

**TENTATIVE**  
**SCHEME OF EXAMINATION**

**for**

**BACHELOR OF VOCATION**  
**in**  
**AUTOMOBILE**

**Offered by**

**University School of Engineering and Technology**

**3<sup>rd</sup> SEMESTER to 6<sup>th</sup> SEMESTER**



**GURU GOBIND SINGH  
INDRAPRASTHA  
UNIVERSITY**

**Guru Gobind Singh Indraprastha University**  
**Dwarka, Delhi – 110078 [INDIA]**

**[www.ipu.ac.in](http://www.ipu.ac.in)**

**BACHELOR OF VOCATION  
(AUTOMOBILE)  
THIRD SEMESTER EXAMINATION  
(LEVEL-VI)**

Paper Code	Paper ID	Paper	L	T/P	Credits
<b>THEORY PAPERS</b>					
ETVAE-601		Principles of Thermal Engineering	3	1	4
ETVAE-603		Chassis Body & Transmission	2	1	3
ETVAE-605		Principles of Design of Machines & Garage Equipment	3	0	3
ETVAE-607		Instrumentation for Automobile Engineers	2	1	3
ETVAE-609		Renewable Energy Sources for Automobiles	3	0	3
<b>OPEN ELECTIVE-III (Select any one)</b>					
ETVMS-607		Industrial Management	3	0	3
ETVAE-611		Theory of Machines	3	0	3
ETVAE-613		Industrial Pollution Prevention and Control	3	0	3
<b>PRACTICAL/VIVA VOCE</b>					
ETVAE-651		Principles of Thermal Engineering Lab	0	3	3
ETVAE-653		Chassis Body & Transmission Lab	0	3	3
ETVAE-655		Principles of Design of Machines & Garage Equipment Lab	0	3	3
ETVAE-657		Industrial Training-II	0	0	4
<b>TOTAL</b>			<b>16</b>	<b>12</b>	<b>32</b>

**^Industrial Training-III:**

The students are advised to undergo 2-weeks training in industry/ Skill Knowledge Provider (SKP)/ Sector Skill Council (SSC) during winter Vacation and should submit training report for evaluation during the Fourth semester.

**BACHELOR OF VOCATION  
(AUTOMOBILE)  
FOURTH SEMESTER EXAMINATION  
(LEVEL-VI)**

Paper Code	Paper ID	Paper	L	T/P	Credits
<b>THEORY PAPERS</b>					
ETVAE-602		I.C. Engines	3	1	4
ETVAE-604		Fuels & Pollution Control	2	1	3
ETVAE-606		Tractors and Farm Equipment and Off Road Vehicles	2	1	3
<b>CORE ELECTIVE-I (Select any one)</b>					
ETVAE-608		Transport Management	3	1	4
ETVAE-610		Tyre Technology	3	1	4
<b>OPEN ELECTIVE-IV (Select any one)</b>					
ETVHS-602		French	3	0	3
ETVHS-604		Spanish	3	0	3
ETVHS-606		Mandarin	3	0	3
ETVHS-608		German	3	0	3
ETVHS-610		Portuguese	3	0	3
ETVMS-602		Entrepreneurship Development and Planning	3	0	3
ETVMS-604		Global Warming and Climate Change	3	0	3
<b>PRACTICAL/VIVA VOCE (Select any one Lab based on OPEN ELECTIVE-IV)</b>					
ETVAE-658		Transport Management Lab	0	3	3
ETVAE-660		Tyre Technology Lab	0	3	3
<b>PRACTICAL/VIVA VOCE</b>					
ETVAE-652		I.C. Engines Lab	0	3	3
ETVAE-654		Fuels & Pollution Control Lab	0	3	3
ETVAE-656		Industrial Training-III^	0	0	2
ETVAE-662		Project-II	0	3	3
<b>TOTAL</b>			<b>13</b>	<b>16</b>	<b>31</b>

**^^Industrial Training-IV:**

The students are advised to undergo 6-8 weeks training in industry/Skill Knowledge Provider (SKP)/ Sector Skill Council (SSC) during summer Vacation and should submit training report for evaluation during the Fourth semester.

**Note for Project:**

The student will submit a synopsis at the beginning of the semester for approval from the departmental committee in a specified format, thereafter he/she will have to present the progress of the work through seminars and progress reports.

**BACHELOR OF VOCATION  
(AUTOMOBILE)  
FIFTH SEMESTER EXAMINATION  
(LEVEL-VII)**

Paper Code	Paper ID	Paper	L	T/P	Credits
<b>THEORY PAPERS</b>					
ETVHS-701		Technical English (Common to all disciplines)	3	0	3
ETVAE-703		Vehicle Body Engineering	2	1	3
<b>CORE ELECTIVE-II (Select any one)</b>					
ETVAE-705		Corrosion Prevention & Vehicle Body Paint Technology	2	1	3
ETVAE-707		Elements of Noise, Vibration & Harshness Control	2	1	3
<b>CORE ELECTIVE-III (Select any one)</b>					
ETVAE-709		Modern Vehicle Technology	2	1	3
ETVAE-711		Mechanics of Vehicles	2	1	3
<b>PRACTICAL/VIVA VOCE (Select any one Lab based on CORE ELECTIVE-II)</b>					
ETVAE-755		Corrosion Prevention & Vehicle Body Paint Technology Lab	0	3	3
ETVAE-757		Elements of Noise, Vibration & Harshness Control Lab	0	3	3
<b>PRACTICAL/VIVA VOCE (Select any one Lab based on CORE ELECTIVE-III)</b>					
ETVAE-759		Modern Vehicle Technology Lab	0	3	3
ETVAE-761		Mechanics of Vehicles Lab	0	3	3
<b>GENERAL ELECTIVE-II (Select any one)**</b>					
ETVSS-751		NCC	2	1	3
ETVSS-753		NSS	2	1	3
ETVSS-755		Sports	2	1	3
ETVSS-757		Community Services	2	1	3
ETVSS-759		ECO Club	2	1	3
ETVSS-761		YOGA	2	1	3
<b>PRACTICAL/VIVA VOCE</b>					
ETVHS-751		Language Lab (Common to all disciplines)	0	3	3
ETVAE-753		Vehicle Body Engineering Lab	0	3	3
ETVAE-763		Minor Project	0	4	4
ETVAE-765		Industrial Training-IV^^	0	0	4
<b>TOTAL</b>			<b>11</b>	<b>17</b>	<b>35</b>

**#Industrial Training-V:**

The students are advised to undergo 2 weeks training in industry/ Skill Knowledge Provider (SKP)/ Sector Skill Council (SSC) during winter Vacation and should submit training report for evaluation during the Sixth semester.

**BACHELOR OF VOCATION  
(AUTOMOBILE)  
SIXTH SEMESTER EXAMINATION  
(LEVEL-VII)**

Paper Code	Paper ID	Paper	L	T/P	Credits
<b>THEORY PAPERS</b>					
ETVAE-702		Automotive Electricals & Electronic System	3	1	4
<b>CORE ELECTIVE-IV (Select any one)</b>					
ETVAE-704		Electric and Hybrid Vehicles	3	0	3
ETVAE-706		Composite Materials for Automobiles	3	0	3
<b>CORE ELECTIVE-V (Select any one)</b>					
ETVAE-708		Vehicle Safety Engineering	3	0	3
ETVAE-710		Autotronics	3	0	3
<b>PRACTICAL/VIVA VOCE (Select any one Lab based on CORE ELECTIVE-IV)</b>					
ETVAE-754		Electric and Hybrid Vehicles	0	3	3
ETVAE-756		Composite Materials for Automobiles	0	3	3
<b>PRACTICAL/VIVA VOCE</b>					
ETVAE-752		Automotive Electricals & Electronic System Lab	0	3	3
ETVAE-758		Industrial Training-V#	0	0	3
ETVAE-760		Major Project*#	0	12	12
<b>TOTAL</b>			<b>09</b>	<b>19</b>	<b>31</b>

##The student will submit a synopsis at the beginning of the semester for approval from the departmental committee in a specified format, thereafter he/she will have to present the progress of the work through seminars and progress reports. Seminar related to major project should be delivered one month after starting of Semester. The progress will be monitored through seminars and progress reports. *The students may be allowed to do Industrial Major Project on-site during 5 days in a week and class work should be completed in 2 working days in the respective institution. If in case, the classes are held during Saturday /Sunday then faculty should be given off in lieu of Saturday/Sunday.*

**For Award of Diploma:**

1. The total number of the credits of the Diploma (Automobile) Programme = 61
2. Student shall be required to appear in examinations of all courses. However, to award the Diploma (Automobile) a student shall be required to earn a minimum of 60 credits.

**For Award of Advanced Diploma:**

1. The total number of the credits of the Advance Diploma (Automobile) Programme = 124
2. Student shall be required to appear in examinations of all courses. However, to award the Advanced Diploma (Automobile) a student shall be required to earn a minimum of 120 credits.

**For Award of B. Voc Degree:**

1. The total number of the credits of the B. Voc. (Automobile) Programme = 188
2. Student shall be required to appear in examinations of all courses. However, to award the degree a student shall be required to earn a minimum of 180 credits.

**FOR LATERAL ENTRY STUDENTS- For Award of Advance Diploma:**

1. The total number of the credits of the Advance Diploma (Automobile) Programme = 63
2. Each student shall be required to appear for examinations in all courses Third Semester onwards. However, for the award of the Advance Diploma (Automobile) a student shall be required to earn a minimum of 60 credits.

**FOR LATERAL ENTRY STUDENTS- For Award of B.Voc Degree:**

1. The total number of the credits of the Degree B.Voc (Automobile) Programme = 124
2. Each student shall be required to appear for examinations in all courses Third Semester onwards. However, for the award of the Degree B.Voc (Automobile) a student shall be required to earn a minimum of 120 credits.

Tentative Scheme for Level VI and VII for B.Voc. (Automobile). The detailed Scheme and Syllabi for Level VI and VII shall be got approved during the Academic Year 2016-17 by the BOS of USET and Academic Council of GGSIPU.