CBSE | DEPARTMENT OF SKILL EDUCATION
CURRICULUM FOR SESSION 2024-2025

AUTOMOTIVE (SUBJECT CODE 404)
JOB ROLE: SALES EXECUTIVE DEALER

CLASS– IX & X

COURSE OVERVIEW:

Automotive - Sales Executive Dealer performs the activity related to preparation of sales of automobile products such as two wheeler, four wheeler, light motor vehicle, heavy automobile and transport vehicle. As sales executive he plans promote sales of automobile products through various mean such as retailer, dealer, stockiest and other outlets. Sales Executive Dealer is responsible for supporting sales to generate sales leads (telemarketing activities) and also support overall sales process to support both sales and service activities.

OBJECTIVES OF THE COURSE:

Followings are the main objectives of this course.
• Communicate effectively with the customers.
• Identify the principal components of automobile.
• Identify and control hazards in the workplace that pose a danger or threat to their safety or that of others.
• Demonstrate self-management skills.
• Demonstrate the ability to provide a self-analysis in context of entrepreneurial skills and abilities.
• Demonstrate the knowledge of the importance of green skills in meeting the challenges of sustainable development and environment protection.
• Identify and demonstrate safe use of hand and power tools/equipment used in vehicle showroom;
• Generate sales leads through telemarketing activities
• Support the overall sales process
• Plan and organize work to meet expected outcomes
• Recognize the benefits of great customer service;
• Provide customers necessary information appropriately and systematically;
• Use techniques to provide services based on customer's needs and wants;
• Administer first aid to a casualty with small cuts, grazes, bruises, external bleeding, minor burns and scalds.

SALIENT FEATURES:

• Automotive as a vehicle unit.
• Systems/sub systems & components.
• Automotive electronics for safety, pollution control, fuel efficiency and comforts.
• Other related areas of automotive electronics for traffic management, diagnostics, repair etc.

LIST OF EQUIPMENT AND MATERIALS:

The list given below is suggestive and an exhaustive list should be prepared by the vocational teacher. Only basic tools, equipment and accessories should be procured by the Institution so that the routine tasks can be performed by the students regularly for practice and acquiring adequate practical experience.

1. Two Post lift
2. Air compressor
3. Wheel balancer
4. Bench vice
5. Work tables

6. Bench grinder
7. Oil draining & filling equipment
8. Cooling system tester
9. Multimeter
10. Hydro meter
11. BC clamp meter
12. Coolant tester
13. Battery & charging system tester (Megatronics)
14. Diagnostic tool(genesis Evo)
15. Hand tools
16. Pneumatic tools
17. Torque wrenches
18. Car seat covers
19. Steering covers
20. Gear Knob covers
21. Fender covers/kits
22. Floor mats
23. Cotton gloves
24. Hard toed boots
25. Sun glasses(3m)
26. Bump caps
27. Air tester filter machine
28. Hydraulic press
29. Hydraulic jacks
30. Vehicle safety stands
31. Parts washing station car
32. Pullers
33. Sliding hammer
34. Wheel aligner
35. Head Light Focusing
36. A/c Machine(124Robinair)
37. General Hand Tools
38. A/c Leakage Tester
39. Old car

CAREER OPPORTUNITIES:

Automobile engineering is a huge industry. There is great number of employment opportunities in the following fields:

- Private national and multinational automobile companies
- Service stations
- Private transport companies

VERTICAL MOBILITY:

At This level, students may start their career as–

- Sales Consultant in Showroom
- Dealership Telecaller Sales Executive

CURRICULUM:

This course is a planned sequence of instructions consisting of Units meant for developing employability and Skills competencies of students of Class IX and X opting for Skills subject along with other subjects.

AUTOMOTIVE (SUBJECT CODE – 404)
CLASS–IX (SESSION 2024-2025)

Total Marks: 100 (Theory-50+Practical-50)

	UNITS	NO.OF HOURS For Theory and Practical 220	MAX. MARKS for Theory and Practical 100
Part A	**Employability Skills**		
	Unit1: Communication Skills-I	13	2
	Unit 2: Self-Management Skills-I	07	2
	Unit 3: ICT Skills-I	13	2
	Unit4: Entrepreneurial Skills-I	10	2
	Unit5: Green Skills-I	07	2
	Total	**50**	**10**
Part B	**Subject Specific Skills**		
	Unit1: History and Evolution of Automobiles	10	4
	Unit2: Various types of Automobiles	10	4
	Unit3: Major Systems & Components of an Automobile	40	18
	Unit4: Road Safety	15	6
	Unit 5: Automobiles and our Environment	15	8
	Total	**90**	**40**
Part C	**Practical Work**		
	Project	20	10
	Viva		05
	Practical File		15
	Demonstration of skill competency via Lab Activities	60	20
	Total	**80**	**50**
	GRAND TOTAL	**220**	**100**

NOTE: Detailed Curriculum/ Topics to be covered under Part A: Employability Skills can be downloaded from CBSE website.

DETAILED CURRICULUM/ TOPICS:

Part-A: EMPLOYABILITY SKILLS

S. No.	Units	Duration in Hours
1.	Unit 1: Communication Skills-I	13
2.	Unit 2: Self-management Skills-I	07
3.	Unit 3: ICT Skills- I	13
4.	Unit 4: Entrepreneurial Skills-I	10
5.	Unit 5: Green Skills-I	07
	TOTAL DURATION	**50**

Detailed Curriculum/ Topics to be covered under Part A: Employability Skills can be downloaded from CBSE website.

Part-B – SUBJECT SPECIFIC SKILLS (Class IX)

UNIT	SESSION	TOPIC/ACTIVITY/PRACTICAL
Unit-1: History and Evolution of Automobiles	Session- 1: Invention of Wheel	Demonstration of Wheel and its Structure.
	Session - 2: Wheel Cart	Types of Carts.
	Session - 3: Invention of Automobiles	Development of Automobiles
	Session - 4: Invention of Automobiles (Post World War II)	Automobile manufacturers and Development of Automobiles in India.
Unit 2: Various Types of Automobiles	Session - 1: Two Wheelers and Three Wheelers	Types of Two Wheelers and Three Wheelers.
	Session - 2: Passenger Vehicles and Commercial Vehicles	Types of Passenger Vehicles and Commercial Vehicles.
	Session - 3: Agricultural Vehicles	Demonstration of Agricultural Vehicles.
	Session - 4: Construction Equipment Vehicles	Demonstration of Construction Equipment Vehicles.
	Session - 5: Special Vehicles	Demonstration of Special Vehicles.
Unit 3: Major Systems & Components of an Automobile	Session - 1: Chassis Frame and Auto Body	Demonstration of Chassis Frame and Auto Body.
	Session - 2: Engine and its Components	Demonstration of Engine and its Components.
	Session - 3: Lubrication System	Demonstration of Lubrication System.
	Session - 4: Cooling System	Demonstration of Cooling System.
	Session - 5: Fuel Supply System	Demonstration of Fuel Supply System
	Session - 6: Transmission System	Demonstration of Transmission System
	Session - 7: Front and Rear Axle	Demonstration of Front and Rear Axle
	Session - 8: Steering System	Demonstration of Steering System

	Session - 9: Suspension System	Demonstration of Suspension System
	Session - 10: Wheel and Tyre	Demonstration of Wheel and Tyre
	Session - 11: Brake	Demonstration of Brake
	Session - 12: Electrical and Electronic System	Demonstration of Electrical and Electronic System
	Session - 13: Air Conditioning	Demonstration of Air Conditioning
Unit-4: Road Safety.	Session - 1: Importance of Road Safety	Demonstration of Importance of Road Safety
	Session - 2: Safe and Responsible Driving	Demonstration of Safe and Responsible Driving
	Session - 3: Road Signs	Various types of Road Signs
	Session - 4: Driving Rules and Registration	Driving Rules and Process of Registration.
	Session - 5: Driving License	Types of Driving license.
Unit-5: Automobiles and our Environment	Session - 1: Air Pollution	Demonstration of Air Pollution.
	Session - 2: Auto Emissions and EU/ BS Standards	Demonstration of Auto Emissions and EU/BS Standards
	Session - 3 : PUC Certification	Demonstration of PUC Certification

PRACTICAL GUIDELINES FOR CLASS IX

Assessment of performance:

The two internal examiners, assigned for the conduct and assessment of Practical Examinations each in **Secondary School Curriculum (Under NSQF).** Question for the viva examinations should be conducted by both the examiners. Question to be more of General nature, project work or the curriculum. Investigatory Project especially those that show considerable amount of effort and originality, on the part of the student, should get suitable high marks, while project of a routine or stereo typed nature should only receive MEDIOCRE marks.

Procedure for Record of Marks in the Practical answer-books:

The examiner will indicate separately marks of practical examination on the title page of the answer books under the following heads:-

Project -10marks

Projects suggested for the final practical are given below.
Students may be assigned to prepare cardboard model of any one of the following:-

1. Chassis frame
2. Autobody
3. Engine and its components
4. Lubrication system
5. Cooling system
6. Fuel supply system
7. Front and rear axle
8. Steering system
9. Suspension system
10. Wheels and Tyres
11. Brake
12. Electrical and Electronic System
13. Air Conditioning System
14. Safety system used in Automobile
15. Road Signs etc

Guidelines for Project Preparation:

The final project work should encompass chapters on:

a) Introduction.
b) Identification of core and advance issues,
c) Learning and understanding
d) Observation during the project period.

Viva based on Project-05 marks

The teacher conducting the final practical examination may ask verbal questions related to the project, if any, done by the student. Alternatively, if no project has been assigned to the students, viva may be based on questions of practical nature from the field of subject as per the Curriculum

Practical File-15 Marks

Students to make a power point presentation /Session assignments / practical file / report.
Instructor shall assign the many outlet to study the elements.
Suggested list of Practical–

1. Servicing and testing of major components of a vehicle 2. Project on automotive innovation.

Demonstration of skill competency in Lab Activities -20 marks

AUTOMOTIVE (SUBJECT CODE – 404)

CLASS–X (SESSION 2024-2025)

Total Marks:100 (Theory-50+Practical-50)

	UNITS	NO. OF HOURS For Theory and Practical 220	MAX. MARKS For Theory and Practical 100
Part A	**Employability Skills**		
	Unit 1: Communication Skills-II	13	2
	Unit 2: Self-Management Skills-II	07	2
	Unit 3: ICT Skills-II	13	2
	Unit 4: Entrepreneurial Skills-II	10	2
	Unit 5: Green Skills-II	07	2
	Total	**50**	**10**
Part B	**Subject Specific Skills**		
	Unit 1: Automobile and its components	20	10
	Unit 2: Tools	10	06
	Unit 3: Vehicle Servicing	20	10
	Unit 4: Customer sales care	15	04
	Unit 5: Innovation and Development	15	06
	Unit 6: Reading of Service manual	10	04
	Total	**90**	**40**
Part C	**Practical Work**		
	Project	20	10
	Viva		05
	Practical File		15
	Demonstration of skill competency via Lab Activities	60	20
	Total	**80**	**50**
	GRAND TOTAL	**220**	**100**

DETAILED CURRICULUM/ TOPICS:

Part-A: EMPLOYABILITY SKILLS

S. No.	Units	Duration in Hours
1.	Unit 1: Communication Skills-II	13
2.	Unit 2: Self-management Skills-II	07
3.	Unit 3: Information and Communication Technology Skills-II	13
4.	Unit 4: Entrepreneurial Skills-II	10
5.	Unit 5: Green Skills-II	07
	TOTAL DURATION	**50**

Detailed Curriculum/ Topics to be covered under Part A: Employability Skills can be downloaded from CBSE website.

Part-B – SUBJECT SPECIFIC SKILLS (Class X)

UNIT	SESSION	TOPIC/ACTIVITY/ PRACTICAL
Unit 1: Automobile and its components	Session 1 : Chassis	□ Types of Chassis
	Session 2 : Body or Superstructure	□ Demonstration of Auto body
	Session 3 : Engine	□ Dismantling and assembly of petrol and diesel engine
	Session 4 : Lubrication System	□ Demonstration of parts of lubrication system.
	Session 5 : Cooling System	□ Demonstration of water cooling system
	Session 6 : Fuel Supply System	□ Project on various types of fuel supply system.
	Session - 7: Transmission System	□ Types of Universal Joints
	Session - 8: Front Axle	□ Live & Dead front Axle
	Session 9 : Steering System	□ Types of arrangement of Front Axle Rigid Axle Beam
		□ Demonstration of mechanical type steering system
	Session 10 : Rear Axle	□ Demonstration of differential and various types of gears used in final drive.
	Session 11:- Suspension System	□ Common problems of the suspension system & preventive measures
	Session 12 : Wheel and Tyres	□ Cut section of wheel
	Session 13 : Brakes	□ Demonstration of mechanical braking system.
	Session 14 : Electrical and Electronics System	□ Demonstration of lead acid battery with its all components.

Unit–2: Tools	Session 1 - Hand Tool	□ Demonstration of all Hand Tools
	Session 2 - Measuring Tools	□ Demonstration of Measuring Tools
	Session 3 - Electrical Tools	□ Demonstration of Electrical Tools
	Session 4 : Special Tools	□ Model of special tools
	Session 5 : Service Workshop Equipment	□ Working of air compressor and wheel balancing machine.
Unit–3: Vehicle Servicing	Session 1 : Washing of a Vehicle	□ Procedure for vehicle washing
	Session 2 : Changing of Oil and Oil Filter	□ Procedure for changing of oil and oil filter
	Session 3 : Changing of Air Filter	□ Procedure for changing Air Filter
	Session 4 : Changing of Fuel Filter	□ Procedure for changing Fuel Filter
	Session 5 : Changing of Coolant	□ Procedure for changing Coolant
Unit–4: Customer Sales Care	Session 1 : Customer Service	□ Dramatization of customer service
Unit–5: Innovation and Development	Session 1 : Innovation and Development	□ To make presentation on new innovations
Unit-6: Reading of Service manual	Session 1: Reading of Service manual	□ Use any owners and service manual.

PRACTICAL GUIDELINES FOR CLASS X

Assessment of Performance:

The two internal examiners, assigned for the conduct and assessment of Practical Examinations each in **Secondary School Curriculum (Under NSQF).** Question for the viva examinations should be conducted by both the examiners. Question to be more of General nature, project work or the curriculum. Investigatory Project especially those that show considerable amount of effort and originality, on the part of the student, should get suitable high marks, while project of a routine or stereo typed nature should only receive MEDIOCRE marks.

Procedure for Record of Marks in the Practical answer-books:

The examiner will indicate separately marks of practical examination on the title page of the answerbooks under the following heads:-

Project -10 marks

Projects suggested for the final practical are given below. Students may be assigned to prepare cardboard model of any one of the following:-

1. Chassis frame
2. Autobody
3. Engine and its components
4. Lubrication system
5. Cooling system
6. Fuel supply system
7. Transmission system
8. Front Axle
9. Steering system
10. Rear Axle
11. Suspension System
12. Wheels and Tyres
13. Brake
14. Electrical and Electronic System
15. Service Tools
16. New Innovations in automobile.

Suggested list of Projects–

1. Servicing and testing of major and minor components of a vehicle
2. Project on automotive innovation.

Guidelines for Project Preparation:

The final project work should encompass chapters on:

a) Introduction
b) Identification of core and advance issues
c) Learning and understanding
d) Observation during the project

Viva based on Project -05 marks

The teacher conducting the final practical examination may ask verbal questions related to the project, if any, done by the student. Alternatively, if no project has been assigned to the students, viva may be based on questions of practical nature from the field of subject as per the Curriculum.

Practical File -15 Marks

Students to make a PowerPoint presentation/ Session Assignments Alternatively, if they can't be assigned a power point presentation then they can communicate their project work through practical file.

Demonstration of skill competency in Lab Activities-20 marks