



Tertiary and Vocational Education Commission

National Competency Standards and Curriculum For Vehicle Body Repair Technician (Painting) NVQ Level 3



Course synopsis

This course is designed to introduce students to the competencies of automobile painting work in automobile body repair field so as to carry out work in the field under supervision. Preparation of the vehicle body for painting, application of primer, sealant, filler and different types of paints on the body surface and maintenance of the tools and equipment used for painting are included for this course.

Course Title	Course Duration
Vehicle Body Repair Technician	NVQ Level 3 -3 months
<p>Job outlook, objectives of the course and career paths available following completion of the course</p> <p>Auto body technicians fix cars after they have been damaged in an accident or other incident. They use a wide array of tools to cut off old parts, connect new parts to the car, fill holes, repair scratches, dents and dings, and make the car look as good as new. Auto body technicians often work directly with customers at shops, and must have good customer service. In the present day there is a special demand for this occupation both locally and abroad due to the high rate of road accidents.</p> <p>The course is of 3 months duration, and will provide basic competencies on automobile body painting. It will be followed by a further six months practical training in body repair workshop, during which students must maintain records and prepare a portfolio of the work they do.</p> <p>Possible career paths for those obtaining this qualification, following further training are</p> <ul style="list-style-type: none"> • Automobile painter • Body repair technician • Collision repair technician • Or as an entrepreneur 	

Competencies / modules to be covered**1. Receive the job to proceed body repair**

This module covers the competencies required to identify customer requirements by communicating with the customer, carry out visual inspection and accept the job.

2. Apply safety measures

This module covers the competencies required to ensure safety of self, others, vehicle, tools, equipment and environment.

3. Clean Body surface by removing impurities

This module covers the competencies required to remove rust and other impurities from the body to ensure proper bonding of paints with the body.

4. Prepare body surface for painting

This module covers the competencies required to prepare body surface and buffer with different material and shape to pre-paint condition by applying primers, fillers, putty and body sealer.

5. Apply paints on prepared surface

This module covers the competencies required to prepare paint mixture and apply different types and colours of paints while ensuring safe work practices and good environmental conditions

6. Polish vehicle body surface

This module covers the competencies required to finish the painted surface and affected area by polishing and waxing

7. Maintain tools and equipment

This module covers the competencies required to maintain tools and equipment used for painting workshop

8. Career Skills 1

This module provides basic communicative skills in English and effective elementary reading and writing skills and basic knowledge of grammar to facilitate this. It also introduces cognitive skills with regard to effective work and the ability to work efficiently alone and in a team.

Module Title :	Course Duration
Receive the job to proceed body repair	
<p>Objectives of the module</p> <p>This module covers the competencies required to identify customer requirements by communicating with the customer and visual inspection to accept the job.</p>	
<p>Competencies to be covered</p> <ol style="list-style-type: none"> 1. Acquire and deepen communication skills (Customer greetings/ Enquire from the customer/Probing questioning, checking back with superior) 2. Carry out visual inspection of vehicle to identify damages or missing items before accept the repair 3. Fill forms and record information 4. Manage time efficiently 	
Recommended teaching methods :	Communicative role plays, team simulations, real work situation

Module Title :	Course Duration:
Apply safety measures	
<p>Objectives of the module This module covers the competencies required to ensure safety of self, others, vehicle, tools, equipment and environment.</p>	
<p>Competencies / modules to be covered</p> <ol style="list-style-type: none"> 1. Acquire knowledge personal safety, safety of others and environment 2. Follow personnel safety instruction 3. Follow safety precautions against fire and electrical hazards 4. Follow environmental safety standards 5. Use of Personal Protective Equipment 6. Use appropriate tools and equipment 7. Prepare the work station to carry out the job 	
Recommended teaching methods :	Role plays, simulations, technical projects, student presentations, real work situations

Module Title	Course Duration
Clean Body surface by removing impurities	
<p>Objectives of the module</p> <p>This module covers the competencies required to remove rust and other impurities from the body to ensure proper bonding of paints with the body.</p>	
<p>Competencies to be covered</p> <ol style="list-style-type: none"> 1. Remove rust using grinder 2. Remove rust using a power wire brush 3. Remove rust using water sand paper 4. Remove rust using chemicals 5. Remove existing paint using chemicals 6. Remove oil and grease using chemicals 7. Remove stickers using heater gun 8. Remove dampness of body surface 9. Remove body sealers using chemicals. 	
Recommended teaching methods :	Demonstrations, simulations, student presentations, guided practice, real work situations

Module Title	Course Duration
Prepare body surface for painting	
<p>Objectives of the module</p> <p>This module covers the competencies required to prepare body surface and buffer with different material and shape to pre-paint condition by applying primers, plastic primers, fillers, flexible body filler putty and body sealer.</p>	
<p>Competencies to be covered</p> <ol style="list-style-type: none"> 1. Acquire knowledge on properties of body fillers, 2K high filler 2. Acquire knowledge on advantages of dry sanding 3. Detect body patches 4. Apply temporary protecting coat 5. Apply oil primer 6. Apply 1 pack / 2 pack primer 7. Apply primer for aluminium and galvanized metal 8. Apply plastic primer on plastic components 9. Apply metal filler 10. Level metal filler manually 11. Apply high filler (2K filler) 12. Apply 1 pack / 2 pack primer filler 13. Detect pin holes 14. Level putty 15. Apply body sealer 	
Recommended teaching methods :	Simulations, demonstrations, guided practices, student presentations, real work situations.

Module Title	Course Duration
Apply paints on prepared surface	
<p>Objectives of the module</p> <p>This module covers the competencies required to prepare paint mixture and apply different types and colours of paints while ensuring safe work practices and good environmental conditions</p>	
<p>Competencies to be covered</p> <ol style="list-style-type: none"> 1. Select type of paint to be apply 2. Mask body parts not be painted 3. Remove dust on painted surface 4. Heat body panels using infrared lamps 5. Match colours to be applied 6. Mix paint colours manually 7. Adjust paint viscosity 8. Apply undercoat 9. Apply 1 pack solid colour paint 10. Apply 1 pack metallic pearl colour paint 11. Apply 2 pack solid colour paint 12. Apply 2 pack metallic pearl colour paint 13. Apply transparent colour silver paint 14. Apply 1 pack metallic pearl colour paint 15. Perform two-tone painting 16. Apply one pack paint with retarder 17. Apply one pack solid colour paint lacquer 18. Apply matt finish paint 19. Apply one pack clear Lacquer 20. Apply fade out thinner on touch ups 21. Apply 2 pack clear lacquer 22. Apply aqua-based paints 	
Recommended teaching methods :	Simulations, demonstrations, student presentations, guided practice, real work situation

Module Title	Course Duration
Polish vehicle body surface	
<p>Objectives of the module This module covers the competencies required to finish the painted surface and affected area by polishing and waxing</p>	
<p>Competencies to be covered</p> <ol style="list-style-type: none"> 1. Perform wet sanding 2. Perform machine compound cutting 3. Perform smooth cutting 4. Perform manual compound cutting 5. Paste body stickers 6. Apply wax 7. Clean body moldings 8. Clean buffers and tires 9. Clean upholsters 10. Clean windscreens and glasses 11. Re-fix badges 	
Recommended teaching methods :	Simulations, demonstrations, student presentations, guided practice, real work situation

Module Title	Course Duration
Maintain tools and equipment	
<p>Objectives of the module</p> <p>This module covers the competencies required to maintain tools and equipment used in painting workshop</p>	
<p>Competencies to be covered</p> <ol style="list-style-type: none"> 1. Maintain tools (pad sanding blocks) 2. Maintain polisher 3. Maintain sanding machine 4. Clean spray gun manually 5. Clean spray gun using gun cleaner 6. Replace spray gun repair kit 7. Clean strainer 8. Replace compressor air hose 9. Top up oil level of compressor 10. Drain water in air tank of compressor 11. Replace air filter of compressor 	
Recommended teaching methods :	Simulations, presentations of situations, demonstration, guided practice, real work situation

Module Title	Course Duration
Career Skills 1	At least 60 hours in any 3 month course
<p>Objectives of the course</p> <p>All recent studies make it clear that one of the greatest problems noted with regard to the employability of students in the TVET sector is the absence of soft skills, in particular communicative competence in English. Employers have indicated that they would appreciate better English in their staff and the ability to communicate with more confidence.</p> <p>This course is designed to fill that gap and is required for all NVQ Level 3 courses.</p>	
<p>Competencies</p> <p>a Understand and use simple expressions to communication This subject provides the necessary communication skills so that students can introduce themselves and interact with others, and can respond to simple questions and follow simple instructions, describe people, places, and tools.</p> <p>b Read and write effectively This subject provides the necessary skills to find and understand the information given in a text, to understand notices, instructions and information, to take down short messages and write simple descriptions.</p> <p>c. Use English correctly This subject is not taught separately but is included in the development of the productive and receptive skills above, since awareness of the structure of the language is necessary for these The development of appropriate vocabulary is also targeted to deploy the above skills</p> <p>d. Develop the capacity to think and plan productively y This subject develops cognitive abilities and skills with regard to effective work, with strengthening of thinking skills, recognition of systems, making deductions etc</p> <p>e. Develop effective working capacity This subject develops the capacity to work effectively individually and in collaboration with others through building the sense of individual responsibility, and accountability within a working group</p>	