



Central International University-CIU

Diversity Learning Institute-DLI

Twikatane e.V Germany

Skills Curriculum/Syllabus

Course Duration: 6 months

Course: General Heavy Duty Vehicle Mechanics & Entrepreneurship

Syllabus Highlights

Expanded breakdown of the Topics

Practicals/Hands-On to be done in each Module

Equipment needed in each Module

Main Goals and Aims of this course

The Objectives of the Course

The points how this course will benefit the communities and the Zambian economy

Recommended books for each module

Free Online Libraries to access the books

Names of organizations that finance and sponsor the projects under this course.

(A) Syllabus Outline:

Module 1: Introduction to Heavy Duty Vehicles	(40 hours)
Module 2: Engine Systems and Maintenance	(60 hours)
Module 3: Transmission and Drivetrain Systems	(50 hours)
Module 4: Electrical and Electronic Systems	(60 hours)
Module 5: Suspension and Steering Systems	(40 hours)
Module 6: Brake Systems	(50 hours)
Module 7: Body and Chassis Systems	(40 hours)
Module 8: Preventive Maintenance and Inspections	(40 hours)
Module 9: Troubleshooting and Repair Techniques	(60 hours)
Module 10: Business Fundamentals for Entrepreneurship	(20 hours)

(B) Main Objectives of the course:

1. Develop a comprehensive understanding of heavy-duty vehicles and their systems.
2. Acquire practical skills in maintaining, repairing, and troubleshooting heavy-duty vehicles.
3. Gain knowledge of business fundamentals to start and manage an entrepreneurial venture in the automotive industry.
4. Foster critical thinking and problem-solving abilities related to heavy-duty vehicle mechanics.
5. Enhance communication and teamwork skills through practical exercises and projects.
6. Promote safety practices and adherence to industry standards.
7. Develop an entrepreneurial mindset and the ability to identify market opportunities.
8. Cultivate leadership and management skills required for running a successful automotive business.

9. Foster an understanding of the importance of environmental sustainability and ethical practices in the automotive industry.
10. Encourage networking and collaboration within the heavy-duty vehicle mechanics and entrepreneurship communities.

(C) Main Goals and Aims:

1. Provide advanced knowledge and practical skills in heavy-duty vehicle mechanics.
2. Equip students with the essential tools to become successful entrepreneurs in the automotive industry.
3. Bridge the gap between technical expertise and business acumen.
4. Contribute to the development of skilled professionals in the automotive sector.
5. Enhance employability and career prospects for graduates.
6. Promote self-employment and job creation through entrepreneurship.
7. Foster economic growth and innovation in the automotive industry.
8. Improve the overall quality and safety standards in heavy-duty vehicle maintenance and repair.
9. Empower individuals to contribute to their communities through job creation and skill transfer.
10. Reduce the reliance on foreign expertise in the automotive sector and promote local talent.