

**Maulana Abul Kalam Azad University of Technology, West Bengal**  
*(Formerly West Bengal University of Technology)*  
**BACHELOR OF TECHNOLOGY IN AUTOMOBILE ENGINEERING**  
**(Effective from academic session 2018-19)**  
**Curriculum Structure**

First Year First Semester							
Mandatory Induction Program- 3 weeks duration							
Sl No.	Category	Subject Code	Subject Name	Total No. of contact hours			Credits
				L	T	P	
Theory							
1	Basic Science course	BS-PH101	Physics-I	3	1	0	4
2	Basic Science course	BS-M102	Mathematics –IB	3	1	0	4
3	Engineering Science Courses	ES-EE101	Basic Electrical Engineering	3	1	0	4
	Total Theory			9	3	0	12
Practical							
1	Basic Science course	BS-PH191	Physics-I Laboratory	0	0	3	1.5
2	Engineering Science Courses	ES-EE191	Basic Electrical Engineering Laboratory	0	0	2	1
3	Engineering Science Courses	ES-ME192	Workshop/Manufacturing Pract ices	1	0	4	3
	Total Practical			1	0	9	5.5
	Total of First Semester			10	3	9	17.5

First Year Second Semester							
Sl No.	Category	Subject Code	Subject Name	Total No. of contact hours			Credits
				L	T	P	
Theory							
1	Basic Science course	BS-CH201	Chemistry-I (Gr-A)	3	1	0	4
2	Basic Science course	BS-M202	Mathematics –IIB	3	1	0	4
3	Engineering Science Courses	ES-CS201	Programming for Problem Solving	3	0	0	3
4	Humanities and Social Sciences including Management courses	HM-HU201	English	2	0	0	2
	Total Theory			11	2	0	13
Practical							
1	Basic Science course	BS-CH291	Chemistry-I Laboratory	0	0	3	1.5
2	Engineering Science Courses	ES-CS291	Programming for Problem Solving	0	0	4	2
3	Engineering Science Courses	ES-ME291	Engineering Graphics & Design (Gr-A)	1	0	4	3
4	Humanities and Social Sciences including Management courses	HM-HU291	Language Laboratory	0	0	2	1
	Total Practical			1	0	13	7.5
	Total of Second Semester			12	2	13	20.5

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Second Year Third Semester							
Sl No.	Category	Subject Code	Subject Name	Total No. of contact hours			Credits
				L	T	P	
Theory							
1	Basic Science course	BS-M301	Mathematics III (PDE, Probability & Statistics)	3	1	0	4
2	Basic Science course	BS-BIO301	Biology	3	0	0	3
3	Engineering Science Courses	ES-ECE301	Basic Electronics Engineering	3	0	0	3
4	Engineering Science Courses	ES-AUE301	Engineering Mechanics	3	1	0	4
5	Professional Core courses	PC-AUE301	Applied Thermodynamics	3	1	0	4
6	Professional Core courses	PC-AUE302	Manufacturing Processes	4	0	0	4
	Total Theory			19	3	0	22
Practical							
1	Professional Core courses	PC-AUE391	Machine Drawing	0	0	3	1.5
	Total Practical			0	0	3	1.5
	Total of Third Semester			19	3	3	23.5

Second Year Fourth Semester							
Sl No.	Category	Subject Code	Subject Name	Total No. of contact hours			Credits
				L	T	P	
Theory							
1	Engineering Science Courses	ES-AUE401	Materials Engineering	3	0	0	3
2	Professional Core courses	PC-AUE401	Strength of Materials	3	1	0	4
3	Professional Core courses	PC-AUE402	Fluid Mechanics & Fluid Machines	4	0	0	4
4	Professional Core courses	PC-AUE403	Theory of Machine	3	1	0	4
5	Professional Core courses	PC-AUE404	Metrology and Instrumentation	3	0	0	3
	Total Theory			16	2	0	18
Practical							
1	Professional Core courses	PC-AUE 491	Manufacturing & Testing Lab	0	0	3	1.5
2	Mandatory courses	MC481	Environmental Science	-	-	2	0
	Total Practical			0	0	5	1.5
	Total of Fourth Semester			16	2	5	19.5

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Third Year Fifth Semester							
Sl No.	Category	Subject Code	Subject Name	Total No. of contact hours			Credits
				L	T	P	
Theory							
1	Professional Core courses	PC-AUE501	Automotive Engines	3	0	0	3
2	Professional Core courses	PC-AUE502	Automotive Body & Chassis Engineering	3	0	0	3
3	Professional Core courses	PC-AUE503	Heat Transfer	3	1	0	4
4	Professional Core Courses	PC-AUE 504	Design of Machine Element	3	1	0	4
5	Humanities and Social Sciences including Management courses	HM-HU 511A/ HM-HU 511B	Values & Ethics / Education, Technology & Society	3	0	0	3
	Total Theory			15	2	0	17
Practical/ Sessional							
1	Professional Core courses	PC-AUE591	Fluid Mechanics & Heat Transfer Lab	0	0	3	1.5
2	Professional Core courses	PC-AUE592	Automobile Engineering Lab I (Engine & Chassis Component Lab)	0	0	3	1.5
3	Professional Core courses	PC-AUE593	Automobile Engineering Lab II (ETPM Lab)	0	0	3	1.5
4	Project (Mini Project)	PW-AUE581	Project-I (30 hrs. Total)	0	0	0	1
	Total Practical			0	0	9	5.5
	Total of Fifth Semester			15	2	9	22.5

***List of Humanities and Social Sciences including Management courses***

HM-HU 511A: Values & Ethics

HM-HU 511B: Education Technology & Society

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Third Year Sixth Semester							
Sl No.	Category	Subject Code	Subject Name	Total No. of contact hours			Credits
				L	T	P	
Theory							
1	Professional Core courses	PC-AUE601	Automotive Transmission	3	0	0	3
2	Professional Core courses	PC-AUE602	Hybrid & Electric Vehicles	3	0	0	3
3	Professional Elective courses	PE-AUE 611A/ PE-AUE 611B	Elective-I	3	0	0	3
5	Humanities and Social Sciences including Management courses	HM-HU 611A/ HM-HU 611B	Humanities-II	3	0	0	3
6	Mandatory courses	MC-601	Essence of Indian Traditional Knowledge	-	1	-	0
	Total Theory			12	1	0	12
Practical/ Sessional							
1	Professional Core courses	PC-AUE691	Automobile Engineering Lab III (Automotive Design Lab)	0	0	3	1.5
2	Professional Core courses	PC-AUE692	Automobile Engineering Lab IV (Vehicle Maintenance Lab)	0	0	3	1.5
2	Project (or Summer internship)	PW-AUE681	Project-II (90 hrs. Total)	0	0	0	3
	Total Practical			0	0	6	6
	Total of Sixth Semester			12	1	6	18

***List of Professional Elective courses***

PE-AUE 611A: Electronic Vehicle Management System

PE-AUE 611B: Transport Management & Motor Vehicles Act

***List of Humanities and Social Sciences including Management courses***

HM-HU 611A: Introduction to Industrial Management

HM-HU 611B: Quantitative Methods for Decision Making