

Strengthening Gamified Digital Learning for Learners and VET personnel in Professional Driver Training

# Curriculum

Project no. 2021-1-DE02-KA220-VET-00002528

Project result PR 1

Author DEKRA SE

Contributor(s) AFT, Transformation, TTS, StageIT

Date of deliverable 02/06/2023

Status Final



#### Table of contents

Overview	2
Module 1: Eco – Training	3
Module 2: Load – safety	4
Module 3: Health, road and environmental safety, service, logistics	5
Module 4: Application of regulations	7

# **GamingDRV Curriculum**

#### **Overview**

Syllabus contains 4 modules of 7 hours (in accordance with DIRECTIVE (EU) 2022/2561).

#### Module 1 - Eco driving-Training

- 1.1 Knowledge of characteristics of the transmission system
- 1.2 Knowledge of technical characteristics and operation of the safety controls
- 1.3 Ability to optimize fuel consumption
- 1.4 Ability to anticipate, assess and adapt to risks in traffic

#### Module 2 – Load safety

1.5 Ability to load the vehicle with due regard for safety rules and proper vehicle use

#### Module 3 - Health, road and environmental safety, service, logistics

- 3.4 Awareness of the importance of physical and mental ability
- 3.6 Ability to adopt behavior to help enhance the image of the company:

#### Module 4 - Application of regulations

- 2.1 Knowledge of the social environment of road transport and the rules governing it
- 2.2 Knowledge of the regulations governing the carriage of goods





## **Module 1: Eco driving – Training**

Objectives	- To know the characteristics of the transmission in order to
	optimize its use.
	- To understand how to adapt driving technique to suit the vehicle
	and the road
Target group	Truck drivers
Training method	Interactive synchronous virtual classroom training with gamified
	learning elements
Duration	7h (45 min per class)
Training content	The driver plays a key role in the use of energy in heavy traffic.
	The training creates the conditions for safe, economical and
	environmentally friendly driving. • traffic injuries decrease → traffic
	safety improves • fuel consumption decreases → up to tens of
	percent savings in fuel costs • exhaust gas emissions are reduced →
	environmental load is reduced • with the change in driving style,
	significant savings in other vehicle operating costs as well • guide
	drivers to a permanent proactive and economical driving style by
	regular monitoring of driving style data and with feedback
Trainer	A teacher or trainer who is familiar with all subject areas,
qualification	experienced in training drivers. Ideally, they should have been a
needed	driver in a previous career, and they should have a vocational
	training qualification and approval needed. They need basic digital
	competences and some experience with digital training methods to
	be able to deliver the training in a virtual classroom with gamified
	elements.





## Module 2: Load - safety

Objective	Ability to load the vehicle with due regard for safety rules and proper
	vehicle use
Target group	Truck drivers
Training method	Interactive synchronous virtual classroom training with gamified
Training metriod	learning elements
Duration	7h (45 min per class)
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Training content	Knowledge of the content of the SFS EN 12195-1 standard for truck
	and combination vehicle loading, practice of securing the load by
	forming 1 - 4 groups of the same content in an isolated area. With
	one group, the number of participants is limited to 10 people per
	cargo basket or transport unit.
	In particular:
	- Forces acting on the vehicle during travel,
	- Calculation of the payload of a vehicle or combination,
	- Calculation of the payload volume,
	- Distribution of the load,
	- Effects of overloading on the axle,
	- Vehicle stability and centre of gravity,
	- Types of packaging and load carriers,
	- Securing and lashing techniques,
	- Use of lashing straps,
	- Review of restraining devices, (use of cargo handling
	equipment and covering with a tarpaulin and removing the tarpaulin),
	- various superstructures of vehicles (sliding tarpaulin,
	tarpaulin for throwing up, certified trailers, box bodies, etc.),
	- securing of special cargoes (long timber transports,
_	beverages, etc. as an example).
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# Module 3: Health, road and environmental safety, service, logistics

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Objective	Awareness of the importance of physical and mental ability: To ensure drivers know how sleep, diet and exercise is directly related to their driving performance, to make drivers aware of the risks on the road, to explain how to minimise the risk of accidents and manage them when they happen and how to manage behaviour to enhance the image of the company.
Target group	Truck drivers
Training method	Interactive synchronous virtual classroom training with gamified
	learning elements
Duration	7h (45 min per class)
Training content	Part 1: Physical and mental ability:
	The importance of sleep:
	Know the legal requirement for rest and why long periods of travel between home and work can increase tiredness How sleep affects you physically and mentally, with guidance on sleep quality and how to get the best rest you can based on the where you are.
	The importance of a balanced diet: A summary of the different food groups (with examples) and what each group does to the body How different food affects the body in different ways i.e. high sugar = alertness over a short time with an immediate low that creates problems with concentration A summary of the recommended daily calorie intake based on age, gender and physical activity
	The importance of physical and mental exercise:  The benefits of physical exercise and what it means for driving, with examples of exercises that drivers can do in the vehicle  Targets for weekly workouts  The benefits of mental exercise (improve cognitive function) on driving and loading activities  Examples of what can go wrong if the brain 'switches off'  The benefits of brain games, puzzles and quizzes
	Part 2: Making drivers aware of the risks of the road and of accidents at work / ability to assess emergency situations Knowledge of how to drive a vehicle based on road conditions, including traffic volume, road type, speed, weather and direction of travel How to recognise and manage mood, deal with frustration and road rage from other road users





	The ability to predict traffic conditions, hazards and risks and to act
	before an incident occurs
	The ability to behave properly in an emergency
	Part 3: Ability to adopt behaviour to help enhance the image of
	the company
	Customer service:
	The importance of good manners and relations at home and at work
	How appearance and attitude can be so important when it comes to
	winning and keeping customers
	Guidance on how to deal with customer complaints and how to
	manage an angry situation
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	competences and some experience with digital training methods to
	be able to deliver the training in a virtual classroom with gamified
	elements.





## **Module 4: Application of regulations**

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Objective	To know the social environment of road transport and the rules
	governing it as well as the carriage of goods
Target group	Truck drivers
Training method	Interactive synchronous virtual classroom training with gamified
	learning elements
Duration	7h (two blocks of 3.5 hours)
Training content	- Part 1 Updating knowledge of European and national social
	regulations:
	- Drivers' driving time and resting time.
	Regulation (EC) No 561/2006
	Directive 2002/15/EC
	Regulation 165/2014
	Updating knowledge of national regulations
	Part 2 Use of a digital tachograph
	- Use
	- Penalties for failure to use, improper use of and tampering with
	the tachograph.
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	Part 3: regulations governing the carriage of goods:
	- transport operating licences, documents to be carried in the
	vehicle, bans on using certain roads, road-use fees, obligations
	under standard contracts for the carriage of goods, drafting of
	documents which form the transport contract, international
	transport permits, obligations under the Convention on the
	Contract for the International Carriage of Goods by Road,
	drafting of the international consignment note, crossing borders,
	freight forwarders, special documents accompanying good
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