

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

# Curriculum

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# **GamingDRV Curriculum**

#### **Overview**

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

#### Module 1 - Eco Driving

- 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 and wellbeing for safe roads

- 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 - Enforcement 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**

Objectives	<ul> <li>To know the characteristics of the transmission in order to optimize its use.</li> <li>To understand how to adapt driving technique to suit the vehicle and the road</li> </ul>
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 qualification needed	A teacher or trainer who is familiar with all subject areas, experienced in training drivers. Ideally, they should have been a 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
	learning elements
Duration	7h (45 min per class)
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).
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 3: Health and wellbeing for safe roads

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.
	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

# Trainer qualification needed

A teacher or trainer who is familiar with all subject areas, experienced in training drivers. Ideally, they should have been a 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 4: Enforcement of regulations**

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
	Undating knowledge of national regulations
	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.
	-
	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,
Taring	freight forwarders, special documents accompanying good
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	training qualification and approval needed. They need basic digital
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