

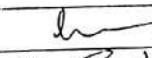
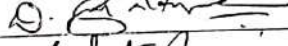


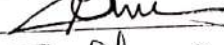
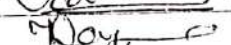
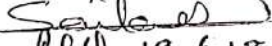
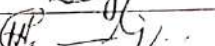
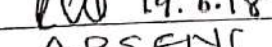
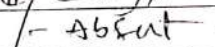
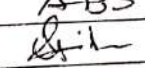
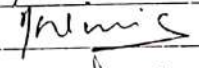

Batch - 2018

CODE NO.	COURSE	CONTACT HOURS/WEEK			CREDITS	MAXIMUM MARKS		
		LECTURE	TUTORIAL	LAB		CONTINUOUS INTERNAL EVALUATION	SEMESTER END EVALUATION	TOTAL
3MAT31	Transforms & Complex Variable	2	2	0	03	50	50	100
3EE31	Analog Electronic Circuits	4	0	0	04	50	50	100
3EE32	Logic Design	4	0	0	04	50	50	100
3EE33	Microcontroller	2	2	0	04	50	50	100
3EE34	Generation, Transmission & Distribution	3	0	0	03	50	50	100
3EE35	Electrical Measurements	3	0	0	03	50	50	100
EEL36	Electronic Circuits Lab	0	0	2	1	50	50	100
EEL37	Logic Design Lab	0	0	2	1	50	50	100
KA38	Kannada/CIP	1	0	0	1	25	25	50
4ATDIP-1	(Dip)Advance Mathematics - II				0			
TOTAL		19	4	4	24	425	425	850


CHAIR PERSON
BOS, EEE

DEAN (Academic)

CHAIRMAN
(Academic Council)

Dr. Jyoti P Koujalagi		Mr. Srinivas BT	ABSENT
Dr. Suryanarayana		Dr. B.V. Sumangala	ABSENT
Dr. Satish HSc		Dr. Shankarlingappa.C.B	
Dr. Pradip Kumar Dixit		Mr. Eranna	
Dr. Saikumar		Mr. Dayananda T.B	
Dr. Ravishankar Dixit	 19.6.18	Mr. Govindaraju H.V	
Dr. Balaram	ABSENT	Mr. Vasudevamurthy S	ABSENT
Mr. Chetan Rajdev		Ms. Nalini S	
Mr. Srikanth Kashyap	ABSENT	Ms. Arpitha Raju	

IV SEMESTER B.E, ACADEMIC YEAR (2019-20)

Batch - 2018

CODE NO.	COURSE	CONTACT HOURS/WEEK			CREDITS	MAXIMUM MARKS		
		LECTURE	TUTORIAL	LAB		CONTINUOUS INTERNAL EVALUATION	SEMESTER END EVALUATION	TOTAL
8MAT41	Numerical Methods and Probability Theory	2	2	0	03	50	50	100
18EE41	Control Systems	4	0	0	04	50	50	100
18EE42	Signal & Systems	2	2	0	03	50	50	100
18EE43	Power Electronics	3	0	0	03	50	50	100
18EE44	Network Analysis	3	2	0	04	50	50	100
18EE45	Analysis of Electrical Machines	3	2	0	04	50	50	100
8EEL46	Microcontrollers Lab	0	0	2	1	50	50	100
8EEL47	Power Electronics Lab	0	0	2	1	50	50	100
8HS402	Kannada/CIPH	1	0	0	1	25	25	50
8MATDIP-2	(Dip)Advance Mathematics - II				0			
	CIDIP-2				0			
	DIPENV-2				0			
TOTAL		18	06	4	24	425	425	850

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 (Academic Council)

Dr. Jyoti P Koujalagi	<i>[Signature]</i>	Mr. Srinivas BT	ABSENT
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Dr. Satish HSc	<i>[Signature]</i>	Dr. Shankarlingappa.C.B	<i>[Signature]</i>
Dr. Pradip Kumar Dixit	<i>[Signature]</i>	Mr. Eranna	<i>[Signature]</i>
Dr. Saikumar	<i>[Signature]</i>	Mr. Dayananda T.B	<i>[Signature]</i>
Dr. Ravishankar Dixit	<i>[Signature]</i>	Mr. Govindaraju H.V	<i>[Signature]</i>
Dr. Balaram	<i>[Signature]</i>	Mr. Vasudevamurthy S	ABSENT
Mr. Chetan Rajdev	<i>[Signature]</i>	Ms. Nalini S	<i>[Signature]</i>
Mr. Srikanth Kashyap	ABSENT	Ms. Arpitha Raju	<i>[Signature]</i>

V SEMESTER B.E, ACADEMIC YEAR (2020-21)

Batch - 2018

DE NO.	COURSE	CONTACT HOURS/WEEK			CREDITS	MAXIMUM MARKS		
		LECTURE	TUTORIAL	LAB		CONTINUOUS INTERNAL EVALUATION	SEMESTER END EVALUATION	TOTAL
HS03	MC (M&E/IPR)	3	0	0	3	50	50	100
EE51	Digital Signal Processing	3	2	0	4	50	50	100
EE52	Field Theory	4	0	0	4	50	50	100
EE53	Power System Analysis	4	0	0	4	50	50	100
EE54	Linear IC's and Applications	4	0	0	4	50	50	100
EE55	Modern Control Theory	3	0	0	3	50	50	100
EEL56	Control Systems Lab	0	0	2	1	50	50	100
EEL57	Electrical Machines Lab	0	0	2	1	50	50	100
EE58	CIV	0	0	0	0	25	25	50
TOTAL		21	2	4	24	425	425	850

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Dr. Suryanarayana	<i>[Signature]</i>	Dr. B.V. Sumangala	ABSENT
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Dr. Saikumar	<i>[Signature]</i>	Mr. Dayananda T.B	<i>[Signature]</i>
Dr. Ravishankar Dixit	<i>[Signature]</i>	Mr. Govindaraju H.V	<i>[Signature]</i>
Dr. Balaram	19.6.18 ABSENT	Mr. Vasudevamurthy S	- Absent -
Mr. Chetan Rajdev	<i>[Signature]</i>	Ms. Nalini S	<i>[Signature]</i>
Mr. Srikanth Kashyap	ABSENT	Ms. Arpitha Raju	<i>[Signature]</i>

VI SEMESTER B.E, ACADEMIC YEAR (2020-21)

Batch - 2018

CODE NO.	COURSE	CONTACT HOURS/WEEK			CREDITS	MAXIMUM MARKS		
		LECTURE	TUTORIAL	LAB		CONTINUOUS INTERNAL EVALUATION	SEMESTER END EVALUATION	TOTAL
18HS04	MC (M&E/IPR)	3	0	0	3	50	50	100
18EE61	Computer Techniques Power Systems Analysis	4	0	0	4	50	50	100
8EE62X	Elective-1	3	0	0	3	50	50	100
8EE63X	Elective- 2	3	0	0	3	50	50	100
8OEEX	Inter Department Elective	3	0	0	3	50	50	100
8EEL65	Digital Signal Processing lab	0	0	2	1	50	50	100
8EEL66	Power System Simulation Lab	0	0	2	1	50	50	100
8EEP67	Mini Project	-	-	2	3	50	50	100
	Internship	-	-	-	(2)	To be carried out during the intervening vacations of VI and VII semesters		
TOTAL		16	0	6	21	400	400	800

S -elective code of the department offering the course
*Students shall register for a course offered by the other departments.

Students Shall Register For One Subject In Each Elective Group

Elective- Group 1 (3 credits each)		Elective- Group 1 (3 credits each)	
18EE631	Electrical Power Utilization	18EE641	Power Systems Planning
18EE632	Electrical Design, Estimating and Costing	18EE642	Special Machines
18EE633	Programmable Logic Controllers	18EE643	FACTS Controllers
18EE634	OOPS with C++	18EE644	Research Methodology <i>Operation Research</i>

Inter Department Electives: Students who have not completed the IDE should register for the completion of 200 credits. According to section 16.2, Academic Regulations of Dr AIT, the credits registered should not exceed 30.

[Signature]
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Dr. Jyoti P Koujalagi	<i>[Signature]</i>	Mr. Srinivas BT	ABSENT
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Dr. Satish IISc	<i>[Signature]</i>	Dr. Shankarlingappa.C.B	<i>[Signature]</i>
Dr. Pradip Kumar Dixit	<i>[Signature]</i>	Mr. Eranna	<i>[Signature]</i>
Dr. Saikumar	<i>[Signature]</i>	Mr. Dayananda T.B	<i>[Signature]</i>
Dr. Ravishankar Dixit	<i>[Signature]</i>	Mr. Govindaraju H.V	<i>[Signature]</i>
Dr. Balaram	<i>[Signature]</i>	Mr. Vasudevamurthy S	absent
Mr. Chetan Rajdev	<i>[Signature]</i>	Ms. Nalini S	<i>[Signature]</i>
Mr. Srikanth Kashyap	ABSENT	Ms. Arpitha Raju	<i>[Signature]</i>

VII SEMESTER B.E, ACADEMIC YEAR (2021-22)

Batch - 2018

CODE NO.	COURSE	CONTACT HOURS/WEEK			CREDITS	MAXIMUM MARKS		TOTAL
		LECTURE	TUTORIAL	LAB		CONTINUOUS INTERNAL EVALUATION	SEMESTER END EVALUATION	
8XX71	MC (E&C/OSHA)	3	0	0	3	50	50	100
8EE71	High Voltage Engineering	4	0	0	4	50	50	100
8EE74X	Elective -3	3	0	0	3	50	50	100
8EE75X	Elective -4	3	0	0	3	50	50	100
8OEXX	Inter Department Elective	3	0	0	3	50	50	100
8EEL76	Relay & HV Lab	0	0	2	1	50	50	100
8EEP78	Project Work Phase-I	--	--	2	2	50	50	100
TOTAL		16	0	4	19	500	500	1000

8 - elective code of the department offering the course
Students shall register for a course offered by the other departments.

Students Shall Register For One Subject In Each Elective Group

Elective- Group 3 (3 credits each)		Elective- Group 4 (3 credits each)	
18EE741	Electrical Drawing	18EE751	Insulation Engineering
18EE742	Energy Auditing And Demand Side Management	18EE752	Electromagnetic Compatibility
18EE743	Embedded Systems	18EE753	Advanced Power Electronics
18EE744	Power systems dynamics and stability	18EE754	Artificial Intelligence Applications to Power Systems

Inter Department Electives: Students who have not completed the IDE should register for the completion of 200 credits. According to section 16.2, Academic Regulations of Dr AIT, the credits registered should not exceed 30.

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BOS, EEE

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Dr. Pradip Kumar Dixit		Mr. Eranna	
Dr. Saikumar		Mr. Dayananda T.B	
Dr. Ravishankar Dixit	19.6.18 ABSENT	Mr. Govindaraju H.V	19 - Absent -
Dr. Balaram		Mr. Vasudevamurthy S	
Mr. Chetan Rajdev		Ms. Nalini S	
Mr. Srikanth Kashyap	ABSENT	Ms. Arpitha Raju	

VIII SEMESTER B.E., ACADEMIC YEAR (2021-22)
Batch - 2018

COURSE NO.	COURSE	CONTACT HOURS/WEEK			CREDITS	MAXIMUM MARKS		
		LECTURE	TUTORIAL	LAB		CONTINUOUS INTERNAL EVALUATION	SEMESTER END EVALUATION	TOTAL
EE81	MC (E&C/OSHA)	3	0	0	3	50	50	100
EE82	Modern Power System Protection	2	2	0	3	50	50	100
EE83x	Elective - 5	3	0	0	3	50	50	100
DEXX	Inter Department Elective*	3	0	0	3	50	50	100
EEP84	Project Work Phase-II	--	--	6	8	100	200	300
EES85	Seminar	--	--	--	1	25	-	25
INTXX	Internship	-	-	-	2	To be carried out during the intervening vacations of VI and VII semesters		
TOTAL		11	2	6	23	325	400	725

ELECTIVE- GROUP 5 (3 credits each)

EE831	Power System Operation & Control	18EE834	Computer Control of Electrical Drives
EE832	HVDC Transmission	18EE835	Micro and Smart System Design
EE833	Alternate Energy Sources	18EE836	Operating Systems

Student shall register for one course in the elective group - 5

Inter - Departmental Electives offered by the Department

8EEE01	Renewable Energy Sources	18EEE02	Electromagnetic Compatibility
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[Signature]
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