



**SYMBIOSIS SKILLS AND PROFESSIONAL  
UNIVERSITY**

**B. Tech. in  
Automobile Engineering**

**Course Structure**

**2020-21**

**Symbiosis Skills and Open University**

**School of Automobile Engineering**

**Program Structure of B. Tech(Automobile Engineering)**

**Semester-I**

Sr No	Course Code	Course Name	Hours						Credits				
			C	CL	T	P	S	H	L	T	P	S	C
1	APSC101	Applied Mathematics I	4	1	1	2	1	5	1	1	1	1	4
2	APSC103	Applied Chemistry	4	2	0	2	1	5	2	0	1	1	4
3	ENGG104	Applied Thermodynamics	4	2	0	2	1	5	2	0	1	1	4
4	ENGG102	Computer Programming	3	1	0	2	1	4	1	0	1	1	3
5	ENGG101	Engineering Drawing	4	0	0	2	3	5	0	0	1	3	4
6	IDCS101	IDSC-I [Life Coping Skills]	3	0	0	0	3	3	0	0	0	3	3
7	IEVS100	Environment studies	3	2	0	0	1	3	2	0	0	1	3
			25	8	1	10	11	30	8	1	5	11	25

**Semester-II**

Sr No	Course Code	Course Name	Hours						Credits				
			C	CL	T	P	S	H	L	T	P	S	C
1	APSC104	Applied Mathematics II	4	1	1	2	1	5	1	1	1	1	4
2	APSC102	Applied Physics	4	2	0	2	1	5	2	0	1	1	4
3	ENGG105	Basic of Electrical and Electronics Engineering	3	1	0	2	1	4	1	0	1	1	3
4	ENGG106	Material Science and Engineering	4	2	0	2	1	5	2	0	1	1	4
5	AUTO101	Automotive Engineering Fundamentals	3	1	0	2	1	4	1	0	1	1	3

6	ENGG108	Workshop Practice (Lab)	3	0	0	2	2	4	0	0	1	2	3
7	IDSC102	IDSC-2 [Life Coping Skills]	3	0	0	0	3	3	0	0	0	3	3
		INTERNSHIP-I	8										8
			32	7	1	12	10	30	7	1	6	10	32

**Symbiosis Skills and Open University**

**School of Automobile Engineering**

**Program Structure of B. Tech(Automobile Engineering)**

**Semester-III**

Sr No	Course Code	Course Name	Hours							Credits				
			C	CL	T	P	S	H	L	T	P	S	C	
1	APSC201	Applied Mathematics III	4	1	1	2	1	5	1	1	1	1	4	
2	MTRX201	Analog and Digital Electronics	4	2	0	2	1	5	2	0	1	1	4	
3	ENGG103	Engineering Mechanics	4	2	0	2	1	5	2	0	1	1	4	
4	AUTO202	Manufacturing Technology	3	1	0	2	1	4	1	0	1	1	3	
5	ENGG204	Fluid Mechanics	3	1	0	2	1	4	1	0	1	1	3	
6	MTRX202	Matlab and Simulink (Lab)	3	0	0	2	2	4	0	0	1	2	3	
7	IDSC201	IDSC-3 [Life Coping Skills]	3	0	0	0	3	3	0	0	0	3	3	
			<b>24</b>	<b>7</b>	<b>1</b>	<b>12</b>	<b>10</b>	<b>30</b>	<b>7</b>	<b>1</b>	<b>6</b>	<b>10</b>	<b>24</b>	

**Semester-IV**

Sr No	Course Code	Course Name	Hours							Credits				
			C	CL	T	P	S	H	L	T	P	S	C	
1	MTRX203	Control Engineering	4	2	0	2	1	5	2	0	1	1	4	
2	ENGG202	Computer Aided Design	3	0	0	2	2	4	0	0	1	2	3	
3	AUTO204	IC Engines	4	1	1	2	1	5	1	1	1	1	4	
4	ENGG107	Strength of Materials	3	1	0	2	1	4	1	0	1	1	3	
5	ENGG201	Heat and Mass Transfer	4	1	1	2	1	5	1	1	1	1	4	
6	AUTO203	Vehicle Electronics I	4	2	0	2	1	5	2	0	1	1	4	

7	IDSC202	IDSC-4 [Life Coping Skills]	3	0	0	0	3	3	0	0	0	3	3
		INTERNSHIP-II	8										8
			33	7	2	12	10	31	7	2	6	10	33

**Symbiosis Skills and Open University**

**School of Automobile Engineering**

**Program Structure of B. Tech(Automobile Engineering)**

**Semester-V**

Sr No	Course Code	Course Name	Hours						Credits				
			C	CL	T	P	S	H	L	T	P	S	C
1	AUTO301	Automotive Engineering	4	1	1	2	1	5	1	1	1	1	4
2	AUTO205	Vehicle Electronics II	4	1	1	2	1	5	1	1	1	1	4
3	AUTO304	Design of Automotive Element	4	2	0	2	1	5	2	0	1	1	4
4	AUTO303	Finite Element Method and Analysis	4	1	1	2	1	5	1	1	1	1	4
5	AUTO201	Theory of Mechanism	3	1	0	2	1	4	1	0	1	1	3
6	AUTO305	Elective I a. Automotive Engine Design**	4	1	1	2	1	5	1	1	1	1	4
	AUTO306	Elective I b. Advanced Manufacturing Process**	4	1	1	2	1	5	1	1	1	1	4
	MTRX206	Elective I c. Digital Signal Processing	4	2	0	2	1	5	2	0	1	1	4
7	IDSC301	IDSC-5 [Life Coping Skills]	3	0	0	0	3	3	0	0	0	3	3
	AUDIT COURSE	Disaster Management											
			26	**7-8	**4-3	12	9	32	**7-8	**4-3	6	9	26
<b>Semester-VI</b>													
Sr No	Course Code	Course Name	Hours						Credits				
			C	CL	T	P	S	H	L	T	P	S	C

1	AUTO307	Auto Product Development	4	1	1	2	1	5	1	1	1	1	4
2	ENGG203	Dynamics of Machinery	4	1	1	2	1	5	1	1	1	1	4
3	AUTO309	Hybrid and Electric Vehicle	4	1	1	2	1	5	1	1	1	1	4
4	AUTO310	Vehicle Dynamics	4	2	0	2	1	5	2	0	1	1	4
5	AUTO302	Robotics and Automation	4	1	1	2	1	5	1	1	1	1	4
6	AUTO311	Elective II a. Noise, Vibrations & Harshness b. <b>Vehicle Assembly</b> c. Powertrain Electronics	4	1	1	2	1	5	1	1	1	1	4
	AUTO312												
	AUTO313												
7	IDSC302	IDSC-6 [Life Coping Skills]	3	0	0	0	3	3	0	0	0	3	3
		INTERNSHIP-III	8										8
			<b>35</b>	<b>7</b>	<b>5</b>	<b>12</b>	<b>9</b>	<b>33</b>	<b>7</b>	<b>5</b>	<b>6</b>	<b>9</b>	<b>35</b>

Symbiosis Skills and Open University													
School of Automobile Engineering													
Program Structure of B. Tech(Automobile Engineering)													
Semester-VII													
Sr No	Course Code	Course Name	Hours						Credits				
			C	CL	T	P	S	H	L	T	P	S	C
1	AUTO401	Internship	13										13
2	AUTO402	Seminar	2										2
			15										15
Semester-VIII													
Sr No	Course Code	Course Name	Hours						Credits				
			C	CL	T	P	S	H	L	T	P	S	C
1	ENGG301	Reliability Engineering	4	1	1	2	1	5	1	1	1	1	4
2	AUTO308	Regulatory Requirements	4	2	0	2	1	5	2	0	1	1	4
3	AUTO314 AUTO315 AUTO316	Elective III a. Automotive Chassis Design b. Automotive Materials c. <b>Automotive Instrumentation</b>	4	1	1	2	1	5	1	1	1	1	4
4	AUTO403	Project	13										13
5	AUTO404	Seminar	2										2
6	IDSC401	IDSC-7 [Life Coping Skills]	3	0	0	0	3	3	0	0	0	3	3
			30	4	2	6	6	18	4	2	3	6	30

Semester	I	II	III	IV	V	VI	VII	VIII	Total
Credit	25	32	24	33	26	35	15	30	220



