

Ref. No.

Panchajanya Vidya Peetha Welfare Trust (Regd)

Dr. Ambedkar Institute of Technology

An Autonomous Institution, Affiliated to Visvesvaraya Technological University, Belagavi, Aided by Govt. of Karnataka, Approved by All India Council for Technical Education (AICTE), New Delhi Accredited by NBA and NAAC with 'A' Grade

BDA Outer Ring Road, Mallathalli, Bengaluru - 560 056

Department of Medical Electronics Engineering

Name of the Course	Course Code	Remarks
		Content Modified
Network Analysis	ML33	Content Modified
Sensors and Measurements	ML35	Content Modified
Microcontroller	ML41	Content Modified
Physiological Control System	ML53	Content Modified
Medical Informatics	ML652	Content Modified
Analog Electronic Circuits	18ML31	Content Modified
Digital Signal Processing	18ML54	Content Modified
Digital Signal Processing	18MLL57	Content Modified
Digital Signal Processing Lab	18MD41	Content Modified
Microcontroller	18ML53	Content Modified
Physiological Control System	18ML551	New Course
Embedded Systems & IOT Applications	18MLL67	New Course
Operation And Testing Medical Devices Lab		New Course
Biomechanics	ML73	Content Modified
Biomedical Digital Signal & Image Processing Lab	MLL76	
Neural Network And Machine Learning	18ML71	New Course

A.A **BOS Chairman**

Principal

Ph : 23211232, Fax : 080-23217789, E-mail : principal@drait.edu.in, Website : www.drait.edu.in



Dr. Ambedkar Institute of Technology

Department of Medical Electronics

BoS VIII

18/03/2017

Proceedings of the Meeting:

The BoS chair person welcomed the members for the meeting. There was a brief self introduction by all the members. The BoS Chair gave an introductory remark about the autonomy practice and earlier BoS.

The chair also brought-forth the outcomes from the internal meetings and the consequent meetings of internal BoS.

The modifications suggested are as listed below outcome of the meeting

- AEC ML 31: The suggestion was to replace the BJT analysis with the FET Analysis
- Network Analysis ML33: To include simulation tool wherever necessary and this has to be assessed for assignment
- EI ML34: To include biomedical sensors, to delete the ac bridges but for the concepts. Topics on CRO and signal generators to be refined to include Digital scopes and RF sources & interferences. And a study experiment to demonstrate the different errors. The experiment to be given as an assignment. Testing & calibration to be included and the same topic to be handled by industry persons in the calibration field. And again second assignment can be based on the industry lecture. And a suggestion to relook into the title of the subject.
- OOPS Lab MLL36: Problem statements to be defined based on applications, which may include one or many experiments. This applies in general to all the labs where the experiment titles need to be carefully modified to show the design and verification.

- Microcontroller ML41: Typical case study for medical electronics application in unit 3 making use of the interface components studied (Block Diagram level)
- Physiological control systems ML53: The simulation of physiological models using <u>Simulink to be included</u>. And this can be evaluated as assignment.
- Embedded C ML551: Unit V: For the case study include typical embedded application development based on Arduino boards.
- Medical Informatics ML652: Cloud concepts for the medical data storage to be included. And an expert lecture may be arranged on this.
- BMDSP ML71: Sleep EEG to be included as an industry component and invite experts from NIMHANS
- ADSP MLL75: To be renamed as BMDSP Lab (Biomedical signal processing Lab)

The outcomes from the internal BoS were also discussed and approved.

- > To advance Java Lab MLL76 from VII sem. to VI sem.
- > To advance seminar MLS83 from VIII sem. To VII sem.

Head of the Department Dept. of Medical Electronics Or. Ambedkar Institute of Technolog Bangalore 560 056.

16

Details of Curriculum Design Under Autonomy for UG Program 2016-17 Batch

BOS 8 (2017) Date: 18/03/2017

Actual	Allocation	10	27	49	67	23	80	16		200	DUNCIL
Credit range	guideline (200 Credits)	10-20	30-40	30-40 ·	60-80	20-30	10-20	20-30			CHAIRMAN/ACADEMIC COUNCIL
	Sem. VIII					80	04	12	04	24	IAIRMAN
	Sem. VII	02			60	07.	04	02	60	24	<u>ل</u>
Number of Credits	Sem. VI				20	04		02	60	26	
Number of Credits	Sem. V	04			17	4			08	25	AIC)
mnN	Sem.		04		21	•			08	25	DEAN (ACADEMIC)
	Sem. III		0.4	22					60	26	DEAN
	Sem. I & II	04	19	27					16	50	and the second second
Category		Humanities And Social Sciences	Basic Sciences	Engineering Sciences	Professional Subjects-Core	Professional Subjects-Elective	Other Elective- Inter department	Project Work+ Seminar + Project tour	Total no of subjects/components	Total No of Credits	Landheld HAIRMAN/BOS
No.		V -	8	υ	D	ш	F	D			CHAIRS CHAIRS
	ella.	and the	NA N	AC, Z	1	1. MAT	proces	Mar M	A A		Sor

Department of Medical Electronics Engineering Details of Curriculum Design Under Autonomy for UG Program 2015-16 Batch

Actual Credit Allocation		10	27	49	67	23	. 08	16		200		OUNCIL
Credit range as	per VTU guideline (200 Credits)	10-20	30-40	30-40	60-80	20-30	10-20	20-30			•	CHAIRMAN/ACADEMIC COUNCIL
	Sem. VIII					08	. 04	12	04	. 24		8MAN/AG
	Sem. VII	02			60	07	04	02	60	24		CHAII
Credits	Sem. VI				20	04		02	60	26		
Number of Credits	Sem. V	04			17	4			08	25		6
Nu	Sem. IV		04		21				08	25		DEAN (ACADEMIC)
	Sem. III		04	22					60	26	-	EAN (AG
	Sem. I & II	04	19	27					16	50		
Category		Humanities And Social Sciences	Basic Sciences	Engineering Sciences	Professional Subjects- Core	Professional Subjects- Elective	Other Elective- Inter department	Project Work+ Seminar + Project tour	Total no of subjects/components	Total No of Credits		C:OELAN
SI.		< \	B	J	<u>0</u>	н Н Н Н Н Н Н Н Н Н Н Н Н Н Н Н Н Н Н Н	IN F	D				CHAIRMAN CHAIRMAN
	Sujoll .		P, z	1	- Mark	Sec.	(And	when had	1111		N.Y.	6

Scanned with CamScanner

Details of Curriculum Design Under Autonomy for UG Program 2014-15 Batch

BOS 8 (2017) Date: 18/03/2017

	Actual Credit	Allocation	10	27	49	71	19	08	16		200		
	Credit range as per VTU	guideline (200 Credits)	10-20	30-40	30-40	60-80	20-30	10-20	20-30			CHAIRMAN/ACADEMIC COUNCIL	
		Sem. VIII					08	04	12	04	24	MAN/ACAI	
11/		Sem. VII	02			11	07	04	02	10	26	CHAIR	
BOS 8 (2017) Date: 18/03/2017	edits	Sem. VI				18	04		02	08	24`		
2017) Dat	Number of Credits	Sem. V	04			21				60	25	<u>(</u>)	
BOS 8 (Nun	Sem III Sem. IV		04		21				08	25	DEAN (ACADEMIC)	
		Sem III		. 04	22					60	26	DEAN (
		Sem I & II	04	19	27					16	50		
	SI Category		A Humanities And Social Sciences	B Basic Sciences	C Engineering Sciences	D Professional Subjects- Core	E Professional Subjects-	F Other Elective- Inter	Project Work+ Seminar + Project tour	Total no of subjects/components	Total No of Credits	CHARMANIBOS D	
		We we	Andone Y	I. Inthe	A .		- July	1200	" XU Maleral	mod h.	APAN.	1	

Department of Medical Electronics

BoS-9: 23-06-2018

Proceedings of the BoS-9 meeting

The BoS Chairperson welcomed the members for the meeting. There was a brief selfintroduction by all the members. The BoS chair gave an introductory remark about the autonomy practice and earlier BoS.

The chair also brought-forth the outcomes from the meetings and the consequent meetings of the internal BoS. The BoS approved all the suggestions from the internal Bos.

The modifications suggested and outcome of the meetings are as listed below:

- > The laboratory experiments need not be title specific, only objectives to be given.
- Sensors and Measurement (ML34)-The study of equipments could be practical oriented.
- Microcontrollers (ML41) Theory sessions could also be made hands on using the simulation software this gives a better understanding of the theoretical aspects.
- Medical science (ML44) Anatomy and Physiology laboratory may be setup displaying models of human systems. And theory could be supported by animation videos
- Embedded C (ML551) IOT applications to be added as one unit and the introductory unit to be made as review only. Title of the subject to be modified as Embedded Systems & IOT. And industry expert from Bosch offered assistance in framing the IOT syllabus
- Lasers and Fiber Optics in Medicine (ML64) -Reframing/Re-organization of the Units in the syllabus.
- Wherever necessary the introduction if repeating it could be given as review for minimum hrs. and questions need not be asked on review portions.

The board approved the proposed scheme for the revised curriculum to be effective from 2018-19. The board also approved the list of BOE members.

The Chairperson thanked all the members for their commitment and contribution in revising the syllabus.

Shanthi. & Signature of the Chairman

Head of the Department Dept. of Medical Electronics Or, Ambedkar Institute of Technology Banadore 560 056.

Dr. Anbedkar Institute of Technology, Bangalore-560056 Department of Medical Electronics Engineering Details of Curriculum Design Under Autonomy for UG Program 2015-16 Batch BOS 9 (2018) Date: 23/6/2018

	i) 6 cha	2010 1 12	0102) (2010) Jake 27/0/2010	0		;	
	N°N	Category			Nun	Number of Credits	redits			Credit range as per VTU	Actual Credit
			Sem I & II	Sem III	Sem. IV	Sem. V	Sem. VI	Sem. VII	Sem. VIII	guideline (200 Credits)	Allocation
	A	Humanities And Social Sciences	04			04		02		10-20	10
R	B	Basic Sciences	19	04	04.					30-40	27
	U	Engineering Sciences	27	22						30-40	49
	D	Professional Subjects- Core			21	21	18	11		60-80	71
E)	<u>ب</u>	Professional Subjects- Elective					04	07	80	20-30	19
1 4	ц.	Other Elective- Inter department						04	04	10-20	08
A) J	Project Work+ Seminar + Project tour					02	02	12	20-30	16
ju i	20	Total no of subjects/components	16	60	08	60	60	6	04		
Then the	K	Total No of Credits	50	26	25	25	26	24	24		200
Ð	1	GHAIRMAN/BOS		DEAN (A	DEAN (ACADEMIC)	G		CHAIRN	(AN/ACA)	CHAIRMAN/ACADEMIC COUNCIL	

Dr. Chibedkar Institute of Technology, Bangalore-560056

Department of Medical Electronics Engineering Details of Curriculum Design Under Autonomy for UG Program 2016-17 Batch

8	
0	
N	
10	
9	
23/6/201	
2	
Date:	
5	
- n	
Н	
0	
\sim	
(2018	
0	
Ň	
C	
6	
BOS	
0	
m	

	10				-				a standard and a		
	No	Category			Nu	Number of Credits	Credits			Credit range as	Actual Credit
			Sem. I & II	Sem. III	Sem. IV	Sem. V	Sem. VI	Sem. VII	Sem. VIII	per VTU guideline (200	7110021101
	A	Humanities And Social Sciences	04			04		02		10-20	10
	В	Basic Sciences	19	. 6	04	-				30-40	27
Ì	U	Engineering Sciences	27	22						30-40	49
and the second s	D	Professional Subjects- Core			21.	17	20	60		60-80	67
- Martin - Contraction - Contr	Ш	Professional Subjects- Elective				4	04	07	08	20-30	23
	ы	Other Elective- Inter department						04	04	10-20	08
N. V.	5	Project Work+ Seminar + Project tour					02.	02	12	20-30	16
Ser -		Total no of subjects/components	16	60	08	08	60	60	04		
~		Total No of Credits	50	26	25	25	26	24	24		200
Junishilter	X.										
	CHAIR	CHAIRMANNBOS	ц	EAN (A	DEAN (ACADEMIC)	(î		CHAIR	MAN/AC?	CHAIRMAN/ACADEMIC COUNCIL	NCIL

 Details of Curriculum Design Under Autonomy for UG Program 2017-18 Batch BOS 9 (2018) Date: 22/6/2018

n °Z	Category			Num	Number of Credits	redits			Credit range	
		Sem. I & II	Sem. III	Sem. IV	Sem. V	Sem.	Sem.	Sem.	as per VIU guideline	Credit Allocation
A	Humanities And Social Sciences	04			64	1	02		(200 Credits) 10-20	
В	Basic Sciences	19	04	04					30-40	
υ	Engineering Sciences	27	22						30-40	
D	Professional Subjects-Core			21	. 17	20	60		60-80	
ш	Professional Subjects-Elective				4	04	07	08	20-30	
щ	Other Elective- Inter department						04	04	10-20	
IJ	Project Work+ Seminar + Project tour					02	.02	12	20-30	
	Total no of subjects/components	16	60	08	08	60	60	04		
	Total No of Credits	50	26	25 -	25	26	24	24		

CHAIRMAN/ACADEMIC COUNCIL

DEAN (ACADEMIC)

Hundritto - M

Dr. Ambedkar Institute of Technology, Bangalore-560056

Details of Curriculum Design Under Autonomy for UG Program 2018-19 Batch Department of Medical Electronics Engineering

BOS 10 (2019) Date: 27/5/2019

No No	Category			Numl	Number of Credits	edits			Percentage of total Credits	Actual
		Sem. I & II	Sem. III	Sem. IV	Sem. V	Sem. VI	Sem. VII	Sem. VIII	as per VTU guideline	Allocation
A	Humanities And Social Sciences	. 02	01	10	03	03	. 02	02	5-10	14
В	Basic Sciences	18	03	03					10-20	24
U	Engineering Sciences	20	03		03				15-20	26
D	Professional Subjects-Core		17	20	15	13	60		30-40	74
ш	Professional Subjects-Elective				03	03	90		10-15	12
ы	Other Elective- Inter department					03	03	03	5-10	60
U	Project Work+ Seminar + Project tour					03	02	11	10-15	16
	Total no of subjects/components	16	12	11	08	10	08	05		
	Total No of Credits	40	24	24	24	25	22	16		175

CHAIRMAN/ACADEMIC COUNCIL

DEAN (ACADEMIC)

CHAD

Dr. Ambedkar Institute of Technology, Banga e-560056

Department of Medical Electronics Engineering

Details of Curriculum Design Under Autonomy for UG Program 2017-18 Batch BOS 10 (2019) Date: 27/5/2019

Г			T			1 days						
	Actual Credit	Allocation		10	27	49	67	23	08	16		200
	Credit range as per VTU	guideline (200 Credits)	(cime in not)	10-20	30-40	30-40	60-80	20-30	10-20	20-30		
		Sem.	TTT A					08	04	12	04	24
		Sem.	III	02			60	07	04	02	60	24
	edits.	Sem.	11				20	04		02	60	26
- (Number of Credits	Sem.	>	04			17	4			80	25
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	Num	Sem.	IV	and the second s	04		21				08	25
1		Sem.	m	in the second	04	22					60	26
		Sem. I	& II	04	19	27					16.	50
	Category			Humanities And Social Sciences	Basic Sciences	Engineering Sciences	Professional Subjects-Core	Professional Subjects-Elective	Other Elective- Inter department	Project Work+ Seminar + Project tour	Total no of subjects/components	Total No of Credits
	SI No			A	В	U	D	ш.	ц	IJ		

CHAIRMAN/ACADEMIC COUNCIL

DEAN (ACADEMIC)

CHAIRMAN CHAIRMAN

July a

Dr. Acoedkar Institute of Technology, Banga de-560056

Department of Medical Electronics Engineering Details of Curriculum Design Under Autonomy for UG Program 2016-17 Batch

BOS 10 (2019) Date: 27/5/2019

					-						
	SI. No	Category			INN	Number of Credits	Credits			Credit range as	Actual Credit Allocation
			Sem. I & II	Sem. III	Sem. IV	Sem. V	Sem. VI	Sem. VII	Sem. VIII	per VTU guideline (200 Credits)	
	A	Humanities And Social Sciences	04			04		02		10-20	10
	В	Basic Sciences	19	04	04		1 x			30-40	27
	υ	Engineering Sciences	27 -	22				-		30-40	49
	D	Professional Subjects- Core			21	17	20	60		60-80	67
	щ	Professional Subjects- Elective		-		4	04	07	08	20-30	23
	н	Other Elective- Inter department						04	04	10-20	08
	U	Project Work+ Seminar + Project tour					02	02	12	20-30	16
		Total no of subjects/components	16	60	08	.08	60	60	04		
×.		Total No of Credits	50	26	25	25	26	24	24		200
4						A STATE OF					

CHAIRMAN/ACADEMIC COUNCIL

DEAN (ACADEMIC)

Julie

CHAIRMANDO

Dr. Ambedkar Institute of Technology Bangalore 56

Department of Medical Electronics

BOS- X1 Dated 14/08/2020

Proceedings of the online BoS Meeting over Google Meet platform

The BoS Chairman welcomed the members on board. The same board members had devised the 2018 scheme defining the broader structure for the 2018 scheme starting from 3^{rd} sem. to 8^{th} sem. The same committee had discussed in length and finalized the syllabus for the 3^{rd} & 4^{th} Sem. of 2018 scheme. The chair person reminded the members the same and placed before the committee the agenda for discussion.

- 1. Feedback on PEO's & newly framed PSO's of the department
- 2. Approval of the Curriculum for the 2019-20,2018-19 and 2017-18 batches
- 3. Review of 3rd & 4th sem. Syllabus & 7th & 8th Sem. syllabus
- 4. Scrutiny & approval of 5th & 6th sem. syllabus
- 5. Approval of subject list for BE Honours & Minors
- 6. Approval of BOE members & examiners panel

Agenda 1 is being circulated among the members and awaited for specific remarks. Overall the PEO's & PSO's were accepted.

Agenda 2 The curriculum was approved for all the three batches

Agenda 3 Review of 3rd & 4th sem. the board member Mr. Santhosh Lawrence General Manager WIPRO-GE observed that 18 ML36 OOPs the theory & lab occur in two different semesters. The Chairperson explained it is because the department has to adhere to stipulated credits per semester, and any one of the labs from 3rd sem. had to be advanced to 4th sem. and however the subject assignment programs have to be verified practically. The syllabus of 3rd & 4th sem. was approved. Syllabus for 7th & 8th Sem. ML73 Biomechanics was introduced as a core subject by adjusting credits from ML71 BMDSP, ML72 DIP & MLL76 BMDSP Lab. The internal BoS had decided to introduce Biomechanics, as this was one of the subjects in GATE 2020 where Biomedical Instrumentation was introduced for the first time. The same was approved by the committee.

Agenda 4 Control Systems & Physiological Control Systems were combined together to form 18ML53 Physiological Control Systems for 4 credits, the syllabus was discussed and approved.

Dr. Vijayalakshmi Prof. & HOD Medical Electronics, BMSCE suggested to rename Medical Electronics lab to a more specific one such as Biomedical Instrumentation Lab 18MLL57 and Electronics lab to a more specific one such as Biomedical Instrumentation Lab 18MLL57 and the same is adapted. Similarly 18MLL59 BMDSP lab since it covers image processing and biomedical signals it was felt that the same may be reflected in the title of the lab also. Hence it was agreed to rename the lab as Biomedical Digital & Image Processing Lab. There was a detailed discussion on Medical Physics 18 ML64 and Medical Imaging Systems 18ML52 and agreed to accept the syllabus. 18ML62 LFO syllabus was reviewed and suggestions by Dr. Bhaskar Mohan Murary, Professor, School of Biosciences & Technology , VIT Vellore, is incorporated. A New lab 18MLL67 Operation & Testing of Medical Devices lab was introduced to introduce the skill in repairing & maintenance of the devices.

Agenda 5 The list of subjects for BE honours & Minors degree was approved Agenda 6 The list of BOE members & examiners panel was approved

The Chairman thanked the BoS members for their interaction and valuable contribution.

D.	in the	m		
	-		-	1
			-	

Dr. Ambedkar Institute of Technology, Bangalore-560056 Department of Medical Electronics Engineering ails of Curriculum Design Under Autonomy for UIC Program 2010, 20 B.

Cur

Details of Curriculum Design Under Autonomy for UG Program 2019-20 Batch BOS XI (2020) Date: 14/8/2020

NoSem I & ISem II & IISem IV NIISem. V NIISem. V NIISem. Sem. VIIIAHumanities And Social Sciences02010103322BBasic Sciences1803033222CEngineering Sciences1803035322DProfessional Subjects-112016101010CEngineering Sciences112016101010CEngineering Sciences112016101010CProfessional Subjects-112016101010FOther Elective-Inter1203333GProject Work+ Seminar16121181010Total no of1612118101313Total no of1612118101315Total No of Credits402424231515		SI	Category			Nun	Number of Credits	edits			Credit range as	Actual
ASem1 & IIISem II wIIISem II wIIISem VISem VISem MII vIIISem output credits)AHumanities And Social Sciences020101033225-10BBasic Sciences180303YSeinces25-1010-20CEngineering Sciences2009YSeince3225-10DProfessional Subjects-2009YSeince34010-20EProfessional Subjects-Y112016101030-40EProfessional Subjects-YY36Y10-15FOther Elective- InterYY36Y10-15FOther Elective- InterYY33610-15GProject Work SeminarYYYY10-15GProject Work <seminar< td="">161211810ITotal no of16121181010II total no of16121181010II total No of Credits402425242315</seminar<>		No									per VTU	Credit
AHumanities And Social Sciences \mathbf{N}				Sem I	Sem III	Sem. IV	-	Sem. VI	Sem.	Sem.	guideline (175	Allocation
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	520	A	Humanities And Social	ITW					IIV	IIII	Creates)	
$ \begin{array}{ c c c c c c c } \hline B & Basic Sciences & 18 & 03 & 03 & \hline & & & & & & & & & & & & & & & & & $	-	:	Sciences	02	01	01	03	3	2	2	5-10	14
CEngineering Sciences 20 09 3 3 3 $10-20$ $10-20$ DProfessional Subjects- 11 20 16 10 10 $30-40$ $30-40$ EProfessional Subjects- 11 20 16 10 10 $30-40$ $30-40$ EProfessional Subjects- 11 20 3^{2} 3^{2} 5^{2} 5^{2} $10-15$ FOther Elective- Inter 10 10 3^{2} 3^{2} 3^{2} 5^{2} 5^{2} FOther Elective- Inter 16 12 11 8 3^{2} 3^{2} 5^{2} 5^{2} GProject Work+ Seminar 16 12 11 8 10^{2} 2^{2} 13 10^{2} GProject Work+ Seminar 16 12 11 8 10 2^{2} 2^{2} 13 10^{2} GProject Work+ Seminar 16 12 11 8 10 2^{2} 2^{2} 13 10^{2} GProject Work+ Seminar 16 12 11 8 10 2^{2} 13 10^{2} GProject Work+ Seminar 16 24 24 25 24 23 15 10^{2} GProject Work+ Seminar 10 24 24 23 15 10^{2} 10^{2} GProject Work+ Seminar 10 10 10 10 10^{2} 10^{2} 10^{2} </td <td>hu.</td> <td>В</td> <td>Basic Sciences</td> <td>18</td> <td>03</td> <td>03</td> <td></td> <td></td> <td></td> <td></td> <td>10-20</td> <td>24</td>	hu.	В	Basic Sciences	18	03	03					10-20	24
	A CL ,	U	Engineering Sciences	20	60			3			10-20	32
EProfessional Subjects- ElectiveI33610-15FOther Elective-InterI3335-10FOther Elective-InterI3335-10GProject Work+SeminarII221310-15GProject Work+SeminarII181016Total no of subjects/components16121181010Total No of Credits40242324231515	A	Q	Professional Subjects- Core		11	20	16	10	10		30-40	67
FOther Elective- Inter3335-10GProject Work+ Seminar3335-10GProject Work+ Seminar221310-15Total no of16121181010-1510Total No of Credits4024242524231515	11 Chewer	ш	Professional Subjects- Elective				3	3	9		10-15	12
Project Work+ SeminarProject Work+ Seminar+ Project tour-Total no of16Total no of16subjects/components16Total No of Credits402425242315		ц	Other Elective- Inter department				3	3	3		5-10	6
s 16 12 11 8 10 40 24 25 24 23 15	Ð	G	Project Work+ Seminar + Project tour					2	2	13	10-15	17
40 24 25 24 23 15			Total no of subjects/components	16	12	11	8	10				
			Total No of Credits	40	24	24	25	24	23	15		175

CHAIRMAN/ACADEMIC COUNCIL

DEAN (ACADEMIC)

CHAIRMANBOS

Details of Curriculum Design Under Autonomy for UG Program 2018-19 Batch BOS XI (2020) Date: 14/8/2020

Aurric 20

	Actual Cr Allocatio		14	24	32	67	12	6	17		175
	Credit range as	per VTU guideline (175 Credits)	5-10	10-20	10-20	30-40	10-15	5-10	10-15		
		Sem. VIII	2						13		15
		Sem. VII	2			10	6	3	2		23
1000 111 (2020) 111 (2020) Date:	redits	Sem. VI	3		3	10	3	3	2	10	24
	Number of Credits	Sem. V	03			16	3	3		8	25
		Sem. IV	01	60		20				11	24
		Sem. III	01	03	60	11				12	24
		Sem. I & II	02	18	20					16	40
	Category		Humanities And Social Sciences	Basic Sciences	Engineering Sciences	Professional Subjects- Core	Professional Subjects- Elective	Other Elective- Inter denartment	Project Work+ Seminar + Project tour	Total no of subjects/components	Total No of Credits
	SI. No		A	в	U	D	ш	ц	Ð		
					HR. C	Jh-	Welleword		A	ð	

CHAIRMAN/ACADEMIC COUNCIL

DEAN (ACADEMIC)

GLAURWANIEOS

Dr. Ambedkar Institute of Technology, Bangalore-560056 Department of Medical Electronics Engineering of Curriculum Design Under Autonomy for UG Program 2017-18 Batch

Details of Curriculum Design Under Autonomy for UG Program 2017-18 Batch BOS XI (2020) Date: 14/8/2020

.Curricula	2017-									
Actu Cred	Alloca	10	27	49	68	22	08	16		200
Credit range as per VTU	guideline (200 Credits)	10-20	30-40	30-40	60-80	20-30	10-20	20-30		
	Sem. VIII					08	04	12	04	24
	Sem. VII	02			10	06	04	02	10	24
Number of Credits	Sem. VI				20	04		02	60	26
Number of Credits	Sem. V	04			17	4			08	25
Nun	Sem. IV		04		21				08	25
	Sem. III		04	22					60	26
	Sem. I & II	04	19	27					16	50
Category		Humanities And Social Sciences	Basic Sciences	Engineering Sciences	Professional Subjects-Core	Professional Subjects-Elective	Other Elective- Inter department	Project Work+ Seminar + Project tour	Total no of subjects/components	Total No of Credits
SI No		V	B	С	D	ш	F	Ċ		

N.8.4

Jung

9

Wehewooy

CHAIRMAN/ACADEMIC COUNCIL

DEAN (ACADEMIC)

CHAIRMANBOS



Dr. Ambedkar Institute of Technology Bangalore 56 Department of Medical Electronics BOS-XII Dated 22/06/2021

Proceedings of the online BoS Meeting over Google Meet platform

The BoS Chairman welcomed the members on board. The same board members had devised the 2018 scheme defining the broader structure for the entire programme of Medical Electronics (2018 scheme) starting from 3rd sem. to 8th sem. The same committee had discussed in length and finalized the syllabus for the 3rd & 4th Sem. 5th & 6th sem. of 2018 scheme. The chair person reminded the members the same and placed before the committee the agenda for discussion.

1. Approval of the Curriculum for the 2020-21,2019-20,2018-19 batches

- 2. Review of 3rd & 4th sem. 5th & 6th Sem.
- 3. Scrutiny & approval of 7th & 8th sem. syllabus
- 4. Approval of subject list for BE Honours & Minors
- 5. Approval of BOE members & examiners panel

Agenda 1 was approved by the committee

Agenda 2

The syllabus of 3rd & 4th semesters were framed after detailed deliberations in the earlier BoS and no revisions were proposed in most of the subjects. The revised subjects are listed below:

18ML41 Microcontroller: The internal BoS had planned to update the syllabus by including MSP430 processor. The committee also approved the same. Dr. VG Sangam enquired about the lab facility for MSP 430 and since the lab resources are available it would be a better option. And Dr. Praful P Pai suggested to introduce ARM Processor through workshops and hands on training so that it may be gradually introduced as a processor of study. This could be mentioned in the syllabus and evaluated as an assignment exercise, to validate the study.

18ML42 Communication Systems: Simulations experiments on basic communication concepts using Simulink to enrich the understanding of the subject and to be evaluated as assignment

18MLL47 Microcontroller Lab: To include programming using both the processors. And Dr.Bhaskar Murary and Dr. ER Rajkumar suggested to change the sequences of exercises so that the students develop programming skills through simple application modules. The Part 1 to have software programs as existing and in Part 2 study of interfacing experiments can be made realise application modules through group modular projects so that the students can

combining interfacing and programming skills. This might help students to involve in developing applications at an early stage. Dr. N Sriraam expressed the concern that the average performers should be kept in mind while framing the contents. The syllabus is modified accordingly.

18ML551-Python Programming: New Professional elective is included as Learning Python programming skills are becoming inevitable from the industry point of view.

Agenda 3:

18MI71 The internal BoS had proposed **Deep Learning** where the three units were on basics of Neural Network & Pattern recognition and introduced the concepts of Deep Learning in the last two units. The committee also approved the syllabus as understanding of Neural Networks is a prerequisite for Deep Learning. And Dr. Vijayalakshmi & Dr. N Sriraam proposed to change the subject title to **Neural Network & Machine Learning**, and the committee decided on the same. The Committee also proposed case study on the application, only then the students will visualize the subjects better. Mr. Tejas Venkatesh also expressed the case study should be based on image analysis while Mr. Pai added Biomedical Signal analysis also for the case study. The suggestions are incorporated and the case study will be evaluated through assignment.

Mr. Ayyappadas M shared his view on expanding the lab facilities for Biomedical Equipments. And he also pointed out that we have to get industry experts for each equipment so that the students acquire the right understanding. The point is noted and implemented as the department is in the process of setting up a new Lab.

The Alumni representative Varsha G expressed the opinion that the students should be briefed about the open electives so that they can make an appropriate choice. This concern will be shared with the college council.

The meeting concluded with the chair person thanking individual members for their invaluable time & support in coming up with a full fledged and competitive curriculum.

Date: 23/6/2021

anths &

BOS Committee