

InnoVET UpTrain – Triale Vocational Education: transparent, digital

Project presentation

INNOVET



bibb Bundesinstitut für
Berufsbildung

Gefördert als InnoVET-Projekt aus Mitteln des Bundesministeriums für Bildung und Forschung.



VDV Akademie

(Academy for the Association
of German Transport Companies)



Federal Ministry
of Education
and Research

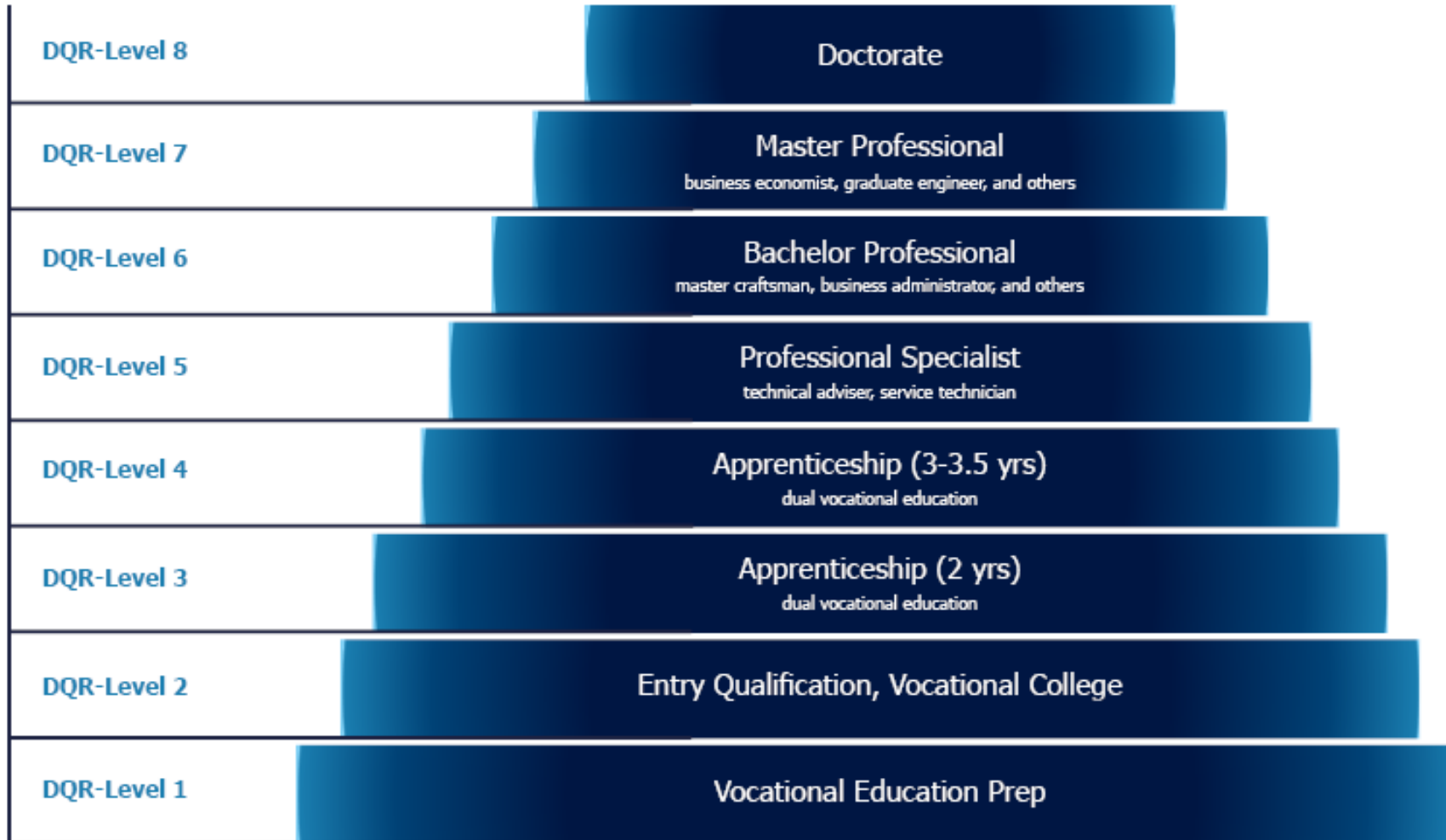


Amendment of the Vocational Training Law (BBiG)

New descriptions of higher vocational trainings within the system of tertiary qualification in Germany



German Qualifications Framework (DQR)



Objectives

**Two new commercial-technical higher-qualifying vocational trainings.
Including a degree by the chamber of commerce (IHK).**

1



Advanced Training Level 1:
**Certified occupational specialist
for electronics mobility (IHK)**



Advanced Training Level 3:
**Master Professional in technological
innovation-strategies (IHK)**

2



learning site cooperations
between transport companies,
universities and industrial
enterprises

3



accompaniment by the
Digital VDV-Academy
(DiVA)

4



trial education and
career counselling

5



permeability within
academic and
vocational education



A photograph of a train platform with tracks receding into the distance. The platform is covered by a dark, arched roof. The tracks are flanked by concrete walls and metal railings. The sky is bright and clear, suggesting a sunny day. The word "Questions" is overlaid in a large, bold, blue font in the center of the image. The text is partially enclosed by a large, semi-transparent white circle with a thin white border.

Questions

Certified Occupational Specialist for Electronics Mobility (IHK)



Parameters: Certified Occupational Specialist for Electronics Mobility (IHK)

Target Group:

- Persons with completed vocational training as electronics technicians, mechatronics technicians or motor vehicle mechatronics technicians, or at least five years of professional experience in comparable activities.

Time frame:

- part-time in 11 full weeks of classes over the course of 9 months
- Duration: 400 hours

Main Focus of Content:

- in-depth understanding of complex technical systems in the field of public transport or rail passenger services
- Intercorporate understanding of problems in mobility
- Competences for planning and processing technical tasks in technical areas of public transport companies



Module Overview

Elective 1 Buses & Coaches



Department-specific content,
e.g. high-voltage training or
engine types

Elective 2 Rail vehicles



Subject-specific content, e.g.
diagnostic technology or predictive
maintenance in the context of rail
vehicles

Elective 3 Control & safety technology



Subject-specific content, e.g.
traction current supply, CBTC or
elements of safety technology

Basic Module

- Public Transport 101 (organisation, financing, legal framework)
- Basic vehicle knowledge
- Future of public transport, interconnected mobility, sustainability & environmental protection



Top 3 additional values of this training

- 1 Specialists:** Participants deepen their technical knowledge and skills through classes with industry experts, exciting online learning units and practical phases within their own as well as other transport companies and industrial partners.
- 2 Network:** Participants build a network with committed colleagues, get to know an intercorporate community and benefit from practical experience in other workshops.
- 3 Future-proof:** Participants are equipped for challenging professional tasks - today and in the future.



Big Picture

„UpTown“ – a sustainable city filled with mobility

Exemplary division:
City life & depot

„Why is this part of my training?!“
illustration of the connectivity of
everyday-life events and
the participants jobs



UpGefahren – The Rallye

gamified extension of the training
(participation optional)

motivation, outlet, team spirit

Comparability to the first trial run:
motivation, mood, networking,
examination performances



Master Professional in Technological Innovation Strategies Mobility (IHK)



Parameters



Admission requirements



- master-craftsmen
- technicians
- graduates of BA programs with professional experience



Parameters



Admission requirements

- master-craftsmen
- technicians
- graduates of BA programs with professional experience

Competences



- Dealing with new complex tasks and problems
- Independent control of processes on a strategic level
- Leadership competence
- Innovation and change competence

Time frame

- Part-time (16 months)
- Duration: 1600 hours



Parameters



Admission requirements

Competences



Accompaniment by the Digital VDV-Academy (DiVA)

- preparation and follow-up of weekly blocks,
- organizational information
- materials for individual work



Big Picture

Modules 1-5

- **1** forecasting and identifying future developments in public transport
- **2** further development of digital technologies and strategic data management
- **3** planning, controlling and monitoring technical innovations in the business areas of vehicles, infrastructure, operations and distribution systems
- **4** leading and developing personnel within the framework of transformation processes
- **5** implementing and controlling innovation management

References to the modules

Further resources and material to be found on the „Lernwiesen“



Content and competences

1

forecasting and identifying future developments in public transport

Analyse and assess developments in public transport based on political, economic, ecological, urban planning and social criteria.

2

further development of digital technologies and strategic data management

3

planning, controlling and monitoring technical innovations in the business areas of vehicles, infrastructure, operations and distribution systems

4

leading and developing personnel within the framework of transformation processes

5

implementing and controlling innovation management



Content and competences

1

forecasting and identifying future developments in public transport

2

further development of digital technologies and strategic data management

3

planning, controlling and monitoring technical innovations in the business areas of vehicles, infrastructure, operations and distribution systems

4

leading and developing personnel within the framework of transformation processes

5

implementing and controlling innovation management

Process digitalisation in the areas of vehicle, infrastructure, operations and distribution systems. **Comparing and evaluating** of new technologies. Scripting languages and principles of data management: data acquisition and evaluation.



Content and competences

1

forecasting and identifying future developments in public transport

2

further development of digital technologies and strategic data management

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planning, controlling and monitoring technical innovations in the business areas of vehicles, infrastructure, operations and distribution systems

4

leading and developing personnel within the framework of transformation processes

5

implementing and controlling innovation management

Innovation and development potential of company divisions. Responsible **implementation and execution** of new processes, systems and concepts.



Content and competences

1

forecasting and identifying future developments in public transport

2

further development of digital technologies and strategic data management

3

planning, controlling and monitoring technical innovations in the business areas of vehicles, infrastructure, operations and distribution systems

4

leading and developing personnel within the framework of transformation processes

5

implementing and controlling innovation management

Assuming professional and personnel responsibility, especially during change processes. **Developing and establishing** new teams and organisational units.



Content and competences

- 1 forecasting and identifying future developments in public transport
- 2 further development of digital technologies and strategic data management
- 3 planning, controlling and monitoring technical innovations in the business areas of vehicles, infrastructure, operations and distribution systems
- 4 leading and developing personnel within the framework of transformation processes
- 5 implementing and controlling innovation management

Managing tasks, measures and activities that bring about cross-functional, strategic, innovative and long-term changes in public transport companies. Project, process and change management.



Top 3 additional values of this training

- 1 Employee retention:** About 70% of public transport employees enter with a vocational education. This training offers long-term career planning at a Master level.
- 2 Operational project work:** Participants proactively engage with their company's current challenges and issues on a scientific level.
- 3 Interdisciplinarity:** Teaching at and with universities, a hybrid between vocational and academic education.



**Putting everything
into practice**

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**learning site cooperations
between transport companies,
universities and industrial
enterprises**

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career counselling**

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**permeability within
academic and
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2 Learning Site Cooperations



learning site cooperations
between transport companies,
universities and industrial
enterprises

Participants receive a complex multifaceted overview from different perspectives

- Public transport companies offer insights into their daily practice
- Universities introduce aspects of current research and possible future developments
- Industrial enterprises represent new and current trends and technologies in the industry, with which the participants might be confronted in the future



3 Digital VDV-Academy (DiVA)



accompaniment by the
Digital VDV-Academy
(DiVA)

Both trainings are accompanied by the Digital VDV-Academy (DiVA). This platform holds all the relevant information for the participants.

- Organisational information
- Preparatory material for each weekly block
- Links to online sessions
- Web Based Trainings
- Study material





PFAD



PERSONEN



DISKUSSION



AKTIVITÄT

📍 CHECK IN

✔ Blockwoche 4
Information | 2 Min

UpTown - Zoom-In Blockwoche 4
Bild | 2 Min

✔ Diese Woche
Information | 2 Min

✔ Checkliste: Reiseplanung
Checkliste | 2 Min

Vernetzte Mobilität in Ihrem
Verkehrsunternehmen
Aufgabe | 5 Min

📅 Montag

📅 WM1/2: Dienstag

📅 WM3: Dienstag

📅 Mittwoch

📅 Donnerstag

📅 Freitag

🔒 CHECK OUT
Verfügbar am 13/10/23

Blockwoche 4



Herzlich willkommen in Blockwoche 4!

Die Woche **startet** wieder einmal **digital**. Dazu gibt es als Vorbereitung auf die folgenden Tage ein WBT zum Thema Grundlagen Arbeitssicherheit.

Am **Dienstag** starten wir dann in Präsenz in **Düsseldorf**:

- Wahlmoduls 1, Kasalla diesmal gemeinsam mit den Beertrain Ultras aka Wahlmodul 2
- die Signal-Raketen sind diesmal unter sich.

Für alle drei WM gilt: Es geht einen Tag um bereichsspezifische Arbeitsschutzmaßnahmen, also **PSA nicht vergessen!**

Am **Mittwoch** treffen alle Wahlmodule wieder aufeinander und es gibt eine gemeinsame **Betriebshofführung in Heerdt**, bei der das Thema Arbeitsschutz ebenfalls im Vordergrund steht.

Danach heißt es: Weiterreisen nach Bochum!

Am **Donnerstag und Freitag** gibt es an der **Hochschule Bochum** Einblicke in das Thema Vernetzte Mobilität und Sie können die nächsten Punkte für die UpGefahren! Rallye sammeln!

AUF GEHT'S! ➔



4 Counselling



trial education and
career counselling

Certified Occupational Specialist for Electronics Mobility

Three counselling sessions in the course of the training.

Master Professional in Technological Innovation Strategies Mobility

Demand-oriented offer

Additional offer for students, if they wish to learn about their career options.



5 Permeability



permeability within
academic and
vocational education

The trainings aim to close a gap both for employees and employers in public transport.

New career paths can offer more options and easier access.

Equalization of academic and vocational education, with the objective to enable graduates of vocational trainings to enter academia and vice versa.



Thank you for your attention!

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Contact

Maria Neuber

UpTrain | Education Officer
VDV-Akademie e. V.

P +49 221 57979-182
M +49 175 97491919

neuber@vdv.de · vdv-akademie.de · up-train.de

