

**Dr. Ambedkar Institute of Technology**  
**Department of Mechanical Engineering**

The documents enclosed are verified and approved.



HOD

Dept. of Mechanical Engineering

Department of Mechanical Engineering  
Dr. Ambedkar Institute of Technology  
Bengaluru - 560 056.

**Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY**  
BANGALORE - 56

Date: 23.08.2010

Minutes of the 1<sup>st</sup> Academic Council meeting held on 21<sup>st</sup> 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 Mjeenakshi 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. <del>Leena</del> <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**

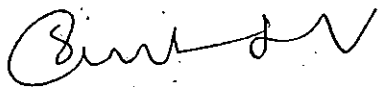
It was proposed to have a common Board of Examiners for I year.

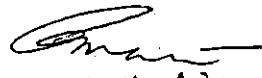
**Agenda 4 : Recommendations for all rules and regulations pertaining to Examination**

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
<b>Total</b>						<b>15</b>	<b>10</b>	<b>06</b>	<b>25</b>	<b>450</b>	<b>400</b>	<b>850</b>	<b>20</b>

**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
<b>Total</b>						<b>15</b>	<b>08</b>	<b>08</b>	<b>25</b>	<b>450</b>	<b>400</b>	<b>850</b>	<b>20</b>

**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, Bengaluru-560 056**  
**SCHEME OF TEACHING AND EXAMINATION from Academic Year 2020-21**  
**B.E Name of the programme**  
**Outcome Based Education (OBE) and Choice Based Credit System (CBCS)**

**III 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					
01	BC	18MA31	Transforms & Boundary Value Problems	Mathematics	2	2	--	03	50	50	100	3
02	PC	18ME31	Material Science	Mechanical	3	0	--	03	50	50	100	3
03	PC	18ME32	Mechanics of Materials	Mechanical	3	2	--	03	50	50	100	4
04	PC	18ME33	Manufacturing Processes - I	Mechanical	3	0	--	03	50	50	100	3
05	PC	18ME34	Basic Thermodynamics	Mechanical	3	2	--	03	50	50	100	4
06	PC	18MEL35	Computer Aided Machine Drawing	Mechanical	2	0	2	03	50	50	100	3
07	PC	18MEL36	Manufacturing Processes Laboratory - I	Mechanical	--		2	03	50	50	100	1
08	PC	18MEL37	Material Testing Laboratory	Mechanical	--		2	03	50	50	100	1
09	PC	18MEL38	Fitting and Forging Workshop	Mechanical	--	--	2	03	50	50	100	1
10	HS	18HS31/32	Constitution of India Professional Ethics and Human Rights / Environmental Studies	Humanities	1	--	0	02	50	50	100	1
11	NC MC	18HS33	Soft Skills (MC)	Humanities	2	--	--	03	50	-	50	PP/ NP
<b>TOTAL</b>					<b>19</b>	<b>06</b>	<b>08</b>	<b>32</b>	<b>550</b>	<b>500</b>	<b>1050</b>	<b>24</b>

**Course prescribed to lateral entry Diploma holders admitted to III semester of Engineering programs**

12	HS	18HS34	Placement Training	Humanities	02	--	--	03	50	-	50	PP/NP
13	MC	18MAD31	Advance Mathematics-I	Mathematics	02	01	--	03	50		50	PP/NP

**Note:** HODs are informed to accommodate one more laboratory in addition to the above courses if needed, without altering the total number of credits (TOTAL: 24).

(a) **The mandatory non – credit courses** Advance Mathematics I and II prescribed at III and IV semesters respectively, to lateral entry Diploma holders admitted to III semester of BE programs shall compulsorily be registered during respective semesters to complete all the formalities of the course and appear for SEE examination.

(b) **The mandatory non – credit courses** Advance Mathematics I and II, prescribed to lateral entrant Diploma holders admitted to III semester of BE programs, are to be completed to secure eligibility to VII semester. However, they are not considered for vertical progression from II year to III year of the programme but considered as head of passing along with credit courses of the programme to eligibility to VII semester.

**Note: BC: Science Course, PC: Professional Core. Hu: Humanities, NCMC: Non-Credit Mandatory Course.**

**Dr. Ambedkar Institute of Technology, Bengaluru-560 056**  
**SCHEME OF TEACHING AND EXAMINATION from Academic Year 2020-21**  
**B.E Name of the programme**  
**Outcome Based Education (OBE) and Choice Based Credit System (CBCS)**

**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					
01	BC	18MA41	Numerical Methods & Applied Statistics	Mathematics	2	2		03	50	50	100	3
02	PC	18ME41	Mechanical Measurements	Mechanical	3	0	--	03	50	50	100	3
03	PC	18ME42	Fluid Mechanics	Mechanical	3	2	--	03	50	50	100	4
04	PC	18ME43	Manufacturing Processes - II	Mechanical	3	0	--	03	50	50	100	3
05	PC	18ME44	Applied Thermodynamics	Mechanical	3	2	--	03	50	50	100	4
06	PC	18ME45	Kinematics of Machines	Mechanical	3	2	--	03	50	50	100	4
07	PC	18MEL46	Manufacturing Processes Laboratory - II	Mechanical	--	--	2	03	50	50	100	1
08	PC	18MEL47	Mechanical Measurements Laboratory	Mechanical	--	--	2	03	50	50	100	1
09	HS	18HS41/42	Constitution of India Professional Ethics and Human Rights / Environmental Studies	Hum/Civil	1	--	--	02	50	50	100	1
10	NC MC	18HS43	Employability Skills (MC)	Humanities	2	--	--	03	50	-	50	PP/ NP
<b>TOTAL</b>					<b>20</b>	<b>08</b>	<b>04</b>	<b>29</b>	<b>500</b>	<b>450</b>	<b>950</b>	<b>24</b>
<b>Course prescribed to lateral entry Diploma holders admitted to III semester of Engineering programs</b>												

11	HS	18HS44	Placement Training	Humanities	02	--	--	03	50	-	50	PP/ NP
12	MC	18MAD41	Advance Mathematics-II	Mathematics	02	01	--	03	50		50	PP/ NP

**Note:** HODs are informed to accommodate one more laboratory in addition to the above courses if needed, without altering the total number of credits (TOTAL: 24).

(a) The mandatory non – credit courses Advance Mathematics I and II prescribed at III and IV semesters respectively, to lateral entry Diploma holders admitted to III semester of BE programs shall compulsorily be registered during respective semesters to complete all the formalities of the course and appear for SEE examination.

(b) **The mandatory non – credit courses** Advance Mathematics I and II, prescribed to lateral entrant Diploma holders admitted to III semester of BE programs, are to be completed to secure eligibility to VII semester. However, they are not considered for vertical progression from II year to III year of the programme but considered as head of passing along with credit courses of the programme to eligibility to VII semester.

**Note:** BC: Science Course, PC: Professional Core. Hu: Humanities, MC: Mandatory Course.

ENV: Environmental Studies, CIP: Constitution of India Professional Ethics and Human Rights

**Dr. Ambedkar Institute of Technology, Bengaluru-560 056**  
**SCHEME OF TEACHING AND EXAMINATION from Academic Year 2020-21**  
**B.E Name of the programme**  
**Outcome Based Education (OBE) and Choice Based Credit System (CBCS)**

**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	Management & Entrepreneurship / Intellectual Property Rights	Hu	3	-	--	03	50	50	100	3
2	PC	18ME51	Design of Machine Elements - I	ME	4	0	--	03	50	50	100	4
3	PC	18ME52	Dynamics of Machines	ME	3	0	--	03	50	50	100	3
4	PC	18ME53	Turbomachines	ME	2	2	--	03	50	50	100	3
5	PC	18ME54	Computer Aided Design and Manufacturing	ME	4	0	--	03	50	50	100	4
6	PE	18ME55X	Professional Elective -1	ME	3	0	--	03	50	50	100	3
7	PE	18XXE01	Open Elective -A		3	--	--	03	50	50	100	3
8	PC	18MEL56	Computer Aided Manufacturing Laboratory	ME	--	--	2	03	50	50	100	1
9	PC	18MEL57	Fuel Testing and Internal Combustion Engines Laboratory	ME	--	0	2	03	50	50	100	1
<b>TOTAL</b>					<b>22</b>	<b>2</b>	<b>4</b>	<b>27</b>	<b>450</b>	<b>450</b>	<b>900</b>	<b>25</b>

10	HS	18HS55	Placement Training	Hu	02	--	--	03	50	-	50	PP/ NP
<b>Note: Hu: Humanities, PC: Professional Core, MC: Mandatory Course</b>												

Course code	Professional Electives - 1	OPEN ELECTIVE –A
18ME551	Engineering Economics	<p>Students can select any one of the open electives (Please refer to consolidated list of Dr AIT for open electives) offered by any Department.</p> <p>Selection of an open elective is not allowed provided,</p> <ul style="list-style-type: none"> <li>• The candidate has studied the same course during the previous semesters of the programme.</li> <li>• The syllabus content of open elective is similar to that of Departmental core courses or professional electives.</li> <li>• A similar course, under any category, is prescribed in the higher semesters of the programme.</li> </ul> <p>Registration to electives shall be documented under the guidance of Programme Coordinator / Mentor.</p>
18ME552	Composite Materials and Manufacturing	
18ME553	Automobile Engineering	
18ME554	Mechatronics and Microprocessor	
18ME555	Principles of Metal Forming	
18ME556	Experimental Stress Analysis	
	<b>OPEN ELECTIVE – A</b>	
18XXE01		

**Dr. Ambedkar Institute of Technology, Bengaluru-560 056**  
**SCHEME OF TEACHING AND EXAMINATION from Academic Year 2020-21**  
**B.E Name of the programme**  
**Outcome Based Education (OBE) and Choice Based Credit System (CBCS)**

**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	Management & Entrepreneurship / Intellectual Property Rights	Hu	3	--	--	03	50	50	100	3	
2	PC	18ME61	Design of Machine Elements - II	ME	3	2	--	03	50	50	100	4	
3	PC	18ME62	Heat Transfer	ME	3	2	--	03	50	50	100	4	
4	PC	18ME63	Mechanical Vibrations	ME	2	2	--	03	50	50	100	3	
5	PE	18ME64X	Professional Elective -2	ME	3	0	--	03	50	50	100	3	
6	OE	18XXE02	Open Elective -B		3	--	--	03	50	50	100	3	
7	PC	18MEL65	Fluid Mechanics and Machines Laboratory	ME	--	--	2	03	50	50	100	1	
8	PC	18MEL66	Heat Transfer Laboratory	ME	--	0	2	03	50	50	100	1	
9	MP	18MEP67	Mini-project	ME				03	50	50	100	2	
10	INT	18XXI69	Industry Internship	(To be carried out during the intervening vacations of VI / VII semesters)				--					
<b>TOTAL</b>					<b>17</b>	<b>6</b>	<b>4</b>	<b>27</b>	<b>450</b>	<b>450</b>	<b>900</b>	<b>24</b>	



10	HS	18HS66	Placement Training	Hu	02	--	--	03	50	-	50	PP/NP
<b>Note: PC: Professional core, PE: Professional Elective, OE: Open Elective, MP: Mini-project, INT: Internship.</b>												
<b>Internship:</b> All the students admitted to III year of BE/B. Tech have to undergo mandatory internship of 4 weeks during the vacations of VI and VII semesters and /or VII and VIII semesters. A University examination will be conducted during VIII semester and prescribed credit are 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 University examination after satisfy the internship requirements.												

Course code	Professional Electives - 2	OPEN ELECTIVE –B
18ME641	Inspection And Quality Control	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"> <li>• The candidate has studied the same course during the previous semesters of the programme.</li> <li>• The syllabus content of open elective is similar to that of Departmental core courses or professional electives.</li> <li>• A similar course, under any category, is prescribed in the higher semesters of the programme.</li> </ul> Registration to electives shall be documented under the guidance of Programme Coordinator / Mentor.
18ME642	Advanced Welding Processes	
18ME643	Internal Combustion Engines	
18ME644	Production And Operations Management	
18ME645	Finite Element Methods	
18ME646	Fluid Power Control Systems	
	<b>OPEN ELECTIVE – B</b>	
18XXE02		

**Dr. Ambedkar Institute of Technology, Bengaluru-560 056**  
**SCHEME OF TEACHING AND EXAMINATION from Academic Year 2021-22**  
**B.E MECHANICAL ENGINEERING**  
**Outcome Based Education (OBE) and Choice Based Credit System (CBCS)**

**VII 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	18HS71	CMEP/OSHA	IM/CV	2	--	--	03	50	50	100	2
2	PC	18ME71	Control Engineering	ME	4	--	--	03	50	50	100	4
3	PC	18ME72	Operations Research	ME	4	--	--	03	50	50	100	4
4	PE	18ME73X	Professional Elective -3	ME	3	--	--	03	50	50	100	3
5	PE	18ME74X	Professional Elective -4	ME	3	--	--	03	50	50	100	3
6	OE	18XX75X	Open Elective - C		3	--	--	03	50	50	100	3
7	PC	18MEL76	Design Laboratory	ME	--	--	2	03	50	50	100	1
8	PC	18MEL77	Computer Aided Modelling and Analysis Laboratory	ME	--	--	2	03	50	50	100	1
9	Project	18MEP78	Project Work Phase - 1	ME	--	--	2	03	50	50	100	2

10	INT	18MEI79	Internship	(If not completed after VI semester examinations, it has to be carried out during the intervening vacations of VII and VIII semesters )	--	--	--	--	--		
<b>TOTAL</b>				<b>19</b>	<b>--</b>	<b>6</b>	<b>27</b>	<b>450</b>	<b>450</b>	<b>900</b>	<b>23</b>
<b>Note: PC: Professional core, PE: Professional Elective, OE: Open Elective, INT: Internship, MC: Mandatory Course</b>											
<p><b>Internship:</b> All the students admitted to III year of BE/B.Tech have to undergo mandatory internship of 4 weeks during the vacations of VI and VII semesters and /or VII and VIII semesters. A University examination will be conducted during VIII semester and prescribed credit are 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 University examination after satisfy the internship requirements.</p>											

Course code	Professional Electives - 3	Open Elective - C
18ME731	Computer Integrated Manufacturing	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"> <li>The candidate has studied the same course during the previous semesters of the programme.</li> <li>The syllabus content of open elective is similar to that of Departmental core courses or professional electives.</li> <li>A similar course, under any category, is prescribed in the higher semesters of the programme.</li> </ul> Registration to electives shall be documented under the guidance of Programme Coordinator / Mentor.
18ME732	Rapid Prototyping	
18ME733	Project Management	
18ME734	Solar Thermal Engineering	
18ME735	Mechanics Of Viscoelastic Materials	
Course code	Professional Electives - 4	
18ME741	Smart Materials	
18ME742	High Entropy Materials	
18ME743	Tribology and Bearing Design	
18ME744	Power Plant Engineering	
18ME745	Computational Fluid Dynamics	
	<b>OPEN ELECTIVE – B</b>	
18XX75X		

**Dr. Ambedkar Institute of Technology, Bengaluru-560 056**  
**SCHEME OF TEACHING AND EXAMINATION from Academic Year 2021-22**  
**B.E MECHANICAL ENGINEERING**  
**Outcome Based Education (OBE) and Choice Based Credit System (CBCS)**

**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	18HS81	CMEP/OSHA	IM/CV	4	--	--	03	50	50	100	2
2	Project	18MEP81	Project Work Phase - 2	ME	--	--	2	03	50	50	100	10
3	Seminar	18MES82	Technical Seminar		--	--	2	03	50	50	100	1
4	INT	18MEI83	Internship	(Completed during the intervening vacations of VI and VII semesters and /or VII and VIII semesters.)				03	50	50	100	2
<b>TOTAL</b>					<b>04</b>	<b>--</b>	<b>04</b>	<b>12</b>	<b>200</b>	<b>200</b>	<b>400</b>	<b>15</b>

**Note: PC: Professional Core, PE: Professional Elective, OE: Open Elective, INT: Internship, MC: Mandatory Course**

**Electives**

**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.

**CMEP: Cost Management of Engineering Projects, OSHA: Occupational Safety and Health Administration**