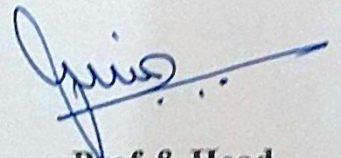


Dr. Ambedkar Institute of technology, Bengaluru-56
Department of Computer Science & Engineering

The enclosed documents are verified & approved.



Prof & Head

Dr. Siddaraju

Department of Computer Science & Engineering

Professor & Head
Department of Computer Science & Engineering
Dr. Ambedkar Institute of Technology
Bangalore-560 056.

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

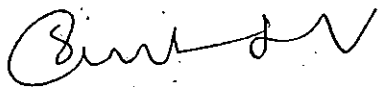
It was proposed to have a common Board of Examiners for I year.

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



Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

Department of Computer Science & Engineering

Scheme for the Batch 2018 (175 CREDITS)

Semester	Credits
1 st	20
2 nd	20
3 rd	24
4 th	24
5 th	25
6 th	24
7 th	23
8 th	15
Total	175

Dr.Ambedkar Institute of Technology, Bengaluru-56
Scheme of Teaching and Examination from the Academic Year 2018 – 19
Outcome Based Education(OBE) and Choice Based Credit System (CBCS)

I SEMESTER B.E (CHEMISTRY GROUP)

Sl. No	Course and Course Code		Course Title	Teaching Department	Paper Setting Board	Teaching Hours /Week		Examination					Credits
						Theory Lecture	Tutorial	Dra Practi	Duration in	CIE Marks	SEE Marks	Total Marks	
1	BC	18MA11	Calculus and Linear Algebra	Mathematics	Science	3	2	--	3	50	50	100	4
2	BC	18CH12	Engineering Chemistry	Chemistry	Science	3	2	--	3	50	50	100	4
3	ES	18CS13	Programming for Problem Solving	Computer Science and Engineering	Computer Science and Engineering	2	2	--	3	50	50	100	3
4	ES	18EC14	Basic Electronics	ECE/E and I/ TC	E and C Engineering	2	2	--	3	50	50	100	3
5	ES	18ME15	Elements of Mechanical Engineering	ME, Auto, IP, IEM, Mfg Engineering	Mechanical Engineering	2	2		3	50	50	100	3
6	BC	18CHL16	Engineering Chemistry Laboratory	Chemistry	Science	--	--	2	3	50	50	100	1
7	ES	18CSL17	Computer Programming Laboratory	Computer Science and Engineering	Computer Science and Engineering	--	--	2	3	50	50	100	1
8	HS	18HS11/ 18HS12	English/ Kannada	Humanities	Humanities	1	--	2	2	50	50	100	1
TOTAL						13	10	6	23	350	350	700	20

First year scheme

Dr.Ambedkar Institute of Technology, Bengaluru-56														
Scheme of Teaching and Examination from the Academic Year 2018 – 19														
Outcome Based Education(OBE) and Choice Based Credit System (CBCS)														
II SEMESTER B.E (PHYSICS GROUP)														
Sl. No	Course and Course Code		Course Title	Teaching Department	Paper Setting Board	Teaching Hours /Week		Examination						Credits
						The	Tuto	Prac	Duratio	CIE	SEE	Total		
1	BC	18MA21	Advanced Calculus and Numerical Methods	Mathematics	Science	3	2	--	3	50	50	100	4	
2	BC	18PH22	Engineering Physics	Physics	Science	3	2	--	3	50	50	100	4	
3	ES	18EE23	Basic Electrical Engineering	E and E Engineering	E and E Engineering	2	2	--	3	50	50	100	3	
4	ES	18CV24	Civil Engineering and Mechanics	Civil Engineering	Civil Engineering	2	2	--	3	50	50	100	3	
5	ES	18MEL25	Engineering Graphics and Design	ME, Auto, IP, IEM, Mfg Engineering	Mechanical Engineering	2	--	2	3	50	50	100	3	
6	BC	18PHL26	Engineering Physics Laboratory	Physics	Science	--	--	2	3	50	50	100	1	
7	ES	18EEL27	Basic Electrical Engineering Laboratory	E and E Engineering	E and E Engineering	--		2	3	50	50	100	1	
8	HS	18HS21/ 18HS22	English/ Kannada	Humanities	Humanities	1		2	2	50	50	100	1	
TOTAL						13	8	8	23	400	400	800	20	
Note: BS: Science Course, ES: Engineering Science, Hu: Humanity and Social Science.														
Definition of Credit:		1 hour Lecture (L) per week per semester = 1 Credit												
		2 hour Tutorial (T) per week per semester =1 Credit												
		2 hour Practical/Laboratory/Drawing (P) per week per semester=1 Credit.												

Second year scheme

III SEMESTER												
Sl. No	Course and Course Code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lectures	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	BC	18MA31	Discrete Mathematical Structures	Mathematics	2	2	--	04	50	50	100	3
2	PC	18CS31	Digital Logic and Computer Design	CSE	4	0	--	04	50	50	100	4
3	PC	18CS32	Data Structures and Algorithms	CSE	4	0	--	04	50	50	100	4
4	PC	18CS33	Operating System	CSE	3	0	--	03	50	50	100	3
5	PC	18CS34	Python Programming	CSE	3	0	--	03	50	50	100	3
6	PC	18CS35	Web Technology	CSE	3	0	--	03	50	50	100	3
7	PC	18CSL36	Data Structures and Algorithms Laboratory	CSE	--	--	2	02	50	50	100	1
8	PC	18CSL37	Digital Logic and Computer Design Laboratory	CSE	--	---	2	03	50	50	100	1
9		18CSL39	Python Programming Laboratory	CSE	--	---	2	02	50	50	100	1
10	HS	18HS31/32	Constitution of India Professional Ethics and Human Rights/ / Env. Studies	Hu/Civ	1	--	--	02	50	50	100	1
11	MC	18HS33	Soft skills (MC)	Humanities	04	-	--	03	50	-	50	0
TOTAL					24	02	06	33	450	450	900	24
Course prescribed to lateral entry Diploma holders admitted to III semester of Engineering programs												
11	MC	18MAD31	Advance Mathematics - I	Mathematics	02	01	--	03	50		50	0
Note: BC: Science Course, PC: Professional Core. Hu: Humanities, MC: Mandatory Course. 18CSL38: Student must complete a certification under anyone online course as specified in the scheme												

Second year scheme

IV SEMESTER												
Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	BC	18MA41	Probability Statistics & Queuing Theory	Mathematics	2	2	--	04	50	50	100	3
2	PC	18CS41	Algorithms Design Techniques	CSE	3	0	--	03	50	50	100	3
3	PC	18CS42	OOP Principles and Practices using C++	CSE	3	0	--	03	50	50	100	3
4	PC	18CS43	Microcontroller and Embedded System	CSE	4	0	--	04	50	50	100	4
5	PC	18CS44	Theoretical Foundation of Computer Science	CSE	4	0	--	04	50	50	100	4
6	PC	18CS45	Computer Organisation and Architecture	CSE	3	0	--	03	50	50	100	3
7	PC	18CSL46	Microcontroller and Embedded System Laboratory	CSE	--	--	2	03	50	50	100	1
8	PC	18CSL47	Object Oriented Programming Laboratory	CSE	--	---	2	03	50	50	100	1
9	PC	18CSL48	Algorithm Design Techniques Laboratory	CSE	--	---	2	03	50	50	100	1
10	HS	18HS41/42	Constitution of India Professional Ethics and Human Rights/ Env. Studies	Hum/Civ	1	--	--	02	50	50	100	1
11	MC	18HS43	Employability skills (MC)	Humanities	04	-	--	03	50	-	50	0
TOTAL					24	02	06	35	450	450	900	24
Course prescribed to lateral entry Diploma holders admitted to III semester of Engineering programs												
	MC	18MAD41	Advance Mathematics - II	Mathematics	02	01	--	03	50		50	0
Note: BC: Science Course, PC: Professional Core. Hu: Humanities, NCMC: Non-Credit Mandatory Course. ENV: Environmental Studies, CIP:Constitution of India Professional Ethics and Human Rights 18CSL48: Student must complete a certification under anyone online course as specified in the scheme												



Third year scheme

V SEMESTER												
Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	HS	18HS51/52	M&E / IPR (title as per BOS decision)	Hu	2	2	--	03	50	50	100	3
2	PC	18CS51	Software Engineering	CSE	3	-	--	03	50	50	100	3
3	PC	18CS52	Core Java	CSE	4	-	--	04	50	50	100	4
4	PC	18CS53	Database Management System	CSE	3	--	--	03	50	50	100	3
5	PC	18CS54	Computer Networks & Internet Protocols	CSE	4	--	--	04	50	50	100	4
6	PE	18CS55X	Elective -1 (PENDING)	CSE	3	--	--	03	50	50	100	3
7	OE	18XXE01	Open Elective -A	CSE	3	--	--	03	50	50	100	3
8	PC	18CSL56	Database Application Laboratory	CSE	--	--	2	02	50	50	100	1
9	PC	18CSL57	Network Programming lab using java & NS	CSE	--	--	2	02	50	50	100	1
TOTAL					22	2	4	27	450	450	900	25
Note: PC: Professional core, PE: Professional Elective, OE: Open Elective, MP: Mini-Project, INT: Internship.												
Electives												
Course code		Professional Electives -2		Open Elective -A								
18CS551		Web Technologies		Students can select any one of the open electives (Please refer to consolidated list of Dr AIT for open electives) offered by any Department. Selection of an open elective is not allowed provided, <ul style="list-style-type: none"> • The candidate has studied the same course during the previous semesters of the programme. • The syllabus content of open elective is similar to that of Departmental core courses or professional electives. • A similar course, under any category, is prescribed in the higher semesters of the programme. Registration to electives shall be documented under the guidance of Programme Coordinator/ Mentor.								
18CS552		Advanced Algorithms										
18CS553		Artificial Intelligence										
18CS554		TCS-Elective										
Open Elective -A INTER-DEPARTMENTAL ELECTIVE OFFERED BY CSE												
Subject Title		Sub Code	No. of Credits									
OOPS with C++		18CSE011	3									
Python programming		18CS E012	3									
Unix Shell Programming		18CS E013	3									

Third year scheme

VI SEMESTER												
Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	HS	18HS61/62	M&E/IPR	Hu	3	2	--	03	50	50	100	3
2	PC	18CS61	Internet of Things	CSE	4	--	--	04	50	50	100	4
3	PC	18CS62	Machine Learning	CSE	4	--	--	04	50	50	100	4
	PC	18CS63	Unix Programming	CSE	3	--	--	03	50	50	100	3
4	PE	18CS64X	Professional Elective -2	CSE	3	--	--	03	50	50	100	3
5	OE	18XXE02	Open Elective -B	CSE	3	--	--	03	50	50	100	3
6	PC	18CSL65	Internet of Things Lab	CSE	--	--	2	02	50	50	100	1
7	PC	18CSL66	Machine Learning Lab	CSE	--	--	2	02	50	50	100	1
8	MP	18CSP67	Mini-project	CSE				03	50	50	100	2
9	INT	18CSI68	Industry Internship	(To be carried out during the intervening vacations of VI and VII semesters)				--	--	--	--	--
TOTAL					20	2	4	24	400	400	800	24
Note: PC: Professional core, PE: Professional Elective, OE: Open Elective, MP: Mini-Project, INT: Internship.												
Electives												
Course code		Professional Electives -2				Open Elective -B						
18CS641		Distributed Operating System				Students can select any one of the open electives (Please refer to consolidated list of Dr AIT for open electives) offered by any Department. Selection of an open elective is not allowed provided, <ul style="list-style-type: none"> The candidate has studied the same course during the previous semesters of the programme. The syllabus content of open elective is similar to that of Departmental core courses or professional electives. A similar course, under any category, is prescribed in the higher semesters of the programme. Registration to electives shall be documented under the guidance of Programme Coordinator/ Mentor.						
18CS642		Digital Image Processing										
18CS643		Compiler Design										
18CS644		Principles of Economics										
Open Elective -B INTER-DEPARTMENTAL ELECTIVE OFFERED BY CSE												
Subject Title		Sub Code		No. of Credits								
Wireless Sensor Networks		18CSE021		3								
Storage Area Network		18CS E022		3								
Adhoc Wireless Networks		18CS E023		3								

Fourth year scheme

VII SEMESTER															
Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits			
					Theory Lecture	Tutoria	Practic al/ Drawi ng	Duration in hours	CIE Marks	SEE Marks	Total Marks				
					L	T	P								
1	MC	18HS71/72	CMEP / OSHA	IM/CV	2	--	--	03	50	50	100	2			
2	PC	18CS71	Android Programming	CSE	3	--	--	03	50	50	100	3			
3	PC	18CS72	Cloud Computing	CSE	4	--	--	04	50	50	100	4			
4	PC	18CS73	Introduction to Big Data Analytics	CSE	3	--	--	03	50	50	100	3			
5	PE	18XX74X	Professional Elective -3	CSE	3	--	--	03	50	50	100	3			
6	PE	18XX75X	Professional Elective -4	CSE	3	--	--	03	50	50	100	3			
7	OE	18XXE03	Open Elective - C	CSE	3	--	--	03	50	50	100	3			
8	PC	18CSL77	Android Programming Laboratory	CSE	--	--	2	02	50	50	100	1			
9	PC	18CSL78	Cloud Computing Laboratory	CSE	--	--	2	02	50	50	100	1			
10	Project	18CSP79	Project Work Phase - 1	CSE	--	--	-	-	-	-	-	-			
11	INT	18CSI80	Internship	(If not completed after VI semester examinations, it has to be carried out during the intervening vacations of VII and VIII semesters)				--	--	--	--	--			
TOTAL					21	--	4	26	350	350	900	23			
Note: PC: Professional Core, PE: Professional Elective, OE: Open Elective, INT: Internship, MC: Mandatory Course															
Internship: All the students admitted to III year of BE have to undergo mandatory internship of 4 weeks during the vacations of VI and VII semesters and /or VII and VIII semesters. A SEE examination will be conducted during VIII semester and prescribed credits shall be added to VIII semester. Internship is considered as a head of passing and is considered for the award of degree. Those, who do not take-up/complete the internship will be declared as failed and have to complete during subsequent SEE examination after satisfy the internship requirements.															
Electives															
Course code	Professional Electives - 3		Course code	Professional Electives - 4		Open Elective -C INTER-DEPARTMENTAL ELECTIVE OFFERED BY CSE									
18CS741	Block Chain Technologies		18CS751	Computer Vision		Subject Title	Sub Code	No. of Credits							
18CS742	Cyber Forensics		18CS752	Introduction to Robotics		Artificial Intelligence with Prolog programming	18CSE031	3							
18CS743	Software Project Management		18CS753	Soft Computing											
										Machine Learning	18CS E032	3			
										Internet of Things	18CS E033	3			
CMEP: Cost Management of Engg Projects, OSHA: Occupational Safety and Health Administration															

VIII SEMESTER												
Sl. No	Course and Course code		Course Title	Teaching Department	Teaching Hours /Week			Examination				Credits
					Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	
					L	T	P					
1	MC	18XX81	CMEP / OSHA	IM /CV	4	--	--	04	50	50	100	2
2	Project	18CSP84	Project Work Phase - 2	CSE	--	--	3	03	50	50	100	10
3	Seminar	18CSS85	Technical Seminar	CSE	--	--	3	03	50	50	100	1
4	INT	18CSI86	Internship	(Completed during the intervening vacations of VI and VII semesters and /or VII and VIII semesters.)				03	50	50	100	2
TOTAL					4	--	6	13	200	200	400	15
<p>Note: PC: Professional Core, PE: Professional Elective, OE: Open Elective, INT: Internship, MC: Mandatory Course</p> <p>Internship: Those, who have not pursued /completed the internship will be declared as failed and have to complete during subsequent SEE examination after they satisfy the internship requirements.</p> <p>CMEP: Cost Management of Engg. Projects, OSHA: Occupational Safety and Health Administration</p>												


 Professor & Head
 Department of Computer Science & IT
 Dr. Ambedkar Institute of Technology
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