

INDEX

Sr.No	Description	Page Number
1	B Tech Mechanical engineering Basic Human Right subject in syllabus structure.	1
2	B Tech Computer engineering Basic Human Right subject in syllabus structure.	2
3	B Tech Automobile engineering Basic Human Right subject in syllabus structure.	3
4	B Tech E&Tc engineering Basic Human Right subject in syllabus structure.	4
5	B Tech Electrical engineering Basic Human Right subject in syllabus structure.	5
6	B Tech Civil engineering Basic Human Right subject in syllabus structure.	6
7	Basic Human Right syllabus for all branches (Mechanical,Computer,Automobile,E&Tc,Electrical and Civil)	7-8
8	B Tech Mechanical engineering Interpersonal Communication skill and self development structure and syllabus.	9-10
9	Shivaji University Third year Automobile engineering Professional skill development – II subject in structure and syllabus	11-12
10	Shivaji University Second year Automobile engineering Professional skill development – I subject in structure and syllabus	13-15

B. Tech. Mechanical Engineering
Course Structure for Semester III [Second Year] w.e.f. 2018-2019

Course Code	Type of Course	Course Title	Weekly Teaching Scheme			Evaluation Scheme				Credits
			L	T	P	CA	MSE	ESE	Total	
BTBSC301	BSC 7	Engineering Mathematics-III	3	1	--	20	20	60	100	4
BTMEC302	ESC 11	Materials Science and Metallurgy	3	1	--	20	20	60	100	4
BTMEC303	PCC 1	Fluid Mechanics	3	1	--	20	20	60	100	4
BTMEC304	PCC 2	Machine Drawing and CAD	2	--	--	20	20	60	100	2
BTMEC305	ESC 12	Thermodynamics	3	1	--	20	20	60	100	4
BTHM3401	HSMC 3	Basic Human Rights	2	--	--	50	--	--	50	Audit (AU/ NP)
BTMEL307	ESC 13	Materials Science and Metallurgy Lab	--	--	2	60	--	40	100	1
BTMEL308	PCC 3	Fluid Mechanics Lab	--	--	2	60	--	40	100	1
BTMEL309	PCC 4	Machine Drawing and CAD Lab	--	--	4	60	--	40	100	2
BTMEF310	Project 1	Field Training /Internship/Industrial Training I	--	--	--	--	--	50	50	1
Total			16	4	8	330	100	470	900	23

Teaching and Evaluation Scheme Second Year B. Tech. (Computer Engineering)

Sr. No.	Code	Course title	Weekly Teaching hours			Evaluation Scheme			Credit
			L	T	P	MSE	CA	ESE	
Semester III									
1	BTBSC301	Engineering Mathematics -III	3	1	-	20	20	60	4
2	BTCOC302	Discrete Mathematics	2	1	-	20	20	60	3
3	BTCOC303	Data Structures	2	1	-	20	20	60	3
4	BTCOC304	Computer Architecture & Organization	2	1	-	20	20	60	3
5	BTCOC305	Digital Electronics & Microprocessors	2	1	-	20	20	60	3
6	BTHMC306	Basic Human Rights	2	-	-	-	50	-	Audit
7	BTCOL307	Python Programming	1	-	2	-	60	40	2
8	BTCOL308	HTML and Javascript	1	-	2	-	60	40	2
8	BTCOL309	Data Structures Lab	-	-	2	-	60	40	1
9	BTCOL310	Digital Electronics & Microprocessor Lab	-	-	2	-	60	40	1
10	BTCOF311	Field Training / Internship/Industrial Training Evaluations	-	-	-	-	-	100	1
Total			15	5	8	100	390	560	23
Semester IV									
1	BTCOC401	Design & Analysis of Algorithms	2	1	-	20	20	60	3
2	BTCOC402	Probability & Statistics	2	1	-	20	20	60	3
3	BTCOC403	Operating System	2	1	-	20	20	60	3
4	BTCOE404	Elective-I A) Object Oriented Programming in C++ B) Object Oriented Programming in Java	2	1	-	20	20	60	3
5	BTCOE405	Elective-II A) Numerical Methods B) Physics of Engineering Materials C) Soft Skills and Personality Development	2	1	-	20	20	60	3
6	BTXXC406	Product Design Engineering	2	-	-	20	20	60	2
7	BTCOL407	Design & Analysis of Algorithms Lab	-	-	2	-	60	40	1
8	BTCOL408	Introduction to Data Science with R	1	-	2	-	60	40	2
9	BTCOL409	Object Oriented Programming Lab	-	-	2	-	60	40	1
10	BTCOL410	Operating System Lab	-	-	2	-	60	40	1
11	BTCOF411	Field Training / Internship/Industrial Training (minimum 4 weeks which can be completed partially in first semester and second Semester or in at one time.)						100	Credits to be evaluated in V Sem.
Total			13	5	8	120	360	620	22

B. Tech. Automobile Engineering

Course Structure for Semester III [Second Year] w.e.f. 2018-2019

Course Code	Type of Course	Course Title	Weekly Teaching Scheme			Evaluation Scheme				Credits
			L	T	P	CA	MSE	ESE	Total	
BTBSC301	BSC 7	Engineering Mathematics-III	3	1	--	20	20	60	100	4
BTMEC302	ESC 11	Material Science and Metallurgy	3	1	--	20	20	60	100	4
BTAMC303	PCC 1	Fluid Mechanics and Machines	3	1	--	20	20	60	100	4
BTAMC304	PCC 2	Automotive Component Drawing and Computer Aided Drafting	2	--	--	20	20	60	100	2
BTPRC305	PCC 3	Theory of Machine	2	1	--	20	20	60	100	3
BTHM3401	HSMC 3	Basic Human Rights	2	--	--	50	--	--	50	Audit (AU/ NP)
BTAML307	ESC 12	Material Science and Metallurgy Lab	--	--	2	60	--	40	100	1
BTAML308	PCC 4	Fluid Mechanics and Machines Lab	--	--	2	60	--	40	100	1
BTAML309	PCC5	Automotive Component Drawing and Computer Aided Drafting Lab	--	--	4	60	--	40	100	2
BTAML310	PCC 6	Theory of Machine Lab	--	--	2	60	--	40	100	1
BTAMF311	Project 1	Field Training /Internship/Industrial Training I	--	--	--	--	--	50	50	1
Total			15	4	10	380	100	420	900	23

Dr. Babasaheb Ambedkar Technological University

B. Tech (Electronics & Telecommunication Engineering) / B. Tech (Electronics Engineering)

Curriculum for Semester III [Second Year]

Sr. No.	Course Code	Type of Course	Course Title	Hours Per Week			Credits
				Lecture	Tutorial	Practical	
1	BTBS301	Basic Science Course	Engineering Mathematics-III	3	1	0	4
2	BTEXC302	Professional Core Course 1	Analog Circuits	2	1	0	3
3	BTEXC303	Professional Core Course 2	Electronic Devices & Circuits	2	1	0	3
4	BTEXC304	Professional Core Course 3	Network Analysis	2	1	0	3
5	BTEXC305	Professional Core Course 4	Digital Logic Design	2	1	0	3
6	BTHM3401	Humanities & Social Science including Management Courses	Basic Human Rights	2	0	0	(Audit)
7	BTEXL307	Professional Core Course 1 Lab	Analog Circuits Lab	0	0	2	1
8	BTEXL308	Professional Core Course 2 Lab	Electronic Devices & Circuits Lab	0	0	2	1
9	BTEXL309	Professional Core Course 3 Lab	Network Analysis Lab	0	0	2	1
10	BTEXL310	Professional Core Course 4 Lab	Digital Logic Design Lab	0	0	2	1
11	BTEXW311	Professional Core Course 5 Lab	Electronics Workshop	0	0	2	1
Total Credits							21

TEACHING AND EVALUATION SCHEME OF SECOND YEAR B.TECH ELECTRICAL ENGINEERING

III SEMESTER.									
S. No	Course Code	Course Title	Teaching Scheme			Evaluation Scheme			Credits
			L	T	P	MSE	CA	ESE	
1	BTBS301	Engineering Mathematics-III	3	1	0	20	20	60	4
2	BTEEC302	Network Analysis and Synthesis	2	1	0	20	20	60	3
3	BTEEC303	Fluid Mechanics and Thermal Engineering	2	1	0	20	20	60	3
4	BTEEC304	Measurement and Instrumentation	2	1	0	20	20	60	3
5	BTEEOEL 305	Elective -I (A) Electrical Engineering Materials (B) Applied Physics (C) Signals and Systems	3	0	0	20	20	60	3
6	BTHM306	Basic Human Rights	2	0	0	-	20	-	Audit
7	BTHS 307	Engineering Economics	2	0	0	20	20	60	2
8	BTEEL308	Network Analysis and Synthesis Lab	0	0	2	-	60	40	1
9	BTEEL309	Measurement and Instrumentation Lab	-	0	4	-	60	40	2
10	BTEEL310	Electrical workshop/ Mini project	-	-	2	-	60	40	1
11	BTEEP311	Field Training/ Internship/ Industrial Training Evaluation						100	1
		TOTAL	16	04	08	120	320	580	23
IV SEMESTER.									
1	BTEEC401	Electrical Machine-I	3	1	0	20	20	60	4
2	BTEEC402	Power System-I	2	1	0	20	20	60	3
3	BTEEC403	Electrical Installation and Estimation	2	1	0	20	20	60	3
4	BTEEC404	Numerical Methods and Programming	2	1	0	20	20	60	3
5	BTEEDEL 405	Elective -II (A) Solid State Devices (B) Analog and Digital electronics (C) Electromagnetic Theory	2	0	0	20	20	60	2
6	BTXX406	Product Design [Online course]	2	0	0	20	20	60	2
7	BTEEOEL 407	Elective -III (A) Industrial safety (B) Introduction to Non-Conventional energy sources (C) Software Techniques.	2	0	0	20	20	60	2
8	BTEEL408	Electrical Machine-I Lab	0	0	2	-	60	40	1
9	BTEEL409	Power System lab-I	0	0	2	-	60	40	1
10	BTEEL410	Numerical Methods and Programming Lab	-	0	2	-	60	40	1
11	BTEEL411	Elective-II Lab	0	0	2	-	60	40	1
12		Field Training / Internship/Industrial Training (minimum 4 weeks which can be completed partially in Third semester and Fourth Semester or in at one time.)							Credits to be evaluated at in V Sem
		TOTAL	15	04	08	140	380	580	23

Civil Engineering :-

04	CV 404	Product Design Engineering	2	-	-	2
05	CVE1	Elective I	3	-	-	3
06	CVA 402	Engineering Management	1	-	-	AU
07	CVA 403	Basic Human Rights	2	-	-	AU
Practical / Drawing and/or Design						
08	CVL 401	Hydraulics Laboratory II	-	-	2	1
09	CVL 402	Surveying Laboratory II	-	-	4	2
10	CVL 403	Mechanics of Solids Laboratory	-	-	2	1
11	CVP 401	Mini Project	-	-	2	1
12	CVF 402	Seminar on Topic of Field Visit to works involving Superstructure Construction	-	-	1	1
			Sub Total	16	3	11
			Total	30		22
Elective I						
	CVE1 401	Numerical Methods in Engineering				
	CVE1 402 OS	Planning for Sustainable Development				
	CVE1 403 OS	Instrumentation & Sensor Technologies for Civil Engineering Applications	3	-	-	3

Semester- V

Sr. No	Subject Code	Subject	Contact Hours			Credit
			L	T	P	
Theory						
01	CV 501	Design of Steel Structures	2	2	-	4
02	CV 502	Structural Mechanics-II	2	1	-	3
03	CV 503	Soil Mechanics	3	1	-	4
04	CV 504	Environmental Engineering	2	-	-	2
05	CV 505	Transportation Engineering	2	-	-	2
06	CV E2	Elective II	3	-	-	3
07	CVA 504	Essence of Indian Traditional Knowledge	1	-	-	AU
Practical / Drawing and/or Design						
08	CVL 501	Soil Mechanics Laboratory	-	-	2	1
09	CVL 502	Environmental Engineering Laboratory	-	-	2	1
10	CVL 503	Transportation Engineering Laboratory	-	-	2	1
11	CVF 503	Seminar on Topic of Field Visit to works related to Building Services	-	-	1	AU
			Sub-Total	15	4	7
			Total	26		21
Elective II						
	CVE2-501	Materials, Testing & Evaluation				
	CVE2-502 OS	Computer Aided Drawing				
	CVE2-503	Development Engineering				
	CVE3-504 OS	Business Communication & Presentation Skills	3	-	-	3

Semester- VI

§: Students should register for the CVF 705 in Semester VI to undergo training during vacation after semester VI and appear at examination in Semester VII. Result shall appear in Grade-sheet of Semester VII

Subject	Subject Title	Contact hours	Cr
---------	---------------	---------------	----

Syllabus is common for all the courses -
 Mechanical, E&TC, Computer, Automobile, Electrical
 & Civil.

Basic Human Rights

BTHM3401	Basic Human Rights	HSMC 3	2L-0T-0P	Audit
----------	--------------------	--------	----------	-------

Teaching Scheme: Lecture: 2 hrs/week	Examination Scheme: Audit Course
--	--

Pre-Requisites: None

Course Outcomes: At the end of the course, students will be able to

CO1	Understand the history of human rights.
CO2	Learn to respect others caste, religion, region and culture.
CO3	Be aware of their rights as Indian citizen.
CO4	Understand the importance of groups and communities in the society.
CO5	Realize the philosophical and cultural basis and historical perspectives of human rights.
CO6	Make them aware of their responsibilities towards the nation.

Mapping of course outcomes with program outcomes

Course Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1								2	1	1		
CO2								2	1	2		
CO3								2	1	1		
CO4								2	3	3	2	1
CO5								2			1	
CO6								2	1	2		2

Course Contents:

Unit 1: The Basic Concepts [04 Hours]

Individual, group, civil society, state, equality, justice. Human Values, Human rights and Human Duties: Origin, Contribution of American bill of rights, French revolution. Declaration of independence, Rights of citizen, Rights of working and exploited people

Unit 2: Fundamental rights and economic program [04 Hours]

Society, religion, culture, and their inter-relationship. Impact of social structure on human behavior, Social Structure and Social Problems: Social and communal conflicts and social harmony, rural poverty, unemployment, bonded labour.

Unit 3: Workers and Human Rights [04 Hours]

Migrant workers and human rights violations, human rights of mentally and physically challenged. State, Individual liberty, Freedom and democracy.

Unit 4: NGOs and human rights in India [04 Hours]

Land, Water, Forest issues.

Unit 5: Human rights in Indian constitution and law [04 Hours]

- i) The constitution of India: Preamble
- ii) Fundamental rights.
- iii) Directive principles of state policy.
- iv) Fundamental duties.
- v) Some other provisions.

Unit 6: UDHR and Indian Constitution [04 Hours]

Universal declaration of human rights and provisions of India. Constitution and law. National human rights commission and state human rights commission.

Texts/References:

1. Shastry, T. S. N., "India and Human rights: Reflections", Concept Publishing Company India (P Ltd.), 2005.
2. C.J.Nirmal, "Human Rights in India: Historical, Social and Political Perspectives (Law in India)", Oxford India.

B. Tech. Mechanical Engineering

Course Structure for Semester IV [Second Year] w.e.f. 2018-2019

Course Code	Type of Course	Course Title	Weekly Teaching Scheme			Evaluation Scheme				Credits
			L	T	P	CA	MSE	ESE	Total	
BTMEC401	PCC 5	Manufacturing Processes - I	2	1	--	20	20	60	100	3
BTMEC402	PCC 6	Theory of Machines-I	3	1	--	20	20	60	100	4
BTMEC403	PCC 7	Strength of Materials	3	1	--	20	20	60	100	4
BTMEC404	BSC 8	Numerical Methods in Mechanical Engineering	2	1	--	20	20	60	100	3
BTID405	PCC 8	Product Design Engineering	2	--	--	20	20	60	100	2
BTBSE406A	OEC 1	Physics of Engineering Materials	3	--	--	20	20	60	100	3
BTBSE3405A		Advanced Engineering Chemistry								
BTHM3402		Interpersonal Communication Skill & Self Development								
BTMEL407	PCC 9	Manufacturing Processes Lab - I	--	--	2	60	--	40	100	1
BTMEL408	PCC 10	Theory of Machines Lab- I	--	--	2	60	--	40	100	1
BTMEL409	PCC 11	Strength of Materials Lab	--	--	2	60	--	40	100	1
BTMEL410	BSC 9	Numerical Methods Lab	--	--	2	60	--	40	100	1
Total			15	4	8	360	120	520	1000	23

Minimum 4 weeks training which can be completed partially in third and fourth semester or in at one time.

Interpersonal Communication Skill & Self Development

BTHM3402	OEC 1	Interpersonal Communication Skill & Self Development	3-0-0	3 Credits
-----------------	-------	--	-------	-----------

Teaching Scheme: Lecture: 3 hrs/week	Examination Scheme: Continuous Assessment: 20 Marks Mid Semester Exam: 20 Marks End Semester Exam: 60 Marks (Duration 03 hrs)
--	---

Pre-Requisites: None

Course Outcomes: At the end of the course, students will be able to:

CO1	Acquire interpersonal communication skills
-----	--

CO2	Develop the ability to work independently.
CO3	Develop the qualities like self-discipline, self-criticism and self-management.
CO4	Have the qualities of time management and discipline.
CO5	Present themselves as an inspiration for others
CO6	Develop themselves as good team leaders

Mapping of course outcomes with program outcomes

Course Outcomes	Program Outcomes											
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1								1				
CO2										2		
CO3												2
CO4									1			
CO5										2		
CO6											3	

Course Contents:

Unit 1: Development of Proficiency in English [06 Hours]

Speaking skills, Feedback & questioning technique, Objectivity in argument (Both one on one and in groups). 5 Ws and 1 H and 7 Cs for effective communication. Imbibing etiquettes and manners. Study of different pictorial expressions of non-verbal communication and their analysis

Unit 2: Self-Management [06 Hours]

Self-Management, Self-Evaluation, Self-discipline, Self-criticism; Recognition of one's own limits and deficiencies, dependency, etc.; Self-Awareness, Self-Management, Identifying one's strengths and weaknesses, Planning & Goal setting, Managing self-emotions, ego, pride. Leadership and Team Dynamics

Unit 3: Time Management Techniques [06 Hours]

Practice by game playing and other learning strategies to achieve the set targets Time Management Concept; Attendance, Discipline and Punctuality; Acting in time, Quality /Productive time.

Unit 4: Motivation/Inspiration [06 Hours]

Ability to shape and direct working methods according to self-defined criteria, Ability to think for oneself, Apply oneself to a task independently with self-motivation. **Motivation techniques:** Motivation techniques based on needs and field situations

Unit 5: Interpersonal Skills Development [06 Hours]

Positive Relationship, Positive Attitudes, Empathise: comprehending others' opinions, points of views, and face them with understanding, Mutuality, Trust, Emotional Bonding, Handling Situations (Interview), Importance of interpersonal skills.

Unit 6: Effective Computing Skills [06 Hours]

Designing an effective Presentation; Contents, appearance, themes in a presentation, Tone and Language in a presentation, Role and Importance of different tools for effective presentation.

References:

1. Mitra, Barun, "Personality Development and Soft Skills", Oxford University Press, 2016.
2. Ramesh, Gopalswamy, "The Ace of Soft Skills: Attitude, Communication and Etiquette for Success", Pearson Education, 2013.
3. Stephen R. Covey, "Seven Habits of Highly Effective People: Powerful Lessons in Personal Change", Free Press Publisher, 1989.
4. Rosenberg Marshall B., "Nonviolent Communication: A Language of Life" 3rd edition, Puddle dancer Press, 1st September, 2003.

Structure of Third Year Engineering (Revised)
(To be implemented from Academic year 2015-16)

Automobile Engineering

Scheme of Teaching and Examination
Semester-V

Sr.No.	Subject	Teaching Scheme (Hrs.)				Examination Scheme(Marks)				
		L	T	P	Total	Theory	T/W	OE	POE	Total
01	Dynamics of Machines	3	---	2	5	100	25	---	25	150
02	Hydraulics and Pneumatics	3	---	2	5	100	25	--	---	125
03	Automotive Chassis	3	---	2	5	100	25	---	---	125
04	Metrology and Quality Control	3	---	2	5	100	25		---	125
05	Heat and Mass Transfer	3	---	2	5	100	25	---	25	150
06	Industrial organization and Engineering Economics	3	---	---	3	100	--	---	---	100
07	Professional Skills – II	--	--	2	2	---	25	--	--	25
Total		18	---	12	30	600	150	--	50	800

Semester-VI

Sr.No.	Subject	Teaching Scheme (Hrs.)				Examination Scheme(Marks)				
		L	T	P	Total	Theory	T/W	OE	POE	Total
01	I.C. Engine	3	---	2	5	100	25	25	---	150
02	Vehicle Body Engineering	3	---	2	5	100	25	---	---	150
03	Automotive Transmission	3	---	2	5	100	25	25*	---	125
04	Machine Design	3	---	2	5	100	25	---	---	125
05	Automotive Refrigeration and Air Conditioning	3	---	2	5	100	25	---	---	125
06	CAD/CAM Lab	---	---	2	2	---	50	---	25	50
07	Seminar	---	---	2	2	---	50	--	--	50
Total		15	---	14	29	500	225	50	25	800

*Indicates oral based of Automotive Chassis and Automotive Transmission
Automotive Industrial Training is compulsory and should be completed in vacation after Sem. VI.

Shivaji University, Kolhapur
T.E. (Automobile) Semester V (Revised)
7. PROFESSIONAL SKILLS – II

Teaching Scheme:
Practical: 2 hrs/week

Examination Scheme:
Term Work: 25 marks

COURSE LEARNING OUTCOMES: After completion of the course, the student shall be able to:

1. Possess Good communication skills.
2. Form network between the students and other community
3. Apply Corporate ethics
4. Conduct assembly meeting and documentation

List of Assignments

1. Report Writing (Synopsis or the first draft of the Report)
2. Technical Proposal (Group activity, document of the proposal)
3. Interpersonal Skills (Group activity and Role play)
4. Interpersonal Skills (Documentation in the form of soft copy or hard copy)
5. Meetings and Documentation (Notice, Agenda, Minutes of Mock Meetings)
6. Corporate ethics and etiquettes (Case study, Role play)
7. Cover Letter and Resume
8. Right to information act 2005
9. Apprentice training act 1961
10. Interlinked skills-personal-social-professional

References

1. Fred Luthans, "*Organisational Behavior*", Mc Graw Hill, edition
2. Lesiker and Petit, "*Report Writing for Business*", Mc Graw Hill, edition
3. Huckin and Olsen, "*Technical Writing and Professional Communication*", McGraw Hill
4. Wallace and Masters, "*Personal Development for Life and Work*", Thomson Learning, 12th edition.
5. Heta Murphy, "*Effective Business Communication*", Mc Graw Hill, edition.
6. R.C Sharma and Krishna Mohan, "*Business Correspondence and Report Writing*".
7. B N Ghosh, "*Managing Soft Skills for Personality Development*", Tata McGraw Hill.
- Lehman.
8. Dufrene, Sinha, "*BCOM*", Cengage Learning, 2nd edition
9. Bell Smith, "*Management Communication*" Wiley India Edition, 3rd edition.
10. Dr. K. Alex, "*Soft Skills*", S. Chand and Company.
11. R. Subramaniam, 2013, "*Professional Ethics*" Oxford University Press. =

Structure of Second Year Engineering (Revised)
(To be implemented from Academic year 2014-15)

Automobile Engineering

Scheme of Teaching and Examination
Semester-III

Sr.No.	Subject	Teaching Scheme (Hrs.)				Examination Scheme (Marks)				
		L	T	P	Total	Theory	T/W	OE	POE	Total
01	Engineering Mathematics III	3	1	---	4	100	25	---	---	125
02	Electrical Technology	3	---	2	5	100	25	---	---	125
03	Applied Thermodynamics	3	---	2	5	100	25	---	25	150
04	Automotive Materials and Manufacturing	3	---	2	5	100	25	---	---	125
05	Fluid Mechanics	3	---	2	5	100	25	---	---	125
06	Instrumentation Laboratory	---	---	2	2	---	25	25	---	50
07	Automotive Component Drawing	---	---	2	2	---	50	25	---	75
08	Workshop Practice-III	---	---	2	2	---	25	---	---	25
Total		15	1	14	30	500	225	50	25	800

Semester-IV

Sr.No.	Subject	Teaching Scheme (Hrs.)				Examination Scheme (Marks)				
		L	T	P	Total	Theory	T/W	OE	POE	Total
01	Computational Methods	3	1	---	4	100	25	---	---	125
02	Kinematics of Machines	3	---	2	5	100	25	---	---	125
03	Metallurgy and Metal Treatment	3	---	2	5	100	25	---	---	125
04	Fluid Machinery	3	--	2	5	100	25	---	25 *	150
05	Strength of Materials	3	1	--	4	100	25	---	---	125
06	Computer Programming in C++	---	---	2	2	---	50	---	25	75
07	Workshop Practice-IV	---	---	2	2	---	50	---	---	50
08	Professional Skills - I	---	---	2	2	---	25	---	---	25
Total		15	2	12	29	500	250	--	50	800

* Oral based on Fluid Mechanics and Fluid Machinery

Shivaji University, Kolhapur

S.E. (Automobile) Semester IV (Revised)

8. PROFESSIONAL SKILLS - I

Teaching Scheme:
Practical: 2 hrs/ week

Examination Scheme:
Term Work: 25 marks

Course Objectives

After completing this course, student will be able to,

1. Acquire English as a language for specific purpose.
2. Prepare themselves according to the requirements of professional life.
3. Improve his personality traits.

Prerequisite: Adequate knowledge of English as a language

1. Communicative Concepts: Greeting people; Inviting people; Leave taking; Likes and dislikes; Agreement and disagreement; Expressing – joy, fear, surprise, worry; Opinions, beliefs, disbeliefs; Possibility and ability; Prediction and probability; Permission.

2. Natural English: Begin the conversation. Keep the conversation moving, Ask questions, Receive visitors, asking for information, Making offers, Friendly warnings and instructions, Giving advice and making suggestions.

3. Interpersonal Skills: Self-esteem and strategies for developing self-confidence; SMART goal setting; Dealing with emotions – anger, conflict, depression; Developing assertiveness.

4. Lifelong Learning: Steps in lifelong learning, Tips to achieve effective learning, Challenges in lifelong learning, Misconceptions about lifelong learning.

5. Body Language: Non verbal communication – Eye contact, Facial expressions, Gestures, Posture and body orientation, Proximity, Vocal; Non-verbal behavior interpretation.

6. Acting Ethically: Ethics and self-righteousness, Right and wrong in the workplace, Striving for integrity.

7. Creative and Critical Thinking: Developing your creativity, Factors that block creativity, Creativity in workplace, Importance of critical thinking.

8. Entrepreneurial Skills Development: Entrepreneurial competencies, Entrepreneurship in daily life, Venture project planning.

Details of Practical: Students in group of 5-6 will be engaged in following activities so as to improve english communication and overall personality development.

1. Personality Type Testing (This will be done in introductory session)
2. Goal Setting
3. Interpersonal Skills and Body Language - A Case Study
4. Presentation Skills
5. Teamwork

6. Creative Thinking and Divergent Thinking
7. Debate
8. Problem Solving and Proactive Mindset
9. Decision Making - A Case Study

Recommended Readings:

1. Masters, L. Ann, Personal Development for Life and Work, New Delhi: Cengage Learning, 2012. Print.
2. Gopaldaswamy Ramesh, The ACE of Soft Skills: Attitude, Communication and Etiquette for Success, New Delhi: Pearson Education, 2012. Print.
3. Soft Skills: Module 1 to 5 (Infosys Campus Connect Programme).