Republic of Rwanda
Ministry of Education

RTB | RWANDA TVET BOARD

AUTSM501

AUTO SPARE PARTS AND MATERIALS MANAGEMENT

Competence: MANAGE AUTO SPARE PARTS AND MATERIALS

RQF Level: 5

Learning Hours

Credits: 5

50

Sector: Transport and Logistics

Trade: Automobile Technology

Module Type: Specific

Curriculum: TRLAUT5001- TVET Certificate 5 Automobile Technology

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2024-25

Issue Date: June, 2024

Purpose statement	This module describes the knowledge, skills, and attitude required manage auto spare parts and materials. At the end of this module, learners will be able to prepare the workplace, order new spare parts and materials from the supplier, manage stock of the auto spare parts and materials, and perform sales and record keeping.					
Leaning assumed to be in place	N/A					
Delivery modality	**Training delivery**		**100%**	**Assessment**		**Total 100%**
	Theoretical content		30%	Formative assessment	50%	50%
	Practical work:		70%		50%	
	• Group project	20%				
	• Individual project /Work	50%				
			Summative Assessment			50%

Elements of Competency and Performance Criteria	
Elements of competency	Performance criteria
1. Prepare the workplace	1.1. Safety measures are clearly maintained based on the health and safety policy
	1.2. Circular economy is strongly applied in workplace based on environmental protection policy.
	1.3. Incident/ accident are conveniently protected according to the safety and security measures.
	1.4. Incident/accident is timely reported based on incident /accident Health and safety policy
2. Order new spare parts and materials from the supplier	2.1. Vehicle spare parts and materials are properly identified based on vehicle specifications
	2.2. Market survey is correctly conducted according to the customer needs
	2.3. Spare parts and materials are neatly ordered as per the ordering process
	2.4. Spare parts and materials are properly received and checked according to the vehicle ordered spare parts and materials.
3. Manage stock of the auto spare parts and materials	3.1. New stock of the spare parts and materials are perfectly recorded based on store standard operation procedures.
	3.2. Auto spare parts and materials are conveniently stored based on store standard operation procedures.

	3.3. Inventory of the spare parts and materials are regularly conducted by using inventory procedures.
	3.4. Inventory reports are correctly prepared based on the inventory procedures.
4. Perform sales and record keeping	4.1. Proforma invoice are well prepared based on customer needs.
	4.2. Spare parts and materials are properly sold based on the agreement between seller and customer
	4.3. Spare parts and materials is correctly requested based on agreement done
	4.4. Sales of the spare parts and materials are regularly recorded by using inventory procedures.
	4.5. Inventory reports are correctly prepared based on the inventory procedures.

Knowledge, Skills and attitudes required to perform the competency

Knowledge	Skills	Attitudes
✓ Types of tools, materials, and equipment ✓ Basic mechanical principles ✓ Mechanical attitude ✓ Applied mathematics ✓ Applied physics ✓ Applied chemistry ✓ Safety rules, precautions and security ✓ Use of Personal Protective equipment ✓ Technical drawing ✓ Technical symbols ✓ Interpretation of specifications ✓ Quality of materials	✓ Computer skills ✓ Communication skills ✓ Troubleshooting skills ✓ Report elaboration skills ✓ Good service delivering skills ✓ Interpersonal skills ✓ Analytical skills ✓ Problem-solving skills ✓ Task management skills ✓ Parts replacement skills ✓ Diagnostic skills ✓ Proper use of measurement instruments. ✓ Basic soldering skills ✓ Use of tools, materials, and equipment	✓ Honest ✓ Accountability ✓ Self-motivated ✓ Gender sensitive ✓ Customer care oriented ✓ Decisive ✓ Time management ✓ Humble ✓ Creative ✓ Patient ✓ Responsible ✓ Innovative ✓ Flexible ✓ integrity ✓ Goal oriented ✓ Self-confident

✓ Basic electricity and electronics ✓ Cost estimation ✓ Apply hydraulic and pneumatic principles	✓ Application of electricity and electronics	

Course Content

Learning outcomes	At the end of the module the learner will be able to: 1. Prepare the workplace 2. Order new spare parts and materials from the supplier 3. Manage stock of the auto spare parts and materials 4. Perform sales and record keeping
Learning outcome 1: Prepare the workplace	**Learning hours: 5**
Indicative content	

- **Maintaining safety measures**
  - ✓ Personal Protective Equipment (PPE)
  - ✓ Electrical safety
  - ✓ Workspace cleanliness
  - ✓ Signage interpretation
  - ✓ Fire preventive plan
  - ✓ Ergonomics
  - ✓ Emergency preparedness
  - ✓ Pollution minimization
- **Application of circular economy in workplace**
  - ✓ Waste management
  - ✓ Workplace layout
  - ✓ Lower energy consumption
- **Protection of incident/accident**
  - ✓ Workplace setup
  - ✓ Hazard analysis
  - ✓ Lifting equipment
  - ✓ Chemical safety
  - ✓ Use of first aid kit
  - ✓ Use of fire extinguishers
- **Reporting incident/accident**
  - ✓ Essential information
  - ✓ Preserving evidence
  - ✓ Facilitating faster Response

✓ Enhancing investigation ✓ Legal and compliance considerations ✓ Reporting procedures

Resources required for the indicative content	
Equipment	Computers or Laptops, Printers and Scanners, Label Printers, Telephones, Office stationary, projector, white boards, PPE, Fire Extinguishers, Lifting Equipment, Air Compressor, Fire blanket, Firefighting or fire hydrant equipment
Materials	Cleaning products, Waste disposal bags,
Tools	Directional signs, Safety posters, First aid kit, Brooms, Dustpans, Mops, Degreasers, Rags, Trash cans, Recycling bins, Safety Data Sheets (SDS)
Facilitation techniques	• Group discussion • Trainer guided • Brainstorming • Demonstration • Simulation
Formative assessment methods	• Written based assessment • Oral based assessment • Product based assessment • Performance assessment

Learning outcome 2:Order new spare parts and materials from the supplier	Learning hours: 15
Indicative content	

- **Identification of new spare parts and materials**
  - ✓ Vehicle spare parts specifications
    - Manufacturing industry
    - Part Numbers
    - Model
    - Year of fabrication
    - Chassis number /Vehicle Identification Number(VIN)
  - ✓ Materials specification
    - Manufacturing date
    - Expiration date
    - Weight
    - Model
  - ✓ Classification of vehicle spare parts
    - Vehicle system or components
    - Brand or manufacturer
    - Function or purpose
    - Material or composition
    - Size or weight
    - Life cycle of spare parts

- **Conducting market survey**
  - ✓ Vehicle spare parts and materials prices
  - ✓ Vehicle spare parts and materials quality
- **Ordering spare parts and materials**
  - ✓ Vehicle details
  - ✓ Parts identification
  - ✓ Creating a requisition
  - ✓ Preparation a purchase order (PO)
  - ✓ Perform order tracking and delivery
    - Order tracking system
    - Delivery confirmation
    - Receiving process
- **Receiving and checking spare parts and materials**
  - ✓ Verification the delivery
  - ✓ Delivery receipt
  - ✓ Quantity and parts number
  - ✓ Technical specifications
  - ✓ Warranty documentation

Resources required for the indicative content	
Equipment	Computers or Laptops, Printers and Scanners, Label Printers, Telephones, Office stationary, projector, white boards.
Materials	Purchase Order Forms, Supplier Catalogues, Requisition Forms, Order Tracking Sheets, Manuals and Guides, Flip chart, pens, markers.
Tools	Procurement Software, Supplier Management System, Inventory Management Software, E-Procurement Platforms, Email and Communication Tools, Document Management System (DMS), E-Signature Tools.
Facilitation techniques	• Group discussion • Trainer guided • Brainstorming • Demonstration • Simulation
Formative assessment methods	• Written based assessment • Oral based assessment

Learning outcome 3: Manage stock of the auto spare parts and materials	Learning hours: 15

Indicative content

- **Recording new stock of spare parts and materials**
  - ✓ Details of the spare parts and materials
- **Storing of auto spare parts and materials**
  - ✓ Handling techniques
  - ✓ Categorization
    - Alphabetic order
    - Vehicle types
    - Model
    - Mark
- **Conducting inventory of auto spare parts and materials**
  - ✓ Stock level
  - ✓ Status
  - ✓ Performing inventory methods
    - Weighted-average cost method
    - First in, first out (FIFO) method
    - Last in, first out (LIFO) method
- **Preparation inventory report of auto spare parts and materials**
  - ✓ Inventory information
  - ✓ Inventory items
  - ✓ Inventory levels
    - Quantity on hand
    - Available quantity
    - Allocated quantity
  - ✓ Inventory valuation

Resources required for the indicative content

Equipment	Shelves Storage Bins and Containers, Forklifts and Pallet Jacks Printers, Label Printers, Computer Systems andTablets , RFID System,Weighing Scales, Barcode Scanning machine,
Materials	Inventory Tags and Labels, Barcodes reader and QR Codes reader, Shelving Labels and Bin Labels, Packing Materials, Inventory Forms.
Tools	Inventory Management Software, Enterprise Resource Planning (ERP) Software, Automated Reordering System, Supplier Management System, Reporting template
Facilitation techniques	• Group discussion • Trainer guided

	• Brainstorming • Demonstration • Simulation
Formative assessment methods	• Written based assessment • Oral based assessment

Learning outcome 4: Perform sales and record keeping	Learning hours: 15
Indicative content	

- **Preparation of proforma invoices**
  - ✓ Key components of a proforma invoice
- **Preparation of invoices**
  - ✓ Seller and Buyer information
  - ✓ Unique invoice number and date
  - ✓ List of products or services sold
  - ✓ Quantity of each item
  - ✓ Unit price and total cost
  - ✓ Payment terms
  - ✓ Tax information
- **Requesting of auto spare parts and materials**
  - ✓ Department or individual requesting the purchase
  - ✓ Description of the required goods or services
  - ✓ Quantity needed
  - ✓ Estimated budget
  - ✓ Justification for purchase
  - ✓ Approval workflow
- **Conducting inventory of auto spare parts and materials**
  - ✓ Stock level
  - ✓ Status
  - ✓ Performing inventory methods
    - Weighted-average cost method
    - First in, first out (FIFO) method
    - Last in, first out (LIFO) method
- **Recording of the sales spare parts and materials**
  - ✓ Sales invoice
  - ✓ Sales log book
  - ✓ Software solutions
    - Point of sale (POS) system
    - Radio frequency identification technology(RFID)
    - Inventory management software

- **Preparation of report of auto spare parts and materials**
  - ✓ Measure inventory performance report
  - ✓ Inventory control report
  - ✓ Inventory valuation report

Resources required for the indicative content	
Equipment	Computer ,Tablet, Cash Register, Credit Card Reader, Receipt Printer, Barcode printer, Phone and Fax Machine, Filing Cabinets, external hard drives,
Materials	Receipt Paper, Invoice Forms, Sales Order Forms, Labels and Tags, Accounting and Ledger Books, Business Cards, spare parts
Tools	Point of Sale (POS) machine, Accounting Software, Spreadsheet Software, RFID technology, Inventory Management Software, Barcode Scanner, Square Reader, Stripe Terminal, Mobile application, cloud based solutions, excel or sprid sheet software
Facilitation techniques	• Group discussion • Trainer guided • Brainstorming • Demonstration • Simulation
Formative assessment methods	• Written based assessment • Oral based assessment

Bibliography

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