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EuroS@P
EUROPEAN ROAD SAFETY PARTNERSHIP

WP5. Development of innovative teaching and certification methodologies

IO.15 - Development of the e-learning platform

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1 ABOUT THE EUROS@P PROJECT

The main objective of the EuroS@P project is to promote the best education solutions in the area of RISM directive, with an increase of awareness and knowledge of road safety, by:

- 1) Developing an e-learning platform with access to project products,
- 2) The development of teaching and training materials dedicated to conducting classes at universities and training courses for RISM staff,
- 3) Raising competencies and skills in RISM, by changing curricula at universities and equipping students and staff with didactic materials based on innovative RISM methods and tools,
- 4) Creating the foundations for Road Safety Professional Certification (RSP),
- 5) The development of a lasting relationship and the continuation of active international cooperation between project partners with the possibility of its extension to other institutions.

The EuroS@P project targets the following groups:

- 1) Students, researchers, and academic teachers at universities.
- 2) Road authority staff at national, regional and local levels.
- 3) Experts, specialists, and practitioners involved in RS activities, including staff who conduct training in various RS courses.
- 4) All users of road infrastructure, as an indirect target group, for whom the risk of road accidents will ultimately be reduced by increasing the effectiveness and efficiency of RISM activities.

The project is also supported by a group of associates who will cooperate with project partners to consult and evaluate the results. They will implement final products and promote the dissemination and accessibility of the project results.

ABOUT OUTPUT IO.15

- **Objective:** Development of the e-learning platform
- **Work package:** The task falls under WP5, focusing on the development of innovative teaching and certification methodologies.
- **Target Groups:**
 - Research and teaching staff from project institutions.
 - Civil engineering and transportation engineering students.
 - National, local, and regional road authority staff.
 - Specialists addressing road safety issues at various levels.

2 STRUCTURED MODULES AND RESOURCES

2.1 General features

When creating a course, organising the content into well-structured modules with clear headings, subtopics, and resource materials is essential. This will help students/specialists navigate the course easily. To achieve this, divide the course into manageable modules, each focusing on a specific aspect of roadside environment safety. Additionally, provide downloadable lecture notes, readings, and supplementary resources under each module¹.

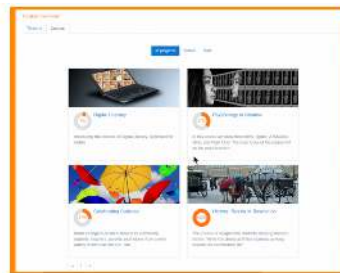
Moodle is a comprehensive learning platform that offers educators, administrators, and learners an all-in-one solution for creating personalised learning environments. A free online Learning Management System (LMS) enables educators to build their own private websites and design dynamic courses to enhance the learning experience. With Moodle, educators have the tools they need to create customised online courses, track student progress, and facilitate communication between learners and teachers (figure 1 - figure 4).



Modern, easy to use interface

Designed to be responsive and accessible, the Moodle interface is easy to navigate on both desktop and mobile devices.

[View demo](#)



Personalised Dashboard

Display current, past and future courses, along with tasks due.

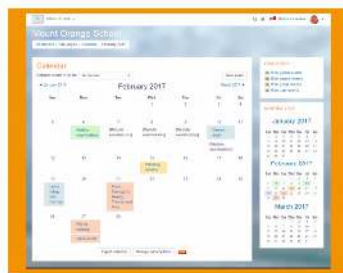
[Dashboard](#)



Collaborative tools and activities

Work and learn together in forums, wikis, glossaries, database activities, and much more.

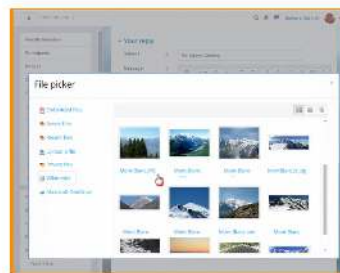
[Activities](#)



All-in-one calendar

Moodle's calendar tool helps you keep track of your academic or company calendar, course deadlines, group meetings, and other personal events.

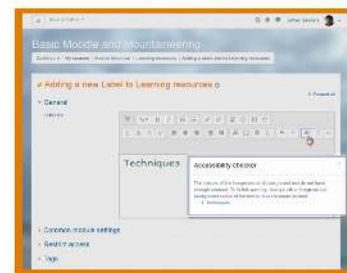
[Calendar](#)



Convenient file management

Drag and drop files from cloud storage services including MS OneDrive, Dropbox and Google Drive.

[Working with files](#)



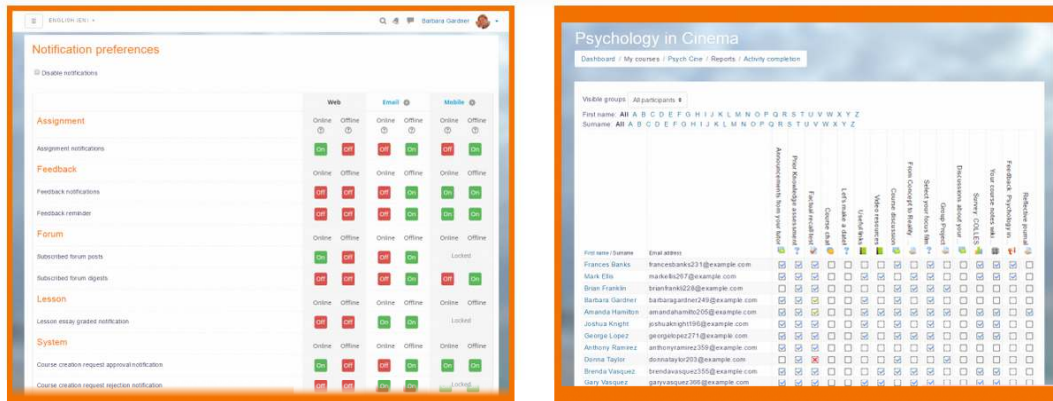
Simple and intuitive text editor

Format text and conveniently add media and images with an editor that works across all web browsers and devices.

[Text editor](#)

Figure 1 Example of Moodle platform

¹ https://docs.moodle.org/311/en/About_Moodle



Notifications

When enabled, users can receive automatic alerts on new assignments and deadlines, forum posts and also send private messages to one another.

[Messaging](#)


[View the complete list of features→](#)

Track progress

Educators and learners can track progress and completion with an array of options for tracking individual activities or resources and at course level.

[Tracking progress](#)

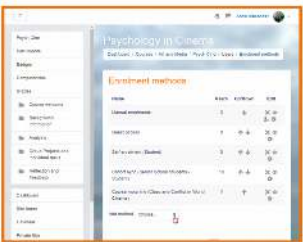
Figure 2 Example of Moodle platform



Customisable site design and layout

Easily customise a Moodle theme with your logo, colour schemes and much more - or simply design your own theme.


[Themes](#)



Secure authentication and mass enrolment

Over 50 authentication and enrolment options to add and enrol users to your Moodle site and courses.

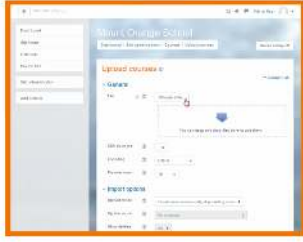
[Authentication / Enrolment](#)



Multilingual capability

Allow users to view course content and learn in their own language, or set it up for multilingual users and organisations.


[Language](#)



Bulk course creation and easy backup

Add courses in bulk, back up and restore large courses with ease.


[Bulk course upload](#)



Manage user roles and permissions

Address security concerns by defining roles to specify and manage user access.

[Roles and permissions](#)



Supports open standards

Readily import and export IMS-LTI, SCORM courses and more into Moodle.

[Standards](#)

Figure 3 Example of Moodle platform - Administrative Features

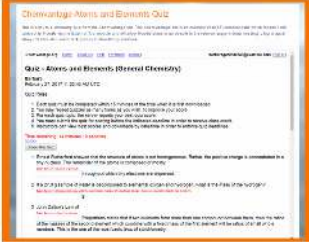



<p>Bulk course creation and easy backup</p> <p>Add courses in bulk, back up and restore large courses with ease. Bulk course upload</p> 	<p>Manage user roles and permissions</p> <p>Address security concerns by defining roles to specify and manage user access. Roles and permissions</p> 	<p>Supports open standards</p> <p>Readily import and export IMS-LTI, SCORM courses and more into Moodle. Standards</p> 
<p>High interoperability</p> <p>Freely integrate external applications and content or create your own plugin for custom integrations. SCORM / External tool</p> 	<p>Simple plugin management</p> <p>Install and disable plugins within a single admin interface. Installing plugins</p>	<p>Regular security updates</p> <p>Moodle is regularly updated with the latest security patches to help ensure your Moodle site is secure. Security</p>
<p>Detailed reporting and logs</p> <p>View and generate reports on activity and participation at course and site level.</p>		

Figure 4 Example of Moodle platform - Course Development and Management Features

2.2 Advantages or disadvantages of Moodle

Advantages of Moodle:

- This platform is free.
- Its functionality is enhanced with Google Classroom.
- It is possible to download free plug-ins that allow students to be contacted in videoconference format and also to be a member of the audio chat.
- With such a plug-in, you can compose your electronic portfolio.

Disadvantages of Moodle:

- You need a hosting and a domain to install and use the system.
- The platform is free, but the hosting service is not free.
- Too many tools, often unused, make it very difficult to use

2.3 Gdansk University of Technology e-learning platform

GUT e-learning is a platform developed by the Gdansk University of Technology to provide remote education, conduct tests to verify knowledge, and access virtual laboratories. E-learning is integral to the university's education and virtualisation, utilising ICT (Information and

Communication Technologies). The courses are available in electronic form via web browsers and mobile applications, created using Moodle - a popular software for eLearning.

At Gdansk University of Technology, it covers a fully remote form (e-learning) and a mixed form, in which traditional classes and distance learning complement each other (blended learning).

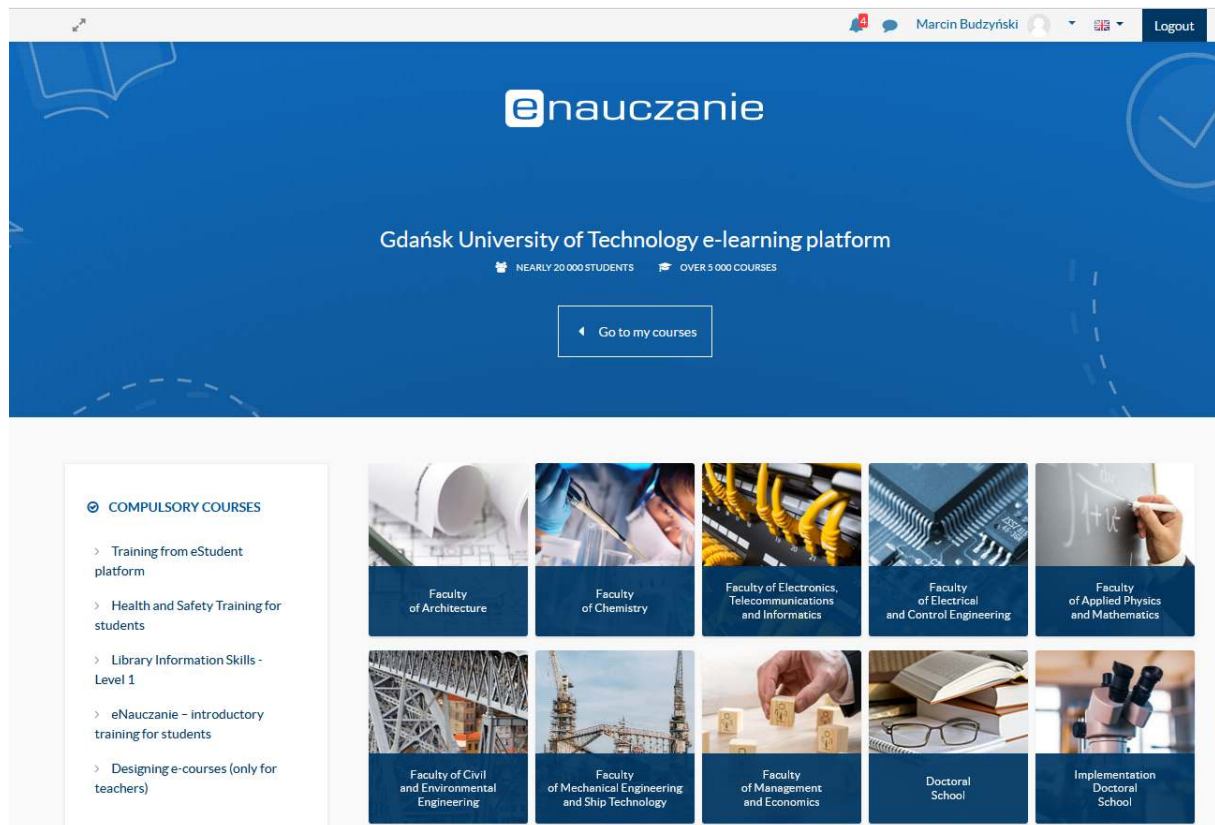


Figure 5 Start menu of e-learning

2.4 Introduction and purpose of the e-learning platform

The Moodle-based e-learning platform, developed under the EuroS@P-IO.15, is a comprehensive digital tool to enhance road safety education.

The e-learning platform is available on the Internet, which enables its use by research centres and road authorities throughout Europe. The e-learning platform contains road safety courses, all available to be applied to existing university course curricula. Through the e-learning platform, the project is committed to creating a one-stop solution for online learning on Road Safety by offering training on all aspects of the subject that cater to all levels.

The platform's content is a synthesis of extensive research on the impact of infrastructure on road safety, combined with established road safety methodologies.

Users of the platform can (figure 6):

- Observe EuroS@P Pedestrian Crossing Safety inspection courses for students and experts.
- Observe EuroS@P Road Safety Inspection courses for students and experts (Student course and Specialist course).
- Observe the EuroS@P Road Safety Professional certification course.

The platform with EuroS@P courses is accessible at: <https://enauczanie.pg.edu.pl/moodle/my/>

The didactic and training materials will be available after logging into the e-learning platform. Detailed information describing the process of registration is available at <https://support.pg.edu.pl/archive/display/HPPG/Access+to+eLearning+platform>.

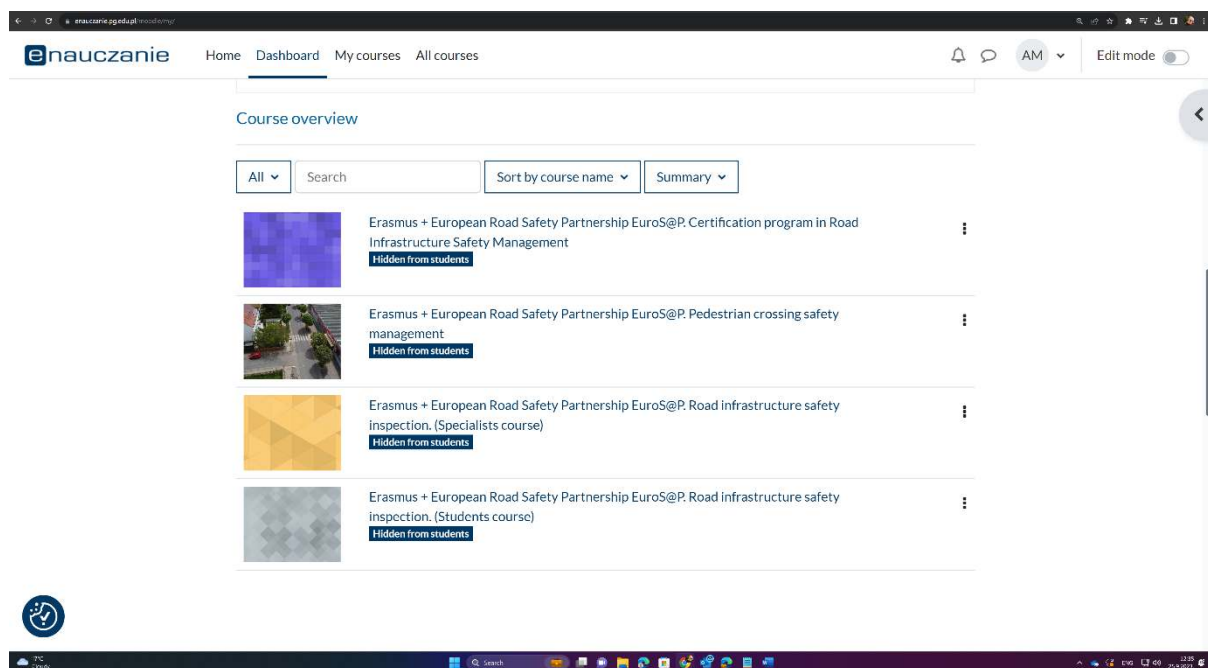


Figure 6 Overview of EuroS@P didactic materials and certification programme available on <https://enauczanie.pg.edu.pl/moodle/my/>

A Chrome browser on a PC or Laptop is recommended for optimal performance. A user registration process is mandatory for full access. Post-registration, certain features may require administrative approval.

2.5 YouTube EuroS@P canal

A dedicated channel on the YouTube platform will complement the course on the platform. The platform with EuroS@P canal is accessible at:

youtube.com/@eurosp4658

The platform's content is video, which is used in didactic materials divided into playlists:

- EuroS@P - Road Safety Inspection - Motorway, expressway sections,
- EuroS@P - Road Safety Inspection - Rural Intersections
- EuroS@P - Road Safety Inspection - Urban Intersections
- EuroS@P - Road Safety Inspection - Rural interchanges
- EuroS@P - Road Safety Inspection - Urban interchanges
- EuroS@P – Interviews.

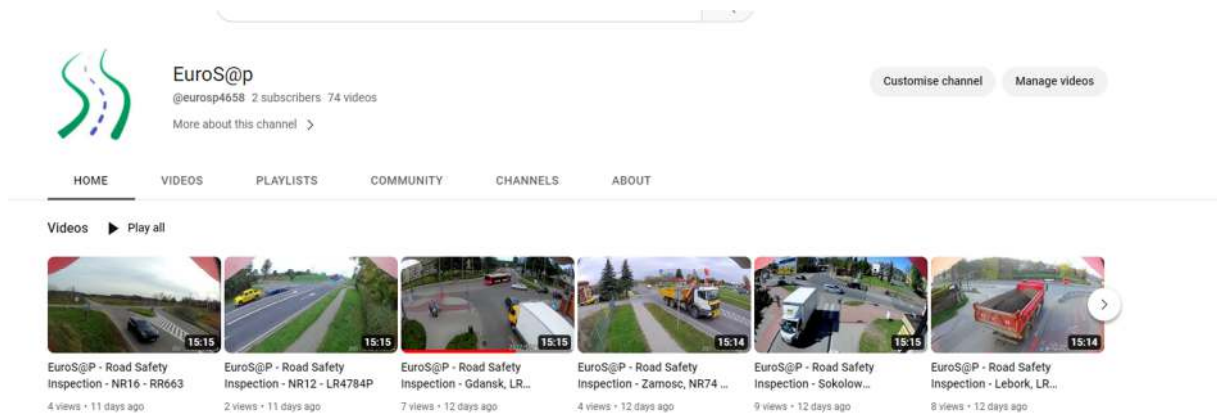


Figure 7 Overview of EuroS@P video didactic materials available on <https://youtube.com/@eurosp4658>