Report on Training at LUT

Project title	Improving STEM Teaching Process using Digital Transformation
Project acronym	DIGSTEM
Project reference number	22310113
Coordinator	University of Pristina in Kosovska Mitrovica
Project start date	September 01, 2023
Project duration	13 months

EVENT DESCRIPTION

Date	03rd-04th October 2023
Authors of the report	Vladimir Maksimovic, Jelena Todorovic, Nebojsa Arsic, Aleksandra Petrovic, University of Pristina in Kosovska Mitrovica
Consortium	• University of Pristina in Kosovska Mitrovica - coordinator • Lublin University of Technology • Obuda University • University of Zilina • Universum College
Venue	Lublin University of Technology (LUT)
Event title	Training for teaching process of STEM
Event description:	

Summary

This document reports the training for staff of WB HEIs on V4 institutions' experience in the application of STEM in teaching. The training included a visit to the host laboratory where WB HEIs staff learned about the application of STEM in practical teaching. The meeting was hosted by the Lublin University of Technology (LUT) in the LUT Campus, Lublin on 03-04th October 2023. The meeting was chaired by the University of Pristina in Kosovska Mitrovica (UPKM) the main coordinator of the project.

Event description

First day

Following the registration of participants, which began at 9:30 a.m., Vladimir Maksimovic (UPKM), Project Coordinator, took the floor to announce the agenda of the meeting. LUT representative Michal Charlak (LUT) then welcomed everyone and briefly introduced Lublin and the university. At 9:45 a.m. representatives of the participants in the project (Stefan Pitulic (UPKM), Uran Rraci (UC), Michal Charlak (LUT), Viktor Gonda (OBU), Radovan Madleňák (UNIZA)) presented their institutions and informed all participants about their capacities and possibilities. After that, at 11:00 a.m. Jelena Todovoric presented the timeline of the project and all project activities: Preparation of the DIGSTEM webinar and DIGSTEM publication. Then Vladimir Maksimovic at 11:30 a.m. continued on project management issues with a special focus on administration and budget.

At 12:00 a.m. the session of the STEM subject in the teaching process in V4 HEIs has started. The speaker, Izolda Gorgol (LUT) gave a presentation on: Application of Wolfram Demonstration Project Platform in teaching.

A coffee break was followed by an event: Inauguration of the academic year of the Faculty of Mathematics and Technical Computer Science (the newest Faculty at LUT), which lasted from 13:00 to 15:30. After the ceremony at 15:30, the session continued where presenter András Horváth (OBU) gave a presentation on: Challenges and Opportunities of Online Learning and Teaching at Obuda University and speaker Radovan Madleňák (UNIZA) gave a presentation on: Online learning environment at University of Zilina. At the end of the session at 17:00, a general discussion of the training was opened, and conclusions were made about the first day of training.

Second day

The second day of the meeting began at 9:30 a.m. with a presentation on LUT's possibilities of using digital transformation in the stem teaching process, led by Michał Charlak from LUT. Following this, digital communication tools for evaluation were presented by Agnieszka Gandzel (LUT). Viktor Gonda (OBU) presented an example of application of the collaborative workshop module in moodle for e-learning of forming technologies course.

Following a productive discussion that took place at 11:45 a.m., all participants were given the opportunity for a coffee break at 12:00 p.m.

The second part of the event, which focused on good practices in the STEM teaching process, was initiated with a presentation by Ewa Łazuka (LUT), who introduced an office365 for students of the Lublin University of Technology. At 12:45 Béla Mészáros (OBU) presented a creation of an online facilitate and engaging workshop practice for students. Subsequently, at 13:30 Radovan Madleňák (UNIZA) presented an innovative laboratory (HMI-LAB) related to neuroscience and its usage for support of students. The use of e-learning tools in the teaching of technical subjects at the University of Žilina was presented by Jiří Tengler at 14:15.

Following a productive discussion that took place at 15:00, all participants were given the opportunity for a coffee break at 15:15.

The visit to Lublin University of Technology Laboratory took place after the break. The visit began at 15:15. with a welcome by Michał Charlak (LUT), who introduced the laboratory's research focus and its significance in the field of technology and science, as well as using laboratories for STEM teaching process. This session provided a continuation of the laboratory exploration and the second tour was led by Ewa Łazuka (LUT) and began at 16:00 and continued until 17:00.

At 17:00, a final discussion session was held, during which participants had the chance to share their insights, ask questions, and provide recommendations based on the knowledge gained during the laboratory tour. This session served as a valuable exchange of ideas and a platform for collaborative thinking. The visit to Lublin University of Technology Laboratory concluded at 17:30.

Later in the day, discuss to strategize future activities within their respective project and distribute tasks efficiently. The day's proceedings concluded with a summarizing session where all partners shared their conclusions and thoughts on the event's second day.

Conclusions

The training in Lublin was successful because V4 HIEs shared their experiences, good practices, and potential solutions for the application of STEM in the teaching process that WB HEIs can apply. All planned agenda items were fulfilled. In addition to interesting keynote speeches, the participants discussed in more detail future activities and tasks on the project. The training contributed to potential future cooperation between partners and space for new ideas. These highly productive meetings served as significant milestones for the project, fostering collaboration, facilitating decision-making, and charting the course forward.

Training at LUT – Agenda

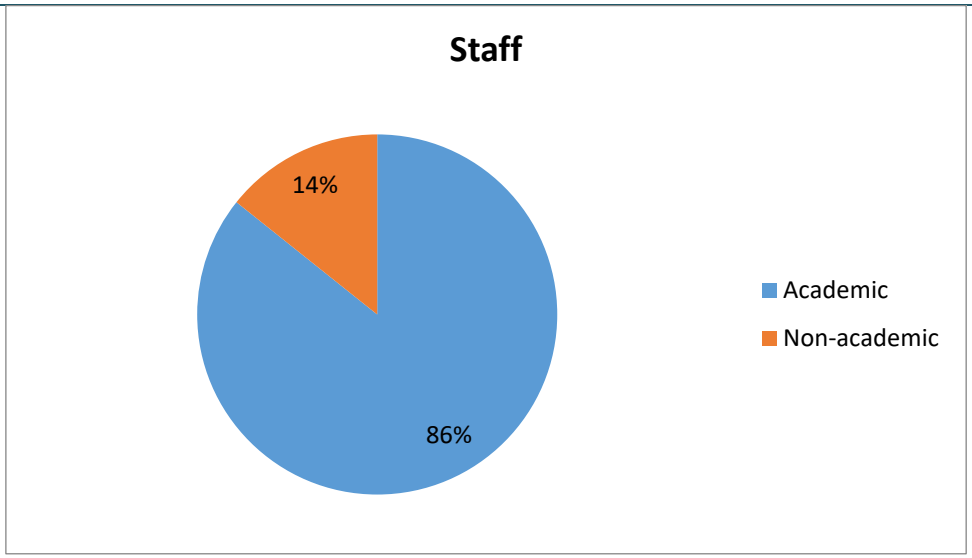
Day 1 - Tuesday, 03rd October 2023	
09:00-09:30	**Participants registration**
09:30-09:45	**Welcome and introduction** *Michał Charlak, Lublin University of Technology* *Vladimir Maksimovic, University of Pristina in Kosovska Mitrovica*
09:45-11:00	**Partner presentations** *Stefan Pitulic, University of Pristina in Kosovska Mitrovica* *Uran Rraci, Universum College* *Michal Charlak, Lublin University of Technology* *Viktor Gonda, Obuda University* *Radovan Madleňák, University of Zilina*
11:00-11:30	**Project activities and timeline: Preparation of the DIGSTEM webinar and DIGSTEM publication** *Jelena Todorovic University of Pristina in Kosovska Mitrovica*
11:30-12:00	**Project Management Issues: Administration and Budget** *Vladimir Maksimovic, University of Pristina in Kosovska Mitrovica*
12:00-12:45	**Application of Wolfram Demonstration Project Platform in teaching** *Izolda Gorgol, Lublin University of Technology*
12:45-13:00	**Break**
13:00-15:30	**Inauguration of the academic year of the Faculty of Mathematics and Technical Computer Science** (the newest Faculty at LUT)
15:30-16:15	**Challenges and Opportunities of Online Learning and Teaching at Engineering at Obuda University** *András Horváth, Obuda University*
16:15-17:00	**Online learning environment at University of Zilina** *Radovan Madleňák, University of Zilina*
17:00-17:30	**General discussion and conclusions of the Day 1**

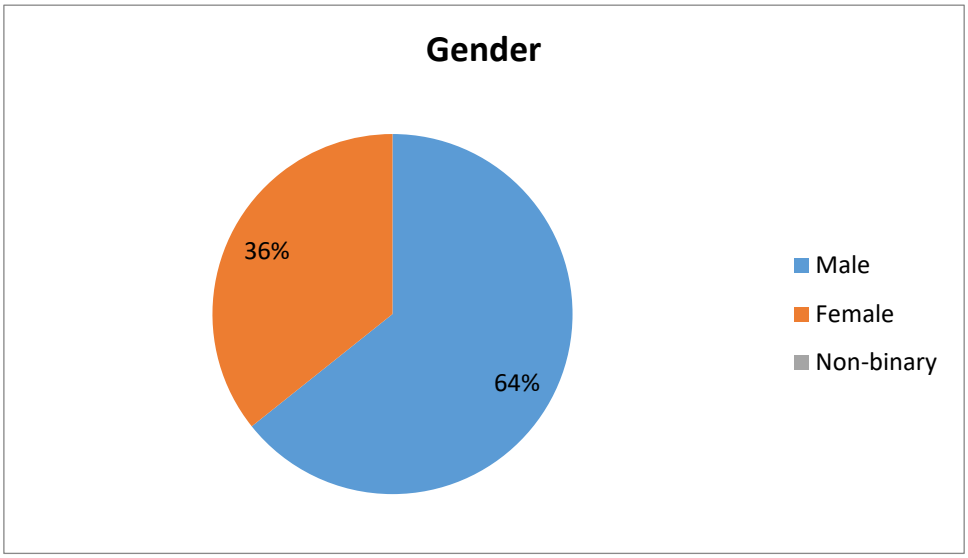
Day 2 - Wednesday, 04th October 2023	
09:00-09:30	**Participants registration**
09:30-10:15	**Possibilities of using Digital Transformation in the STEM Teaching Process** *Michał Charlak, Lublin University of Technology*
10:15-11:00	**Digital communication tools for evaluation** *Agnieszka Gandzel, Lublin University of Technology*
11:00-11:45	**Application of the Collaborative Workshop Module in Moodle for Elearning of Forming Technologies Course** *Viktor Gonda, Obuda University*
11:45-12:00	**Break**
12:00-12:45	**Office365 for students of Lublin University of Technology** *Ewa Łazuka, Lublin University of Technology*
12:45-13:30	**Creation an Online Facilitate and Engaging Workshop Practice for Students** *Béla Mészáros, Obuda University*
13:30-14:15	**HMI-LAB and its usage for support of student** *Radovan Madleňák, University of Zilina*
14:15-15:00	**The use of e-learning tools in the teaching of technical subjects at the University of Žilina (practical presentation)** *Jiří Tengler, University of Zilina*
15:00-15:15	**Break**
15:15-16:00	**Study visit to LUT laboratory** *Ewa Łazuka, Lublin University of Technology*
16:00-17:00	**Study visit to LUT laboratory** *Michał Charlak, Lublin University of Technology*
17:00-17:30	**General discussion and conclusions of the Day 2**

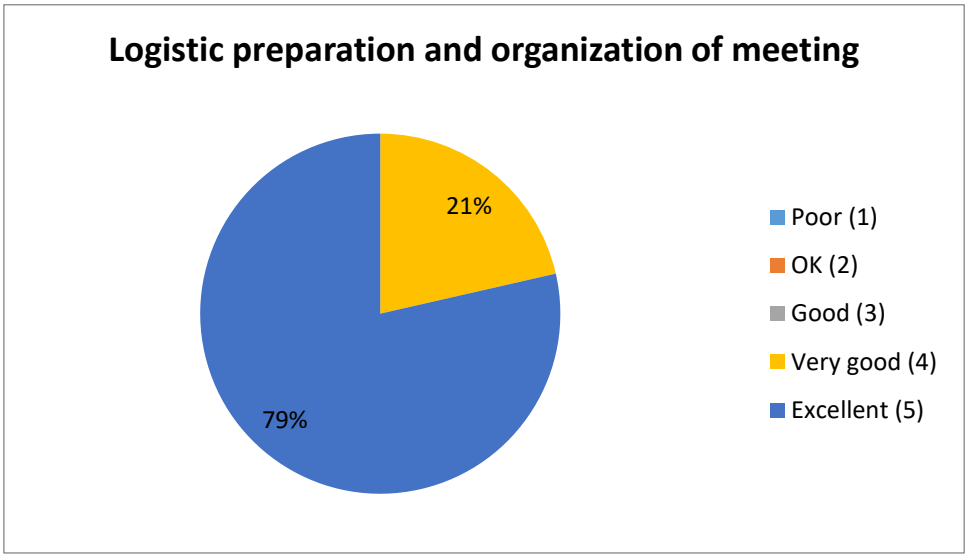
Useful Information

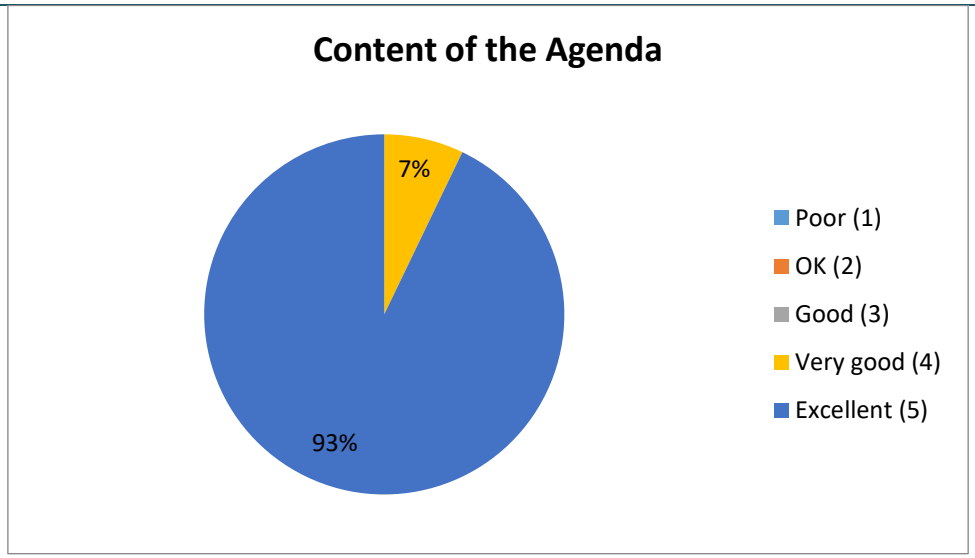
The study visit was held in the Faculty of Mathematics and Technical Computer Science, room 8 (1st floor)

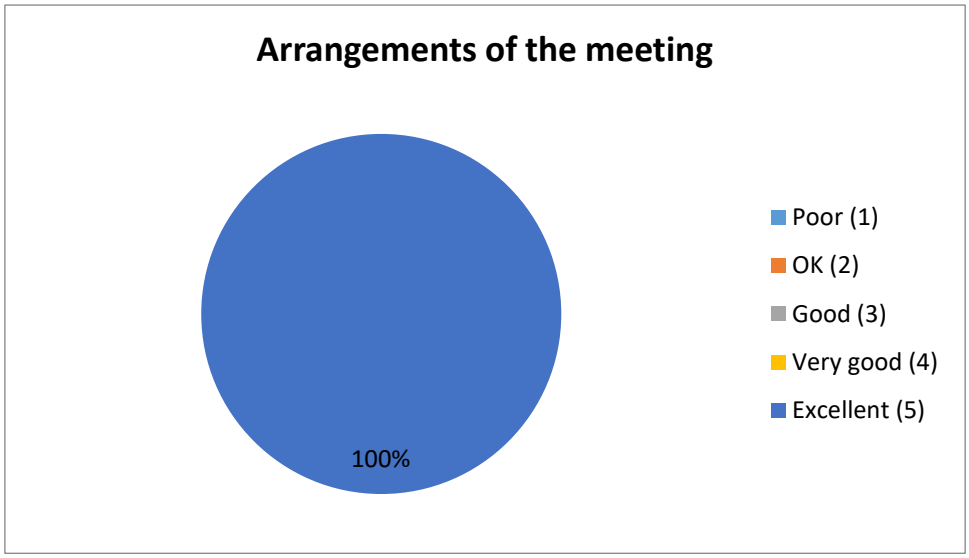
Event Evaluation List

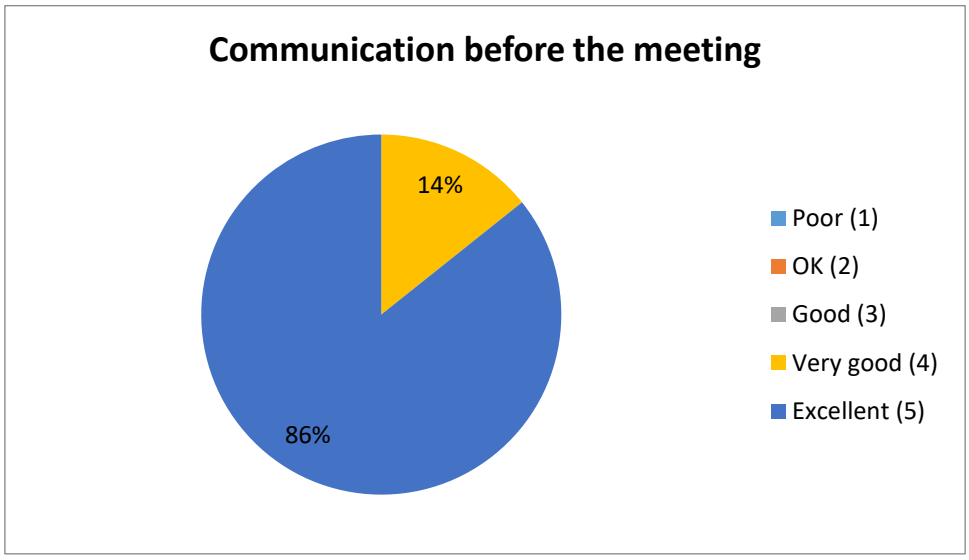


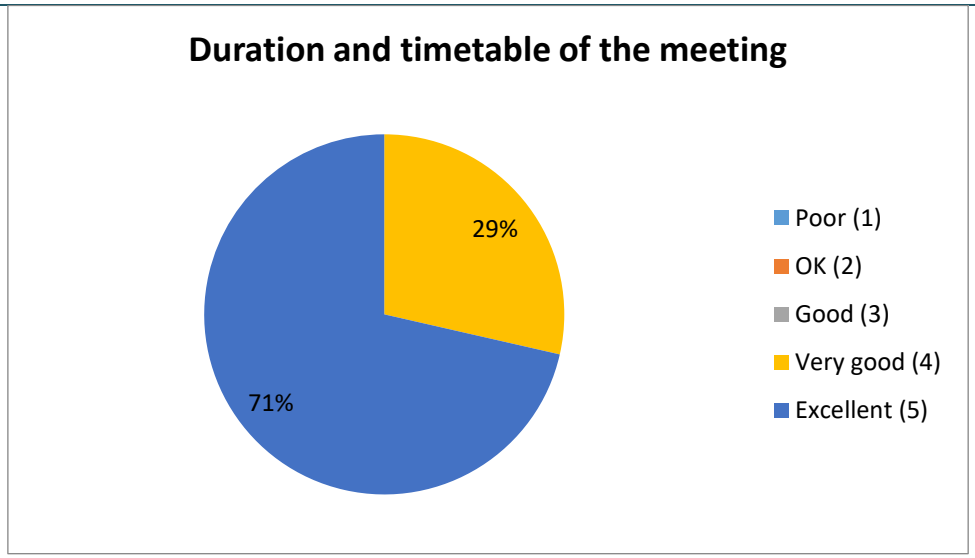


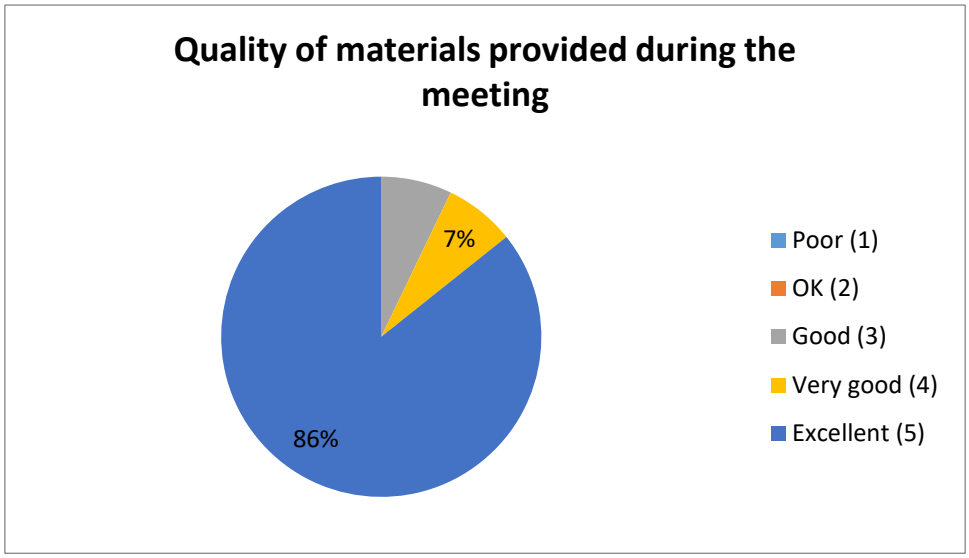


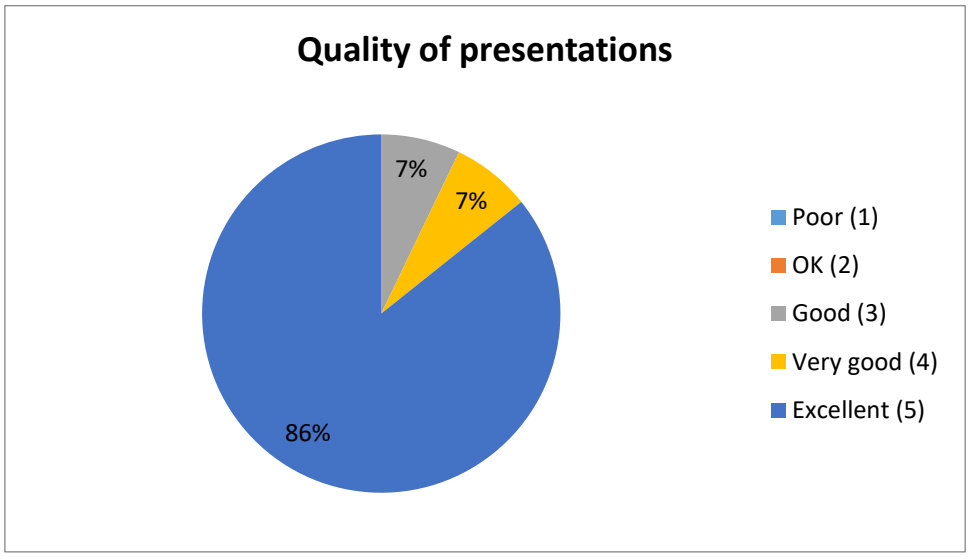

Content of the Agenda
7%
93%
Poor (1)
OK (2)
Good (3)
Very good (4)
Excellent (5)

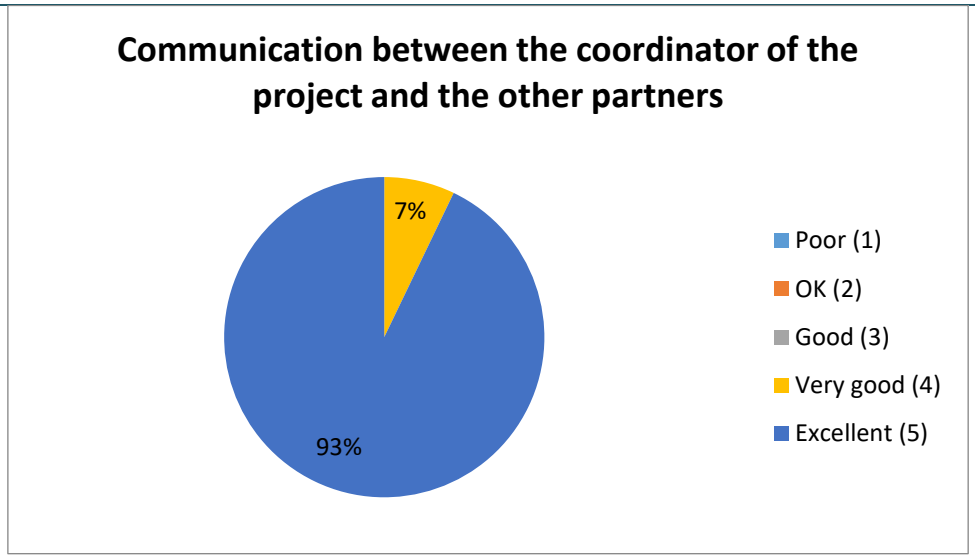

Arrangements of the meeting
100%
Poor (1)
OK (2)
Good (3)
Very good (4)
Excellent (5)

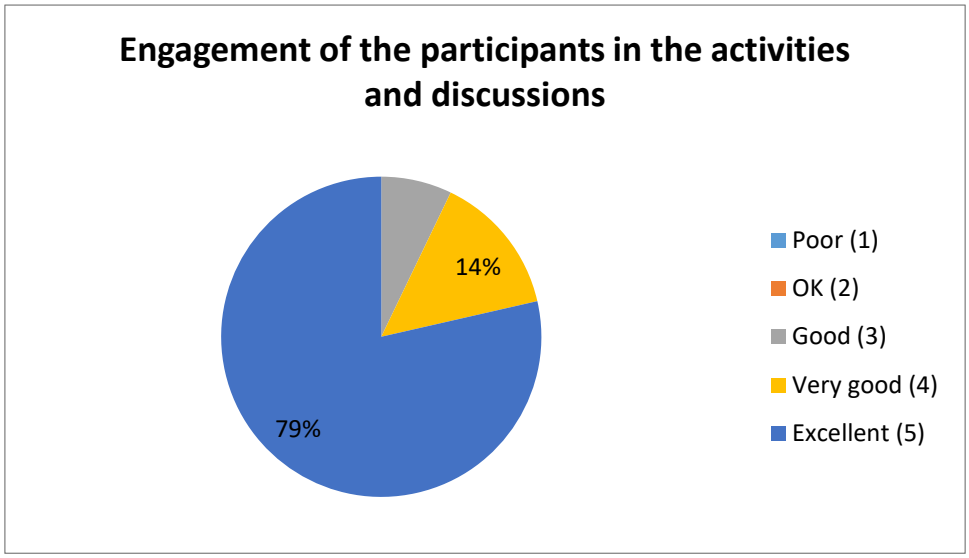

Communication before the meeting
14%
86%
Poor (1)
OK (2)
Good (3)
Very good (4)
Excellent (5)

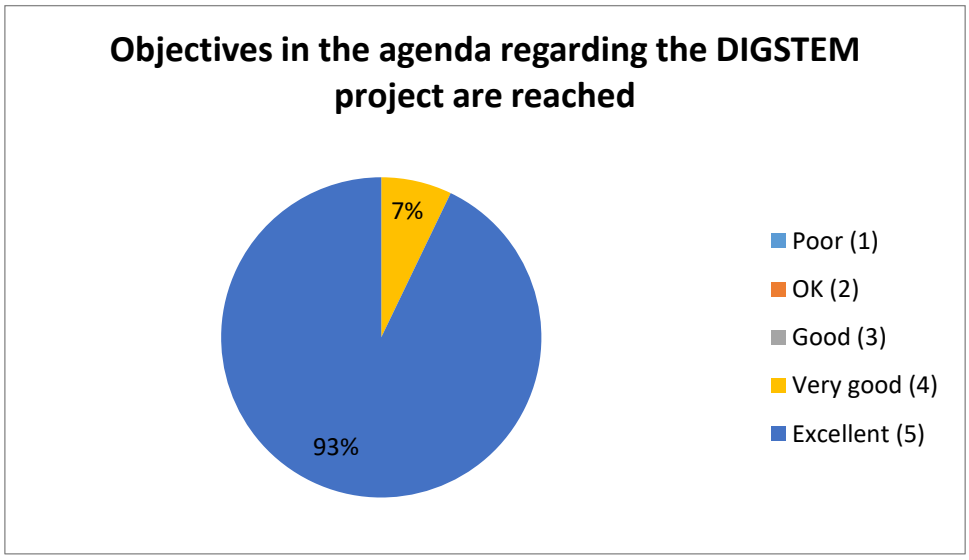

Duration and timetable of the meeting
29%
71%
Poor (1)
OK (2)
Good (3)
Very good (4)
Excellent (5)

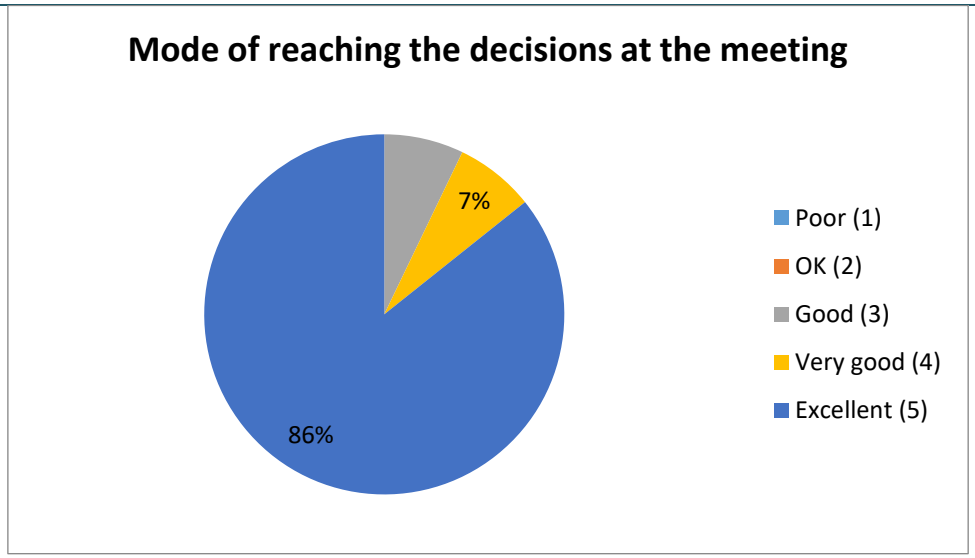

Quality of materials provided during the meeting
7%
86%
Poor (1)
OK (2)
Good (3)
Very good (4)
Excellent (5)

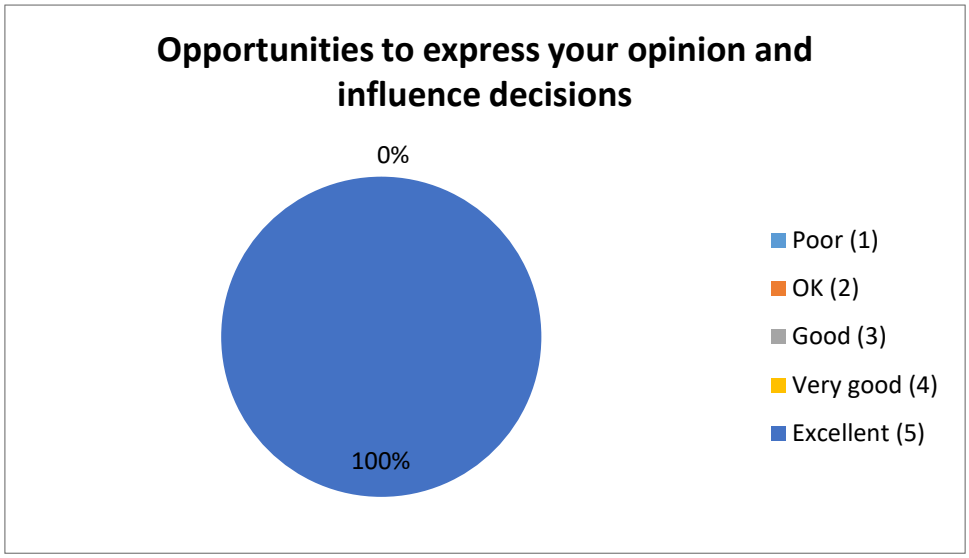

Quality of presentations
7%
7%
86%
Poor (1)
OK (2)
Good (3)
Very good (4)
Excellent (5)

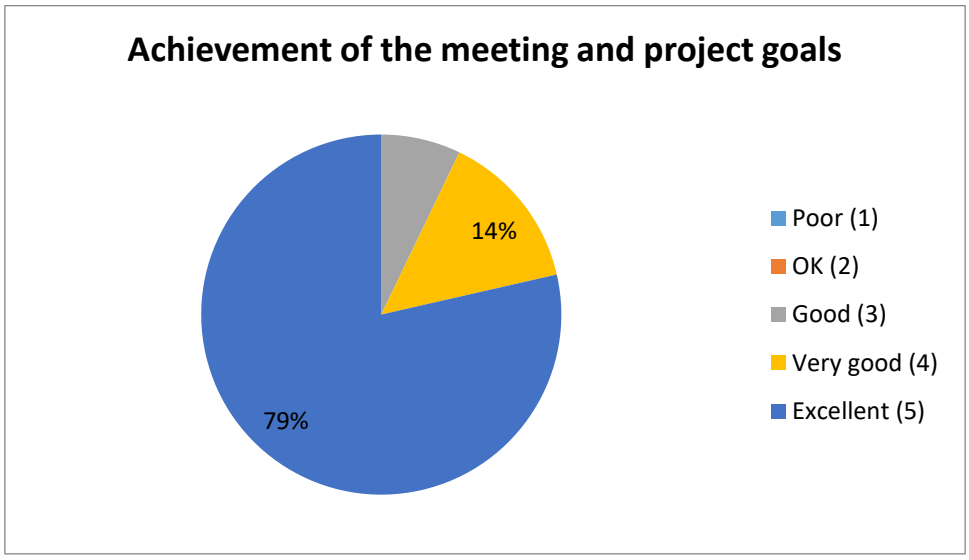

Communication between the coordinator of the project and the other partners
7%
93%
Poor (1)
OK (2)
Good (3)
Very good (4)
Excellent (5)

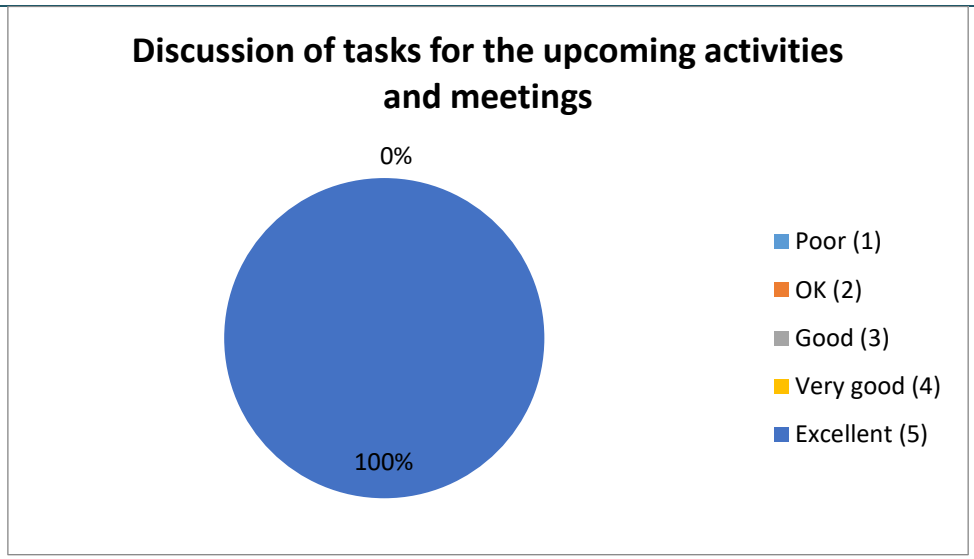

Engagement of the participants in the activities and discussions
14%
79%
Poor (1)
OK (2)
Good (3)
Very good (4)
Excellent (5)


Objectives in the agenda regarding the DIGSTEM project are reached
7%
93%
Poor (1)
OK (2)
Good (3)
Very good (4)
Excellent (5)


Mode of reaching the decisions at the meeting
7%
86%
Poor (1)
OK (2)
Good (3)
Very good (4)
Excellent (5)


Opportunities to express your opinion and influence decisions
0%
100%
Poor (1)
OK (2)
Good (3)
Very good (4)
Excellent (5)


Achievement of the meeting and project goals
14%
79%
Poor (1)
OK (2)
Good (3)
Very good (4)
Excellent (5)



Training at LUT - Attendance list

Attendance list

DIGSTEM - ATTENDANCE LIST

Event	**Training "Improving STEM Teaching Process using Digital Transformation"**
Venue	**Lublin University of Technology, Lublin, Poland**
Date	**03/10/2023 - 04/10/2023**
Organizer	**Lublin University of Technology**

No.	Name	Institution acronym	E-mail	Signature	Signature for pictures & audiovisual material publication[1]
1.	JIŘÍ TENGLER	UNIZA	TENGLER@UNIZA.SK		
2.	RADOVAN MADLENAK	UNIZA	MADLENAK@UNIZA.SK		
3.	Vladimir Maksimović	UPKM	vladimir.maksimovic@pr.ac.rs		
4.	Jelena Todorović	UPKM	jelena.todorovic@pr.ac.rs		
5.	Miloš Gvozdić	UPKM	milos.gvozdic@pr.ac.rs		
6.	Stefan Pitulić	UPKM	stefan.pitulic@pr.ac.rs		
7.	VIKTOR GONDA	OE	GONDA.VIKTOR@BGK.UNI-OBUDA.HU		
8.	Béla Mészáros	OE	meszaros.bela@BGK.UNI-OBUDA.HU		
9.	ANDRÁS HORVÁTH	OE	horvath.andras@bgk.uni-obuda.hu		
10.	Urszula Gonzal	PL	i.gonzal@pollub.pl		
11.	MICHAŁ CHARLAK	PL	m.charlak@pollub.pl		
12.					
13.					
14.					

[1]By signing this you agree to give permission to the hosts of the event to take pictures and audiovisual footage of you, during this event and publish those in public mediums such as website, social media, media outlets & printed promotional materials. The usage of the pictures shall be solely for purposes of event and topic related promotional events and initiatives.

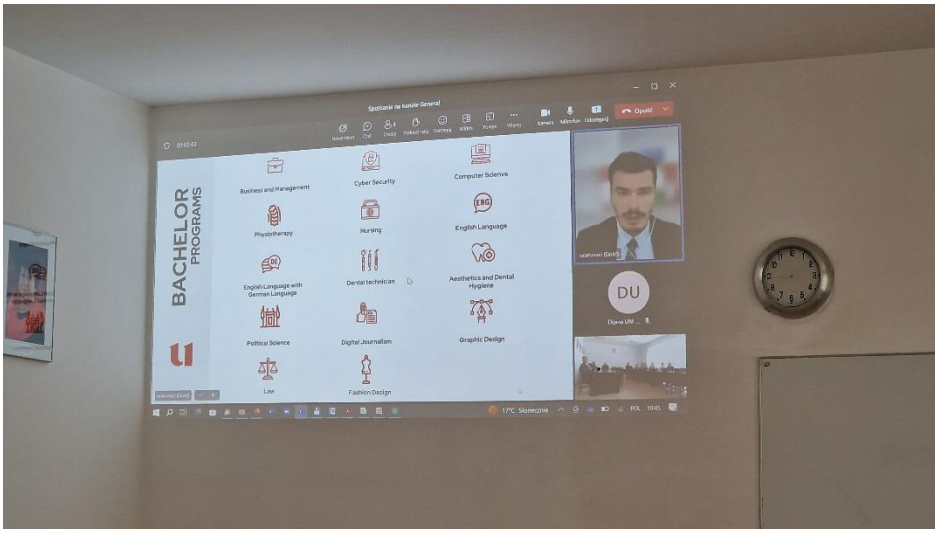
DIGSTEM - ATTENDANCE LIST

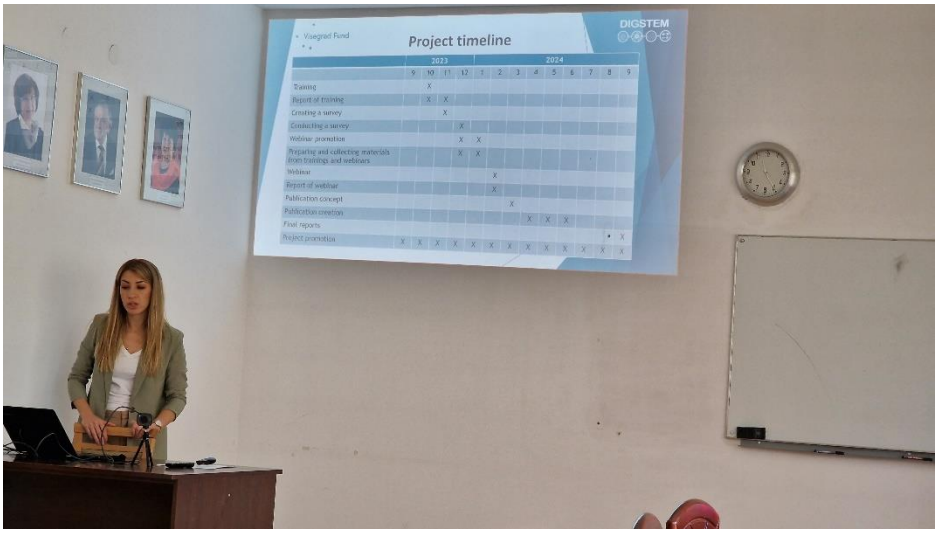
Event	**Training "Improving STEM Teaching Process using Digital Transformation"**
Venue	**Lublin University of Technology, Lublin, Poland**
Date	**03/10/2023 - 04/10/2023**
Organizer	**Lublin University of Technology**

No.	Name	Institution acronym	E-mail	Signature	Signature for pictures & audiovisual material publication[1]
1.	Vladimir Maksimović	UPKM	vladimir.maksimovic@pr.ac.rs		
2.	Jelena Todorović	UPKM	jelena.todorovic@pr.ac.rs		
3.	Miloš Gvozdić	UPKM	milos.gvozdic@pr.ac.rs		
4.	Stefan Pitulić	UPKM	stefan.pitulic@pr.ac.rs		
5.	Mészáros Béla	OE	meszaros.bela@bgk.uni-obuda.hu		
6.	VIKTOR GONDA	OE	gonda.viktor@bgk.uni-obuda.hu		
7.	ANDRÁS HORVÁTH	OE	horvath.andras@bgk.uni-obuda.hu		
8.	RADOVAN MADLENAK	UNIZA	madlenak@uniza.sk		
9.	JIŘÍ TENGLER	UNIZA	tengler@uniza.sk		
10.	AGNIESZKA GANDREL	PL	agandrel@pollub.pl		
11.	CHARLAK MICHAŁ	PL	m.charlak@pollub.pl		
12.	Dorota Wojcicka-Migasiuk	PL	d.wojcicka-migasiuk@pollub.pl		
13.	Ela Łazuka	PL	e.lazuka@pollub.pl		
14.					

[1]By signing this you agree to give permission to the hosts of the event to take pictures and audiovisual footage of you, during this event and publish those in public mediums such as website, social media, media outlets & printed promotional materials. The usage of the pictures shall be solely for purposes of event and topic related promotional events and initiatives.

Photos	Improving STEM Teaching Process using Digital Transformation Project Meeting DIGSTEM Project Meeting Faculty of Mathematics and Information Technology Michał Charlak POLITECHNIKA LUBELSKA LUBLIN UNIVERSITY OF TECHNOLOGY

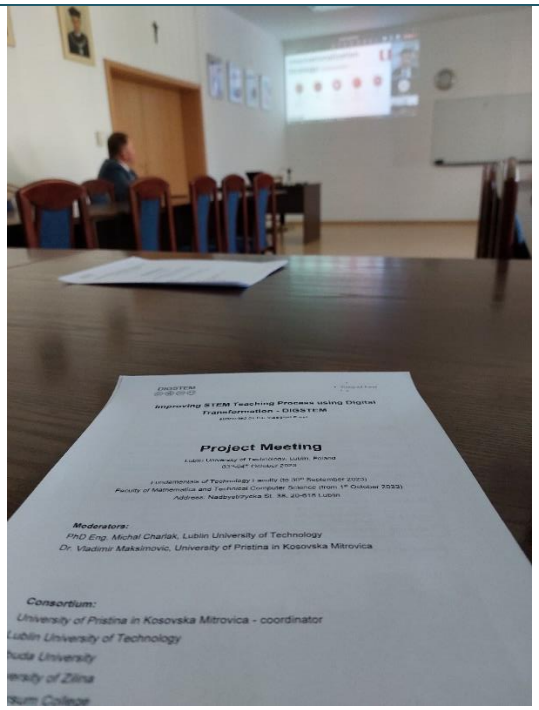

BACHELOR PROGRAMS
Business and Management
Physiotherapy
English Language with German Language
Political Science
Law
Cyber Security
Nursing
Dental technician
Digital Journalism
Fashion Design
Computer Science
English Language
Aesthetics and Dental Hygiene
Graphic Design
DU


Project timeline
DIGSTEM
2023
2024

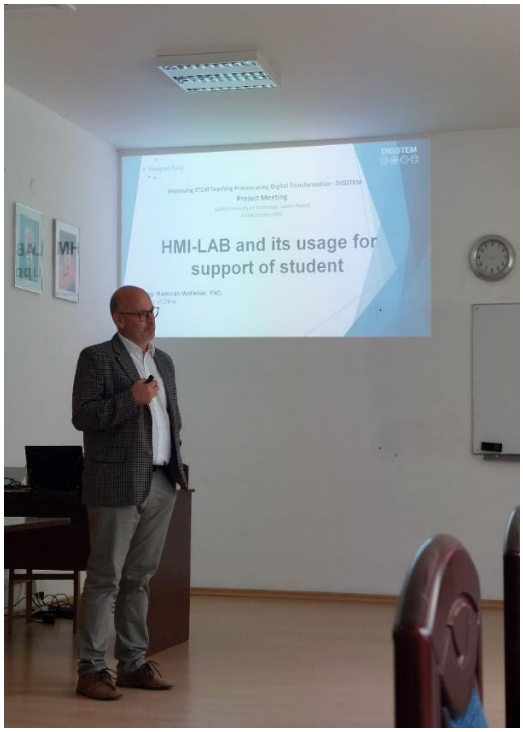
Project Management Issues

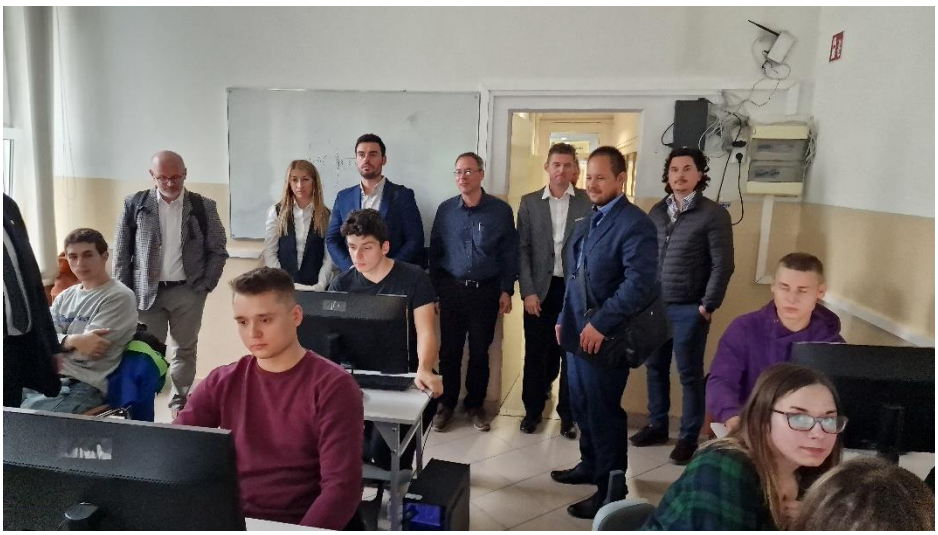
Application of the Collaborative Workshop Module in Moodle for Elearning of Forming Technologies Course

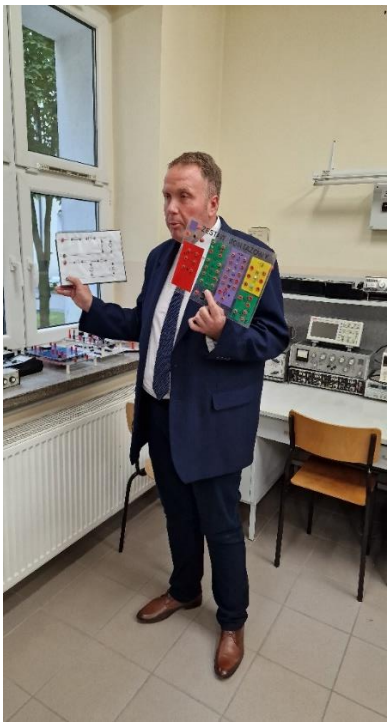
Creation of an Online Facilitate and
Engaging Workshop Practice for Students


Project Meeting
Moderators:
PhD Eng. Michał Charlak, Lublin University of Technology
Dr. Vladimir Maksimovic, University of Pristina in Kosovska Mitrovica
Consortium:
University of Pristina in Kosovska Mitrovica - coordinator
Lublin University of Technology

Agnieszka Gandzel,
Lublin University of Technology


HMI-LAB and its usage for
support of student

Presentation title	**Study visit to LUT laboratory**
Photos	



ODBIORNIK

ODBIORNIK

Visegrad Fund

DIGSTEM

Improving STEM Teaching Process using Digital Transformation - DIGSTEM

Project Meeting

Lublin University of Technology, Lublin, Poland

03-04 October 2023

Project activities and timeline:
Preparation of the DIGSTEM webinar and DIGSTEM publication

Jelena Todorovic
University of Pristina in Kosovska Mitrovica

Visegrad Fund

DIGSTEM

The main objectives of the project

- IMPLEMENTATION PERIOD: 01/09/2023–30/09/2024

- The overall goal of the project is to improve the application of digital technologies STEM (Science, Technology, Engineering, Mathematics) in the educational process of higher education institutions (HEIs) in Kosovo* through the exchange of experiences between HEIs from Kosovo*and the V4 region.
- The experience of HEIs from the V4 group will help to clearly define methodological approaches in the publication that will aim to:
  - developing the research spirit in young people,
  - developing a logical and critical observation of the experiment performance,
  - developing the ability to work with instrumental technique,
  - connecting theoretical knowledge and experiments,
  - increasing the level of scientific literacy.

Visegrad Fund

DIGSTEM

Deliverables

Training for teaching process of STEM (Event-Public), Lublin, PL 03/10/2023-04/10/2023	V4 institutions will prepare presentations and two-days training for staff of WB HEIs on their experience in the application of STEM in teaching. The training will also include a visit to the host laboratory where WB HEIs staff will learn about the application of STEM in practical teaching.
Webinar "Implementation of STEM principles in education system" (Event-Public), Mitrovica, XK First week in February 2024	The webinar will be organized online. The main organizer of the webinar is the University of Pristina in Kosovska Mitrovica. Teaching and non-teaching staff from WB HEIs and V4 HEIs will participate.
Publication (Product) 01/03/2024-30/06/2024	As a final result, the publication will contain all the material from the project.
Promotional materials (Product) 01/09/2023-28/09/2024	The project coordinator in collaboration with other partners will design promotional materials to be distributed to target groups. Promotional materials will be in electronic versions.

Visegrad Fund

DIGSTEM

Webinar

- Through the webinar, students, teaching and non-teaching staff of HEIs will be introduced to the capacities and state of the partner institutions and thus create space for a way that will enable the implementation of STEM principles in education. The conclusions from the webinar will be included in the final publication.
- All partner institutions will have presenters at the webinar, while the webinar will be hosted online by the University of Pristina in Kosovska Mitrovica. Participation in the webinar can be taken by staff and students both from the participating HEIs and from other HEIs that are not part of the project. The link will be available for registration throughout the month.

Visegrad Fund

DIGSTEM

Webinar - survey

- Before the webinar, a survey of students and teaching staff will be conducted. Surveys will be used to examine the prevalence and application of digital technologies STEM in teaching, what are the benefits, what are the advantages and disadvantages, how helpful is it, etc.
- Each partner institution will present its survey results.
- The survey will be compiled by the coordinator, and other partner institutions can make proposals for it.
- The survey questions should be created during November, while the survey should be conducted in December.

Visegrad Fund

DIGSTEM

Webinar

- Each institution will have experts who will present on the webinar.
- Experts should prepare topics and presentations. Presentations are preferred, but video content is also possible.
- Promotion of the webinar should be a month before the event in order to include as many students as possible (sharing links regarding the event).
- Each institution should provide a certain number of students, teaching and non-teaching staff to attend and follow the webinar (20-30 people).
- Before the webinar, the material that will be presented by the experts should be sent to the coordinator, so that it can be included in the publication.

Visegrad Fund

DIGSTEM

Publication

- The publication will consist of two parts. The first part will contain descriptions of project results and project activities (trainings, webinar conclusions, photos from the event, etc.) and will be intended for the general public. The second part will serve as a guide for the implementation of STEM in education based on the training reports and conclusions of the webinar.
- All material presented at the training and webinar by the experts will be included in the publication.
- The electronic publication will be distributed through the website and social networks. It will be available after the end of the project.
- All institutions will participate in the creation of the publication. The publication will be designed by the project coordinator.
- Defining the concept of the publication will take place one month before its creation, so that all partner institutions will be able to make proposals and participate in defining the content.
- Experts will create final publication based on reports from trainings and webinar.

Visegrad Fund

DIGSTEM

Promotion

- Partner institutions should share links and posts from the project website on their websites and official profiles on social networks during the project.

- Website: www.digstem.pr.ac.rs
- Facebook: www.facebook.com/DigstemVisegrad
- Instagram: www.instagram.com/digstem_visegrad

Visegrad Fund

DIGSTEM

Project timeline

	2023				2024								
	9	10	11	12	1	2	3	4	5	6	7	8	9
Training		X											
Report of training		X	X										
Creating a survey			X										
Conducting a survey				X									
Webinar promotion				X	X								
Preparing and collecting materials from trainings and webinars				X	X								
Webinar						X							
Report of webinar						X							
Publication concept							X						
Publication creation								X	X	X			
Final reports													X
Project promotion	X	X	X	X	X	X	X	X	X	X	X	X	X

Visegrad Fund

DIGSTEM

THANK YOU FOR YOUR ATTENTION

Visegrad Fund

DIGSTEM

Improving STEM Teaching Process using Digital Transformation - DIGSTEM

Project Meeting

Lublin University of Technology, Lublin, Poland

03-04 October 2023

Project Management Issues

Administration and Budget

Dr. Vladimir Maksimovic
University of Pristina in Kosovska Mitrovica

Visegrad Fund

DIGSTEM

Project overview

- The goal of the project is to improve the application of digital technologies in the field of STEM (science, technology, engineering, mathematics) within the educational process of higher education institutions (HEIs) in the WB countries through the exchange of experiences between HEIs from the WB and the V4 region.
- Project implementation period: 01/09/2023 – 30/09/2024
- Consortium:
  - University of Pristina in Kosovska Mitrovica - coordinator
  - Lublin University of Technology
  - Obuda University
  - University of Zilina
  - Universum College
- Budget: €25,273.00 (The 1st installment in the amount of €20,219.00 and the 2nd installment in the amount of €5,054.00 after the Final Report, Financial Statement and Audit report)

Visegrad Fund

DIGSTEM

Coordinator's reports to Fund

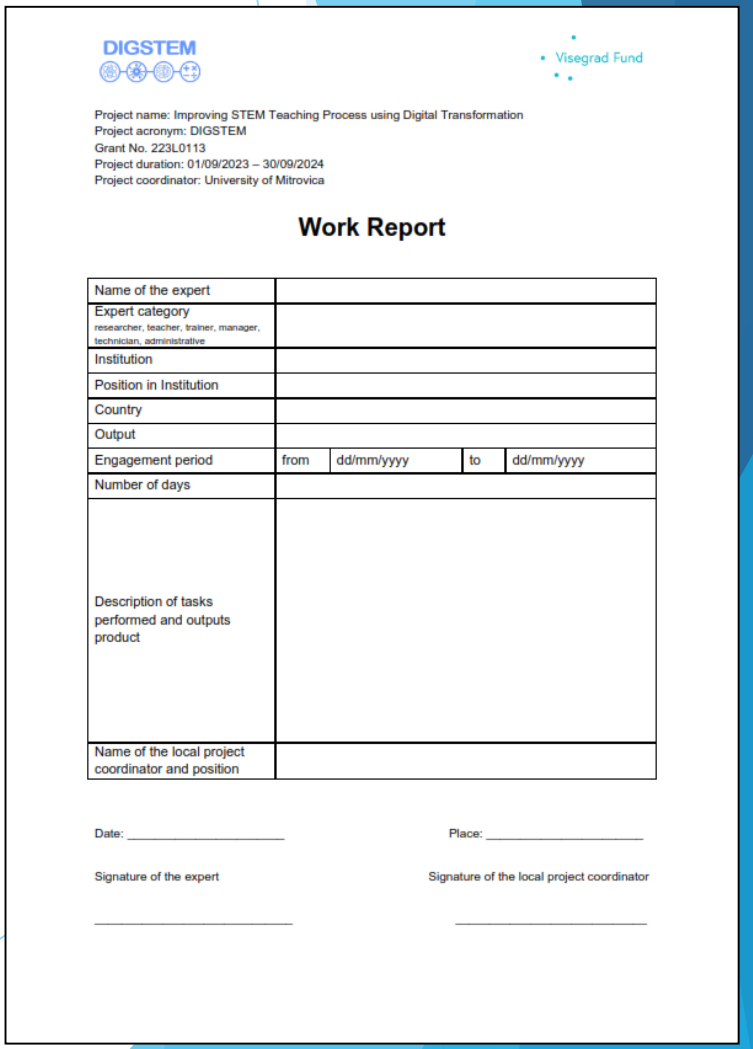
- Interim report
- Final Report
- Financial Statement
- Audit Report
- The Fund reserves the right to carry out monitoring visits of projects and, if necessary, to request additional documentation

Partner's reports (requests) to coordinator

- **Work report**
- **Reimbursement request**
- **Bank account details**
- **Copies of the tickets and bills**
- Transportation costs reimbursement sheet (only if you use the private car as a means of transport)

Work report for Experts

- Work report must be filled for every expert and every task
- Must be signed by expert and local project coordinator
- Name of expert
- Expert category (researcher, teacher, trainer, manager, technician, administrative)
- Institution
- Position in institution
- Country
- Output
- Engagement period
- Number of days
- Description of tasks performed and outputs product



DIGSTEM

Visegrad Fund

Project name: Improving STEM Teaching Process using Digital Transformation
Project acronym: DIGSTEM
Grant No. 223L0113
Project duration: 01/09/2023 – 30/09/2024
Project coordinator: University of Mitrovica

Work Report

Name of the expert				
Expert category researcher, teacher, trainer, manager, technician, administrative				
Institution				
Position in Institution				
Country				
Output				
Engagement period	from	dd/mm/yyyy	to	dd/mm/yyyy
Number of days				
Description of tasks performed and outputs product				
Name of the local project coordinator and position				

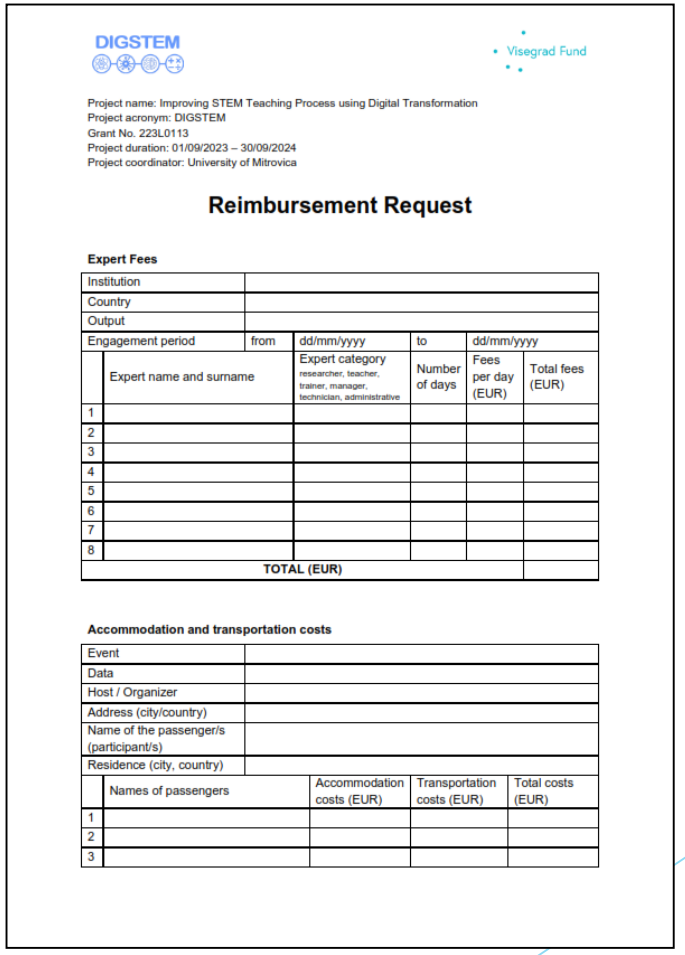
Date: _____ Place: _____

Signature of the expert

Signature of the local project coordinator

Reimbursement request for experts, travel and accommodation

- Fees for all expert should be filed in Table 1 (same data as in Work report)
- Transportation, accommodation and board for all experts
- Accommodation costs include and meals costs
- Annexes for delivery:
  - Work report
  - Copies of the tickets and bills
  - Bank account details
- Must be signed by local project coordinator and legal representative
- If your institution use currency other than EUR, convert them to EUR using the exchange rate of your national bank on the day the bills and tickets are issued



DIGSTEM

Visegrad Fund

Project name: Improving STEM Teaching Process using Digital Transformation
Project acronym: DIGSTEM
Grant No. 223L0113
Project duration: 01/09/2023 – 30/09/2024
Project coordinator: University of Mitrovica

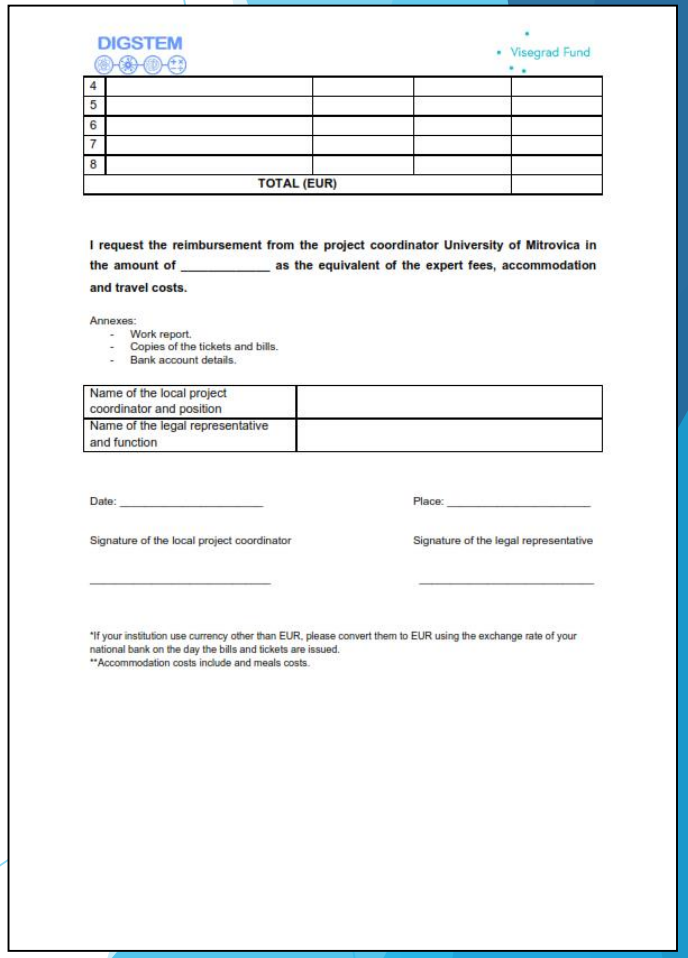
Reimbursement Request

Expert Fees

Institution						
Country						
Output						
Engagement period		from	dd/mm/yyyy	to	dd/mm/yyyy	
	Expert name and surname		Expert category researcher, teacher, trainer, manager, technician, administrative	Number of days	Fees per day (EUR)	Total fees (EUR)
1						
2						
3						
4						
5						
6						
7						
8						
TOTAL (EUR)						

Accommodation and transportation costs

Event				
Data				
Host / Organizer				
Address (city/country)				
Name of the passenger/s (participant/s)				
Residence (city, country)				
	Names of passengers	Accommodation costs (EUR)	Transportation costs (EUR)	Total costs (EUR)
1				
2				
3				



DIGSTEM

Visegrad Fund

4				
5				
6				
7				
8				
TOTAL (EUR)				

I request the reimbursement from the project coordinator University of Mitrovica in the amount of _____ as the equivalent of the expert fees, accommodation and travel costs.

Annexes:
- Work report,
- Copies of the tickets and bills.
- Bank account details.

Name of the local project coordinator and position	
Name of the legal representative and function	

Date: _____ Place: _____

Signature of the local project coordinator

Signature of the legal representative

_____ _____

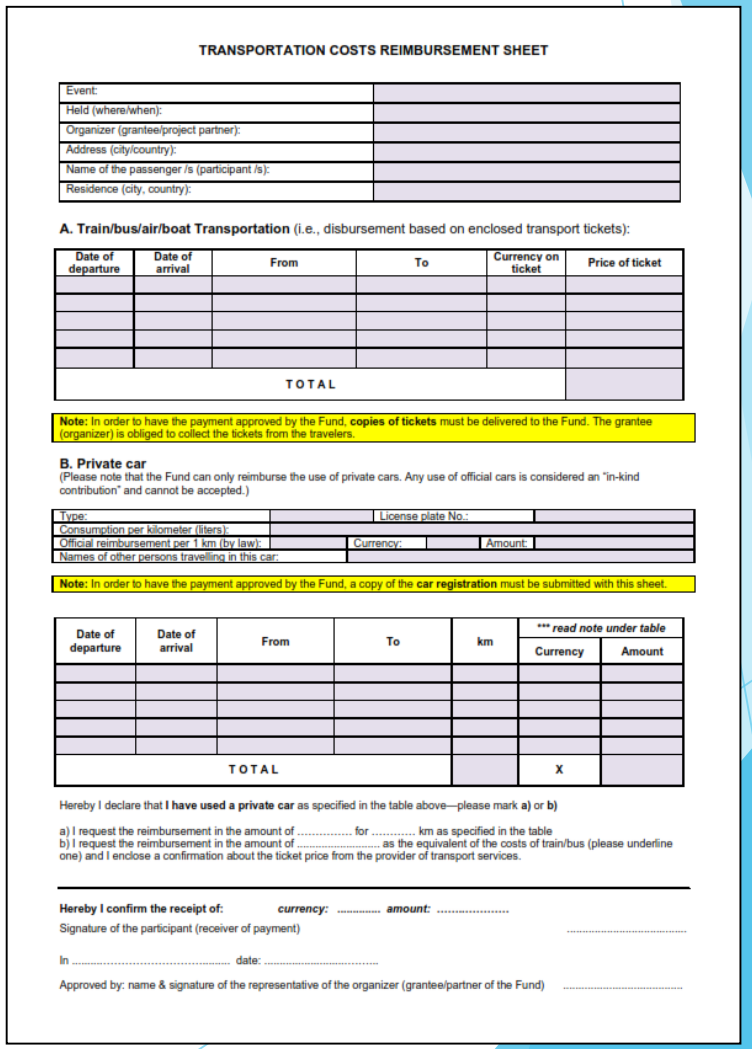
*If your institution use currency other than EUR, please convert them to EUR using the exchange rate of your national bank on the day the bills and tickets are issued.
**Accommodation costs include and meals costs.

Visegrad Fund

DIGSTEM

Transportation costs reimbursement

- Only if you use the private car to travel to the venue
- Section B should be filled
- Must be signed by local project coordinator
- Type of car
- License plate number
- Consumption per kilometre (liter)
- Currency and amount
- Names of other persons travelling in this car
- Total km
- From - To



TRANSPORTATION COSTS REIMBURSEMENT SHEET

Event:	
Held (where/when):	
Organizer (grantee/project partner):	
Address (city/country):	
Name of the passenger /s (participant /s):	
Residence (city, country):	

A. Train/bus/air/boat Transportation (i.e., disbursement based on enclosed transport tickets):

Date of departure	Date of arrival	From	To	Currency on ticket	Price of ticket
TOTAL					

Note: In order to have the payment approved by the Fund, **copies of tickets** must be delivered to the Fund. The grantee (organizer) is obliged to collect the tickets from the travelers.

B. Private car
(Please note that the Fund can only reimburse the use of private cars. Any use of official cars is considered an "in-kind contribution" and cannot be accepted.)

Type:		License plate No.:			
Consumption per kilometer (liters):					
Official reimbursement per 1 km (by law):		Currency:		Amount:	
Names of other persons travelling in this car:					

Note: In order to have the payment approved by the Fund, a copy of the **car registration** must be submitted with this sheet.

Date of departure	Date of arrival	From	To	km	*** read note under table	
					Currency	Amount
TOTAL					X	

Hereby I declare that **I have used a private car** as specified in the table above—please mark **a)** or **b)**

a) I request the reimbursement in the amount of ..... for ..... km as specified in the table
b) I request the reimbursement in the amount of ..... as the equivalent of the costs of train/bus (please underline one) and I enclose a confirmation about the ticket price from the provider of transport services.

Hereby I confirm the receipt of: ***currency:*** ..... ***amount:*** .....

Signature of the participant (receiver of payment) .....

In ..... date: .....

Approved by: name & signature of the representative of the organizer (grantee/partner of the Fund) .....

Payment procedure

- The table shows the local distribution of money
- Payment will be made after each completed deliverable
- Payment will be made 15 days after the reimbursement documents (reinvoice) have been submitted to coordinator (Oct - Nov)
- Based on the amount in the reimbursement request, the coordinator will pay the money to your institution and your institution will make a contract with you and pay you the money based on your local institutional/national legislation
- Overhead costs will be made after all completed deliverable (Jun 2024 – July 2024)
- Unforeseen costs are first financed from overhead, and then administration costs
- If you haven't spent all the money from the accommodation and transportation category, you can use that extra money for food (board)
- If the money is not spent for a specific completed task (deliverable), we will ask the Fund to authorize us to transfer money for new or existing experts (additional task) as part of the Webinar deliverable
- For online participants we must ask Fund which part can be paid to them

Dliverblies	Costs category	Mitrovica	Prishtina	Lublin	Budapest	Žilina	Comments	Mitrovica	Prishtina	Lublin	Budapest	Žilina
Training 1	Expert 1 - Lecturers	X	X	500	500	500	Presentation of experiences in teaching process of STEM	X	X	Agnieszka Gandzel	Ágota Drégelyi-Kiss	Radovan Madleňák
	Expert 2 - Lecturers	X	X	500	500	400	Presentation of experiences in teaching process of STEM	X	X	Mariusz Śniadkowski	Balázs Mikó	Lucia Madleňáková
	Expert 3 - Lecturers	X	X	500	300	400	Presentation of experiences in teaching process of STEM	X	X	orota Wójcicka-Migasi	Gabriella Farkas	Jiří Tengler
	Expert 4 - Lecturers	X	X	400	X	X	Presentation of experiences in teaching process of STEM	X	X	Michał Charlak	X	X
	Expert 5 - Lecturers	X	X	300	X	X	Presentation of experiences in teaching process of STEM	X	X	Ewa Łazuka	X	X
	Expert 6 - Lecturers	X	X	300	X	X	Presentation of experiences in teaching process of STEM	X	X	Izolda Gorgol	X	X
	Accommodation 1	200	200	X	200	200	Accommodation in Lublin	Vladimir Maksimovic	Shqipe Gerguri Rashiti	X	Ágota Drégelyi-Kiss	Radovan Madleňák
	Accommodation 2	200	200	X	200	200	Accommodation in Lublin	Stefan Pitulic	Hyrmet Mdyti	X	Balázs Mikó	Lucia Madleňáková
	Accommodation 3	200	200	X	200	200	Accommodation in Lublin	Jelena Todrovic	Filip Ruxho	X	Gabriella Farkas	Jiří Tengler
	Accommodation 4	200	200	X	X	X	Accommodation in Lublin	Milos Gvozdic	Gentiana Berisha	X	X	X
	Travel 1	300	300	X	250	250	Travel in Lublin	Vladimir Maksimovic	Shqipe Gerguri Rashiti	X	Ágota Drégelyi-Kiss	Radovan Madleňák
	Travel 2	300	300	X	250	250	Travel in Lublin	Stefan Pitulic	Hyrmet Mdyti	X	Balázs Mikó	Lucia Madleňáková
	Travel 3	300	300	X	250	250	Travel in Lublin	Jelena Todrovic	Filip Ruxho	X	Gabriella Farkas	Jiří Tengler
	Travel 4	300	300	X	X	X	Travel in Lublin	Milos Gvozdic	Gentiana Berisha	X	X	X
Training 1 - Report	Expert 1 - Lecturers	600	X	X	X	X	Presentation of experiences in teaching process of STEM	X	X	X	X	X
Webinar	Expert 1 - Lecturers	125	125	125	125	125	Presentation of experiences in teaching process of STEM	Vladimir Maksimovic	Shqipe Gerguri Rashiti	Agnieszka Gandzel	Ágota Drégelyi-Kiss	Radovan Madleňák
	Expert 2 - Lecturers	125	125	125	125	125	Presentation of experiences in teaching process of STEM	Branimir Jaksic	Hyrmet Mdyti	Ewa Łazuka	Balázs Mikó	Jiří Tengler
	Expert 3 - Lecturers	125	125	125	X	X	Presentation of experiences in teaching process of STEM	Jelena Todrovic	Filip Ruxho	Michał Charlak	X	X
	Expert 4 - Lecturers	125	125	X	X	X	Presentation of experiences in teaching process of STEM	Aleksandra Petrovic	Blerina Bylykbashi	X	X	X
	Expert 5 - Lecturers	125	X	X	X	X	Presentation of experiences in teaching process of STEM	Jordan Radosavljevic	X	X	X	X
Publication	Expert 1	250	250	250	250	250	Preparation of publication based on tranings and webinar	Branimir Jaksic	Shqipe Gerguri Rashiti	Agnieszka Gandzel	Balázs Mikó	Radovan Madleňák
	Expert 2	250	250	250	250	250	Preparation of publication based on tranings and webinar	Vladimir Maksimovic	Filip Ruxho	Mariusz Śniadkowski	Ágota Drégelyi-Kiss	Jiří Tengler
	Expert 3	250	250	X	X	X	Preparation of publication based on tranings and webinar	Jelena Todrovic	Blerina Bylykbashi	X	X	X
	Expert 4	250	250	X	X	X	Preparation of publication based on tranings and webinar	Nebojsa Arsic	Gentiana Berisha	X	X	X
	Printing	0	0	0	0	0	Printing publication	X	X	X	X	X
Web site	Expert 1	1000	X	X	X	X	Web site designing and updates	Vladimir Maksimovic	X	X	X	X
	Promotional	1000	X	X	X	X	Promotion on social networks	X	X	X	X	X
Promotion materials	Expert 1	350	X	X	X	X	Materials designing	Vladimir Maksimovic	X	X	X	X
	Expert 2	350	X	X	X	X	Materials designing	Branimir Jaksic	X	X	X	X
	Expert 2	0	0	0	0	0	Materials designing	X	X	X	X	X
Overheads		2273	300	300	300	300	Administrative costs and external audit	X	X	X	X	X
External Audit		1200	X	X	X	X	External Audit	X	X	X	X	X
TOTAL		**6925**	**3500**	**3375**	**3400**	**3400**						
				25273								

Payment procedure

- The table shows the local distribution of money
- Payment will be made after each completed deliverable
- Payment will be made 15 days after the reimbursement documents (reinvoice) have been submitted to coordinator (Oct - Nov)
- Based on the amount in the reimbursement request, the coordinator will pay the money to your institution and your institution will make a contract with you and pay you the money based on your local institutional/national legislation
- Overhead costs will be made after all completed deliverable (Jun 2024 – July 2024)
- Unforeseen costs are first financed from overhead, and then administration costs
- If you haven't spent all the money from the accommodation and transportation category, you can use that extra money for food (board)
- If the money is not spent for a specific completed task (deliverable), we will ask the Fund to authorize us to transfer money for new or existing experts (additional task) as part of the Webinar deliverable
- For online participants we must ask Fund which part can be paid to them

Dliverblies	Costs category	Mitrovica	Prishtina	Lublin	Budapest	Žilina	Comments	Mitrovica	Prishtina	Lublin	Budapest	Žilina
Training 1	Expert 1 - Lecturers	X	X	500	500	500	Presentation of experiences in teaching process of STEM	X	X	Agnieszka Gandzel	Ágota Drégelyi-Kiss	Radovan Madleňák
	Expert 2 - Lecturers	X	X	500	500	400	Presentation of experiences in teaching process of STEM	X	X	Mariusz Śniadkowski	Balázs Mikó	Lucia Madleňáková
	Expert 3 - Lecturers	X	X	500	300	400	Presentation of experiences in teaching process of STEM	X	X	orota Wójcicka-Migasiu	Gabriella Farkas	Jiří Tengler
	Expert 4 - Lecturers	X	X	400	X	X	Presentation of experiences in teaching process of STEM	X	X	Michał Charlak	X	X
	Expert 5 - Lecturers	X	X	300	X	X	Presentation of experiences in teaching process of STEM	X	X	Ewa Łazuka	X	X
	Expert 6 - Lecturers	X	X	300	X	X	Presentation of experiences in teaching process of STEM	X	X	Izolda Gorgol	X	X
	Accommodation 1	200	200	X	200	200	Accommodation in Lublin	Vladimir Maksimovic	Shqipe Gerguri Rashiti	X	Ágota Drégelyi-Kiss	Radovan Madleňák
	Accommodation 2	200	200	X	200	200	Accommodation in Lublin	Stefan Pitulic	Hyrmet Mdyti	X	Balázs Mikó	Lucia Madleňáková
	Accommodation 3	200	200	X	200	200	Accommodation in Lublin	Jelena Todrovic	Filip Ruxho	X	Gabriella Farkas	Jiří Tengler
	Accommodation 4	200	200	X	X	X	Accommodation in Lublin	Milos Gvozdic	Gentiana Berisha	X	X	X
	Travel 1	300	300	X	250	250	Travel in Lublin	Vladimir Maksimovic	Shqipe Gerguri Rashiti	X	Ágota Drégelyi-Kiss	Radovan Madleňák
	Travel 2	300	300	X	250	250	Travel in Lublin	Stefan Pitulic	Hyrmet Mdyti	X	Balázs Mikó	Lucia Madleňáková
	Travel 3	300	300	X	250	250	Travel in Lublin	Jelena Todrovic	Filip Ruxho	X	Gabriella Farkas	Jiří Tengler
	Travel 4	300	300	X	X	X	Travel in Lublin	Milos Gvozdic	Gentiana Berisha	X	X	X
Training 1 - Report	Expert 1 - Lecturers	600	X	X	X	X	Presentation of experiences in teaching process of STEM	X	X	X	X	X
Webinar	Expert 1 - Lecturers	125	125	125	125	125	Presentation of experiences in teaching process of STEM	Vladimir Maksimovic	Shqipe Gerguri Rashiti	Agnieszka Gandzel	Ágota Drégelyi-Kiss	Radovan Madleňák
	Expert 2 - Lecturers	125	125	125	125	125	Presentation of experiences in teaching process of STEM	Branimir Jaksic	Hyrmet Mdyti	Ewa Łazuka	Balázs Mikó	Jiří Tengler
	Expert 3 - Lecturers	125	125	125	X	X	Presentation of experiences in teaching process of STEM	Jelena Todrovic	Filip Ruxho	Michał Charlak	X	X
	Expert 4 - Lecturers	125	125	X	X	X	Presentation of experiences in teaching process of STEM	Aleksandra Petrovic	Blerina Bylykbashi	X	X	X
	Expert 5 - Lecturers	125	X	X	X	X	Presentation of experiences in teaching process of STEM	Jordan Radosavljevic	X	X	X	X
Publication	Expert 1	250	250	250	250	250	Preparation of publication based on tranings and webinar	Branimir Jaksic	Shqipe Gerguri Rashiti	Agnieszka Gandzel	Balázs Mikó	Radovan Madleňák
	Expert 2	250	250	250	250	250	Preparation of publication based on tranings and webinar	Vladimir Maksimovic	Filip Ruxho	Mariusz Śniadkowski	Ágota Drégelyi-Kiss	Jiří Tengler
	Expert 3	250	250	X	X	X	Preparation of publication based on tranings and webinar	Jelena Todrovic	Blerina Bylykbashi	X	X	X
	Expert 4	250	250	X	X	X	Preparation of publication based on tranings and webinar	Nebojsa Arsic	Gentiana Berisha	X	X	X
	Printing	0	0	0	0	0	Printing publication	X	X	X	X	X
Web site	Expert 1	1000	X	X	X	X	Web site designing and updates	Vladimir Maksimovic	X	X	X	X
	Promotional	1000	X	X	X	X	Promotion on social networks	X	X	X	X	X
Promotion materials	Expert 1	350	X	X	X	X	Materials designing	Vladimir Maksimovic	X	X	X	X
	Expert 2	350	X	X	X	X	Materials designing	Branimir Jaksic	X	X	X	X
	Expert 2	0	0	0	0	0	Materials designing	X	X	X	X	X
Overheads		2273	300	300	300	300	Administrative costs and external audit	X	X	X	X	X
External Audit		1200	X	X	X	X	External Audit	X	X	X	X	X
TOTAL		**6925**	**3500**	**3375**	**3400**	**3400**						
				25273								

Visegrad Fund

DIGSTEM

Dissemination

Share and follow

- Website: www.digstem.pr.ac.rs
- Facebook: www.facebook.com/DigstemVisegrad
- Instagram: www.instagram.com/digstem_visegrad

Visegrad Fund

DIGSTEM

THANK YOU FOR YOUR ATTENTION!

Any questions?

Visegrad Fund

DIGSTEM

Improving STEM Teaching Process using Digital Transformation - DIGSTEM

Project Meeting

Lublin University of Technology, Lublin, Poland

03-05 October 2023

Application of Wolfram Demonstration Project Platform in Teaching

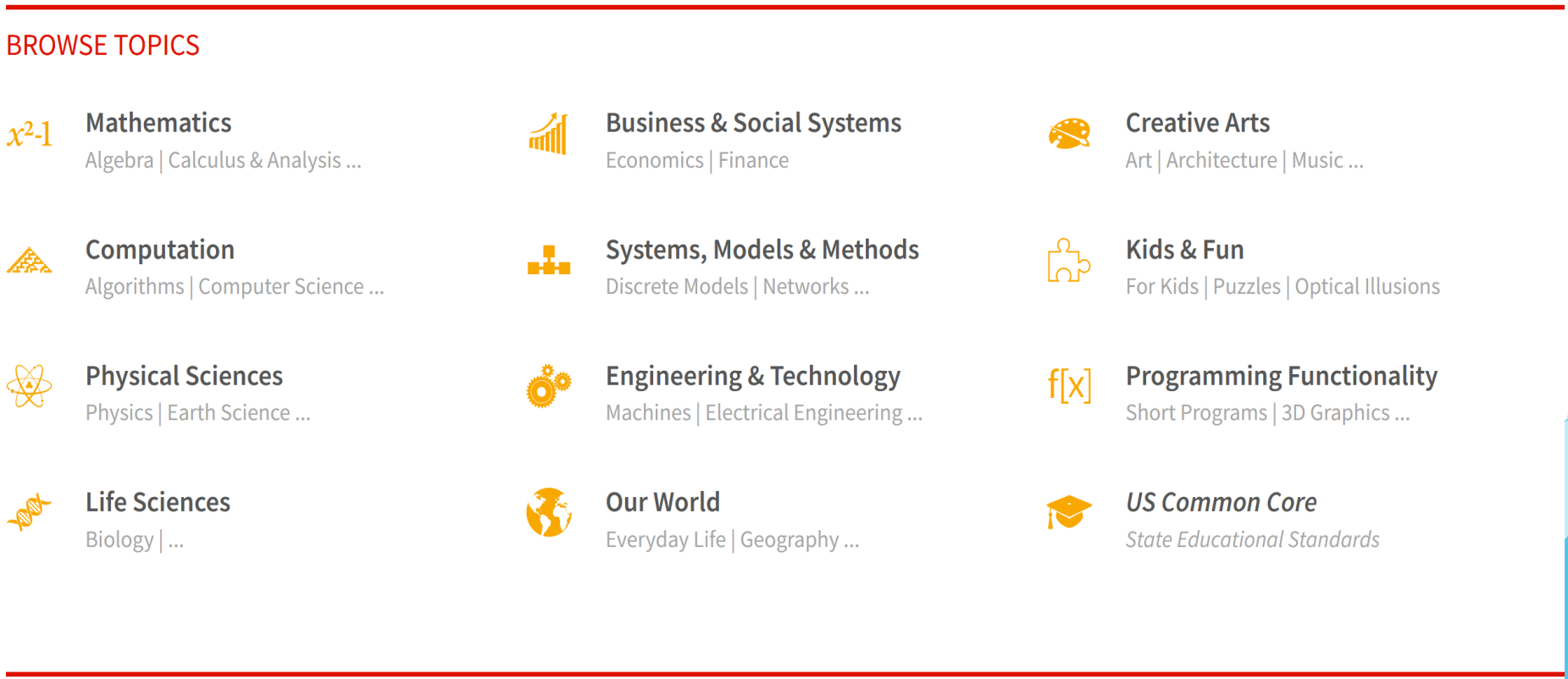
Izolda Gorgol
Lublin University of Technology

Visegrad Fund

DIGSTEM

https://demonstrations.wolfram.com/

- 12,000+ Interactive Wolfram Notebooks for education, research, recreation and more
- Possible to use on-line
- Possible to download off-line versions – then one need to install Wolfram Player



Visegrad Fund

DIGSTEM

Examples of demonstrations

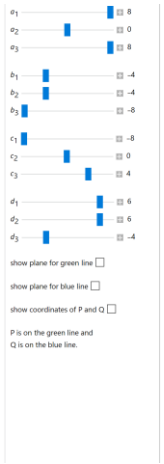
- Intersecting Cylinders
- Shortest Distance between Two Skew Lines
- Hanoi Towers
- Numerical Methods for Differential Equations
- Forest Fire Simulation

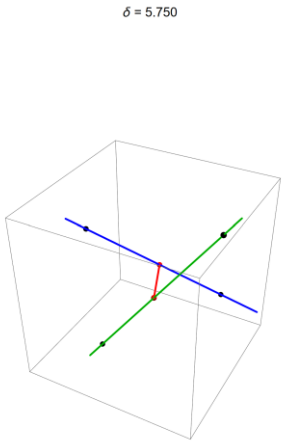
Intersecting Cylinders

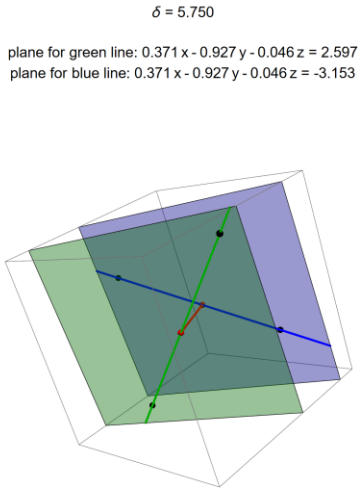
- An example of the presentation illustratig 3D objects (elevation of intersection of two cylinders)

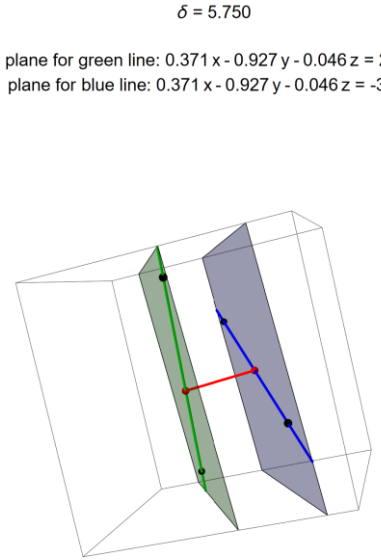
Shortest Distance between Two Skew Lines

- Illustration of the definition of the distance of two skew lines
- Possibility of manipulation of coordinates of points, showing planes, rotate the figure



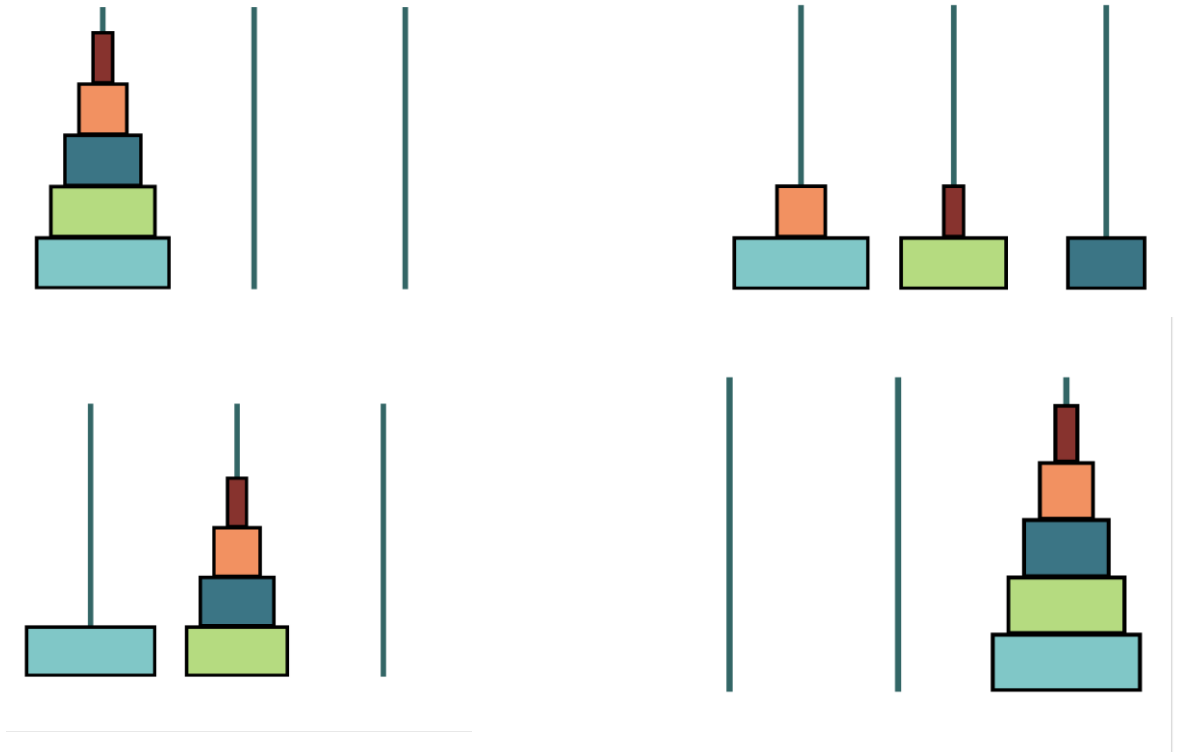






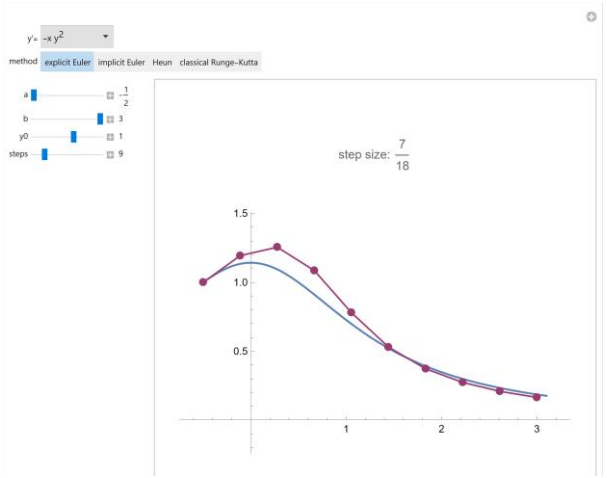
Hanoi Towers

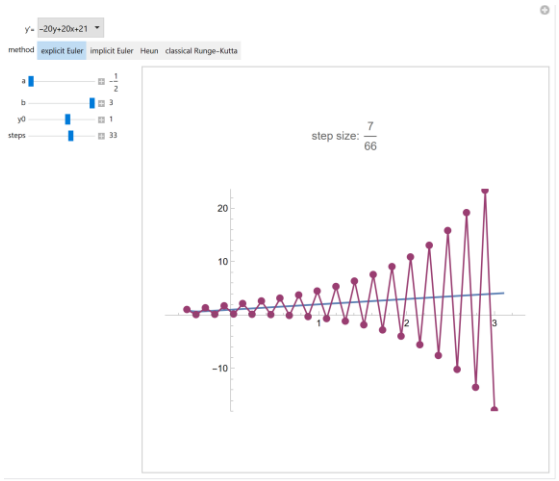
- Illustration of Hanoi Towers puzzle – how to move a tower of discs from one peg to another not placing bigger disc onto smaller. One can follow each move; possibility of changing numer of discs and pegs.

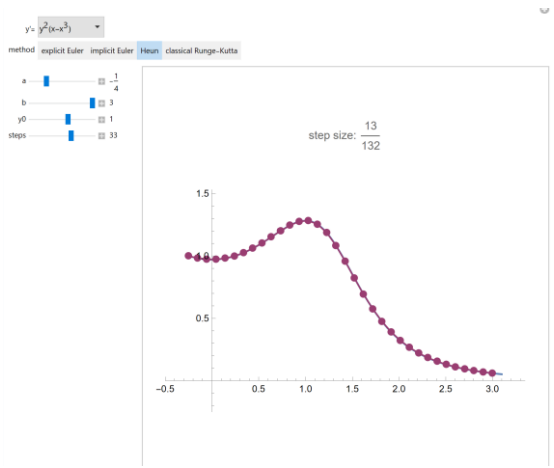


Numerical Methods for Differential Equations

- Possibility of illustrating 4 numerical methods for solving different Cauchy problems with various integration steps



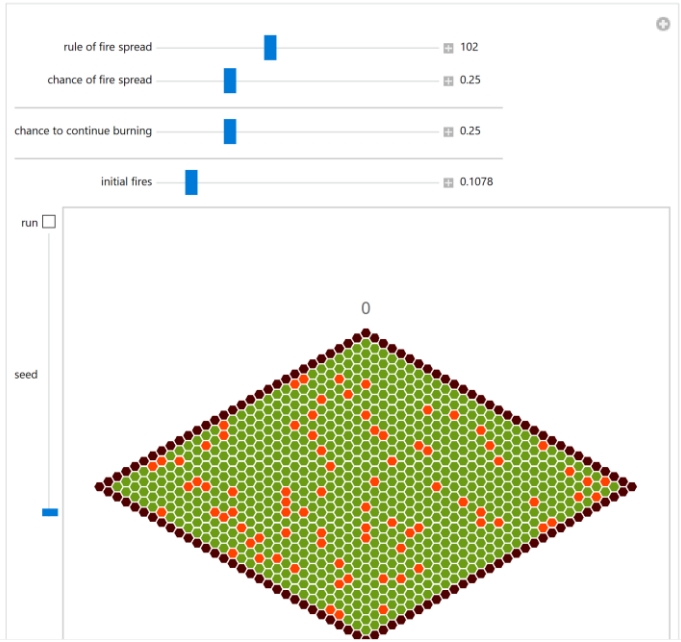




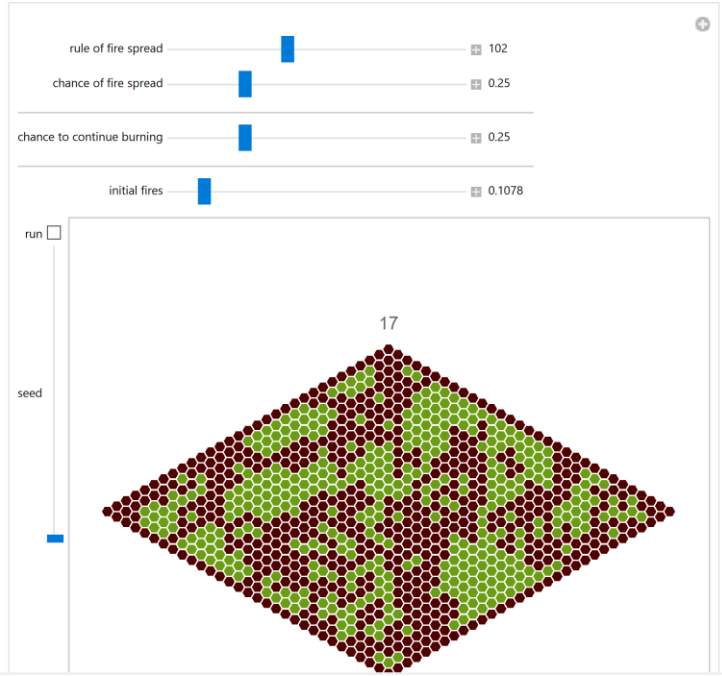
Forest Fire Simulation

- Animation of spreading a fire with different fire scenarios: the numer of burning trees at the beginning, propability of fire propagation, etc. (start and end)

Forest Fire Simulation Using a Randomized Hexagonal Automaton



Forest Fire Simulation Using a Randomized Hexagonal Automaton



Visegrad Fund

DIGSTEM

THANK YOU FOR YOUR ATTENTION

Visegrad Fund

Improving STEM Teaching Process using Digital Transformation - DIGSTEM

Project Meeting

Lublin University of Technology, Lublin, Poland

03-04 October 2023

Challenges and Opportunities of Online Learning and Teaching at Engineering at Obuda University

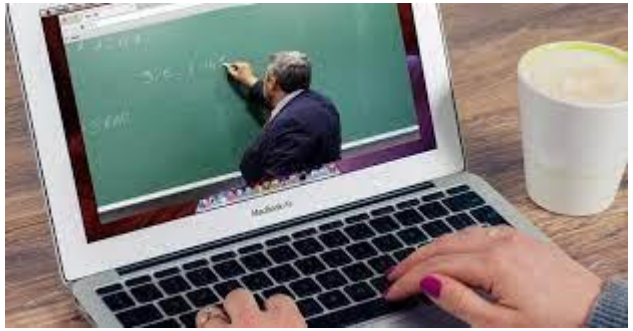
András Horváth

Bánki Donát Faculty of Mechanical and Safety Engineering, Óbuda University, Budapest, Hungary

Visegrad Fund

DIGSTEM

Online learning, or how the world has changed



Visegrad Fund

DIGSTEM

Online learning - Definition

Online education is the method of education in which students and teachers or instructors use digital technologies and the Internet to communicate and interact with each other without physically being in the same space. This enables learning and instructional flexibility and enables students to access educational content from many different places and times.

Visegrad Fund

DIGSTEM

The types of online learning

1. Synchronous Learning

2. Asynchronous Learning

3. Blended or Hybrid Learning

4. Self-Paced Learning

5. Massive Open Online Courses (MOOCs)

Visegrad Fund

DIGSTEM

1. Synchronous Learning

- **Real-Time Interaction**
- **Scheduled Sessions**
- **Instructor-Led**
- **Interactive Learning**
- **Visual and Verbal Communication**
- **Immediate Feedback**
- **Structured Learning Environment**
- **Technology Requirements**
- **Attendance and Participation**
- **Recorded Sessions**

Visegrad Fund

DIGSTEM

1. Synchronous Learning at Óbuda University

https://bigbluebutton.org/

- Open source
- Cost effective
- **Dedicated to Education**
- **Integration (with e.g. Moodle)**
- **Interactive Tools**
- **Screen Sharing**
- **Breakout Rooms**
- **Recording Capabilities**
- **No Installation Required**
- **Continuous Development**

Microsoft Teams

- Real-Time Communication
- **File Sharing and Collaboration**
- **Integration with Microsoft 365 Apps**
- **Mobile Accessibility**
- **Limited Free Version**
- **Dependency on Microsoft Ecosystem**
- **Limited Customization for Non-Technical Users**
- **Platform Updates**

Visegrad Fund

DIGSTEM

2. Asynchronous Learning

Learning Management System (LMS)

CANVAS

coursera

edx

udemy

Visegrad Fund

DIGSTEM

2. Asynchronous Learning

Khan Academy

Lynda.com is becoming Linkedin Learning

UDACITY

SKILLSHARE.

teachable VS THINKIFIC

Visegrad Fund

DIGSTEM

2. Asynchronous Learning at Óbuda University

Advantages	Disadvantages
Open Source	Technical Expertise
Cost-Effective	Usability
Flexible and Customizable	Resource-Intensive
Large Community	
Access Control and Security	
Rich Content Creation	

Visegrad Fund

DIGSTEM

3. Blended or Hybrid Learning

Blended learning, also known as hybrid learning, is an educational approach that combines traditional face-to-face instruction with online learning experiences. This model aims to leverage the strengths of both in-person and online teaching methods to create a more flexible and effective learning environment.

Advantages	Disadvantages
Flexibility	Design and Planning
Enhanced Engagement	Technology Requirements
Personalized Learning	Technology Requirements
Efficiency	Assessment and Evaluation
Access to Resources	Accessibility
Scalability	Communication

Visegrad Fund

DIGSTEM

4. Self-Paced Learning

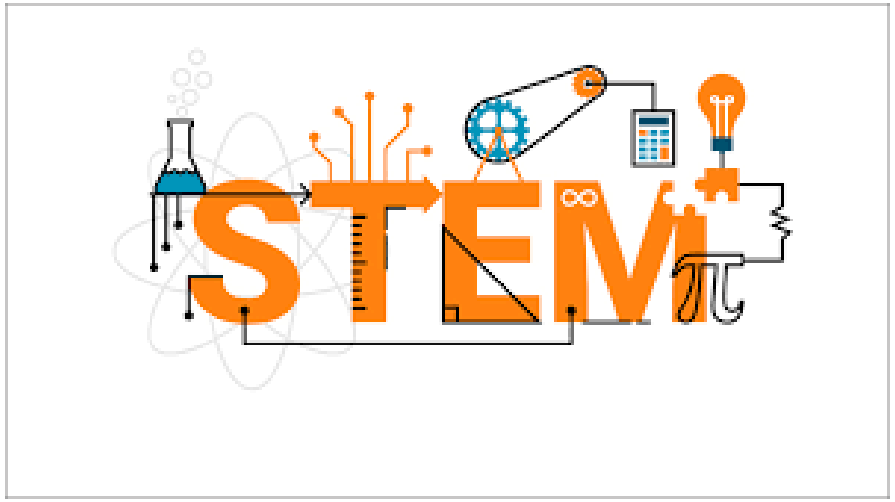
Self-paced learning is an instructional approach in which learners have control over the pace at which they progress through course materials or educational content.
In self-paced learning, students can decide when and how quickly they study, review, and complete assignments or modules, rather than following a fixed schedule or timeline set by an instructor.
This approach offers flexibility and allows learners to tailor their educational experience to their individual needs and preferences.

- **No Set Schedule:** Unlike traditional classroom-based or instructor-led courses, self-paced learning does not adhere to a predetermined class schedule or specific deadlines for assignments or assessments.
- **Individualized Progress:** Learners progress through the content at their own speed, allowing them to focus more on challenging topics or breeze through familiar material.
- **Self-Assessment:** Learners are typically responsible for self-assessment and monitoring their own progress. They can review and revisit content as many times as needed to reinforce their understanding.
- **Minimized Peer Interaction:** Self-paced learning may involve minimal interaction with instructors or peers, although some courses incorporate discussion forums or chat features for collaboration.

Visegrad Fund

DIGSTEM

What is STEM?



"STEM" is an acronym that stands for Science, Technology, Engineering and Mathematics. These subjects are grouped together because of the interconnectedness of their disciplines in the academic world and their shared importance in driving innovation in the modern economy.

Visegrad Fund

DIGSTEM

STEM-based learning programs

- STEM is a growing movement in education, not only in the United States, but around the world.
- STEM-based learning programs are designed to increase student interest in higher education and careers in these fields.
- STEM education typically uses **a newer blended learning model** that combines traditional classroom instruction with online and hands-on learning.
- The purpose of this model of blended learning is to provide students with the opportunity to learn about different methods of learning and problem solving.

STEM-based learning programs

STEM Science

Classes in the science category of STEM programs must be familiar with biology, ecology, chemistry, and physics. STEM science classes incorporate technology, engineering, and math into science studies.

STEM

Science

This encompasses a wide range of fields that study the natural world and aim to understand how the universe works. This includes disciplines such as:

-Biology (study of living organisms)
-Chemistry (the study of matter and its properties)
-Physics (study of matter, energy and fundamental forces)
-Earth science (the study of planet Earth and its processes)
-Environmental science (the study of the environment and human impacts)
-Astronomy (the study of celestial bodies and the universe)

sTEM

Technology

This field focuses on the practical application of scientific knowledge and covers a range of areas including:

- Information Technology (IT)
- Computer technology
- Artificial Intelligence (AI)
- Robotics
- Data analysis

ST**E**M

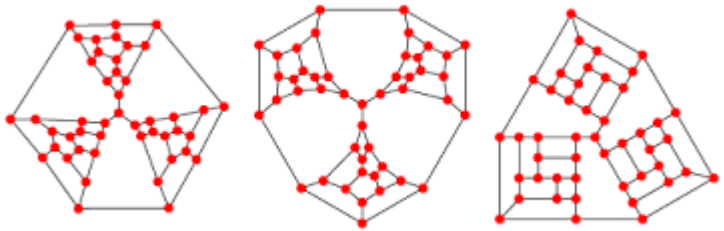
Engineering

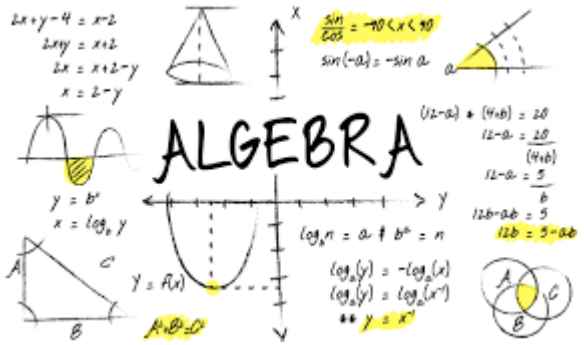
Engineering involves the application of mathematical and scientific principles to the design, construction and maintenance of structures, machines, systems and processes. There are several branches, including:

- Mechanical engineering
- Deep construction
- Electric engineer
- Chemical engineering
- Aeronautical Engineering
- Biomedical engineering

Mathematics

It is the study of numbers, quantity, space, structure and change. It provides the basic tools and techniques used in STEM fields. Sub-disciplines include:





- Algebra
- Geometry
- Calculation
- Statistics
- Discrete mathematics

In recent years, some advocates have proposed expanding the acronym "STEAM" to include "Arts" as a crucial component, emphasizing the importance of creativity and design in technological innovation.

STEM

Art?

Visegrad Fund

DIGSTEM

Online teaching in STEM

Emphasis on STEM education has increased worldwide due to its role in fostering innovation, economic growth, and problem-solving skills, making individuals in these fields highly sought after in the workforce.

STEM fields often involve hands-on activities, experiments, and problem-solving, which can be more challenging to replicate in a virtual environment. However, with the right strategies and tools, effective online teaching in STEM is achievable.

Visegrad Fund

DIGSTEM

Tips for online learning in STEM

Choose the Right Technology

- Learning Management System (LMS)
- Video Conferencing Tools
- Online Lab Simulations
- Interactive Whiteboards
- Online Collaboration Tools

Create Engaging Content

- Video Lectures
- Interactive content
- Real-World Applications
- Mutimedia

Virtual Labs and Experiments:

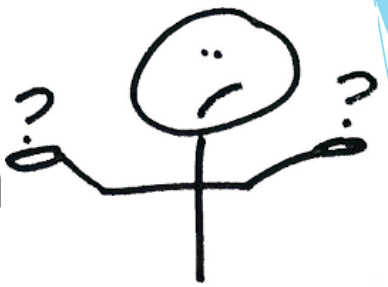
•**Virtual Labs:** Utilize virtual lab simulations, if available, to replicate experiments and hands-on learning experiences.

•**At-Home Experiments:** Design experiments that students can safely conduct at home using readily available materials.

Visegrad Fund

DIGSTEM

PhET Interactive Simulation



PhET Interactive Simulations is a University of Colorado Boulder project that creates free interactive math and science simulations. Founded in 2002 by Nobel laureate Carl Wieman, PhET Simulations aims to improve the teaching and learning of science and mathematics. Their simulations offer a unique learning experience that differs from traditional teaching methods.

https://phet.colorado.edu/
https://phet.colorado.edu/hu/
https://phet.colorado.edu/sr/

164
interactive simulations

121
language translations

Visegrad Fund

DIGSTEM

Practice of online teaching of STEM at Óbuda University

1. Carpathian-mediterranean Online Education Centre (K-MOOC)
2. Application Of The Collaborative Workshop Module In Moodle For Elearning Of Forming Technologies Course – Prof. Viktor Gonda, Óbuda University
3. Creation an Online Facilitate and Engaging Workshop Practice for Students – Béla Mészáros, Óbuda University

Visegrad Fund

DIGSTEM

1. Carpathian-mediterranean Online Education Centre (K-MOOC)

https://www.kmooc.uni-obuda.hu/

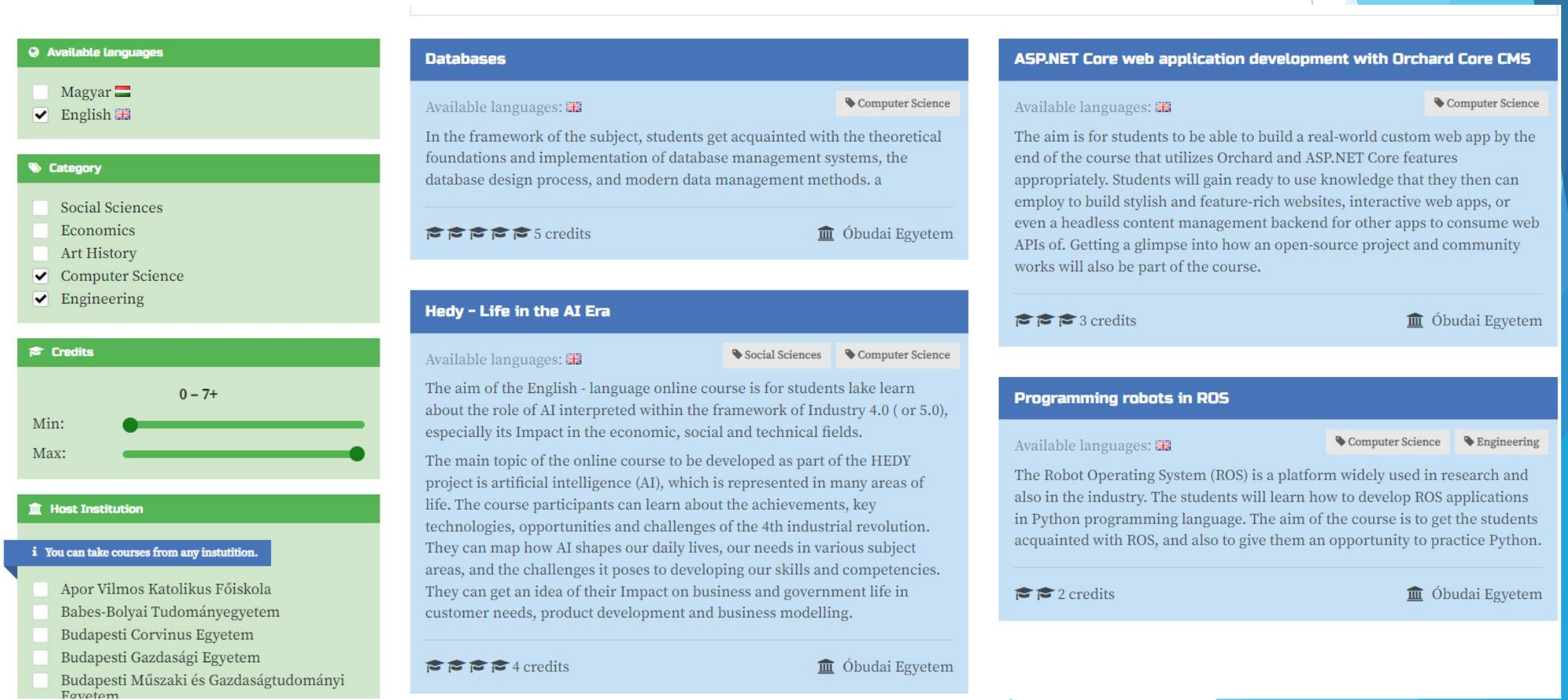
- MOOC: Massive Open Online Courses
- It is open to everyone, the courses are not location-based and the pace of learning is controlled by the student
- In Hungarian and in English
- The K-MOOC aims to promote and disseminate online courses in Hungary, primarily for Hungarians in the Carpathian Basin, but also for all native Hungarian speakers around the world. It is now also available in English for foreign students and learners.
- K-MOOC provides a form of online education recognised with a credit or certificate for students of higher education institutions, faculties and departments in the Carpathian Basin, which offer partial or complete Hungarian language education, and offers a new form of education for lifelong learning.

Visegrad Fund

DIGSTEM

1. Carpathian-mediterranean Online Education Centre (K-MOOC)

https://www.kmooc.uni-obuda.hu/



Visegrad Fund

DIGSTEM

1. Carpathian-mediterranean Online Education Centre (K-MOOC)

https://www.kmooc.uni-obuda.hu/

Available STEM courses in Hungarian language

- Introduction to Quantum Informatics
- Digital Techniques I., II.
- Mechanics
- Artificial Intelligence I, II
- Introduction to Matlab

By taking a K-MOOC Course, you can...

- gain new, exciting knowledge in your interests
- improve your digital competency
- learn from university teachers
- peek into the world of higher education
- learn with time to spare four your other university courses
- move at your own speed
- learn for free
- retake courses every semester, as many times as you want
- request a Credit Certificate if you are successful
- rest assured if you fail, as there are no negative consequences

Visegrad Fund

DIGSTEM

THANK YOU FOR YOUR ATTENTION!

Visegrad Fund

DIGSTEM

Improving STEM Teaching Process using Digital Transformation - DIGSTEM

Project Meeting

Lublin University of Technology, Lublin, Poland

03-04 October 2023

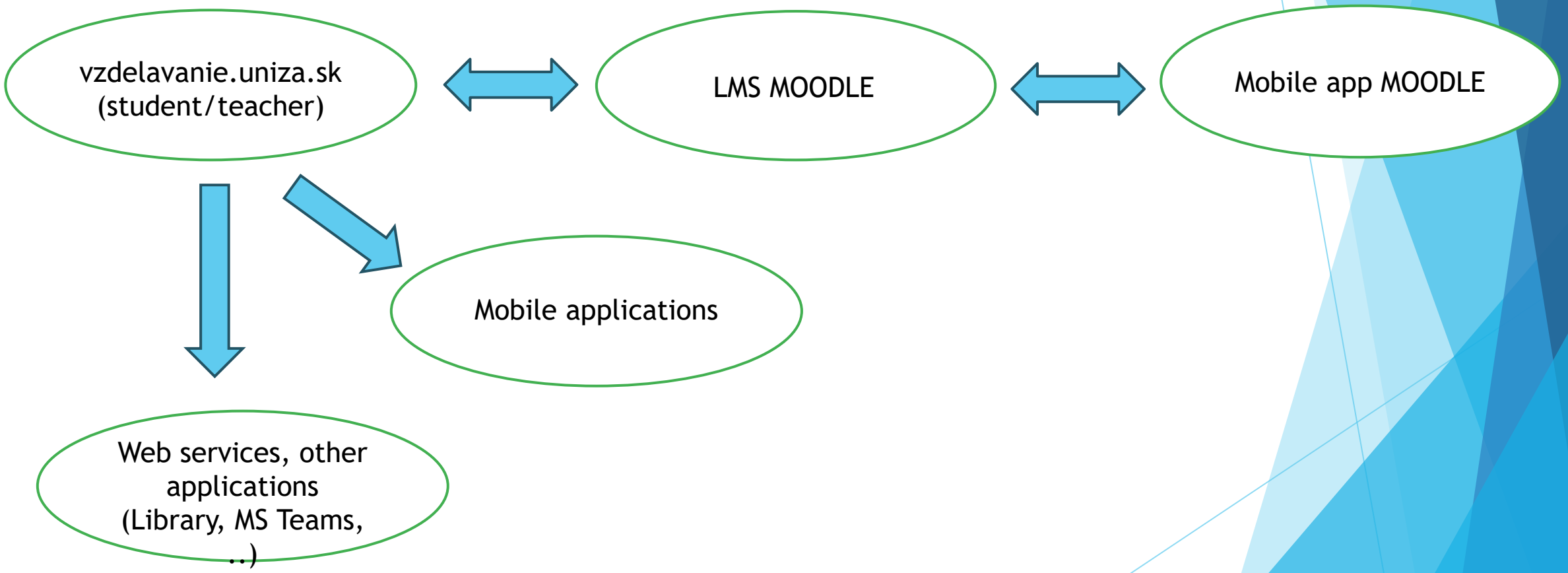
Online learning environment at University of Zilina

prof. Ing. Radovan Madleňák, PhD.
University of Zilina

Visegrad Fund

DIGSTEM

AILS (Academic Information and Learning System) structure



Visegrad Fund

Vzdelavanie.uniza.sk - main page

DIGSTEM

UNIVERSITY OF ŽILINA

MAIN OFFER

E-LEARNING

Academic year: 2023 / 2024

NOVÝ VZDELÁVACÍ MINISERIÁL

More

ODEVZDEJ.CZ

Odevzdej.cz
Antiplagiátorská kontrola seminárnych a iných prác

More

TEACHING PLANS

More

ISIC

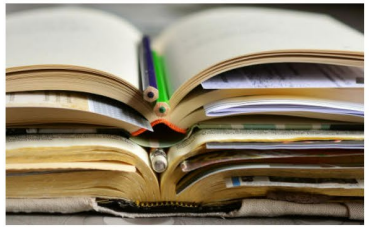
ISIC INTERNATIONAL STUDENT IDENTITY CARD

More

PSYCHOLOGICAL SUPPORT CENTER

More

STUDENTS WITH SPECIFIC NEEDS



More

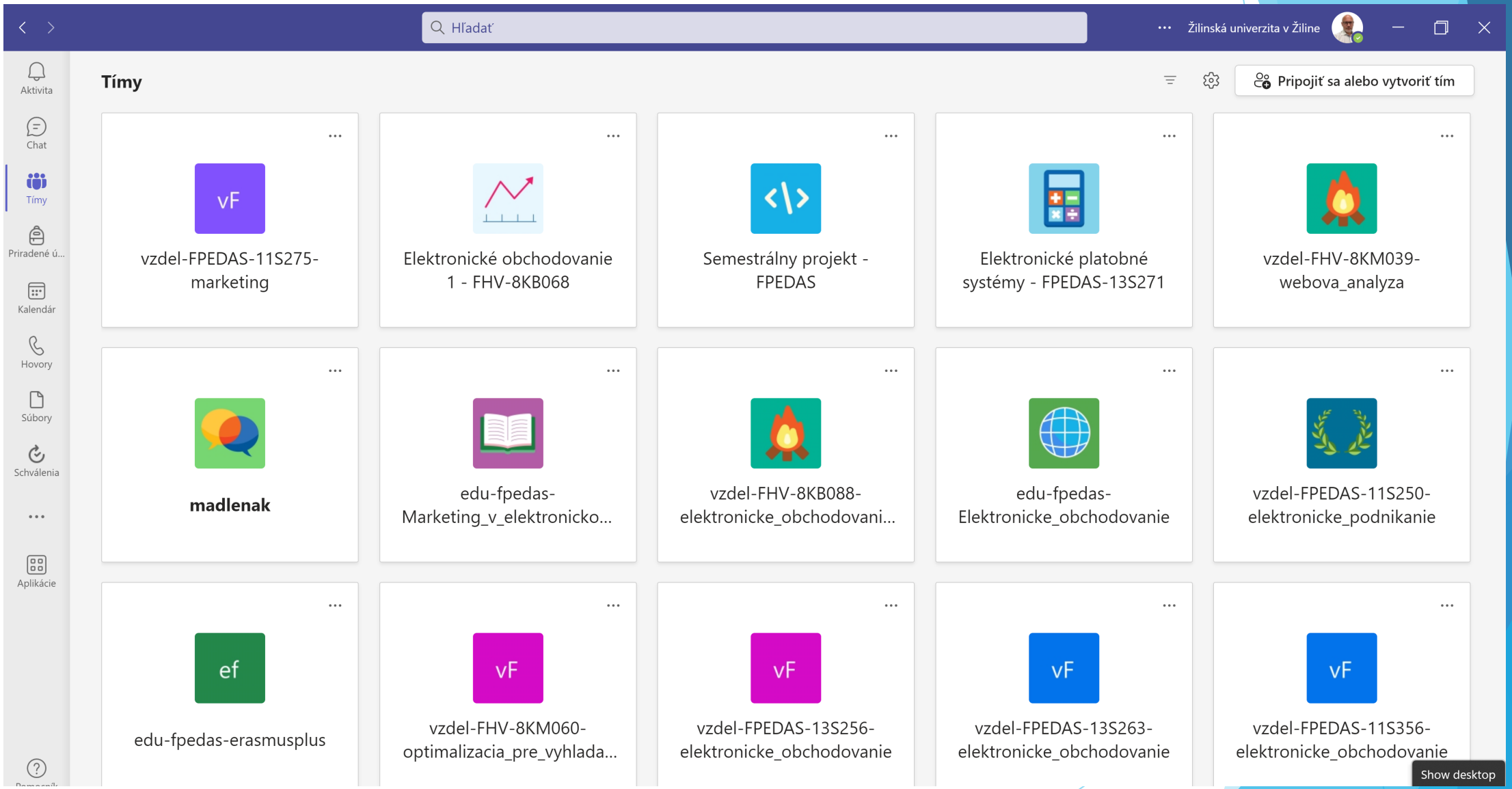
MAP OF UNIZA

More

Visegrad Fund

MS Teams - teacher's page

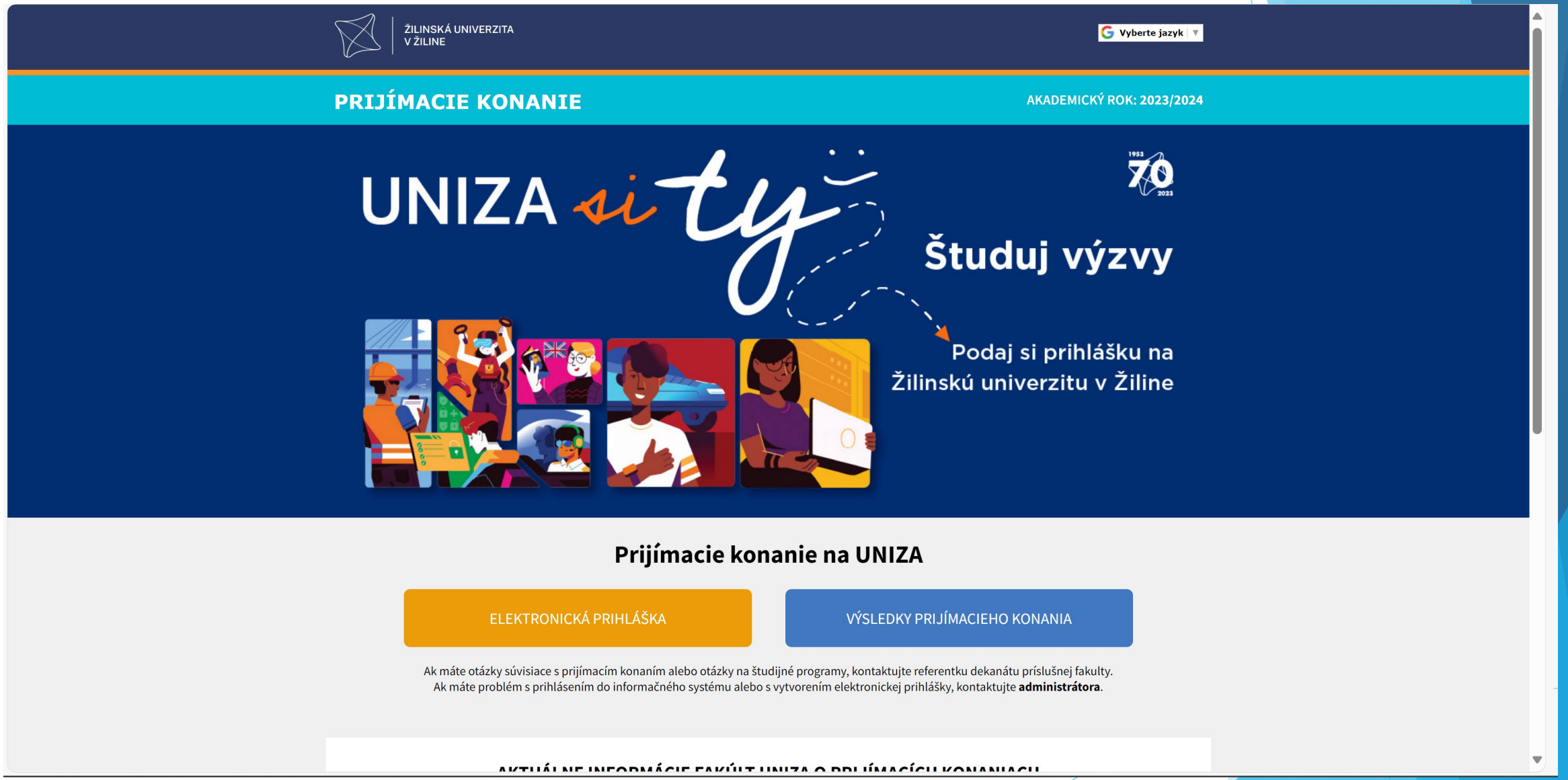
DIGSTEM



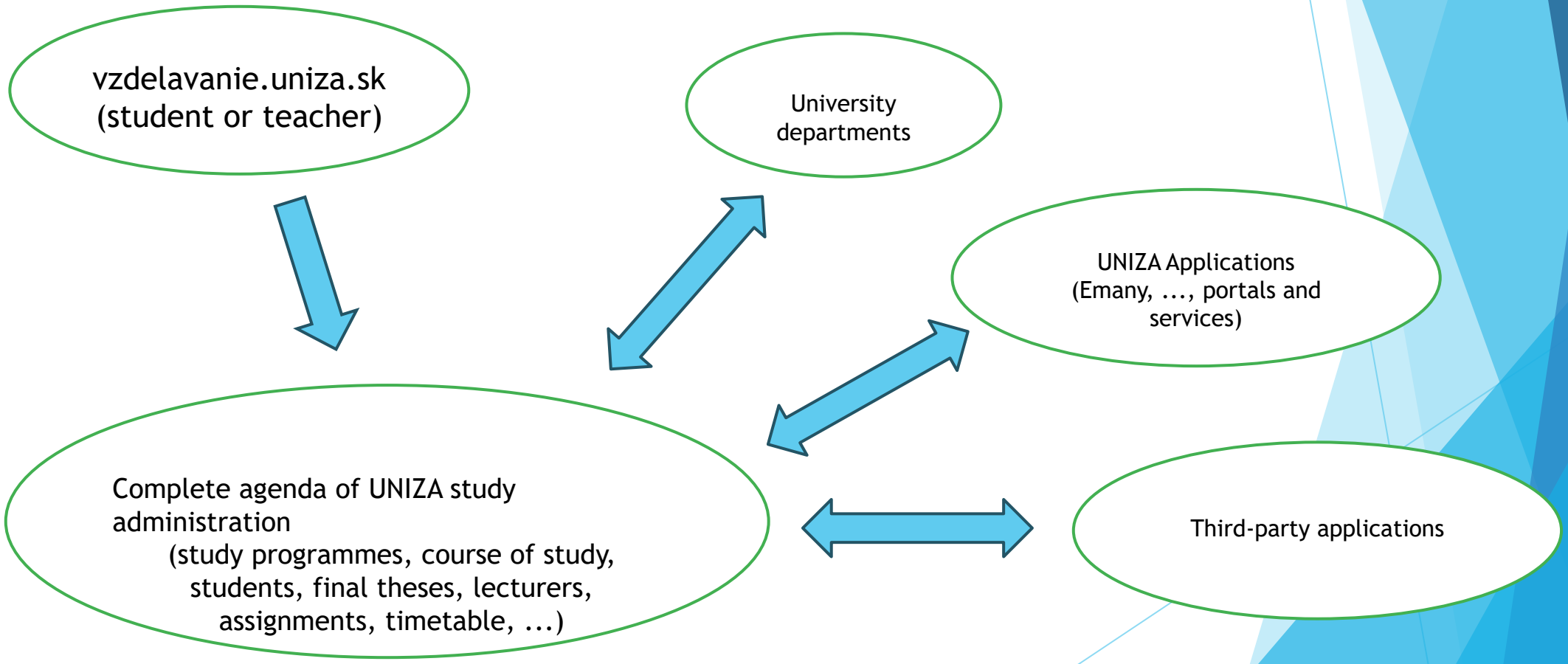
Visegrad Fund

Vzdelavanie.uniza.sk - Electronic application for studies

DIGSTEM



Information system - vzdelavanie.uniza.sk



Vzdelavanie.uniza.sk – Study plans

ŽILINSKÁ UNIVERZITA V ŽILINE

VŠEOBECNÉ INFORMÁCIE HLAVNÁ PONUKA

E-VZDELÁVANIE

Akademický rok: 2023 / 2024

Učebné plány na akademický rok 2023 / 2024

Fakulta: Fakulta prevádzky a ekonomiky dopravy a spojov

Miesto: Žilina

Forma štúdia: Denné bakalárske štúdium

Ročník: 1

Štud.program: distribučné technológie a služby

Predmet	Skr.	Pov.	Rozsah	Ukon.	Kred.	Katedra
Zimný semester						
1B0E101 všeobecná ekonomická teória	VET	Pov.	2 - 1 - 0	S	5.0	Ek
1B0M101 matematika 1	Mat1	Pov.	2 - 3 - 1	S	7.0	KMHI
1B0M109 informatika 1	Inf1	Pov.	0 - 0 - 3	H	3.0	KMHI
1B0S101 úvod do dopravy	UDD	Pov.	2 - 1 - 0	S	5.0	KS
1B0S102 technológie elektronických komunikácií	TEK	Pov.	2 - 0 - 1	S	5.0	KS
1B0S103 manažment podniku	MPO	Pov.	4 - 2 - 0	S	5.0	KS
1B0M107 seminár z matematiky	SEM1	Výb.	0 - 2 - 0	H	2.0	KMHI
1B0P001 telesná výchova 1	TV1	Výb.	0 - 2 - 0	H	2.0	ÚTV
1B0P002 telovýchovné sústredenie 1	TVS1	Výb.	0 - 1 - 0	H	1.0	ÚTV
Letný semester						
1B0M151 matematika 2	Mat2	Pov.	2 - 3 - 1	S	7.0	KMHI
1B0M154 informatika 2	INF2	Pov.	0 - 0 - 3	H	5.0	KMHI

Visegrad Fund

Vzdelavanie.uniza.sk - Courses provided by the selected department

DIGSTEM

UNIVERSITY OF ŽILINA

MAIN OFFER

E-LEARNING

Academic year: 2023 / 2024

Katedra Department of Communications
Teaching in the academic year 2023 / 2024

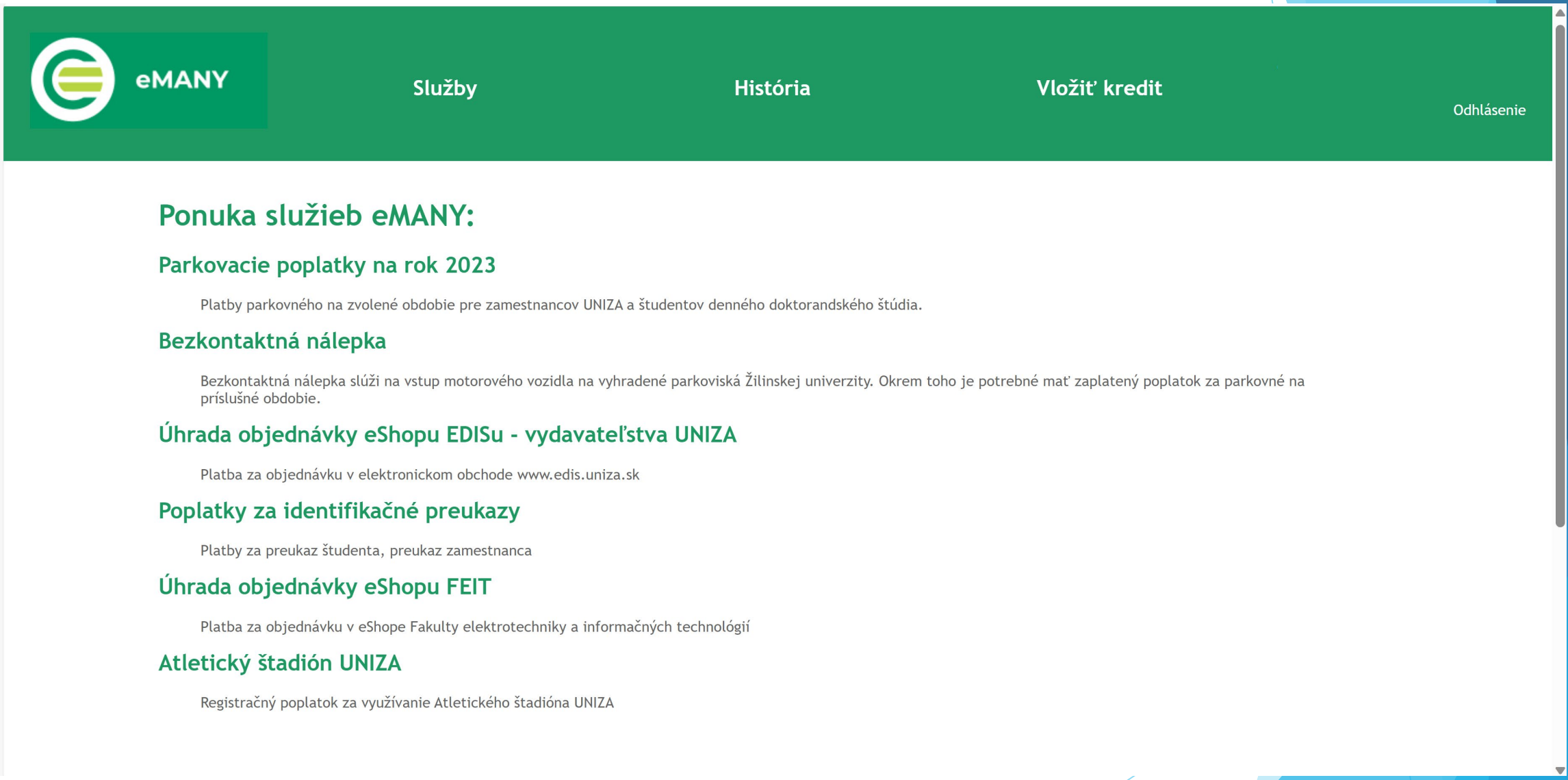
Faculty of Operation and Economics of Transport and Communications — **Full-time Bachelor's Degree Study**

Year	Subject	Extent	Com.	End.	Cred.
Winter term					
1	1B0S101 Introduction to Transport Theory	2 - 1 - 0	Com.	S	5.0
1	1B0S102 Technologies of Electronical Communication	2 - 0 - 1	Com.	S	5.0
1	1B0S103 Management of Enterprise	4 - 2 - 0	Com.	S	5.0
1	1B0S104 Distribution Management	2 - 1 - 0	Com.	S	5.0
1	1B0S204 Algoritmization and Basics of Programming	2 - 0 - 2	Com.	S	5.0
1	1B0S000 výmaz predmetu	0 - 0 - 0	Opt.	S	.0
2	1B0S201 E-Business	2 - 0 - 2	Com.	S	7.0
2	1B0S202 Accounting	2 - 0 - 3	Com.	S	7.0
2	1B0S203 Human Resource Management	2 - 0 - 2	Com.	S	5.0
2	1B0S206 Telematic Services	2 - 0 - 2	Com.	S	5.0
2	1B0S104 Distribution Management	2 - 1 - 0	C.o.	S	5.0
2	1B0S203 Human Resource Management	2 - 0 - 2	C.o.	S	5.0
2	1B0S204 Algoritmization and Basics of Programming	2 - 0 - 2	C.o.	S	5.0
2	1B0S205 Public Aministration	2 - 0 - 2	C.o.	S	5.0
2	1B0S207 Safety Management of Information Systems	2 - 0 - 2	C.o.	S	5.0
2	1B0S201 E-Business	2 - 0 - 2	Opt.	S	7.0
2	1B0S204 Algoritmization and Basics of Programming	2 - 0 - 2	Opt.	S	5.0
3	1B0S301 Information Systems in Management	3 - 0 - 2	Com.	S	7.0
3	1B0S302 Distribution Mechanization and Automation	3 - 0 - 2	Com.	S	7.0
3	1B0S303 Telematic Services	2 - 0 - 3	Com.	S	7.0
3	1B0S304 Economic Statistics	2 - 0 - 2	Com.	S	5.0
3	1B0S305 Market Research	2 - 0 - 2	Com.	S	5.0
3	1B0S307 Information Systems in Management	3 - 0 - 2	Com.	S	6.0
3	1B0S308 E-Commerce	2 - 0 - 2	Com.	S	5.0

Visegrad Fund

Uniza payment application - Emany

DIGSTEM



Visegrad Fund

Third party app - Timetable of lectures

DIGSTEM

Google Play Hry Aplikácie Filmy a televízia Knihy Pre deti

UNIZA Rozvrh

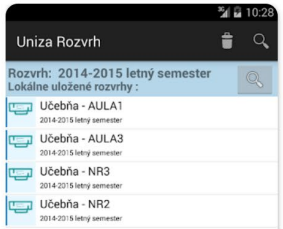
LK DEV

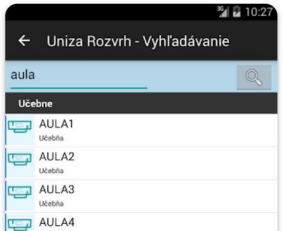
1 tis.+
Stiahnuté

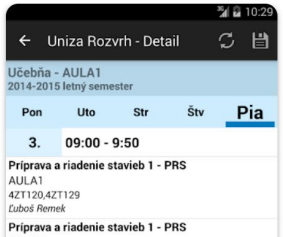
E
Pre všetkých

Zdieľať Pridať do zoznamu želaní

Nemáte žiadne zariadenia

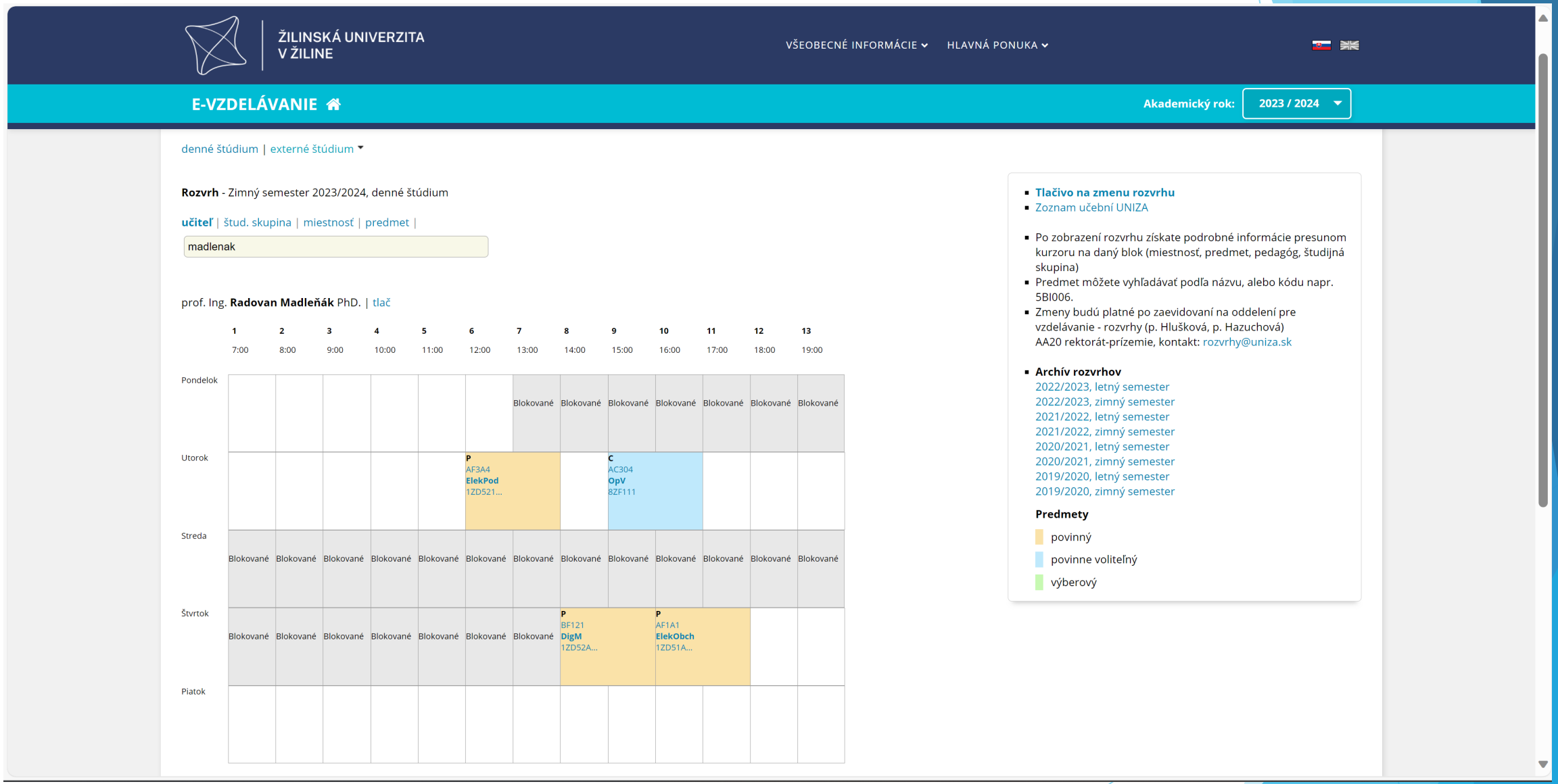




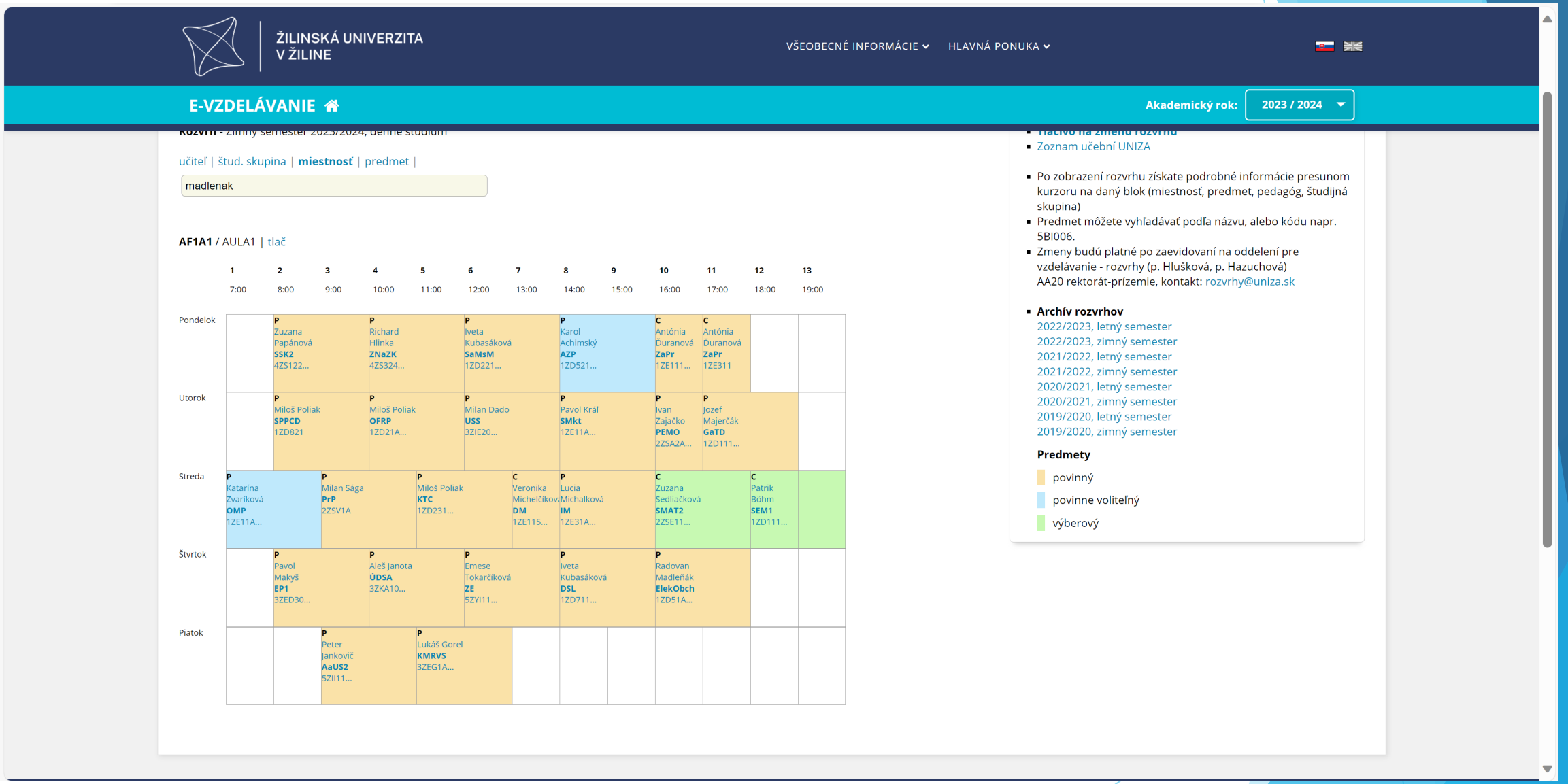


Podpora aplikácie

Vzdelavanie.uniza.sk - Timetable of lectures (teacher)



Vzdelavanie.uniza.sk - Timetable of lectures (room)



Vzdelavanie.uniza.sk - Teachers' lectures (per academic year)

UNIVERSITY OF ŽILINA

MAIN OFFER

E-LEARNING

Academic year: 2023 / 2024

Subjects in the academic year 2023 / 2024

Form	Year	Subject	Location	Teaching	Appreciation
Winter term					
Faculty of Operation and Economics of Transport and Communications					
Full-time Bachelor's Degree Study	2	1B0S201 E-Business	Žilina		
Full-time Bachelor's Degree Study	3	1B0S308 E-Commerce	Žilina		
Full-time Master's Degree Study	1	1I0S107 E-Commerce	Žilina		
Full-time Master's Degree Study	2	1I0S107 E-Commerce	Žilina		
Full-time Master's Degree Study	2	1I0S203 Digital Marketing	Žilina		
Part-time Master's Degree Study	2	1I1S107 E-Commerce	Žilina		
Faculty of Humanities					
Full-time Master's Degree Study	1	7I0D511 Search Engine Optimization	Žilina		
Part-time Master's Degree Study	1	720E511 Search Engine Optimization	Žilina		
Summer term					
Faculty of Operation and Economics of Transport and Communications					
Full-time Bachelor's Degree Study	2	1B0S252 Postal and Distributional Networks	Žilina		
Full-time Bachelor's Degree Study	3	1B0S360 Final Thesis	Žilina		
Full-time Master's Degree Study	1	1I0S155 Database Design	Žilina		
Full-time Master's Degree Study	2	1I0S260 Final Thesis	Žilina		
Full-time Doctoral Degree Study	1	1D0F116 Information Systems in Process and Services Management	Žilina		
Part-time Doctoral Degree Study	1	1D0F116 Information systems in process and service management	Žilina		

Vzdelavanie.uniza.sk - Syllabus of the subject

ŽILINSKÁ UNIVERZITA V ŽILINE

VŠEOBECNÉ INFORMÁCIE HLAVNÁ PONUKA

E-VZDELÁVANIE

Akademický rok: 2023 / 2024

Informačný list predmetu

Vysoká škola: Žilinská univerzita v Žiline	
Fakulta: Prevádzky a ekonomiky dopravy a spojov	
Kód predmetu: 1B0S201	**Názov predmetu:** elektronické podnikanie (ElekPod)
Atribúty predmetu:	Povinnosť: povinný Ukončenie: Skúška Predmet jadra: áno Profilový predmet: áno
Druh, rozsah a metóda vzdelávacích činností:	
Týždenný počet hodín výučby vo forme prednášky, cvičenia, semináre, klinickej praxe	Prednášky: 2.0 Cvičenia: 0.0 Lab.cvičenia: 2.0
Metóda, akou sa vzdelávacia činnosť uskutočňuje	Výučba sa uskutočňuje prezenčne
Metódy dosiahnutia výsledkov vzdelávania	Predmet sa vyučuje formou prednášok s problémovým výkladom, ktoré majú charakter výkladu základných princípov a teórie elektronického podnikania. Prednášky sú podporované s využitím IKT (video prezentácie a prípadové štúdie aplikovanie foriem elektronického podnikania v praxi). Interakcia so študentami a motivácia aktívne sa zúčastňovať diskusie na prednáškach je zabezpečená využívaním gamifikačných nástrojov. Cvičenia sú realizované formou praktického precvičovania problematiky preberanej na prednáškach. Študenti aktívne vyhľadávajú informácie z oblasti aplikácie foriem elektronického podnikania, ktoré sú zverejňované v stanovených termínoch v študentskom časopise.
Počet kreditov: 7.0	
Záťaž študenta: 175 hodín Špecifikácia záťaže: Celková časová náročnosť predmetu je 175 hodín (7 kreditov x 25 h), z toho: - kontaktná výučba: 52 hodín (2-2 h x 13 týždňov) - tvorba podkladov pre vydávanie elektronického časopisu – 4 vydania po 6 hodín – 24 hodín, - samoštúdium a príprava na priebežné testovanie – 49 hodín - príprava na skúšku a absolvovanie skúšky - 50 hodín	
Odporúčaný semester/trimester štúdia: 2. ročník, zimný semester	
Stupeň štúdia: 1.	
Podmieňujúce predmety: Prerekvizity: Korekvizity: Podniková ekonomika	
Podmienky na absolvovanie predmetu: *Priebežné hodnotenie:* Cvičenia: bodové hodnotenie cvičení zahŕňa: hodnotenie aktívnej práce na cvičeniach, získaných vedomostí a schopností používať odbornú terminológiu v písomnom a ústnom prejave študenta pri tvorbe tematicky zameraných študentských elektronických časopisov. V rámci cvičení študenti absolvujú: - 13 krátkych priebežných testov v elektronickom systéme pre podporu vzdelávania po 2 body, t. j. spolu 26 bodov - tvorba príspevkov do študentského časopisu (spolu 4 príspevky za každého študenta – spolu 14 bodov). Jednotlivé čísla študentského časopisu sú venované špecifickým formám elektronického podnikania: - 3. týždeň – ERP systémy - 6. týždeň – CRM systémy - 9. týždeň – Systémy elektronického obchodovania	

Vzdelavanie.uniza.sk - List of exams

ŽILINSKÁ UNIVERZITA V ŽILINE

VŠEOBECNÉ INFORMÁCIE HLAVNÁ PONUKA

E-VZDELÁVANIE

Akademický rok: 2022 / 2023

Nový termín Zoznam všetkých termínov - iní učitelia

Zoznam termínov na predmet: elektronické obchodovanie

Dátum/čas	Miestnosť	Skúšajúci	Kapacita	Počet prihlásených	Typ	Poznámka	
21.12.2022 / 10:00	BF106		12	2	riadny termín	Predtermín pre študentov, ktorí navštevovali prednášky.	
09.01.2023 / 09:00	AS127		40	21	riadny termín	Prvý termín, ktorý je určený študentom, čo navštevovali prednášky.	
19.01.2023 / 09:00	AS127		40	29	riadny termín		
23.01.2023 / 09:00	AS127		40	37	riadny termín		
30.01.2023 / 08:30	AS127		40	28	riadny termín	Pozor zmena času konania skúšky!!	
01.02.2023 / 09:00	BF121		20	15	riadny termín		
07.02.2023 / 09:00	AS127		40	25	riadny termín		
14.02.2023 / 09:00	BF121		25	21	riadny termín	Posledný termín	
10.03.2023 / 11:30	BF327		10	5	riadny termín		
05.04.2023 / 10:00	ONLINE		10	3	riadny termín	Stretnutie o 10:00 pred kanceláriou BF441.	
04.05.2023 / 10:00	ONLINE		20	3	riadny termín	Posledný termín. Stretneme sa pre miestnosťou BF441. Emailom mi potvrdte účasť a taktiež mi uveďte, z akého predmetu idete na skúšku.	

Kontakt Podpora IKT UNIZA Univerzitný lekár Návod na prácu s LMS Moodle Sprievodca prváka

Vzdelavanie.uniza.sk - Students registered for the exam

ŽILINSKÁ UNIVERZITA V ŽILINE

VŠEOBECNÉ INFORMÁCIE HLAVNÁ PONUKA

E-VZDELÁVANIE

Akademický rok: 2022 / 2023

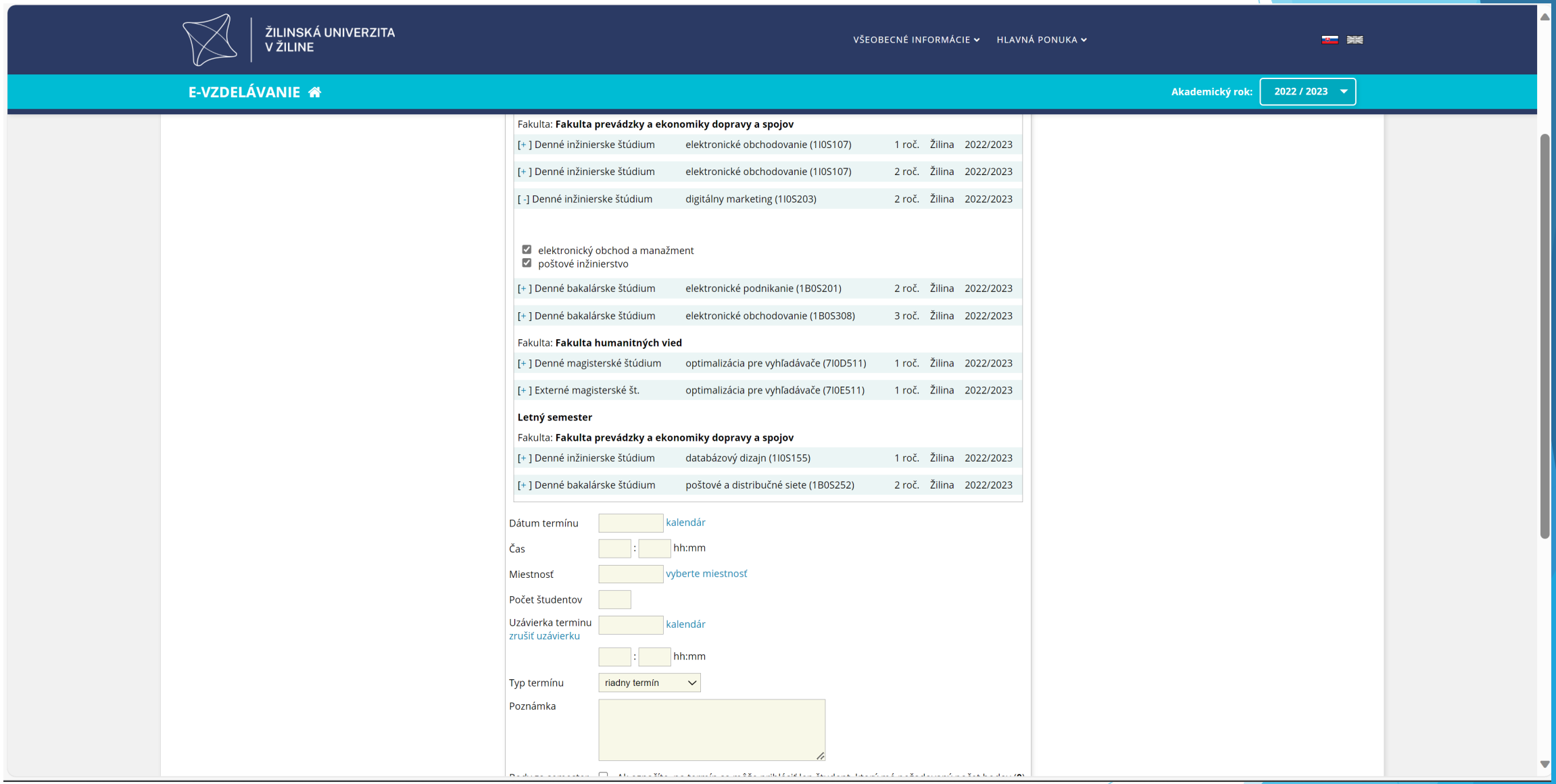
Informácie o termíne

2022	elektronické obchodovanie	Fakulta prevádzky a ekonomiky dopravy a spojov	Denné inžinierske štúdium	1
2022	elektronické obchodovanie	Fakulta prevádzky a ekonomiky dopravy a spojov	Denné inžinierske štúdium	2
2022	elektronické obchodovanie	Fakulta prevádzky a ekonomiky dopravy a spojov	Denné bakalárske štúdium	3

Dátum/čas	**19.01.2023 / 09:00**
Uzávierka	**18.01.2023 / 10:00**
Miestnosť	**AS127**
Kapacita	**40**
Počet prihlásených	**29**

	Študent	Forma	Štud. skupina	Ročník	Odbor/zameranie	Predmet	Počet termínov
☐		Den.inž.	1 ZE11A	1	EaMP	elektronické obchodovanie	1
☐		Den.bak.	1 ZE221	2	EOaM	elektronické obchodovanie	1
☐		Den.inž.	1 ZE11A	1	EaMP	elektronické obchodovanie	1
☐		Den.inž.	1 ZD51A	1	PI	elektronické obchodovanie	1
☐		Den.inž.	1 ZE11A	1	EaMP	elektronické obchodovanie	1
☐		Den.bak.	1 ZE231	3	EOaM	elektronické obchodovanie	1
☐		Den.inž.	1 ZE11D	1	EaMP	elektronické obchodovanie	1
☐		Den.inž.	1 ZE11D	1	EaMP	elektronické obchodovanie	1
☐		Den.inž.	1 ZE11D	1	EaMP	elektronické obchodovanie	1

Vzdelavanie.uniza.sk - Creation of the exams date



Vzdelavanie.uniza.sk - Overview of marks for the subject

ŽILINSKÁ UNIVERZITA V ŽILINE

VŠEOBECNÉ INFORMÁCIE | HLAVNÁ PONUKA

E-VZDELÁVANIE

Akademický rok: 2022 / 2023

1B0S308 - elektronické obchodovanie (zimný semester 2022 / 2023)

Skúšková správa | Správa s priemermi | Zoznam študentov | Pôvodná správa (pre študentov označených "+") | Export údajov

Údaje možno **zoradiť** kliknutím na záhlavie stĺpca
Dátumy zadávajte v tvare DD.MM.RRRR (deň,mesiac,rok)
* Predmet je prenesený z predchádzajúceho akademického roka.
+ Predmet je prenesený do ďalšieho akademického roka.
- Predmet je uzavretý a nemožno ho meniť.

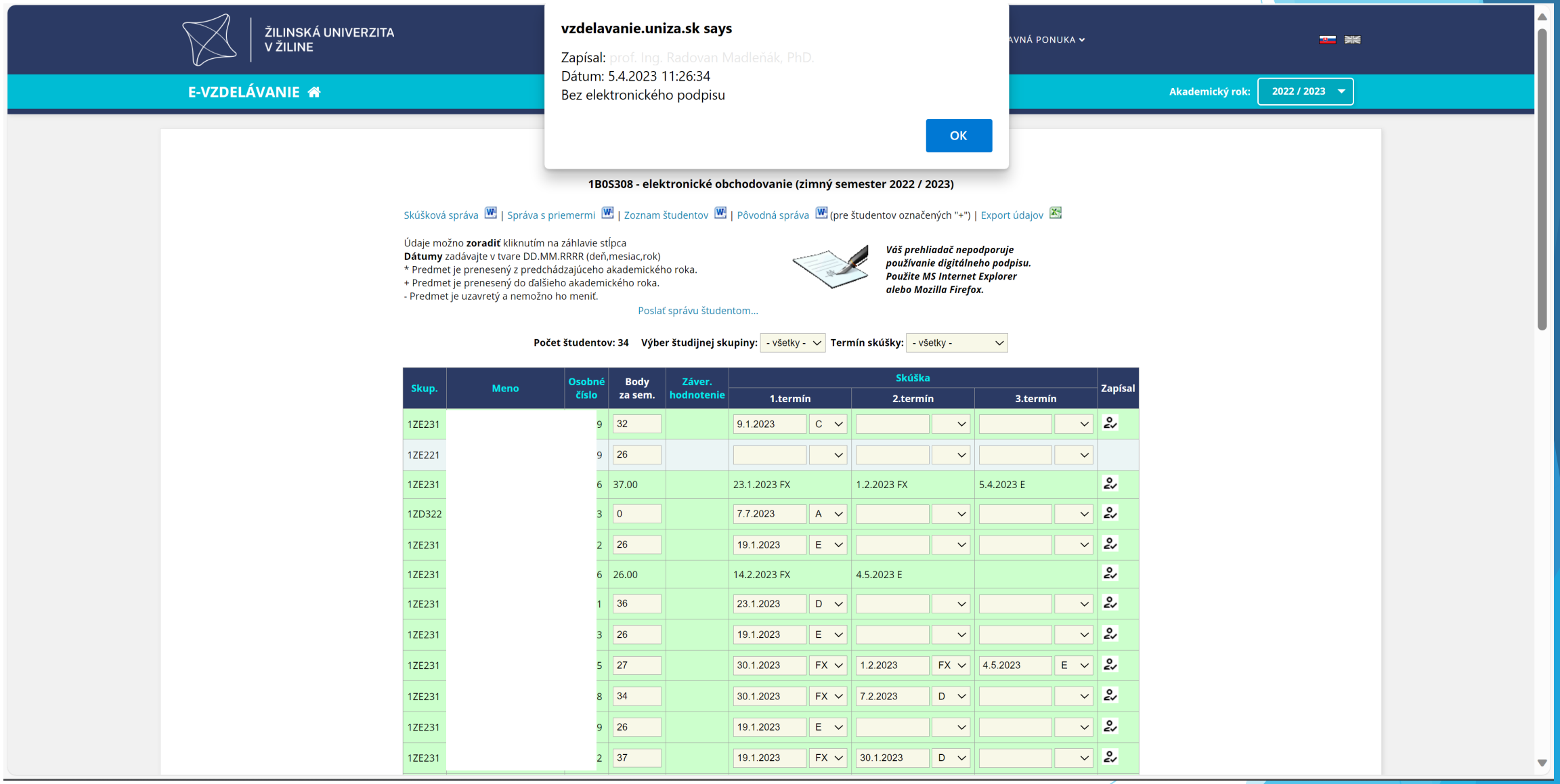
Váš prehliadač nepodporuje používanie digitálneho podpisu. Použite MS Internet Explorer alebo Mozilla Firefox.

Poslať správu študentom...

Počet študentov: 34 **Výber študijnej skupiny:** - všetky - **Termín skúšky:** - všetky -

Skup.	Meno	Osobné číslo	Body za sem.	Záver. hodnotenie	Skúška			Zapísal
					1.termín	2.termín	3.termín	
1ZE231		9	32		9.1.2023 C			
1ZE221		9	26					
1ZE231		6	37.00		23.1.2023 FX	1.2.2023 FX	5.4.2023 E	
1ZD322		3	0		7.7.2023 A			
1ZE231		2	26		19.1.2023 E			
1ZE231		6	26.00		14.2.2023 FX	4.5.2023 E		
1ZE231		1	36		23.1.2023 D			
1ZE231		3	26		19.1.2023 E			
1ZE231		5	27		30.1.2023 FX	1.2.2023 FX	4.5.2023 E	
1ZE231		8	34		30.1.2023 FX	7.2.2023 D		
1ZE231		9	26		19.1.2023 E			
1ZE231		2	37		19.1.2023 FX	30.1.2023 D		

Vzdelavanie.uniza.sk - Information on who has written the grade



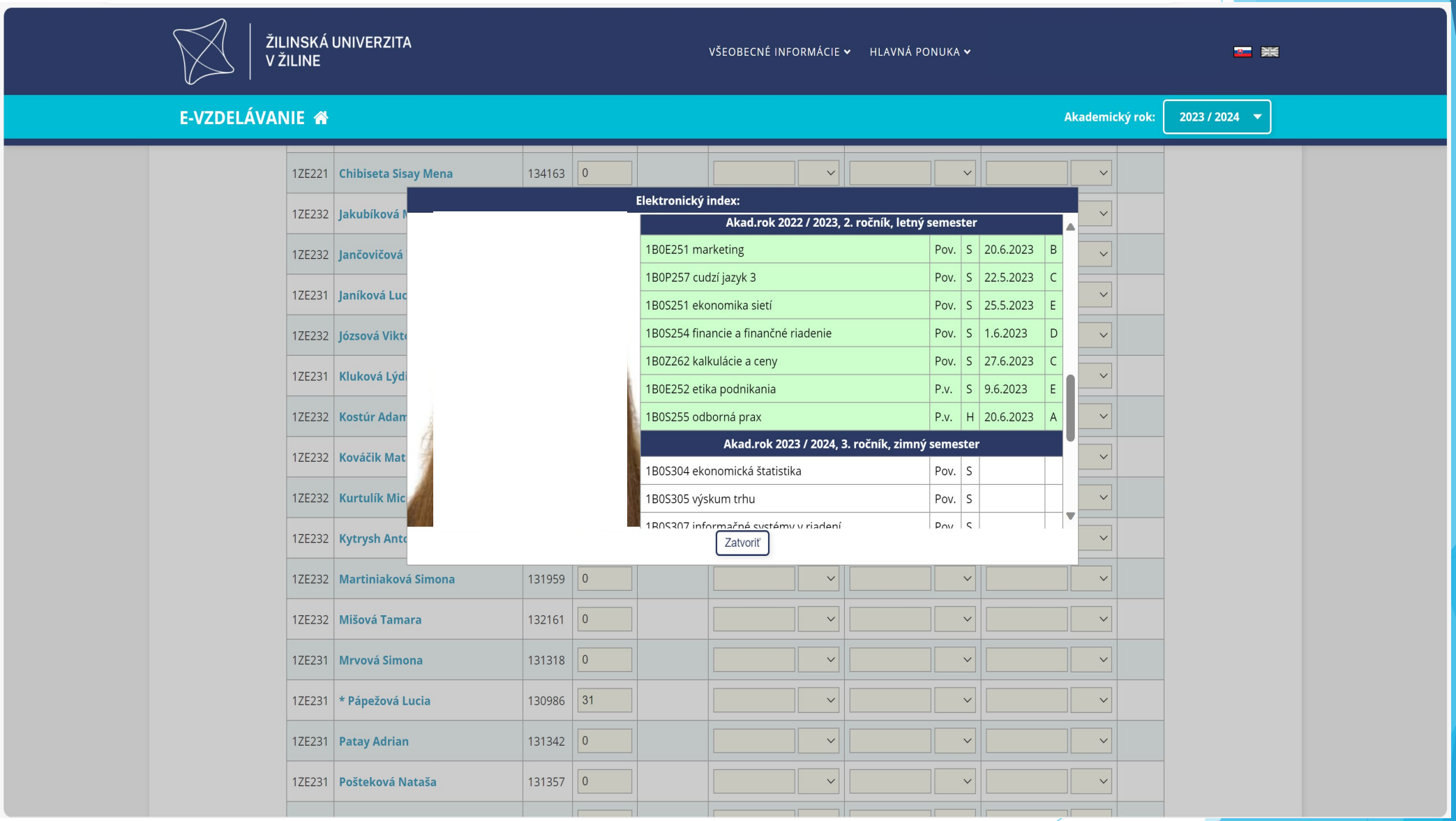
Visegrad Fund

Vzdelavanie.uniza.sk - Student with specific needs (indicator)

DIGSTEM

1ZE11C			38.00		23.1.2023 E		
1ZE11B			37.00		23.1.2023 A		
1ZE11B			38.00		9.1.2023 D		
1ZE11D			30.00		30.1.2023 D		
1ZE11C			32.00		23.1.2023 D		
1ZE11B			39.00		19.1.2023 A		
1ZE11C			38.00		23.1.2023 E		
1ZE11C			36.00		23.1.2023 D		
1ZE11B			33.00		23.1.2023 D		
1ZE11D			33.00		23.1.2023 FX	1.2.2023 FX	7.2.2023 D
1ZE11B			36.00		23.1.2023 A		
1ZE11B			34.00		23.1.2023 FX	7.2.2023 FX	14.2.2023 E

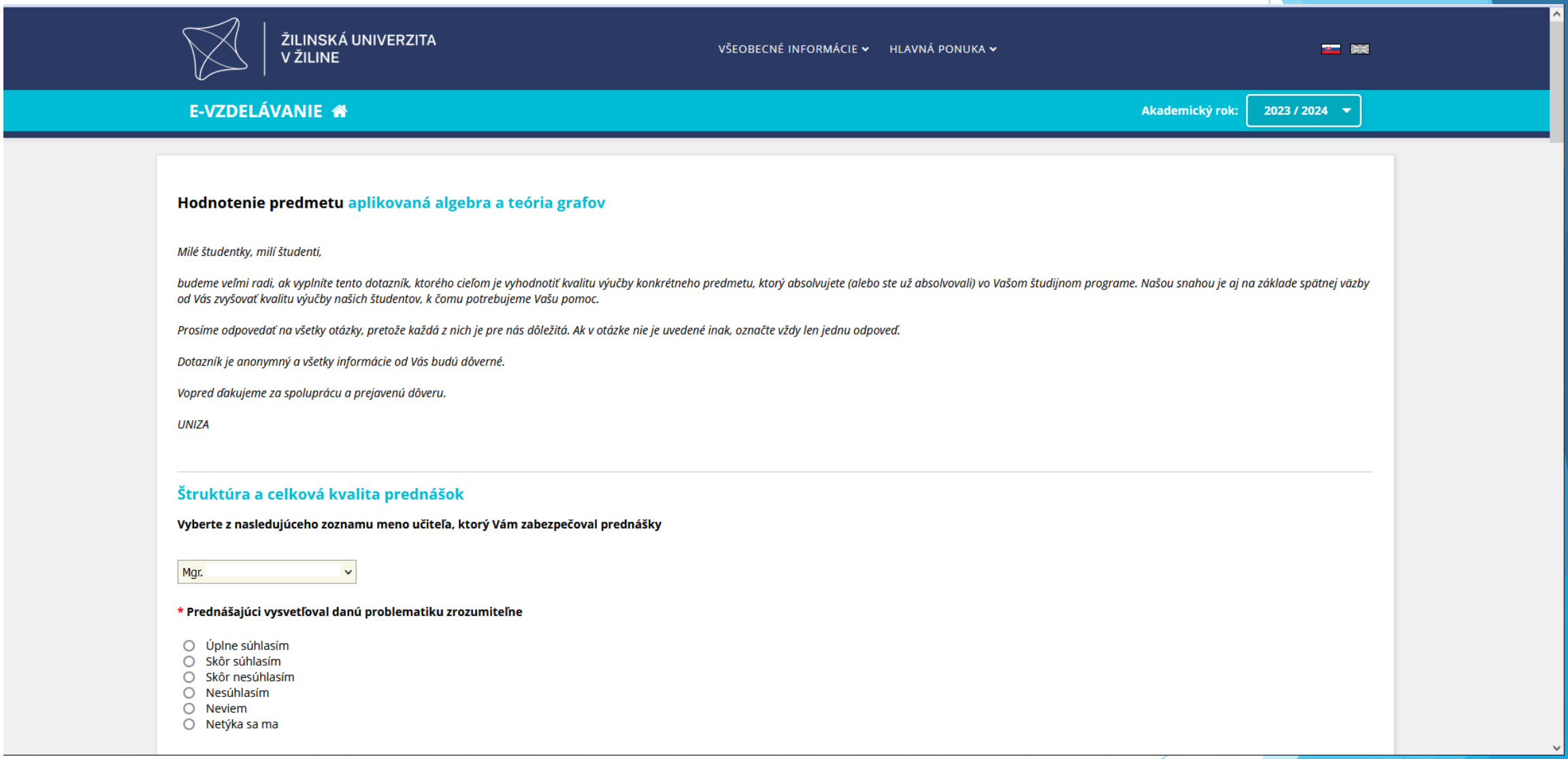
Vzdelavanie.uniza.sk - Information about student's grades



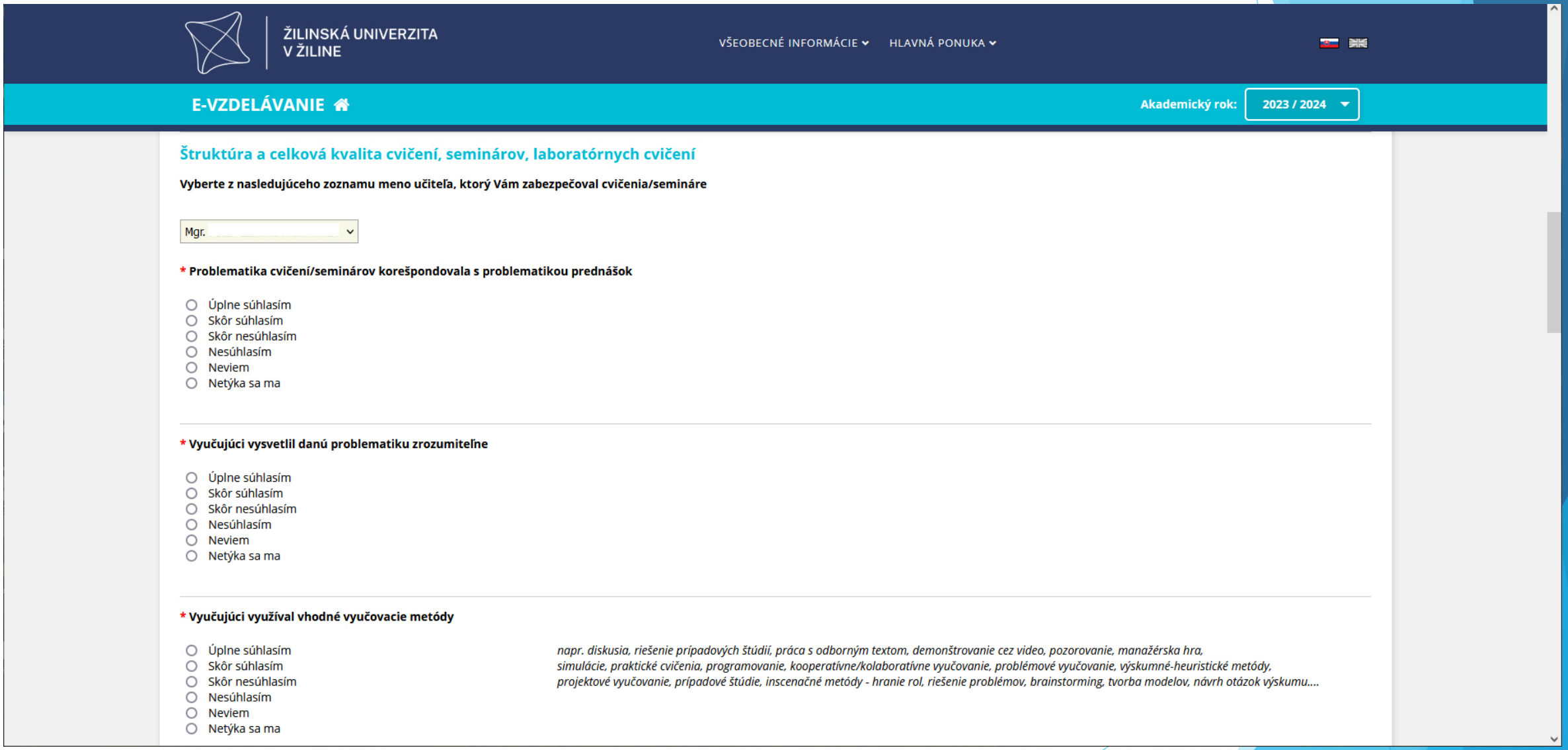
Visegrad Fund

DIGSTEM

Vzdelavanie.uniza.sk - Survey of student feedback



Vzdelavanie.uniza.sk - Survey of student feedback



ŽILINSKÁ UNIVERZITA V ŽILINE

VŠEOBECNÉ INFORMÁCIE HLAVNÁ PONUKA

E-VZDELÁVANIE

Akademický rok: 2023 / 2024

Štruktúra a celková kvalita cvičení, seminárov, laboratórnych cvičení

Vyberte z nasledujúceho zoznamu meno učiteľa, ktorý Vám zabezpečoval cvičenia/semináre

Mgr.

*** Problematika cvičení/seminárov korešpondovala s problematikou prednášok**

- Úplne súhlasím
- Skôr súhlasím
- Skôr nesúhlasím
- Nesúhlasím
- Neviem
- Netýka sa ma

*** Vyučujúci vysvetlil danú problematiku zrozumiteľne**

- Úplne súhlasím
- Skôr súhlasím
- Skôr nesúhlasím
- Nesúhlasím
- Neviem
- Netýka sa ma

*** Vyučujúci využíval vhodné vyučovacie metódy**

- Úplne súhlasím
- Skôr súhlasím
- Skôr nesúhlasím
- Nesúhlasím
- Neviem
- Netýka sa ma

napr. diskusia, riešenie prípadových štúdií, práca s odborným textom, demonštrovanie cez video, pozorovanie, manažérska hra, simulácie, praktické cvičenia, programovanie, kooperatívne/kolaboratívne vyučovanie, problémové vyučovanie, výskumné-heuristické metódy, projektové vyučovanie, prípadové štúdie, inscenačné metódy - hranie rol, riešenie problémov, brainstorming, tvorba modelov, návrh otázok výskumu....

Visegrad Fund

Vzdelavanie.uniza.sk - Survey of student feedback

DIGSTEM

ŽILINSKÁ UNIVERZITA V ŽILINE

VŠEOBECNÉ INFORMÁCIE HLAVNÁ PONUKA

E-VZDELÁVANIE

Akademický rok: 2023 / 2024

*** Pri výučbe sme mali k dispozícii potrebné technické vybavenie**

napr. SW, HW, meracie prístroje, špecifické vybavenie vo väzbe na odbor....

- ○ Úplne súhlasím
- ○ Skôr súhlasím
- ○ Skôr nesúhlasím
- ○ Nesúhlasím
- ○ Neviem
- ○ Netýka sa ma

Celkové zhodnotenie predmetu

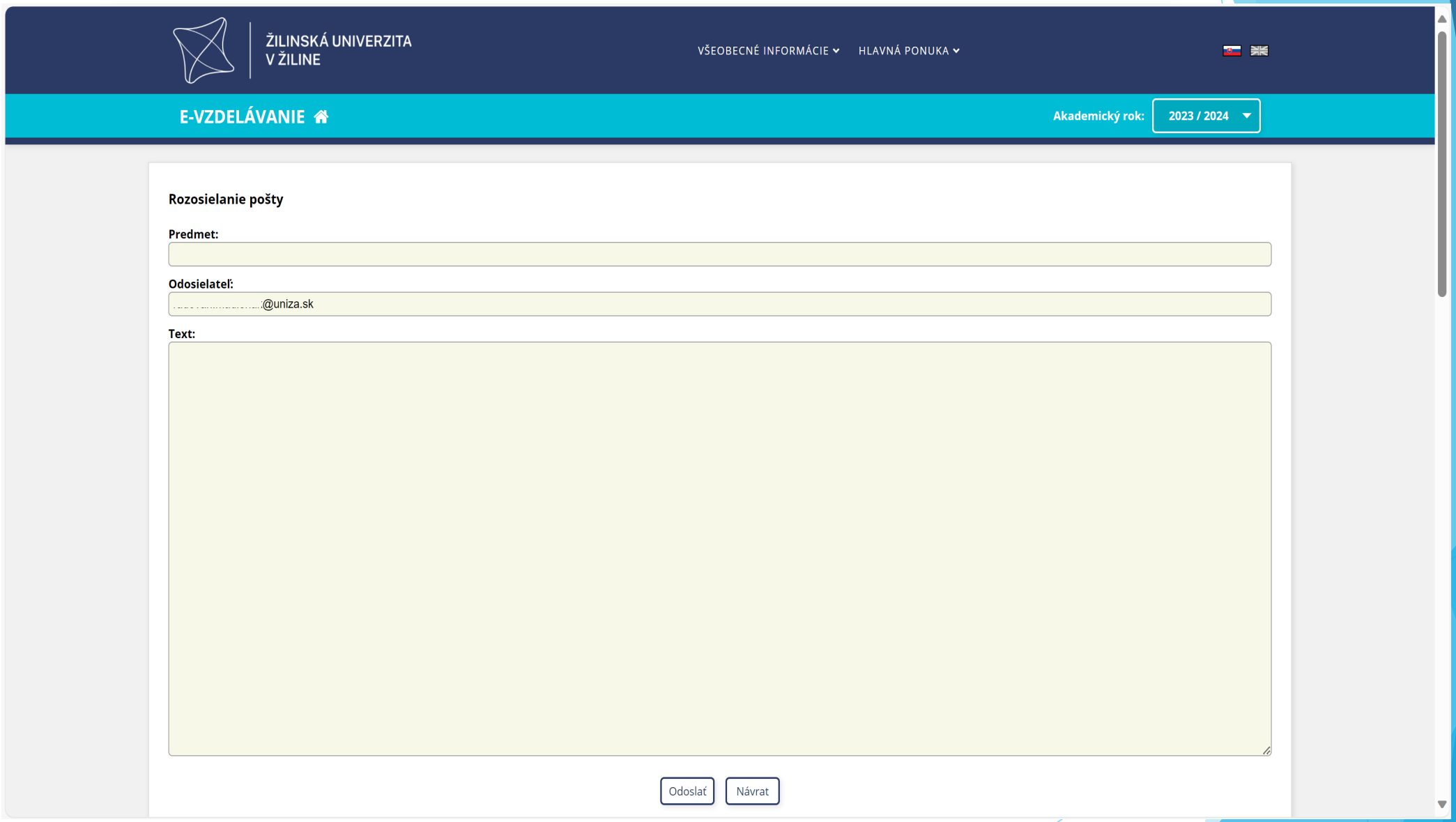
*** Vyznačte tri slová z uvedeného zoznamu, ktoré najlepšie vystihujú výučbu predmetu**

☐ zaujímavý	☐ nejasný	☐ potrebný	☐ ľahký
☐ nudný	☐ monotónny	☐ zavádzajúci	☐ ťažký
☐ systematický	☐ motivujúci	☐ interaktívny	☐ praktický

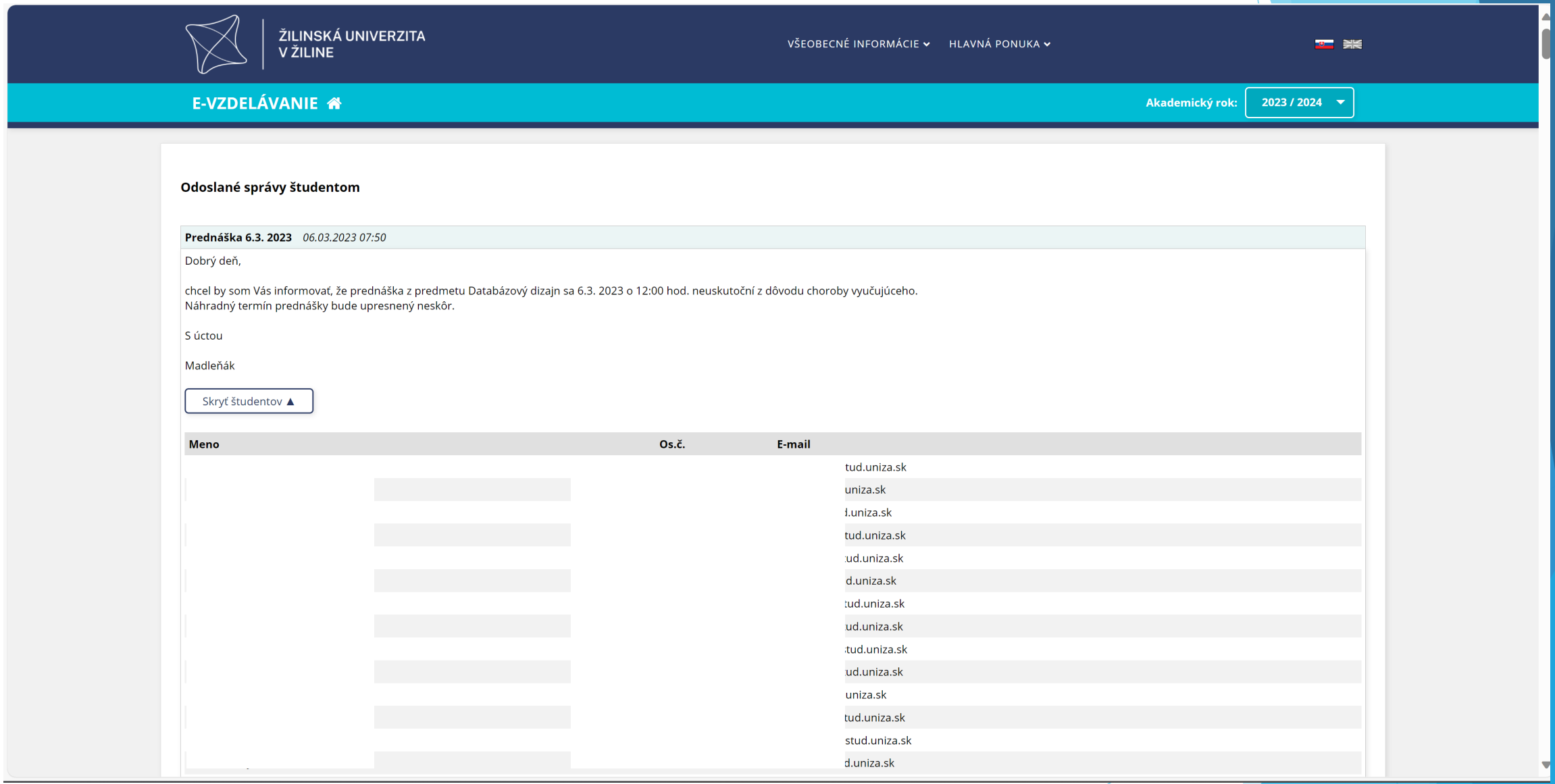
Tu môžete doplniť Vaše hodnotenie o ďalšie postrehy, ktoré by mohli prispieť k zvýšeniu Vašej spokojnosti

Odoslať

Vzdelavanie.uniza.sk - Messaging system (Teacher to students)



Vzdelavanie.uniza.sk - Archive of Messages (Teacher to students)



Visegrad Fund

DIGSTEM

Vzdelavanie.uniza.sk - List of the final thesis

ŽILINSKÁ UNIVERZITA V ŽILINE

VŠEOBECNÉ INFORMÁCIE HLAVNÁ PONUKA

E-VZDELÁVANIE

Akademický rok: 2023 / 2024

Záverečné práce na akademický rok 2023 / 2024

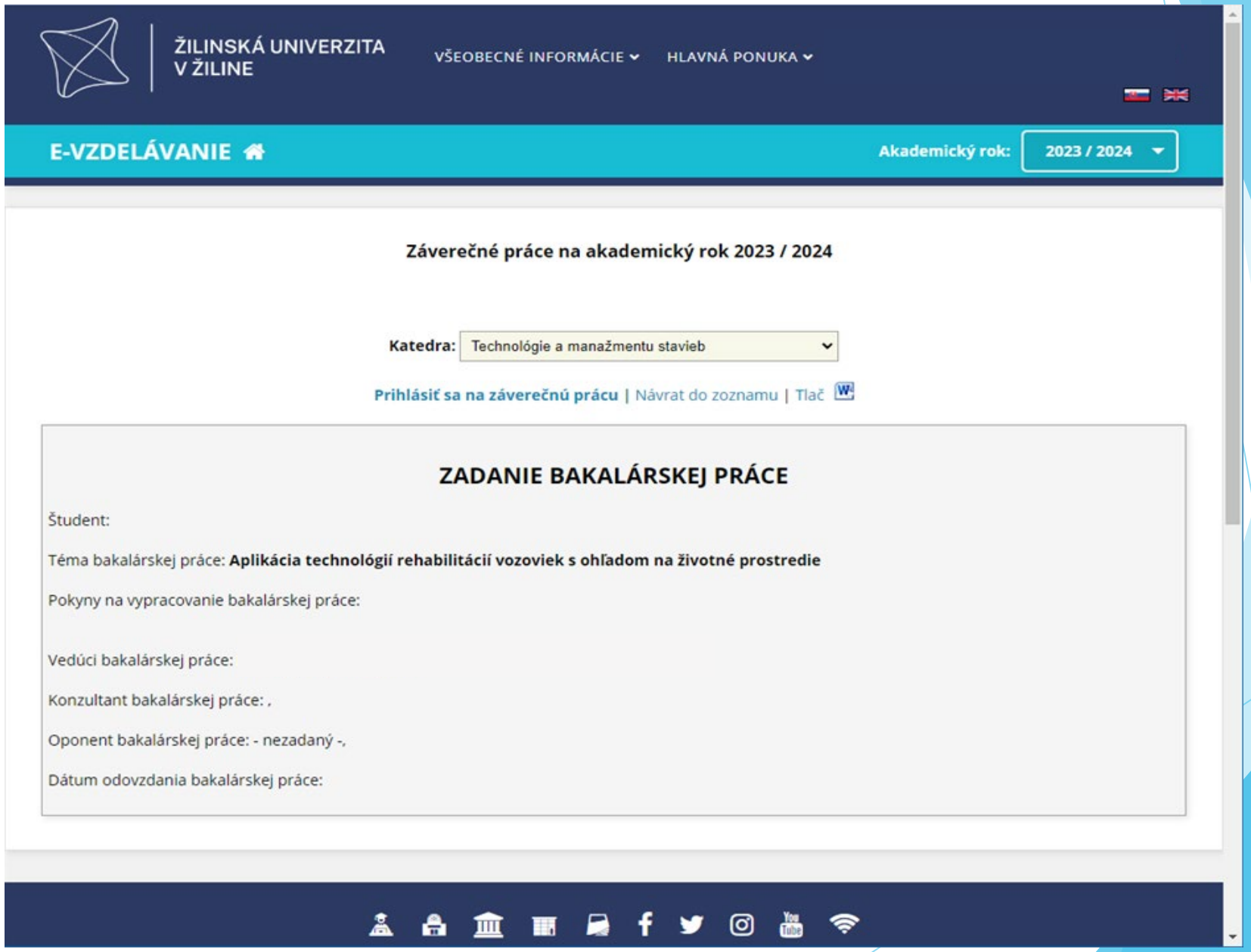
Katedra: Technológie a manažmentu stavieb

Názov práce	Vedúci	Prihlásený	Akcia
Analýza parametrov v univerzálnej rovnici straty pôdy USLE	Nguyen Giang, doc. Ing. CSc.		Prihlásiť
Analýza vplyvu prípravy vzoriek na výsledky hustomernej skúšky	Nguyen Giang, doc. Ing. CSc.		Prihlásiť
Analýza životného cyklu vozoviek	Mušuta Juraj, Ing.		Prihlásiť
Aplikácia technológií rehabilitácií vozoviek s ohľadom na životné prostredie	Mikolaj Ján, prof. Ing. CSc.		Prihlásiť
Bariéry spojené so zavádzaním nástrojov a prístupov v rámci platformy Construction 4.0	Šedivý Štefan, Ing. PhD.		Prihlásiť
Digitálne platformy modelov stavieb	Pitoňák Martin, doc. Ing. PhD.		Prihlásiť
Efektívna vzdialenosť pri porovnávaní praktického výkonu skrapera a terénnych sklápačov	Danišovič Peter, Ing. PhD.		Prihlásiť
Elektronizácia stavebných konaní	Pitoňák Martin, doc. Ing. PhD.		Prihlásiť
Kľúčové výkonnostné parametre správcu ciest v podmienkach ŽSK	Zgútová Katarína, doc. Ing. Dr.		Prihlásiť
Možnosti kontroly miery zhutnenia podložia vozovky	Kozel Matúš, Ing. PhD.		Prihlásiť
Nakladacia rampa so zastrešením - návrh konštrukčného riešenia	Odrobiňák Jaroslav, doc. Ing. PhD.		Prihlásiť
Návrh a posúdenie progresívnych technológií z hľadiska energetickej náročnosti	Mikolaj Ján, prof. Ing. CSc.		Prihlásiť
Návrh založenia vežového žeriavu	Bulko Roman, Ing. PhD.		Prihlásiť
Odolnosť cestnej infraštruktúry voči účinkom klimatickej krízy	Remek Ľuboš, Ing. PhD.		Prihlásiť
Operatívne určovania zaťažiteľnosti mostných provizórií pre súčasné potreby armády	Odrobiňák Jaroslav, doc. Ing. PhD.		Prihlásiť
Optimalizácia počtu cestných sklápačov v nadväznosti na strojovú zostavu dozér-rýpadlo	Danišovič Peter, Ing. PhD.		Prihlásiť
Optimalizácia počtu dopravných prostriedkov pre obsluhu rýpadla, resp. nakladača	Danišovič Peter, Ing. PhD.		Prihlásiť
Prístupy v stavebníctve znižujúce uhlíkovú stopu	Šedivý Štefan, Ing. PhD.		Prihlásiť

Visegrad Fund

DIGSTEM

Vzdelavanie.uniza.sk - Application for the final thesis



Visegrad Fund

DIGSTEM

UNIZA Moodle IS

vzdelavanie.uniza.sk/moodle
moodle.uniza.sk

- list of categories and subjects (study programmes)
- modules enabling students and teachers to carry out the teaching process (study materials, tests, assignments, assessments, question bank, comments, ...)

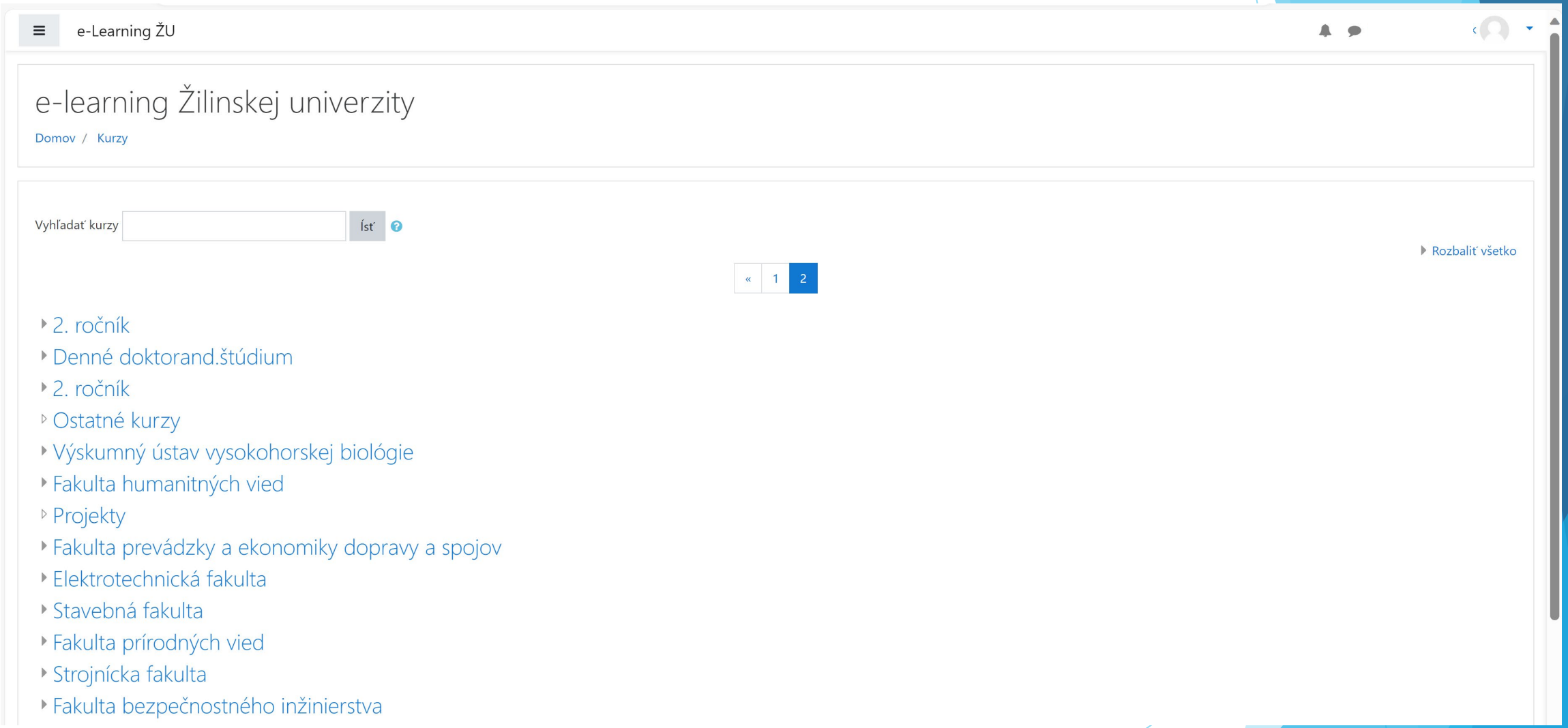
Mobile application

- configuration option
- functionality (alerts, mobile functions)

Visegrad Fund

Moodle - List of all subjects at UNIZA

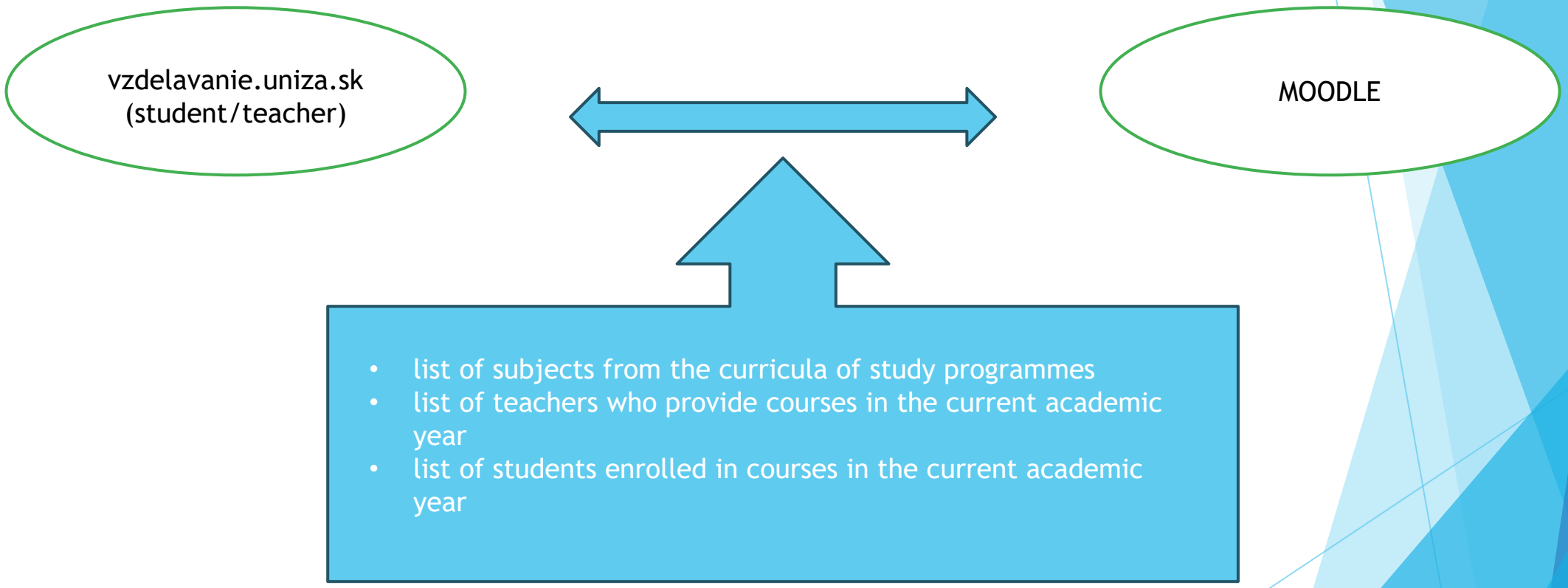
DIGSTEM



Visegrad Fund

DIGSTEM

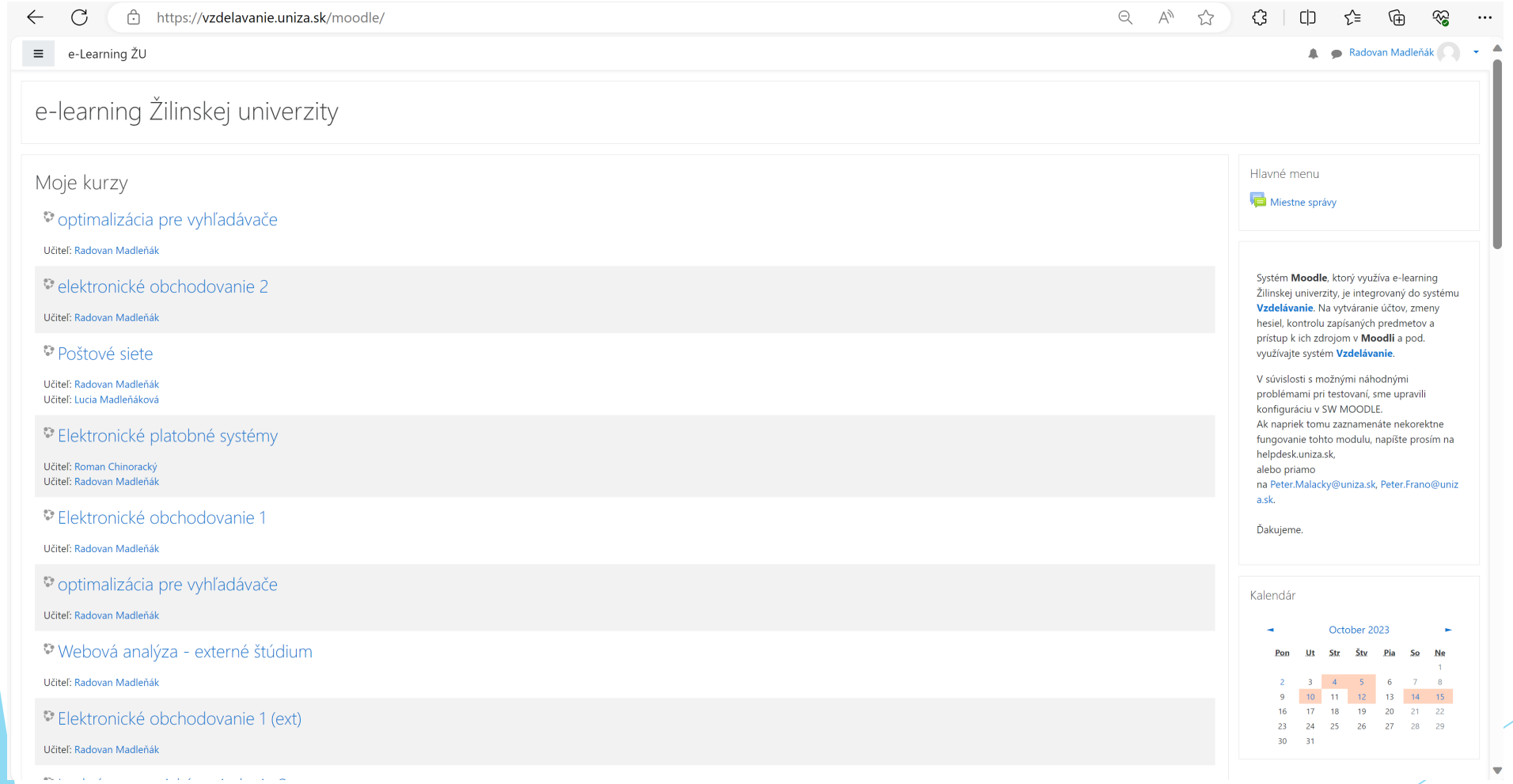
UNIZA Moodle IS - user's view

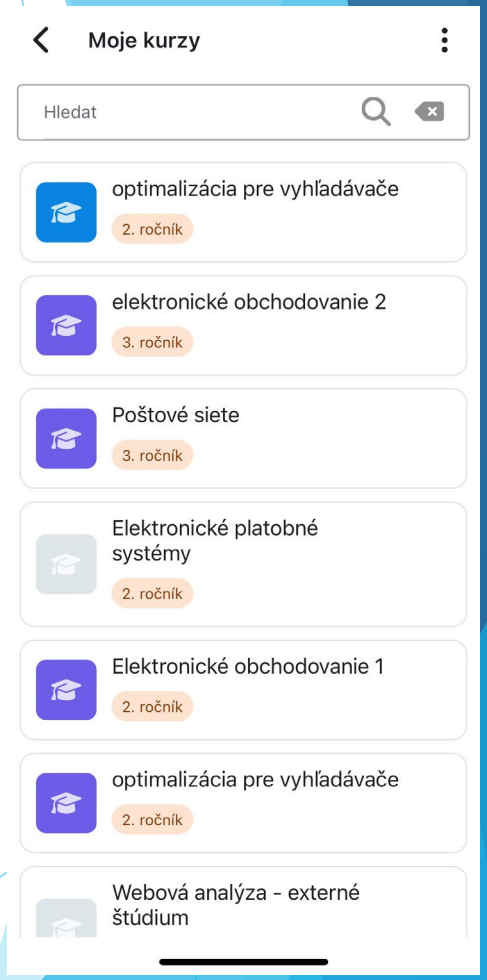


Visegrad Fund

Moodle - List of all subjects provided by teacher (web/mobile)

DIGSTEM

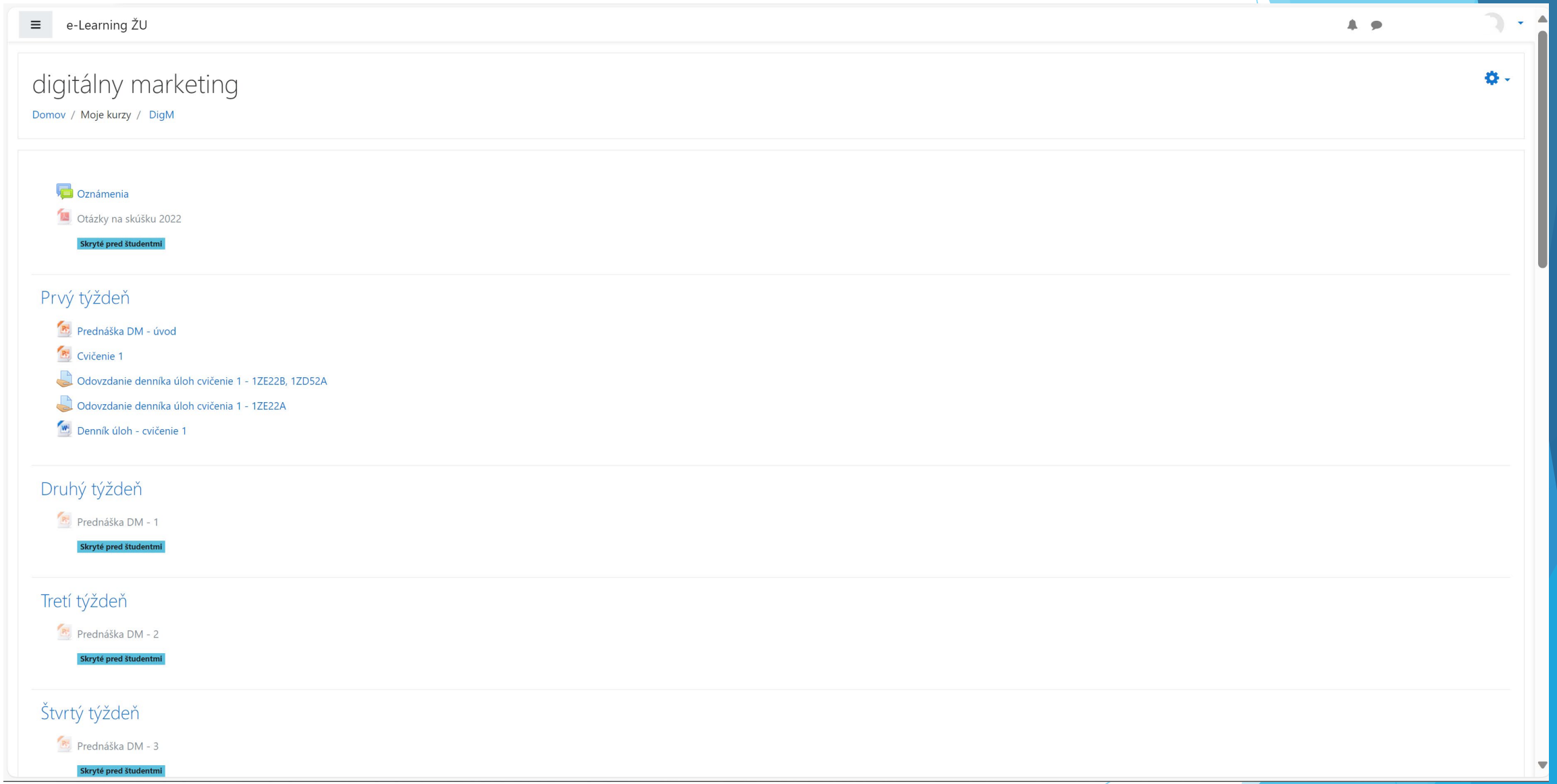




Visegrad Fund

Moodle - Subject page

DIGSTEM



Visegrad Fund

DIGSTEM

Types of Moodle at UNIZA

MOODLE

- access is only granted to users who are enrolled in the course as a student or who are providing the course as an educator
- individual assignment of roles as required
- system and other modules for securing processes
- custom development of modules according to requirements

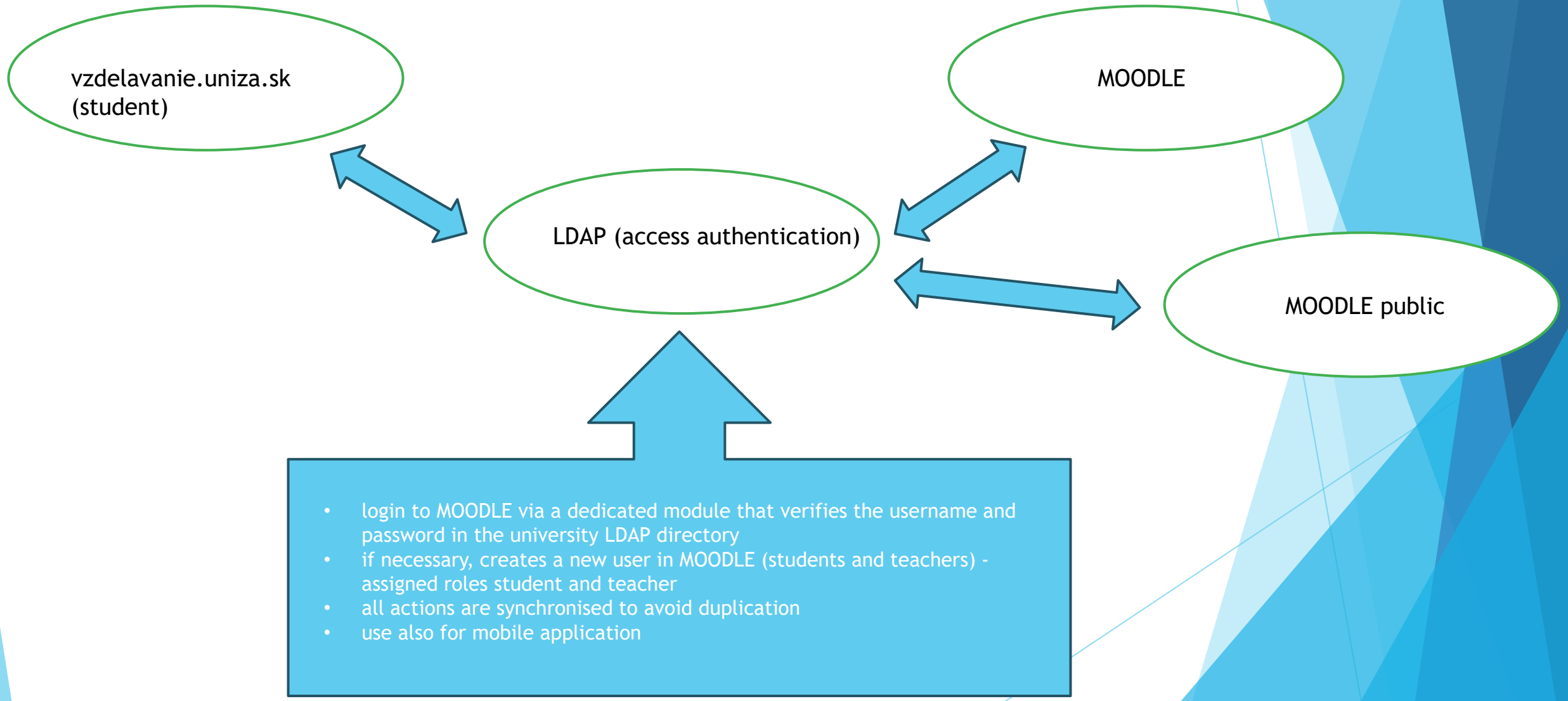
MOODLE public

- MOODLE version for unauthorised access
- possibility to create a subject (course) for subjects that are not in UNIZA study programmes
- access for ERASMUS students, projects
- promotional purposes

Visegrad Fund

DIGSTEM

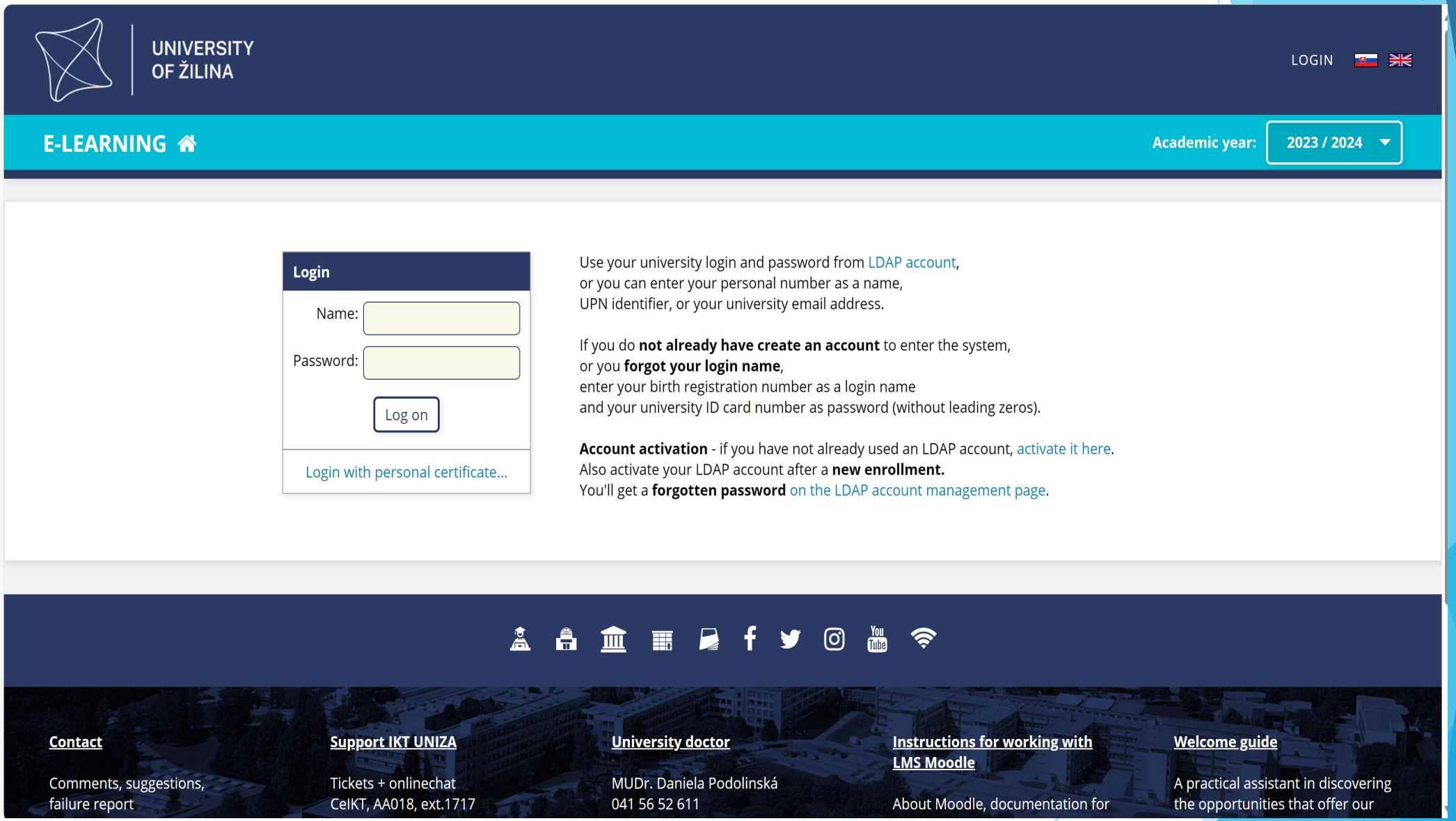
Security of UNIZA eLearning systems



Visegrad Fund

DIGSTEM

Vzdelavanie.uniza.sk - Login page



Visegrad Fund

UNIZA Moodle - Login page

DIGSTEM

Moodle UNIZA | Home | English (en) | Log in

Moodle Žilinskej univerzity v Žiline

Oznámenia portálu

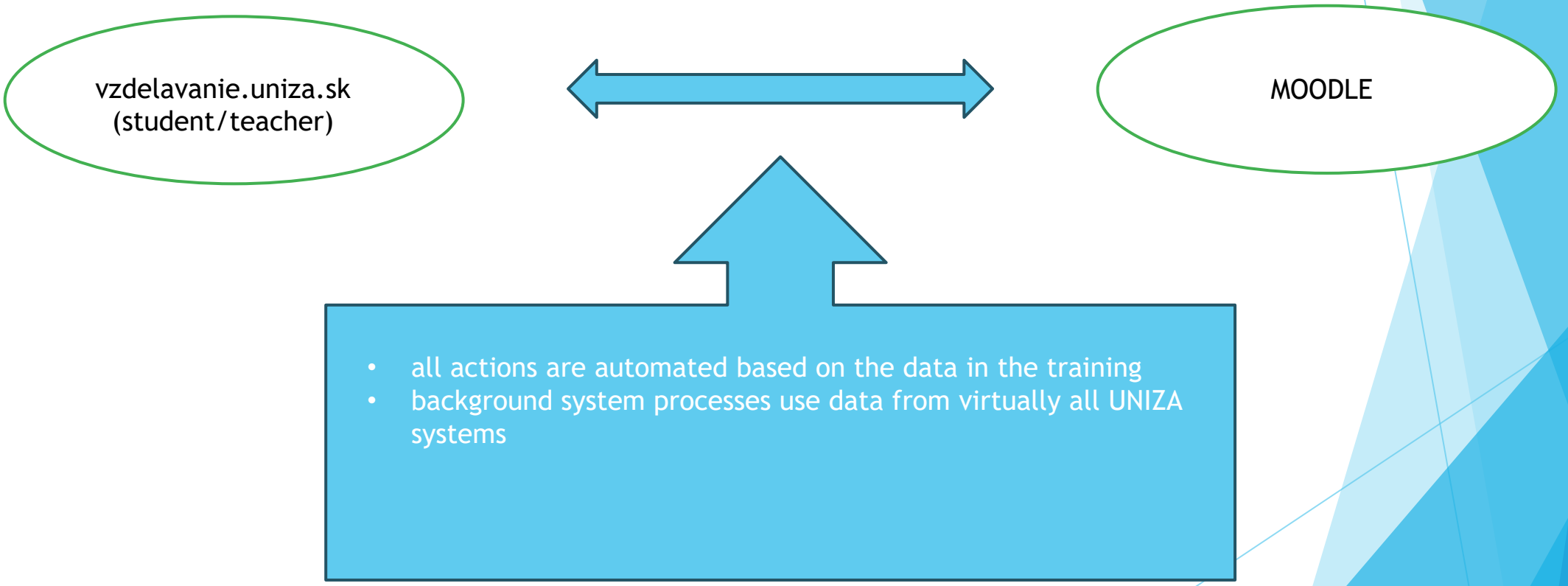
There are no discussion topics yet in this forum

?

Visegrad Fund

DIGSTEM

Sync data in eLearning IS



Visegrad Fund

DIGSTEM

THANK YOU FOR YOUR ATTENTION

ANY QUESTIONS?

Visegrad Fund

DIGSTEM

Improving STEM Teaching Process using Digital Transformation - DIGSTEM

Project Meeting

Lublin University of Technology, Lublin, Poland

03-05 October 2023

Possibilities of using Digital Transformation in the STEM Teaching Process

Michał Charlak
Lublin University of Technology

Visegrad Fund

DIGSTEM

Science, Technology, Engineering use:

- Calculations
- Designing
- Computing
- Simulations
- Phenomena Analysis
- Programming
- Controll and regulation
- Remote controlling
- Data converting
- Measurements
- Data acquisition
- Data mining
- On-line meetings
- Other brilliant solutions!

Visegrad Fund

DIGSTEM

E-learning tools

- MS Teams
- Webex
- Zoom
- VirtualClass
- Moodle
- Google classroom

- Advantages
- Disadvantages
- Ease of use
- Smart control
- Effectiveness
- Functions

Visegrad Fund

DIGSTEM

Methods

- Asynchronous
- Synchronous transmission
- Preparing documents, lessons
- Showing pesentations, movies
- Tasks, projects
- Simulations
- Virtual laboratories

- knowledge
- skills
- social competence

Visegrad Fund

DIGSTEM

Case study: Electrotechnology

- theory
- calculation tasks
- LabView Simulations
- videos from the Internet
- videos recorded by employees
- online broadcast from the laboratory when 2 students perform the exercise
- …?
- traditional laboratory classes in the next semester

Why?

Visegrad Fund

DIGSTEM

Case study: Electrotechnology

Problems:

- The students were unable to perform the simplest measurement activities
- They couldn't connect the circuits properly
- They were unable to identify and fix connection issues

Reasons:

- Students did not have to **solve real problems** themselves during classes, so they did not **pay attention to details**.
- They were unable to **use the acquired knowledge and combine it with manual skills.**
- Students did not acquire specialized **manual skills** during online classes

Visegrad Fund

DIGSTEM

2nd Case Study

- Teach someone remotely how to sharpen a pencil using a knife without your student using it
- What teaching methods and tools do you need?

Visegrad Fund

DIGSTEM

2nd Case Study

- Teach someone remotely how to sharpen a pencil using a knife
- What teaching methods and tools should be used?

VR technology with feedback controlled by AI ?!

Looks good! …for teaching a dentist or surgeon

But would you like to go to a specialist with such education only?

Visegrad Fund

DIGSTEM

THANK YOU FOR YOUR ATTENTION

Visegrad Fund

DIGSTEM

Improving STEM Teaching Process using Digital Transformation - DIGSTEM

Project Meeting

Lublin University of Technology, Lublin, Poland

03-05 October 2023

Digital communication tools for evaluation

Agnieszka Gandzel,

Lublin University of Technology

Visegrad Fund

DIGSTEM

ADVANTAGES OF USING DIGITAL TOOLS IN STUDENT EVALUATION

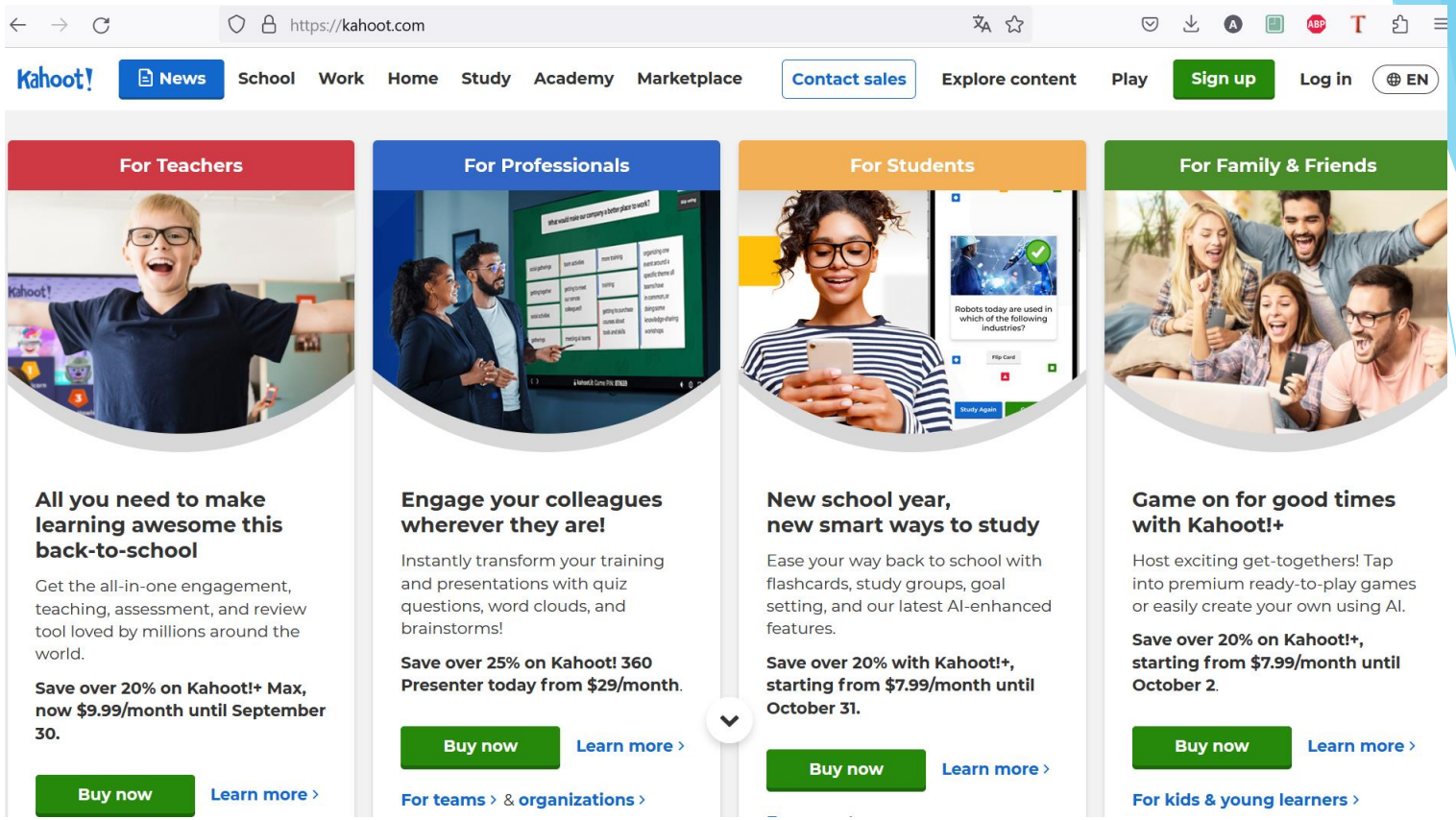
- creating a friendly and effective learning environment,
- attractive activities
- interactivity,
- quick feedback and error correction;
- motivating students

S. Juszczyk, *Edukacja na odległość. Kodyfikacja pojęć, reguł i procesów*. Wydawnictwo WAM, Toruń 2002, s. 10 – 49

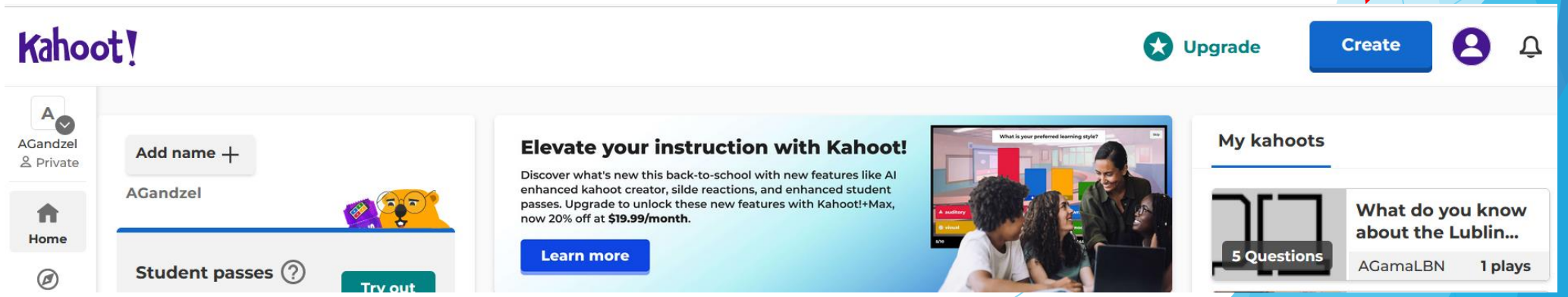
- Visegrad Fund

DIGSTEM

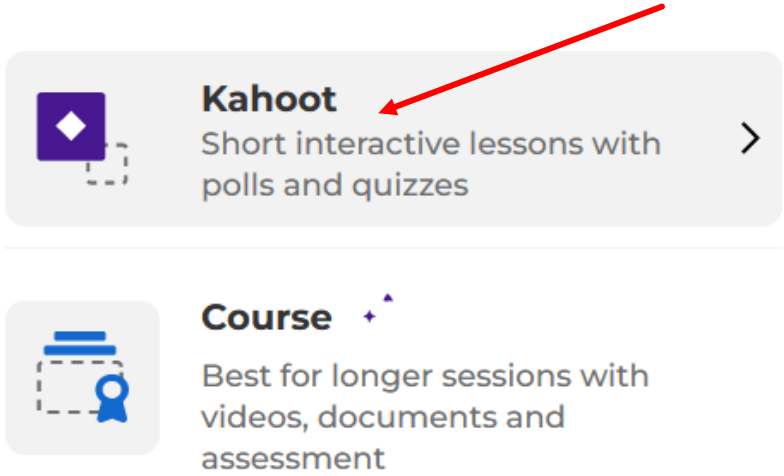
1.


https://kahoot.com
Kahoot!
News
School
Work
Home
Study
Academy
Marketplace
Contact sales
Explore content
Play
Sign up
Log in
EN
For Teachers
All you need to make learning awesome this back-to-school
Get the all-in-one engagement, teaching, assessment, and review tool loved by millions around the world.
Save over 20% on Kahoot!+ Max, now $9.99/month until September 30.
Buy now
Learn more
For Professionals
Engage your colleagues wherever they are!
Instantly transform your training and presentations with quiz questions, word clouds, and brainstorms!
Save over 25% on Kahoot! 360 Presenter today from $29/month.
Buy now
Learn more
For teams & organizations
For Students
New school year, new smart ways to study
Ease your way back to school with flashcards, study groups, goal setting, and our latest AI-enhanced features.
Save over 20% with Kahoot!+, starting from $7.99/month until October 31.
Buy now
Learn more
For Family & Friends
Game on for good times with Kahoot!+
Host exciting get-togethers! Tap into premium ready-to-play games or easily create your own using AI.
Save over 20% on Kahoot!+, starting from $7.99/month until October 2.
Buy now
Learn more
For kids & young learners

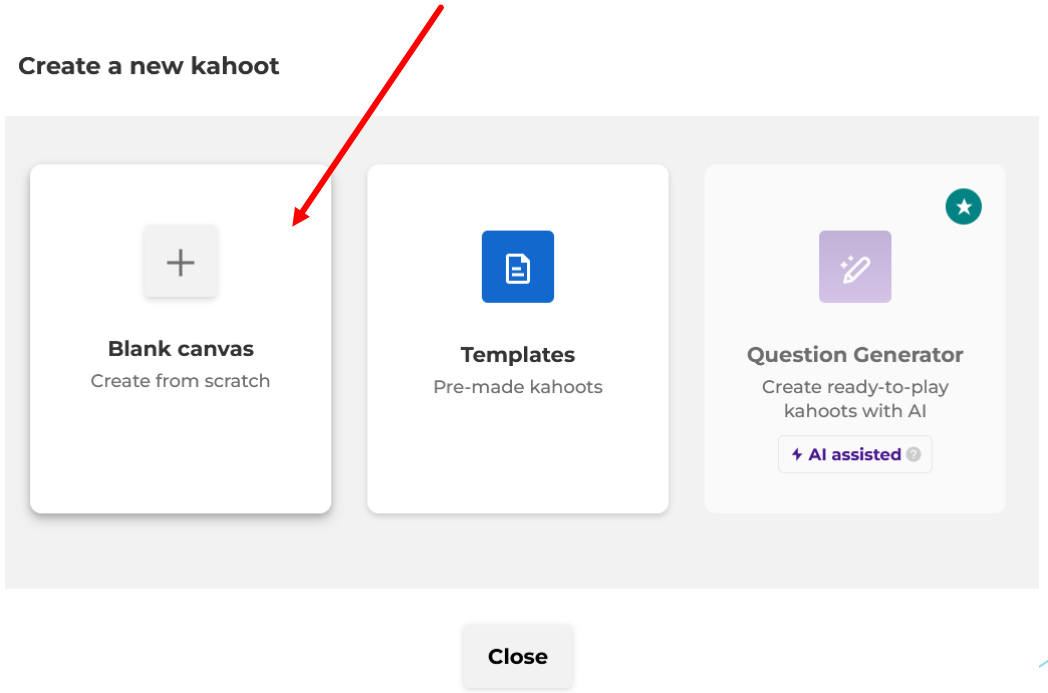
2.

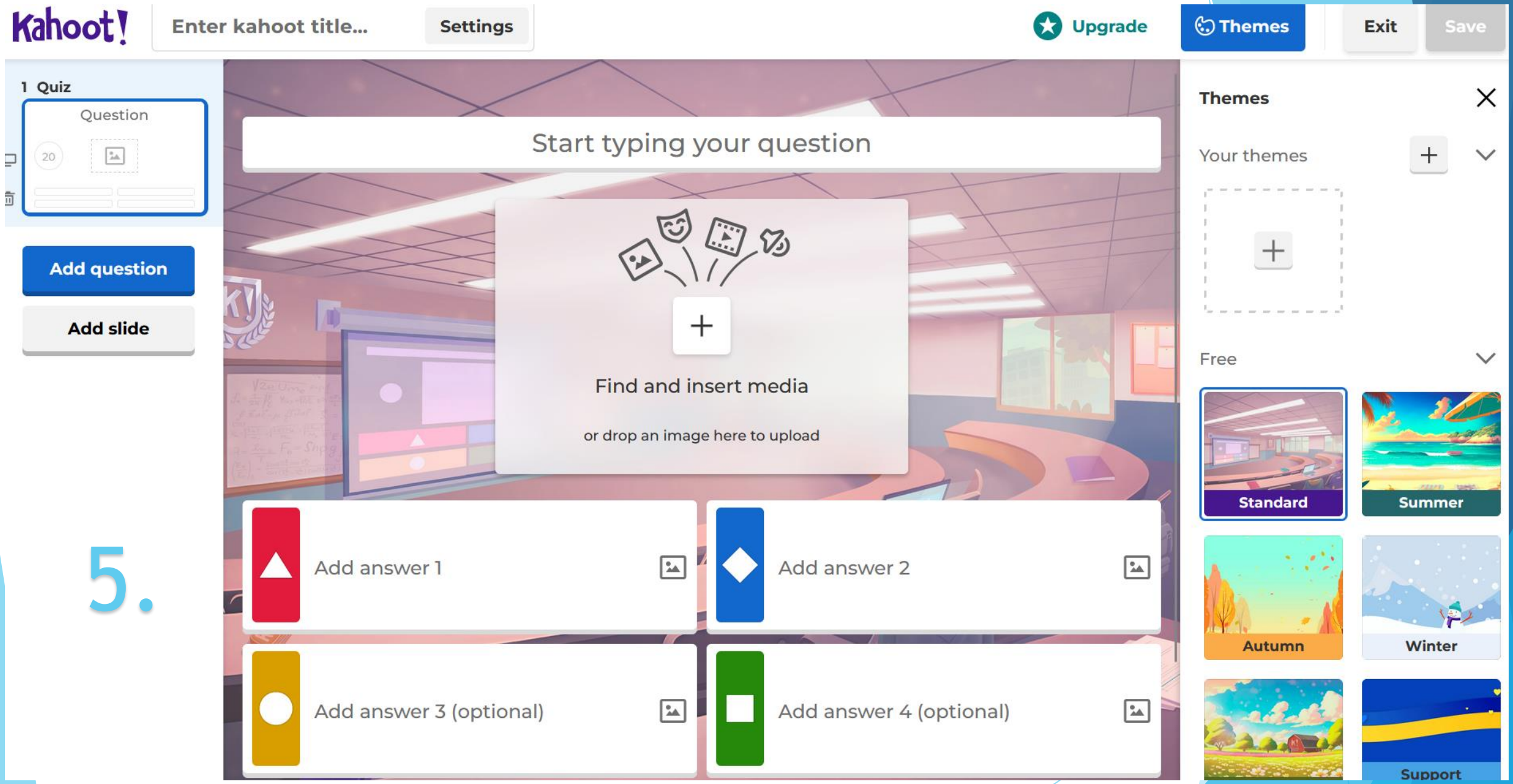

Kahoot!
Upgrade
Create
AGandzel
Private
Home
Add name
AGandzel
Student passes
Try out
Elevate your instruction with Kahoot!
Discover what's new this back-to-school with new features like AI enhanced kahoot creator, silde reactions, and enhanced student passes. Upgrade to unlock these new features with Kahoot!+Max, now 20% off at $19.99/month.
Learn more
My kahoots
What do you know about the Lublin...
5 Questions
AGamaLBN
1 plays

3.


Kahoot
Short interactive lessons with polls and quizzes
Course
Best for longer sessions with videos, documents and assessment

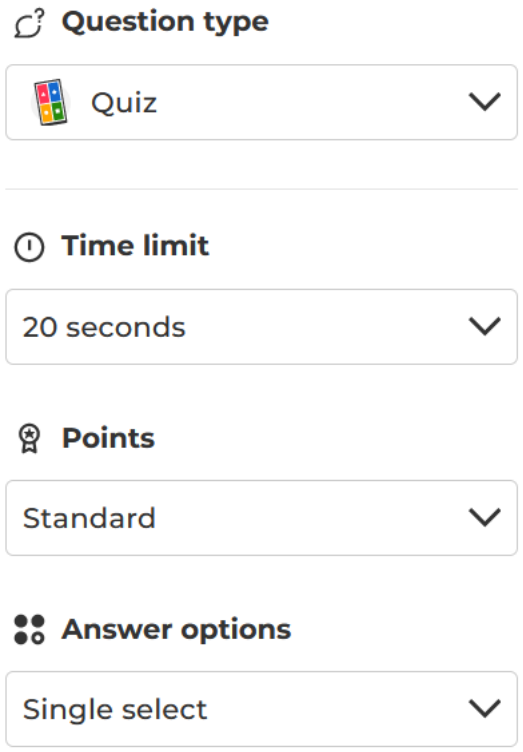
4.


Create a new kahoot
Blank canvas
Create from scratch
Templates
Pre-made kahoots
Question Generator
Create ready-to-play kahoots with AI
AI assisted
Close

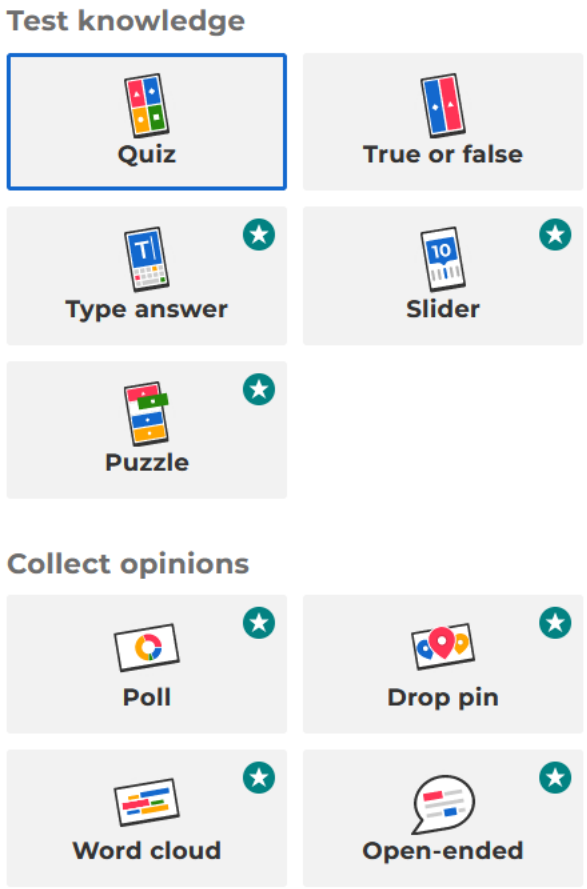

Kahoot!
Enter kahoot title...
Settings
Upgrade
Themes
Exit
Save
1 Quiz
Question
20
Add question
Add slide
Start typing your question
Find and insert media
or drop an image here to upload
Add answer 1
Add answer 2
Add answer 3 (optional)
Add answer 4 (optional)
Themes
Your themes
Free
Standard
Summer
Autumn
Winter
Support

5.

6.



7.



www.kahoot.it

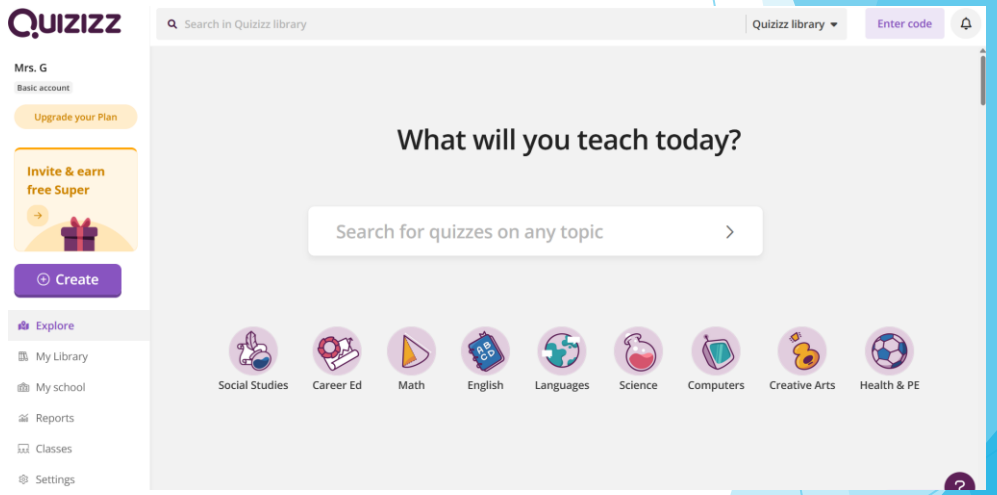
Mrs. G

Basic account

Upgrade your Plan

Invite & earn free Super

Create



What would you like to create?

Quiz

Make assessments and practice motivating with interactive questions

Lesson

Add fun and interactive slides to assessments that students already love

Assessment

- Multiple Choice
- Fill in the Blank
- Reorder
- Match
- Drag and Drop
- Drop Down
- Math Response
- Labeling
- Hotspot
- Graphing
- Categorize
- Comprehension BETA

Higher-order thinking

- Draw
- Open Ended
- Video Response
- Audio Response

Visegrad Fund

DIGSTEM

THANK YOU FOR YOUR ATTENTION

Visegrad Fund

DIGSTEM

Improving STEM Teaching Process using Digital Transformation - DIGSTEM

Project Meeting

Lublin University of Technology, Lublin, Poland

03-04 October 2023

Application of the Collaborative Workshop Module in Moodle for Elearning of Forming Technologies Course

Viktor Gonda

Obuda University, Banki Donat Faculty of Mechanical and Safety Engineering

Workshop tool

- Workshop is a powerful peer assessment activity. Students add submissions which are then distributed amongst their peers for assessment based on a grading scale specified by the teacher.
- Workshop phases
  - The work flow for the Workshop module can be viewed as having five phases. The typical workshop activity can cover days or even weeks. The teacher switches the activity from one phase to another.
  - The typical workshop follows a straight path from Setup to, Submission, Assessment, Grading/Evaluation, and ending with the Closed phase. However, an advanced recursive path is also possible.
  - The progress of the activity is visualized in so called Workshop planner tool. It displays all Workshop phases and highlights the current one. It also lists all the tasks the user has in the current phase with the information of whether the task is finished or not yet finished or even failed.

https://docs.moodle.org/402/en/Workshop_activity

Workshop phases

- Setup phase
  - In this initial phase, Workshop participants cannot do anything (neither modify their submissions nor their assessments). Course facilitators use this phase to change workshop settings, modify the grading strategy of tweak assessment forms. You can switch to this phase any time you need to change the Workshop setting and prevent users from modifying their work.
- Submission phase
  - In the submission phase, Workshop participants submit their work. Access control dates can be set so that even if the Workshop is in this phase, submitting is restricted to the given time frame only. Submission start date (and time), submission end date (and time) or both can be specified.
  - The workshop submissions report allows teachers to see who has submitted and who has not, and to filter by submission and last modified:
  - A student is able to delete their own submission as long as they can still edit it and it has not been assessed. A teacher can delete any submission at any time, however if it has been assessed, they will be warned that the assessments will also be deleted and reviewers' grades may be affected.

Workshop phases (cont.)

- Assessment phase
  - If the Workshop uses peer assessment feature, this is the phase when Workshop participants assess the submissions allocated to them for the review. As in the submission phase, access can be controlled by specified date and time since when and/or until when the assessment is allowed.
- Grading evaluation phase
  - The major task during this phase is to calculate the final grades for submissions and for assessments and provide feedback for authors and reviewers. Workshop participants cannot modify their submissions or their assessments in this phase any more. Course facilitators can manually override the calculated grades. Also, selected submissions can be set as published so they become available to all Workshop participants in the next phase. See Workshop FAQ for instructions on how to publish submissions.
- Closed
  - Whenever the Workshop is being switched into this phase, the final grades calculated in the previous phase are pushed into the course Gradebook.This will result in the Workshop grades appearing in the Gradebook and in the workshop. Participants may view their submissions, their submission assessments and eventually other published submissions in this phase.

Workshop for forming course

2022/23/2 - Kötés- és alakítástechnológia - BAXKA14BNE/00

Irányítópult / Kurzusok / 2022/23/2 / BGK / 2022/23/2 - Kötés- és alakítástechnológia - BAXKA14BNE/00 / Alakítástechnológia / Alakító eljárások beadandó feladat - workshop

Course Title

Alakító eljárások beadandó feladat - workshop

Forming technologies

Leadások megnyíltak: 2023. március 8., szerda, 16:19
Leadások lezárultak: 2023. április 20., csütörtök, 22:00
Értékelések megnyíltak: 2023. április 21., péntek, 16:00
Értékelések lezárultak: 2023. május 4., csütörtök, 22:00

Deadlines for
Submission (4 weeks) and assessment (2 weeks)

Lezárva

Beállítási szakasz Kapcsoljon át a beállítási fázisra	Leadási szakasz Kapcsoljon át a leadási fázisra	Értékelési szakasz Kapcsoljon át a felmérési fázisra	Pontozásértékelési szakasz Kapcsoljon át az értékelési fázisra	**Lezárva** Jelenlegi fázis
✓ Műhelymunka leírásának beállítása ✓ Utasítások megadása a leadott munkákhoz ✓ Értékelő űrlap szerkesztése	✓ Utasítások megadása az értékeléshez ✓ Leadott munkák hozzárendelése elvárt: 22 leadott: 18 hozzárendelendő: 0 ⓘ Legalább egy szerző még nem adta le munkáját ⓘ Leadható ekkortól: 2023. március 8., szerda, 16:19 (198 nappal ezelőtt) ⓘ Leadott munkák határideje: 2023. április 20., csütörtök, 22:00 (155 nappal ezelőtt) ⓘ Az időkorlátozás Önre nem vonatkozik.	ⓘ Értékelhető 2023. április 21., péntek, 16:00 időponttól (154 nappal ezelőtt) ⓘ Értékelés határideje: 2023. május 4., csütörtök, 22:00 (141 nappal ezelőtt) ⓘ Az időkorlátozás Önre nem vonatkozik.	✗ Leadott munkákra adott pontok kiszámítása elvárt: 22 kiszámított: 18 ✗ Értékelési pontok kiszámítása elvárt: 22 kiszámított: 17 ✗ A tevékenység összegzésének megírása	

Workshop phases Teacher's view

Workshop for forming course

Visegrad Fund

DIGSTEM

Report about submissions

Műhelymunka pontjairól szóló jelentés

Name | Topic | Incoming points | Report points | Given points | Assessment points

Vezetéknév / Keresztnév	Leadott munka / Utolsó módosítás	Beérkezett pontok	Leadott munkára adott pont (szerző: 10)	Adott pontok	értékelési pont (/ 10)
[redacted]	Zömítés és redukálás módosítás dátuma: 2023. április 20., csütörtök, 21:34	10 (10) 10 (10)<	~~10~~ 8	10 (10)> 9 (10)>	10
	A felhasználóhoz nincs leadott munka	-	-	-	-
	Mélyhúzás módosítás dátuma: 2023. április 20., csütörtök, 20:30	10 (10) 10 (10)<	~~10~~ 9	10 (10)> 10 (10)>	10
	FFPV6S Zömítés-redukálás: csapágygolyó módosítás dátuma: 2023. április 20., csütörtök, 11:57	10 (10) 10 (10)<	~~10~~ 7	10 (10)> 9 (10)>	10
	Kivágás-lyukasztás kábelelvezető lemez módosítás dátuma: 2023. április 16., vasárnap, 16:48	- (-) 10 (10)<	~~10~~ 7	10 (10)> 10 (10)>	10
	Mélyhúzás - Hochsteiger József módosítás dátuma: 2023. április 20., csütörtök, 11:41	10 (10) 8 (10)<	~~9~~ 6	- (-)> - (-)>	-

Workshop for forming course

2022/23/2 - Kötés- és alakítástechnológia - BAXKA14BNE/00

Irányítópult / Kurzusok / 2022/23/2 / BGK / 2022/23/2 - Kötés- és alakítástechnológia - BAXKA14BNE/00 / Alakítástechnológia / Alakító eljárások beadandó feladat - workshop

Alakító eljárások beadandó feladat - workshop

Leadások megnyíltak: 2023. március 8., szerda, 16:19
Leadások lezárultak: 2023. április 20., csütörtök, 22:00
Értékelések megnyíltak: 2023. április 21., péntek, 16:00
Értékelések lezárultak: 2023. május 4., csütörtök, 22:00

Lezárva

Assignment

Beállítási szakasz Kapcsoljon át a beállítási fázisra	Leadási szakasz Kapcsoljon át a leadási fázisra	Értékelési szakasz Kapcsoljon át a felmérési fázisra	Pontozásértékelési szakasz Kapcsoljon át az értékelési fázisra	Lezárva Jelenlegi fázis
✓ Műhelymunka leírásának beállítása	✓ Utasítások megadása az értékeléshez	ⓘ Értékelhető 2023. április 21., péntek, 16:00 időponttól (154 nappal ezelőtt)	✗ Leadott munkákra adott pontok kiszámítása elvárt: 22 kiszámított: 18	
✓ Utasítások megadása a leadott munkákhoz	✓ Leadott munkák hozzárendelése elvárt: 22 leadott: 18 hozzárendelendő: 0	ⓘ Értékelés határideje: 2023. május 4., csütörtök, 22:00 (141 nappal ezelőtt)	✗ Értékelési pontok kiszámítása elvárt: 22 kiszámított: 17	
✓ Értékelő űrlap szerkesztése	ⓘ Legalább egy szerző még nem adta le munkáját	ⓘ Az időkorlátozás Önre nem vonatkozik.	✗ A tevékenység összegzésének megírása	
	ⓘ Leadható ekkortól: 2023. március 8., szerda, 16:19 (198 nappal ezelőtt)			
	ⓘ Leadott munkák határideje: 2023. április 20., csütörtök, 22:00 (155 nappal ezelőtt)			
	ⓘ Az időkorlátozás Önre nem vonatkozik.			

Course Title

Forming technologies
Deadlines for
Submission and assessment

Workshop phases Teacher's view

Workshop Assignment

Aim: An overview of the technologies of parts created by mass production and chip-free forming processes in manufacturing technology, especially regarding the upsetting-reduction, blanking/punching and deep-drawing technologies.

We use the framework of the Moodle workshop for the task. During the workshop, the student work will have two phases: 1. development of the topic, 2. evaluation.

First, each student receives an individual topic, as a result of which they have to present the production technology of a part by plastic forming on presentation slides and with a short text summary. In the second phase, two other student works must be evaluated: those who, e.g. he was assigned the technology of compaction-reduction, in the evaluation he receives the other two technologies, so they can get an overview of all three technologies.

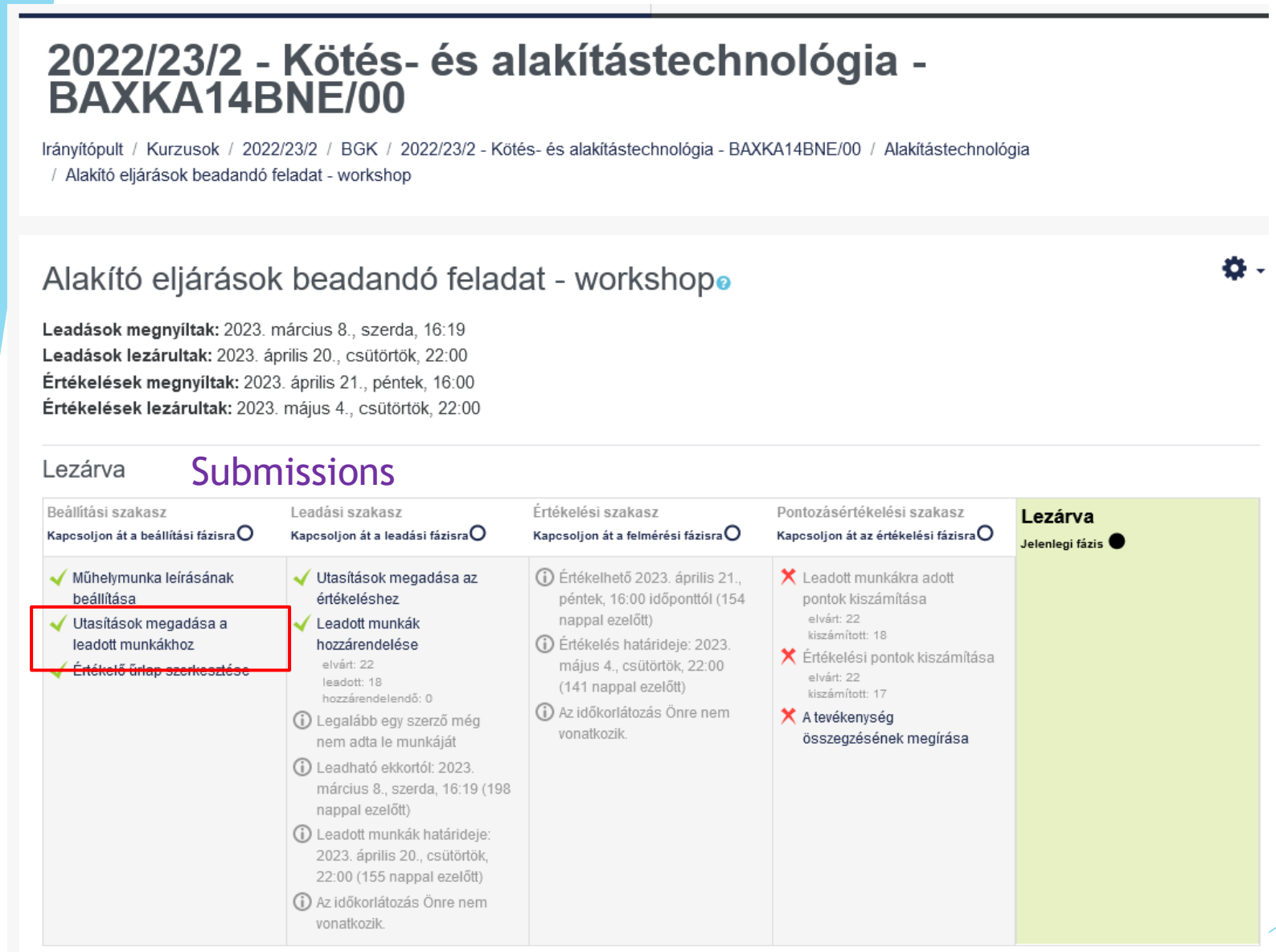
Student Code – Technology, e.g.:
A27C0U Deep drawing; DE20FI upsetting-reduction; GPSCA3 blanking/punching

Workshop Assignment

You can choose a component for each topic, some examples:
1. Upsetting-reduction : screws, rivets, other fasteners, bearing rollers, other selected parts
2. Blanking/punching : electronic components, switches, computer housing, sheet metal components of vehicles, other selected components
3. Deep drawing: car body parts, drink cans, kitchen utensils, lampshades, other selected parts

The proposed activitiews for the first phase: 1. Review the basics of the three technologies using the presentation slides, or using the note. 2. Select the component for the given technology. Here, you can use books, notes, electronic search results (Google, Wikipedia, Youtube) as sources. 3. Prepare the ppt and doc file required for submission and upload it to Moodle.

Workshop for forming course



2022/23/2 - Kötés- és alakítástechnológia - BAXKA14BNE/00

Irányítópult / Kurzusok / 2022/23/2 / BGK / 2022/23/2 - Kötés- és alakítástechnológia - BAXKA14BNE/00 / Alakítástechnológia / Alakító eljárások beadandó feladat - workshop

Alakító eljárások beadandó feladat - workshop

Leadások megnyíltak: 2023. március 8., szerda, 16:19
Leadások lezárultak: 2023. április 20., csütörtök, 22:00
Értékelések megnyíltak: 2023. április 21., péntek, 16:00
Értékelések lezárultak: 2023. május 4., csütörtök, 22:00

Lezárva

Submissions

Beállítási szakasz Kapcsoljon át a beállítási fázisra	Leadási szakasz Kapcsoljon át a leadási fázisra	Értékelési szakasz Kapcsoljon át a felmérési fázisra	Pontozásértékelési szakasz Kapcsoljon át az értékelési fázisra	Lezárva Jelenlegi fázis
✓ Műhelymunka leírásának beállítása ✓ Utasítások megadása a leadott munkákhoz ✓ Értékelő űrlap szerkesztése	✓ Utasítások megadása az értékeléshez ✓ Leadott munkák hozzárendelése elvárt: 22 leadott: 18 hozzárendelendő: 0 ⓘ Legalább egy szerző még nem adta le munkáját ⓘ Leadható ekkortól: 2023. március 8., szerda, 16:19 (198 nappal ezelőtt) ⓘ Leadott munkák határideje: 2023. április 20., csütörtök, 22:00 (155 nappal ezelőtt) ⓘ Az időkorlátozás Önre nem vonatkozik.	ⓘ Értékelhető 2023. április 21., péntek, 16:00 időponttól (154 nappal ezelőtt) ⓘ Értékelés határideje: 2023. május 4., csütörtök, 22:00 (141 nappal ezelőtt) ⓘ Az időkorlátozás Önre nem vonatkozik.	✗ Leadott munkákra adott pontok kiszámítása elvárt: 22 kiszámított: 18 ✗ Értékelési pontok kiszámítása elvárt: 22 kiszámított: 17 ✗ A tevékenység összegzésének megírása	

Course Title

Forming technologies
Deadlines for
Submission and assessment

Workshop phases Teacher's view

Visegrad Fund

Submissions

DIGSTEM

To be uploaded:

1 power point ppt (10 slides):
structure:

slide 1: presentation of the selected component;

2-3-4. theoretical presentation of the technology;

5-6-7-8-9. presentation of the production technology of the specific component;

10. summary.

1 word doc (1 page): text summary for the power point slides.

Workshop for forming course

2022/23/2 - Kötés- és alakítástechnológia - BAXKA14BNE/00

Irányítópult / Kurzusok / 2022/23/2 / BGK / 2022/23/2 - Kötés- és alakítástechnológia - BAXKA14BNE/00 / Alakítástechnológia / Alakító eljárások beadandó feladat - workshop

Alakító eljárások beadandó feladat - workshop

Leadások megnyíltak: 2023. március 8., szerda, 16:19
Leadások lezárultak: 2023. április 20., csütörtök, 22:00
Értékelések megnyíltak: 2023. április 21., péntek, 16:00
Értékelések lezárultak: 2023. május 4., csütörtök, 22:00

Lezárva

Assessment considerations

Beállítási szakasz Kapcsoljon át a beállítási fázisra	Leadási szakasz Kapcsoljon át a leadási fázisra	Értékelési szakasz Kapcsoljon át a felmérési fázisra	Pontozásértékelési szakasz Kapcsoljon át az értékelési fázisra	Lezárva Jelenlegi fázis
✓ Műhelymunka leírásának beállítása ✓ Utasítások megadása a leadott munkákhoz ✓ Értékelő űrlap szerkesztése	✓ Utasítások megadása az értékeléshez ✓ Leadott munkák hozzárendelése elvárt: 22 leadott: 18 hozzárendelendő: 0 ⓘ Legalább egy szerző még nem adta le munkáját ⓘ Leadható ekkortól: 2023. március 8., szerda, 16:19 (198 nappal ezelőtt) ⓘ Leadott munkák határideje: 2023. április 20., csütörtök, 22:00 (155 nappal ezelőtt) ⓘ Az időkorlátozás Önre nem vonatkozik.	ⓘ Értékelhető 2023. április 21., péntek, 16:00 időponttól (154 nappal ezelőtt) ⓘ Értékelés határideje: 2023. május 4., csütörtök, 22:00 (141 nappal ezelőtt) ⓘ Az időkorlátozás Önre nem vonatkozik.	✗ Leadott munkákra adott pontok kiszámítása elvárt: 22 kiszámított: 18 ✗ Értékelési pontok kiszámítása elvárt: 22 kiszámított: 17 ✗ A tevékenység összegzésének megírása	

Course Title

Forming technologies
Deadlines for
Submission and assessment

Workshop phases Teacher's view

Assessment considerations

Viewpoints:

Formal: The length and structure of the submitted ppt and doc are in accordance with the announcement;

Content: Does the component match the designated technology; whether the theoretical summary is substantive; whether the presented production technology is correct and understandable.

Do you have any further suggestions for the job?

Workshop for forming course

2022/23/2 - Kötés- és alakítástechnológia - BAXKA14BNE/00

Irányítópult / Kurzusok / 2022/23/2 / BGK / 2022/23/2 - Kötés- és alakítástechnológia - BAXKA14BNE/00 / Alakítástechnológia / Alakító eljárások beadandó feladat - workshop

Alakító eljárások beadandó feladat - workshop

Leadások megnyíltak: 2023. március 8., szerda, 16:19
Leadások lezárultak: 2023. április 20., csütörtök, 22:00
Értékelések megnyíltak: 2023. április 21., péntek, 16:00
Értékelések lezárultak: 2023. május 4., csütörtök, 22:00

Lezárva

Peer review arrangement

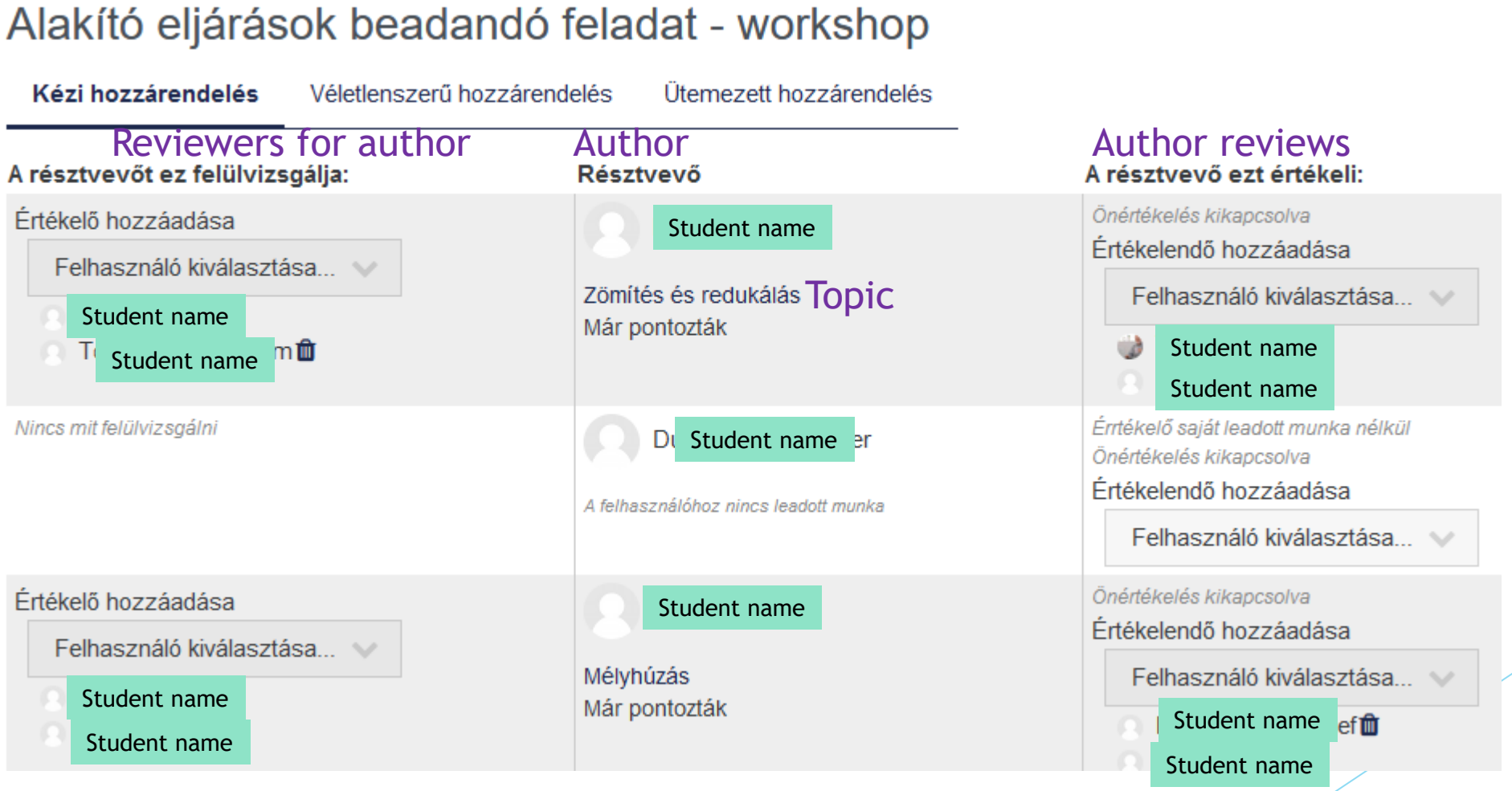
Beállítási szakasz Kapcsoljon át a beállítási fázisra	Leadási szakasz Kapcsoljon át a leadási fázisra	Értékelési szakasz Kapcsoljon át a felmérési fázisra	Pontozásértékelési szakasz Kapcsoljon át az értékelési fázisra	Lezárva Jelenlegi fázis
✓ Műhelymunka leírásának beállítása ✓ Utasítások megadása a leadott munkákhoz ✓ Értékelő űrlap szerkesztése	✓ Utasítások megadása az értékeléshez ✓ Leadott munkák hozzárendelése elvárt: 22 leadott: 18 hozzárendelendő: 0 ⓘ Legalább egy szerző még nem adta le munkáját ⓘ Leadható ekkortól: 2023. március 8., szerda, 16:19 (198 nappal ezelőtt) ⓘ Leadott munkák határideje: 2023. április 20., csütörtök, 22:00 (155 nappal ezelőtt) ⓘ Az időkorlátozás Önre nem vonatkozik.	ⓘ Értékelhető 2023. április 21., péntek, 16:00 időponttól (154 nappal ezelőtt) ⓘ Értékelés határideje: 2023. május 4., csütörtök, 22:00 (141 nappal ezelőtt) ⓘ Az időkorlátozás Önre nem vonatkozik.	✗ Leadott munkákra adott pontok kiszámítása elvárt: 22 kiszámított: 18 ✗ Értékelési pontok kiszámítása elvárt: 22 kiszámított: 17 ✗ A tevékenység összegzésének megírása	

Course Title

Forming technologies
Deadlines for
Submission and assessment

Workshop phases Teacher's view

Peer review arrangement



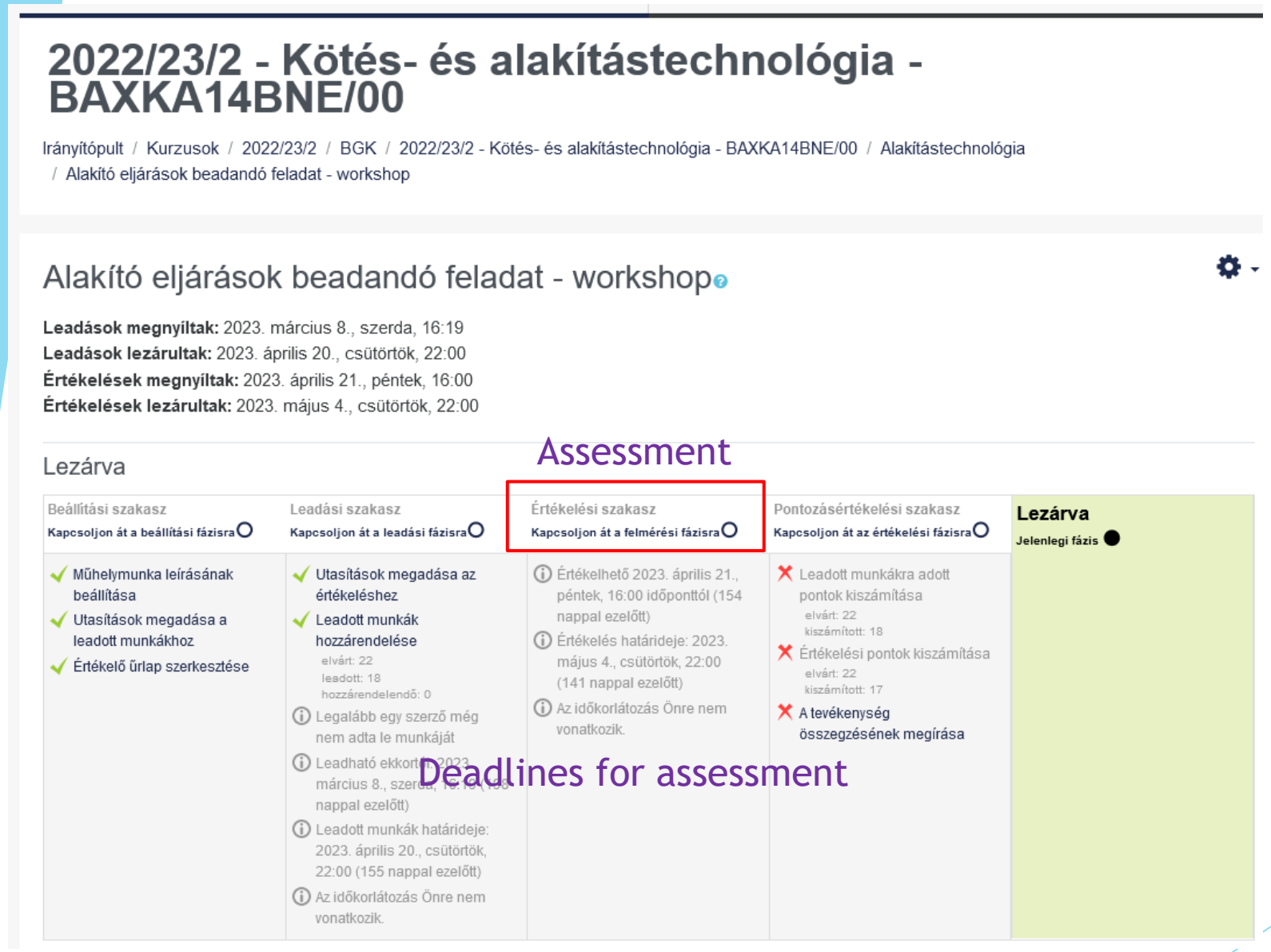
Workshop for forming course

Course Title

Forming technologies
Deadlines for
Submission and assessment

Workshop phases Teacher's view

Workshop for forming course



Course Title

Forming technologies
Deadlines for
Submission and assessment

Workshop phases Teacher's view

Workshop for forming course

2022/23/2 - Kötés- és alakítástechnológia - BAXKA14BNE/00

Irányítópult / Kurzusok / 2022/23/2 / BGK / 2022/23/2 - Kötés- és alakítástechnológia - BAXKA14BNE/00 / Alakítástechnológia / Alakító eljárások beadandó feladat - workshop

Alakító eljárások beadandó feladat - workshop

Leadások megnyíltak: 2023. március 8., szerda, 16:19
Leadások lezárultak: 2023. április 20., csütörtök, 22:00
Értékelések megnyíltak: 2023. április 21., péntek, 16:00
Értékelések lezárultak: 2023. május 4., csütörtök, 22:00

Lezárva

Beállítási szakasz Kapcsoljon át a beállítási fázisra	Leadási szakasz Kapcsoljon át a leadási fázisra	Értékelési szakasz Kapcsoljon át a felmérési fázisra	Pontozásértékelési szakasz Kapcsoljon át az értékelési fázisra	Lezárva Jelenlegi fázis
✓ Műhelymunka leírásának beállítása ✓ Utasítások megadása a leadott munkákhoz ✓ Értékelő űrlap szerkesztése	✓ Utasítások megadása az értékeléshez ✓ Leadott munkák hozzárendelése elvárt: 22 leadott: 18 hozzárendelendő: 0 ⓘ Legalább egy szerző még nem adta le munkáját ⓘ Leadható ekkortól: 2023. március 8., szerda, 16:19 (198 nappal ezelőtt) ⓘ Leadott munkák határideje: 2023. április 20., csütörtök, 22:00 (155 nappal ezelőtt) ⓘ Az időkorlátozás Önre nem vonatkozik.	ⓘ Értékelhető 2023. április 21., péntek, 16:00 időponttól (154 nappal ezelőtt) ⓘ Értékelés határideje: 2023. május 4., csütörtök, 22:00 (141 nappal ezelőtt) ⓘ Az időkorlátozás Önre nem vonatkozik.	✗ Leadott munkákra adott pontok kiszámítása elvárt: 22 kiszámított: 18 ✗ Értékelési pontok kiszámítása elvárt: 22 kiszámított: 17 ✗ A tevékenység összegzésének megírása	

Evaluation

Summary of points

Course Title

Forming technologies
Deadlines for
Submission and assessment

Workshop phases Teacher's view

Visegrad Fund

Submissions

DIGSTEM

2022/23/2 - Kötés- és alakítástechnológia - BAXKA14BNE/00

Alakító eljárások beadandó feladat - workshop

Workshop title

Leadott munkám

Utasítások a leadott munkához

Feltöltendő:

Submission tasks

1 db power point ppt (10 dia): felépítése: 1. dia: a kiválasztott alkatrész bemutatása; 2-3-4. a technológia elméleti bemutatása; 5-6-7-8-9. a konkrét alkatrész gyártástechnológiájának bemutatása; 10. összefoglalás.

1 db word doc (1 oldal): a power point diákhoz tartozó szöveges összefoglaló.

Zömítés és redukálás

név: Student name

leadás dátuma: *2023. április 20., csütörtök, 21:33* | módosítás dátuma: *2023. április 20., csütörtök, 21:34*

- Zömítés és re Student name .docx
- Zömítés és Re Student name .pptx

Submitted files

Submissions

Visegrad Fund

DIGSTEM

Dr. Gonda Viktor visszajelzése

Teacher's response

Formailag rendezett ppt, word javítható. Zömítősajtót érdemes lenne bemutatni. Megeresztés leírása pontatlan. Forrásjelölés nincs. Értékelés lehetne részletesebb.

Értékelés

Student name tékelte

Pont: 10 / 10

Értékelő űrlap

Peer reviewer's (student) response

1 szempont

Szempontok:

Formai: A leadott ppt és doc hossza, felépítése a kiírásnak megfelelő;

Tartalmi: Az alkatrész illeszkedik-e a kijelölt technológiához; az elméleti összefoglaló lényegretörő-e; a bemutatott gyártástechnológia helyes és érthető-e.

Van-e további javaslata a munkával kapcsolatban?

1 szempont osztályzata	10 / 10
Megjegyzés ehhez: 1 szempont	Tartalmilag és külalakban megfelel, sőt meg is haladja a minimumot. A technológia általános ismertetése tömör és lényegretörő, az elméletet számolással is igazolja. A beszúrt képek összhangba vannak a magyarázattal, segítik a megértést. Esetleg a wordbe egy műszaki rajzot be lehetett volna szúrni.

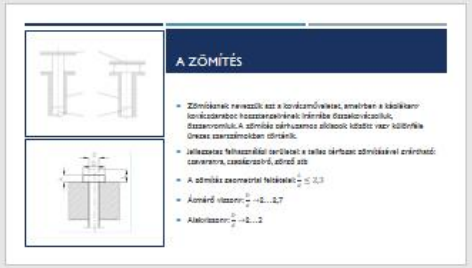
Visegrad Fund

Example for presentation slides

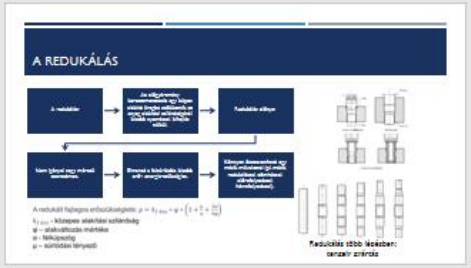
DIGSTEM

1

2



3



4

5

6

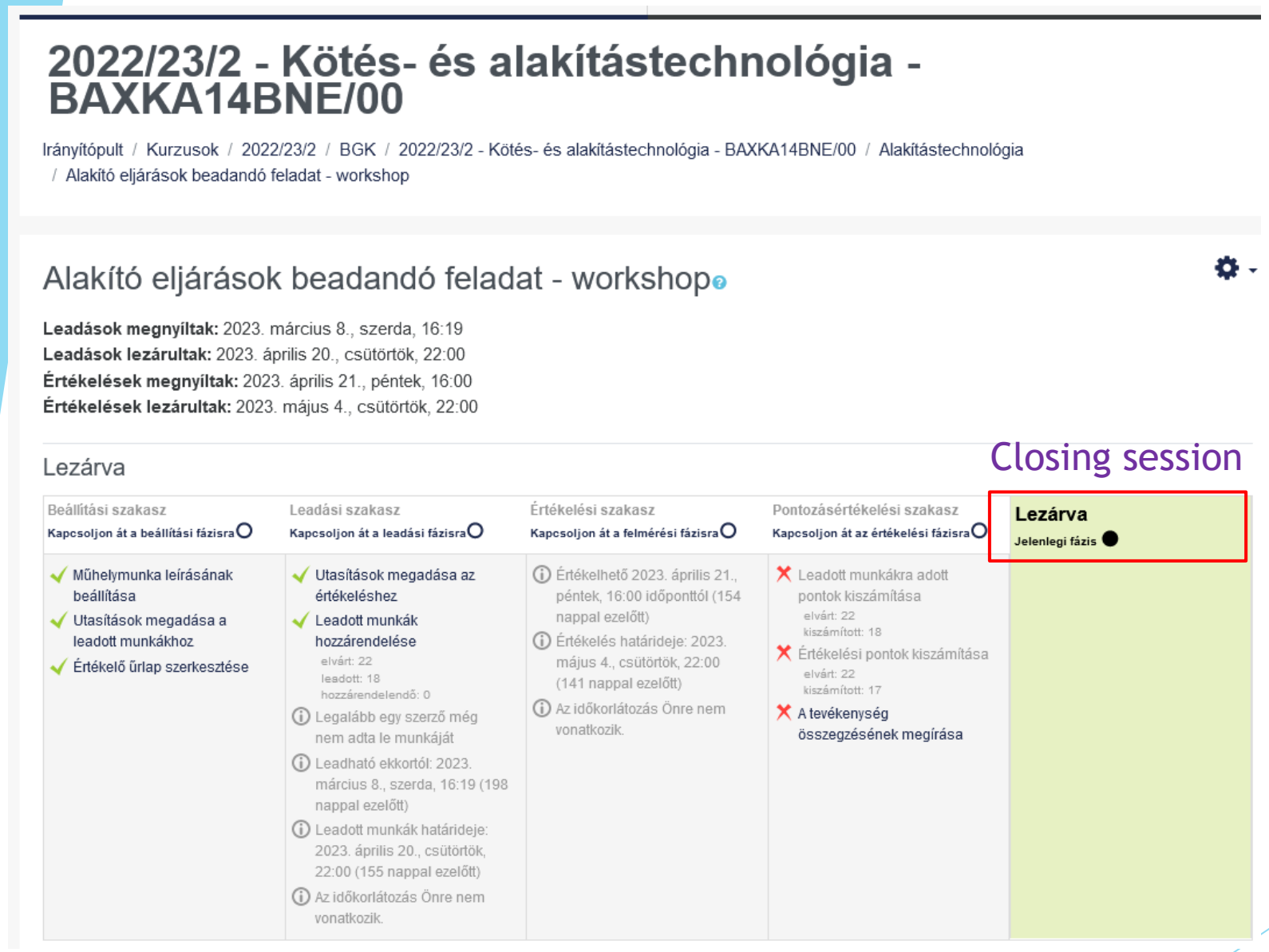
7

8

9

10

Workshop for forming course



2022/23/2 - Kötés- és alakítástechnológia - BAXKA14BNE/00

Irányítópult / Kurzusok / 2022/23/2 / BGK / 2022/23/2 - Kötés- és alakítástechnológia - BAXKA14BNE/00 / Alakítástechnológia / Alakító eljárások beadandó feladat - workshop

Alakító eljárások beadandó feladat - workshop

Leadások megnyíltak: 2023. március 8., szerda, 16:19
Leadások lezárultak: 2023. április 20., csütörtök, 22:00
Értékelések megnyíltak: 2023. április 21., péntek, 16:00
Értékelések lezárultak: 2023. május 4., csütörtök, 22:00

Lezárva

Beállítási szakasz	Leadási szakasz	Értékelési szakasz	Pontozásértékelési szakasz	Lezárva
Kapcsoljon át a beállítási fázisra	Kapcsoljon át a leadási fázisra	Kapcsoljon át a felmérési fázisra	Kapcsoljon át az értékelési fázisra	Jelenlegi fázis
✓ Műhelymunka leírásának beállítása	✓ Utasítások megadása az értékeléshez	ⓘ Értékelhető 2023. április 21., péntek, 16:00 időponttól (154 nappal ezelőtt)	✗ Leadott munkákra adott pontok kiszámítása elvárt: 22 kiszámított: 18	
✓ Utasítások megadása a leadott munkákhoz	✓ Leadott munkák hozzárendelése elvárt: 22 leadott: 18 hozzárendelendő: 0	ⓘ Értékelés határideje: 2023. május 4., csütörtök, 22:00 (141 nappal ezelőtt)	✗ Értékelési pontok kiszámítása elvárt: 22 kiszámított: 17	
✓ Értékelő űrlap szerkesztése	ⓘ Legalább egy szerző még nem adta le munkáját	ⓘ Az időkorlátozás Önre nem vonatkozik.	✗ A tevékenység összegzésének megírása	
	ⓘ Leadható ekkortól: 2023. március 8., szerda, 16:19 (198 nappal ezelőtt)			
	ⓘ Leadott munkák határideje: 2023. április 20., csütörtök, 22:00 (155 nappal ezelőtt)			
	ⓘ Az időkorlátozás Önre nem vonatkozik.			

Course Title

Forming technologies
Deadlines for
Submission and assessment

Closing session

Workshop phases Teacher’s view

Visegrad Fund

DIGSTEM

THANK YOU FOR YOUR ATTENTION

Visegrad Fund

DIGSTEM

Improving STEM Teaching Process using Digital Transformation - DIGSTEM

Project Meeting

Lublin University of Technology, Lublin, Poland

03-05 October 2023

Office365 for students of Lublin University of Technology

Ewa Łazuka
Faculty of Mathematics and Information Technology
Lublin University of Technology

Visegrad Fund

DIGSTEM

Service Office365

Office365 is a collection of applications and network services available from Microsoft servers.

Most important applications for students:

- Outlook – internal e-mail,
- OneDrive – network disc; data storage space,
- Excel, Word, PowerPoint – office applications,
- Teams – programme to contact teachers: chat, audio-video meetings,
- Whiteboard – virtual board used for classes.

Visegrad Fund

DIGSTEM

What is Microsoft Office 365? A 2020 Beginners Tutorial:
https://www.youtube.com/watch?v=ZY8KQrZd0Tw

The basic feature of OFFICE 365 is its adaptation to efficient teamwork online and the use of data stored in a cloud online.
The IT Centre of LUT sets up students' accounts in Office 365. These are official accounts.
If you already have a private Office 365 account – it won't be compatible with the platform available via LUT for free.

Visegrad Fund

DIGSTEM

To get an Office365 account, please send an email to the IT Centre to office365@pollub.edu.pl.

You will get the email with the login and temporary password to your account on Office365 platform.

The temporary password may be changed in account settings.

Due to security matters, it is recommended not to use the same password for Office365 and your email box.

Visegrad Fund

DIGSTEM

Sample student account login:

name.surname@pollub.edu.pl (before)

S123456@pollub.edu.pl (now)

Sample Erasmus+/ exchange student account login :

E123456@pollub.edu.pl

Numbers 123456 are a student album number.

Sample teacher account login: n.surname@pollub.pl

Visegrad Fund

DIGSTEM

Any exchange of information between the teacher and the student connected to online education and verification of study effects must be done exclusively via:

- Office365 on Office365 platform,
- Email box with the domain pollub.edu.pl.

It is obligatory for students to use Office365 account and the email box with the domain pollub.edu.pl, because it is one of the forms of identification verification in online contact. The teachers will not take into account students' mail sent from other domains.

Visegrad Fund

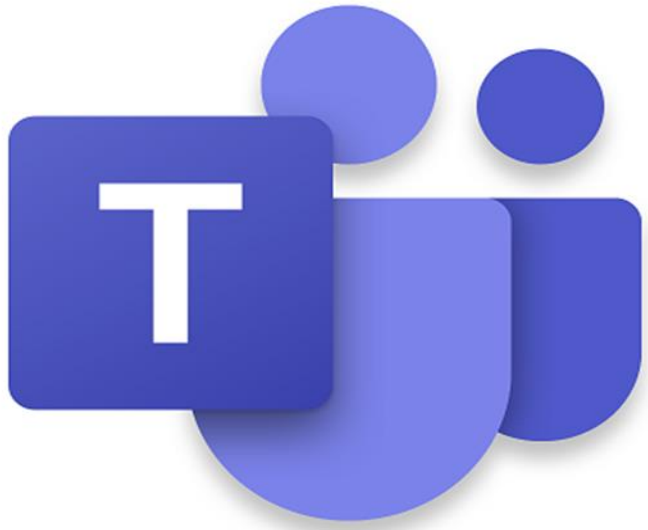
DIGSTEM

Email box check and students' Office 365 login must be done regularly and systematically!

Visegrad Fund

DIGSTEM

1. Online class with audio-video or audio:
   - Real time connection: video, audio and text – Teams.

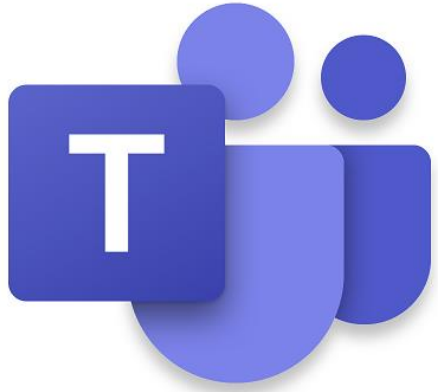


Visegrad Fund

DIGSTEM

2. Distribution of didactic materials in different formats, including multimedia files:

- **Files for downloading – applications OneDrive and Teams,**
- **Video materials for viewing – Teams application.**

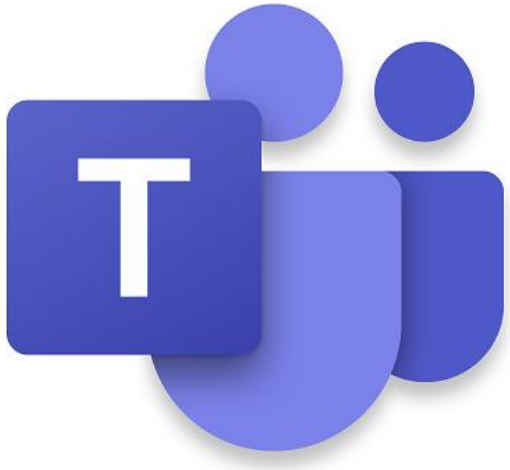


Visegrad Fund

DIGSTEM

3. Office hours in synchronic or asynchronic mode via audio or text (chat):

- **Video streaming or audio connection (live) and text chat (synchronic or asynchronic) – Teams.**

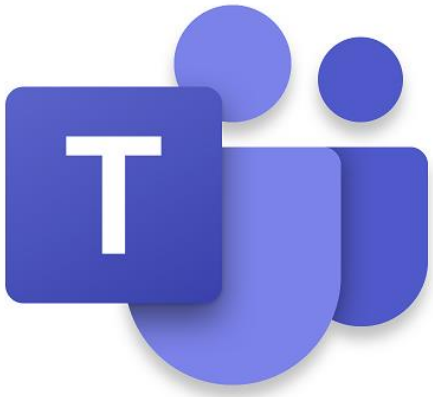


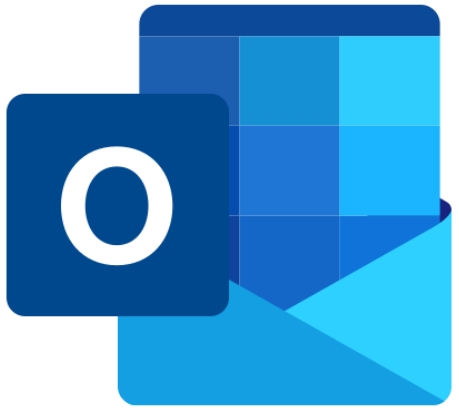
Visegrad Fund

DIGSTEM

4. Exchange of materials with students via email and current information via chat :

- **Text chat (synchronic or asynchronic) – Teams,**
- **Internal email in Lublin University of Technology – Outlook.**



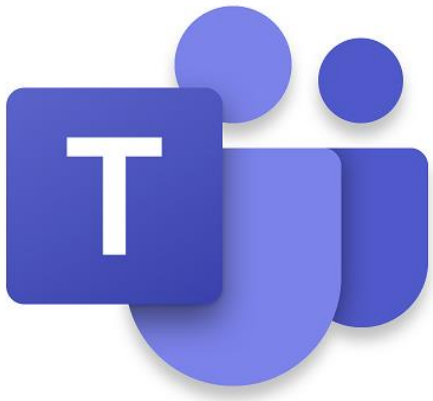


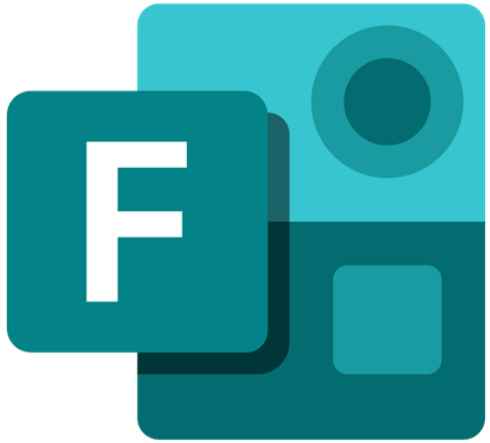
Visegrad Fund

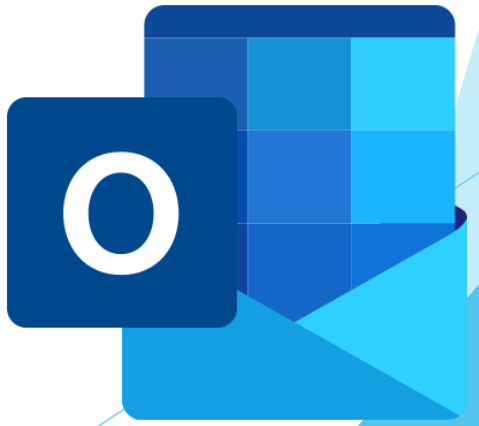
DIGSTEM

5. Verification of the study effects; including particular works in the semester, semester projects, final projects

- **Oral answers in video streaming – Teams,**
- **Written works – Forms, Teams,**
- **Written documents (reports, projects) – Teams, Outlook.**







Visegrad Fund

DIGSTEM

Office365 main platform login website:

http://office.com

Outlook direct login website:

http://outlook.com

Teams direct login website:

http://teams.microsoft.com

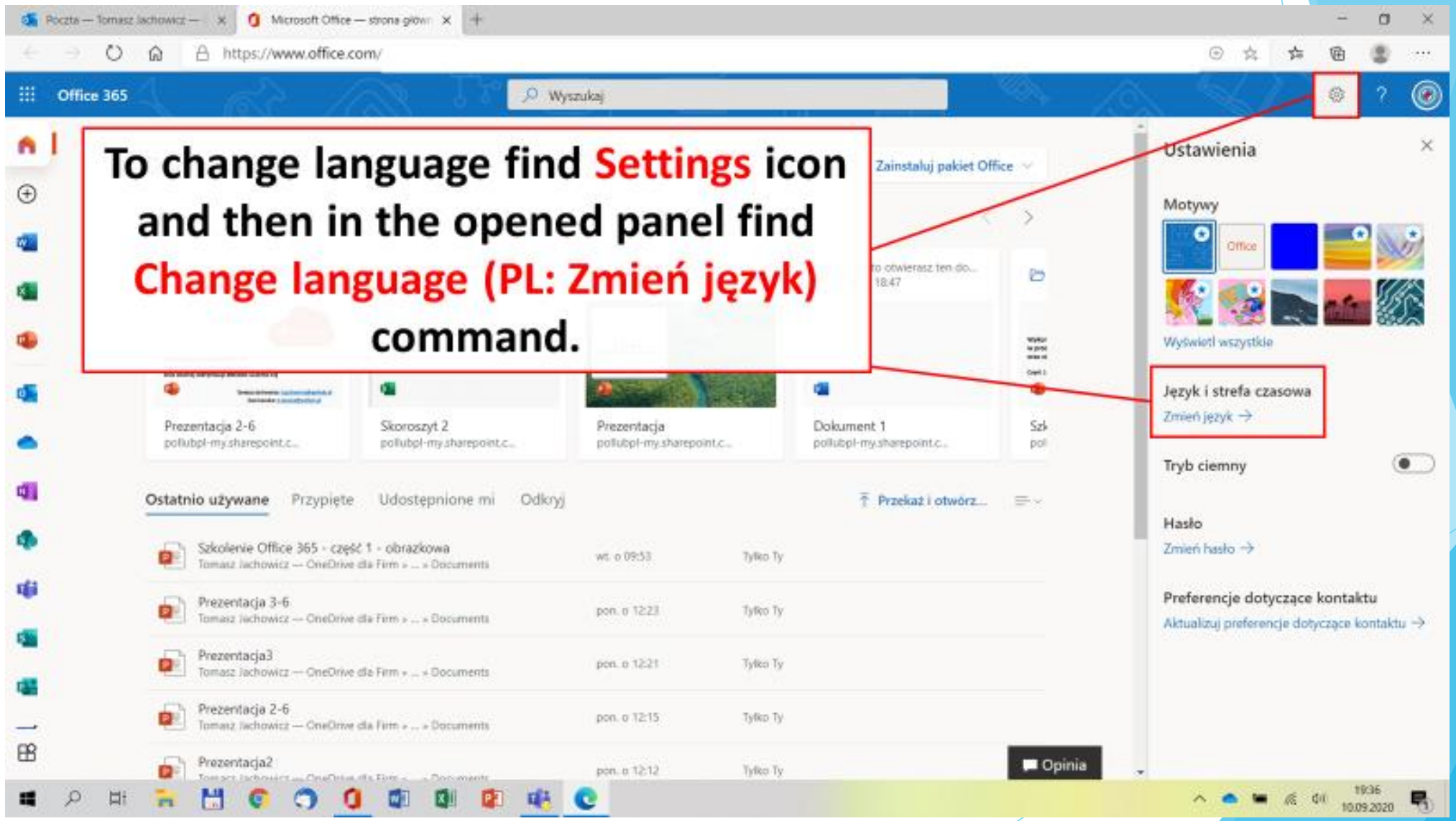
Visegrad Fund

DIGSTEM

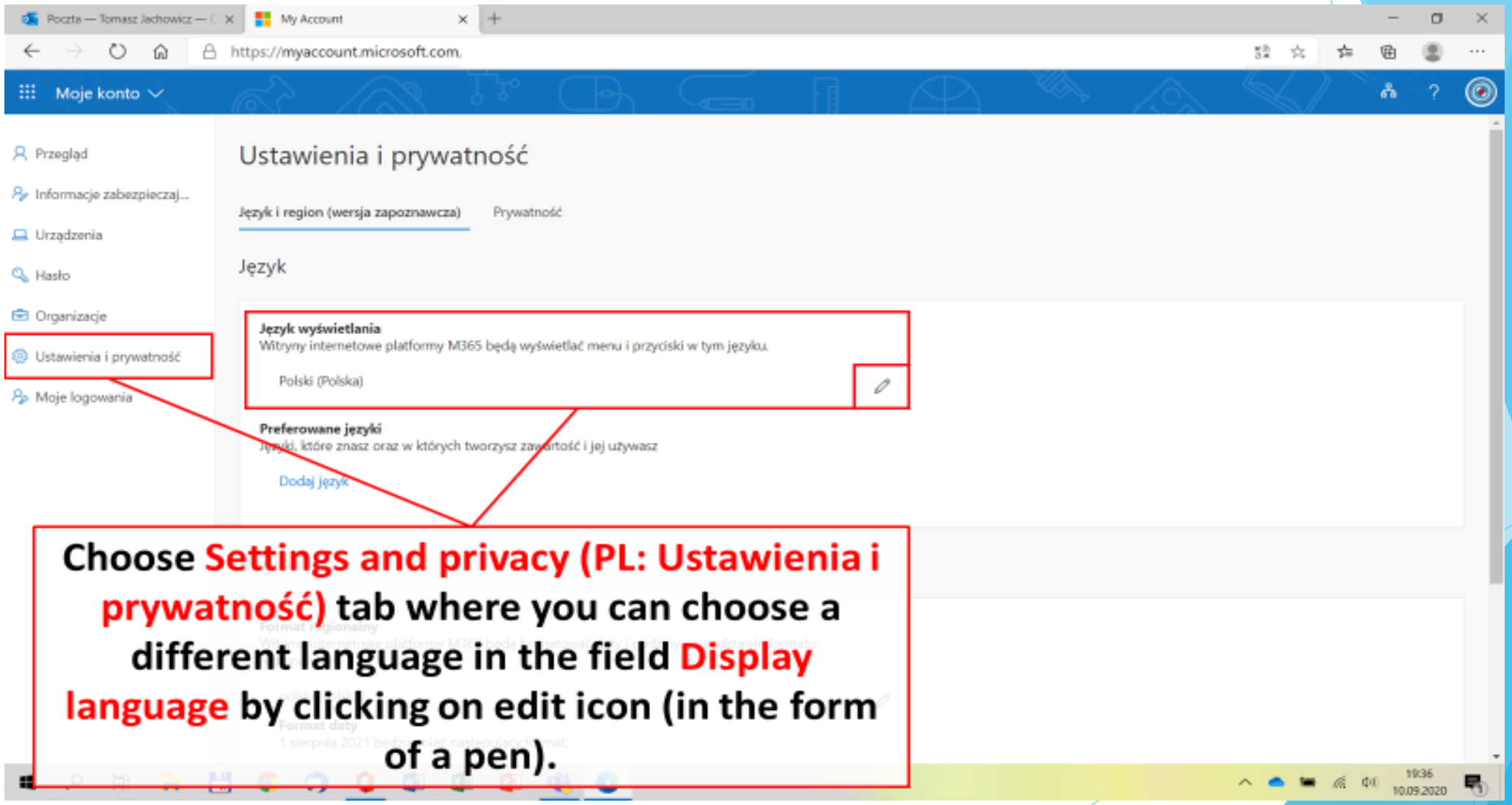
After login to Office 365, the main language of communication will be Polish.

If you change the language, all Office 365 applications will be operated in a language you set.

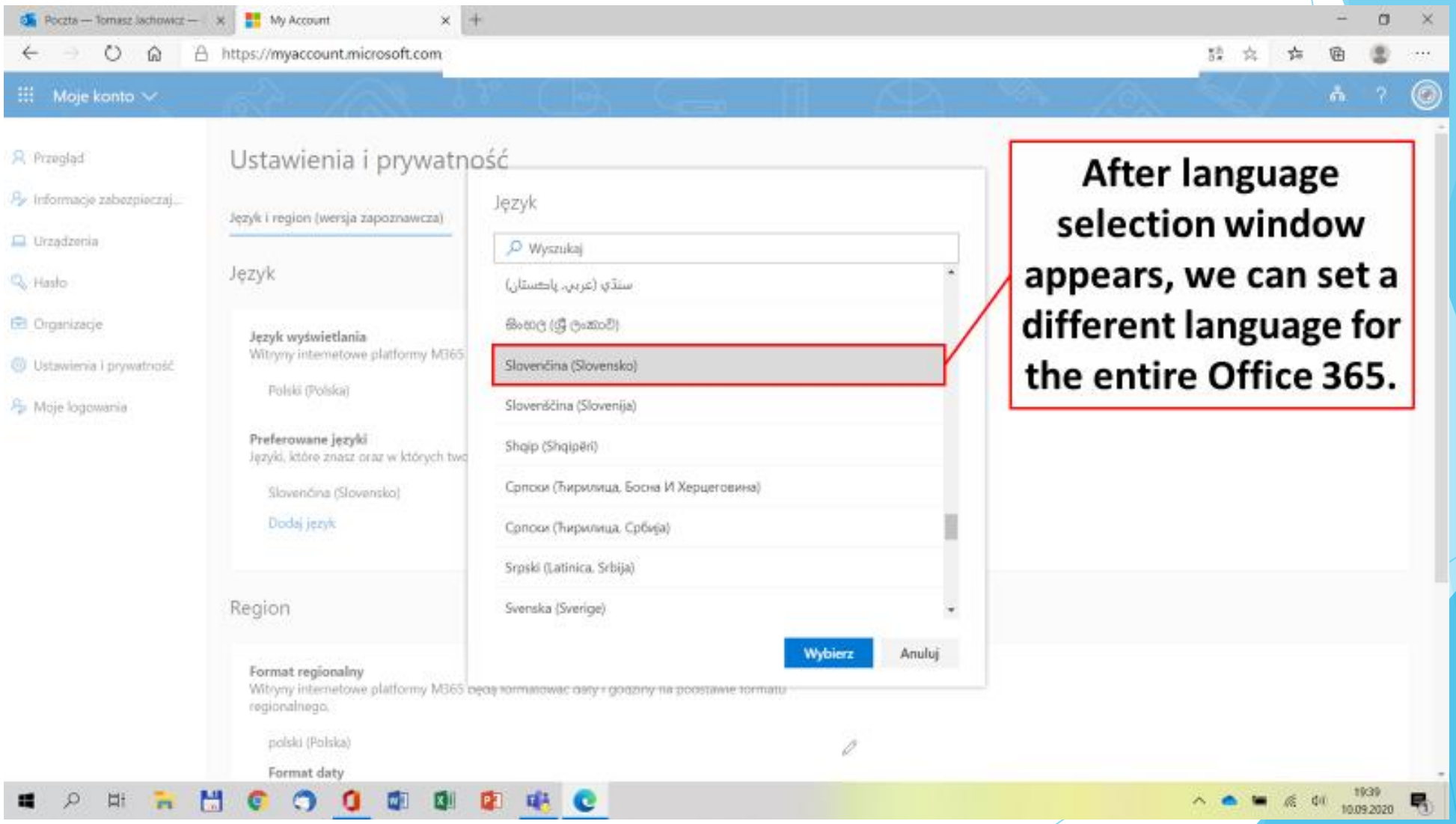
- Visegrad Fund



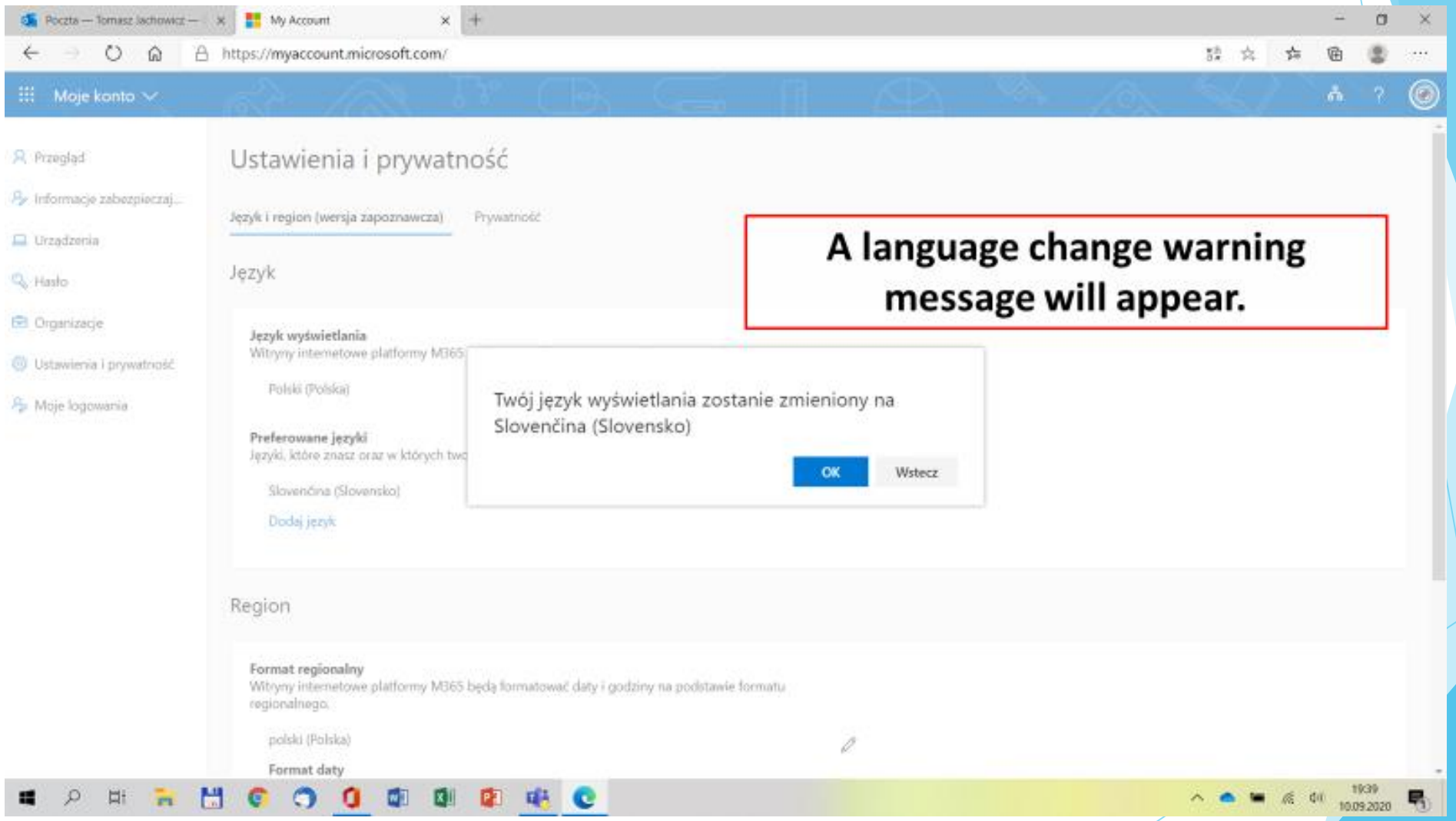
- Visegrad Fund



- Visegrad Fund

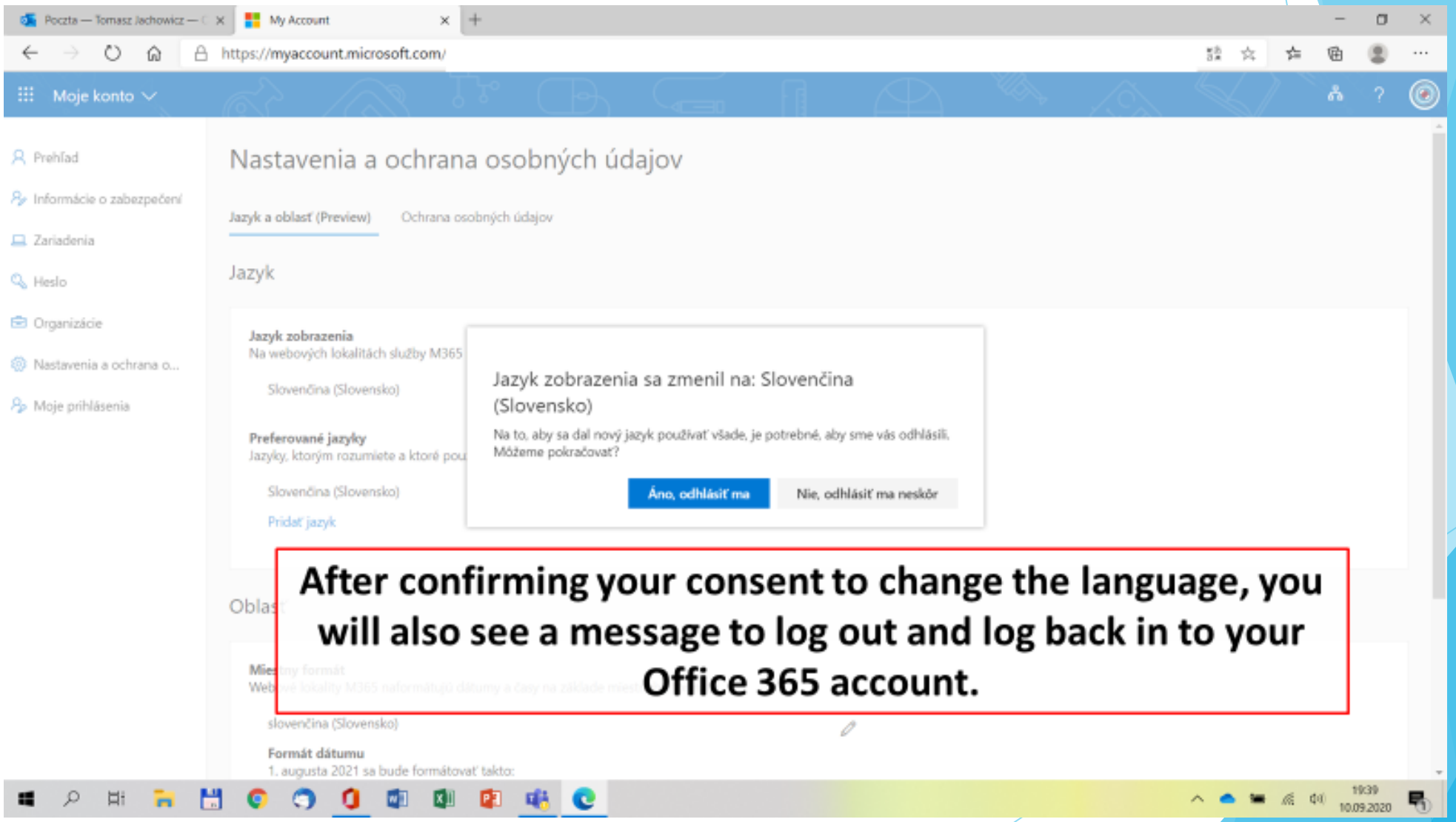


- Visegrad Fund



- Visegrad Fund

DIGSTEM



Visegrad Fund

DIGSTEM

Office 365 hard disc applications

All components of Office 365 can be opened with a web browser. The recommended browser is Microsoft Edge.

Some of Office 365 apps can be installed on a hard drive.
It is especially recommended for two apps:
Teams and Whiteboard.

Visegrad Fund

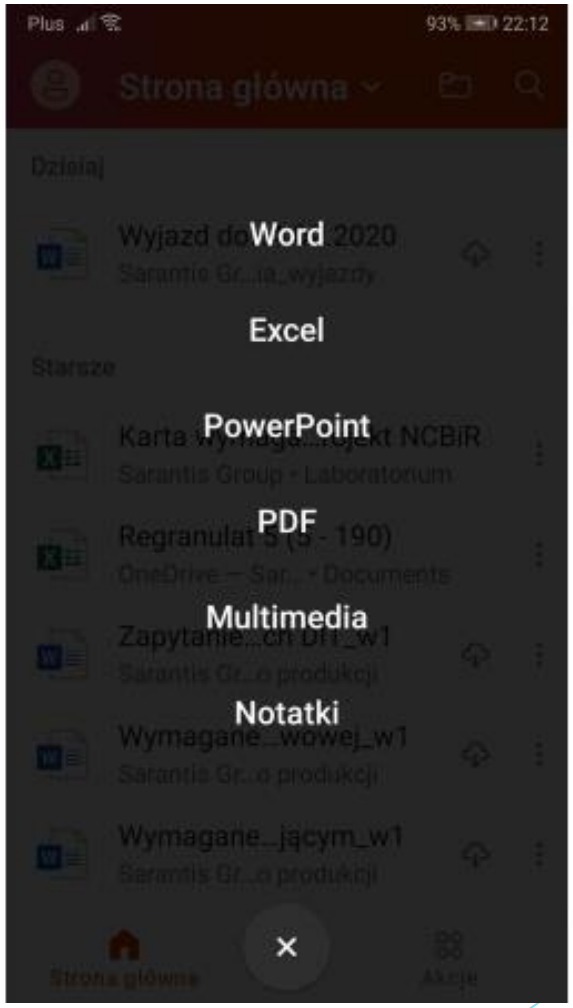
DIGSTEM

Office 365 mobile apps

Office 365 is available for mobile devices on Android and iOS platforms.

It is worth installing on your mobile device those apps which are used for direct transfer of information i.e. Teams and Outlook. This way instant messaging with lecturers and colleagues from studies will be possible.

- Visegrad Fund



Visegrad Fund

DIGSTEM

Office 365 – lecturers vs. students

Lecturers and students use the same Office 365 platform. This way they have the same programmes and features. Models of reports, templates, projects, control works and other documents prepared in Office 365 provided by teachers will not cause problems with reading, saving, and sending for checking.

Visegrad Fund

DIGSTEM

OneDrive

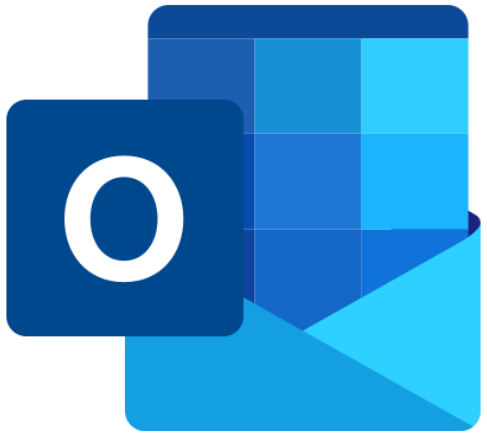
OneDrive disc space of 1024GB is provided for Office 365 user.

OneDrive Video Training

https://support.microsoft.com/en-us/office/onedrive-video-training-1f608184-b7e6-43ca-8753-2ff679203132

Visegrad Fund

DIGSTEM



Outlook

Outlook app is set to send e-mails between the users of Lublin University of Technology organization who have Office 365 accounts.

Visegrad Fund

DIGSTEM

E-mail communication between the users of Lublin University of Technology organization sent and received with Outlook functions correctly both ways, however it should be treated as an internal communication only within Office 365 service.

Students have to distinguish the internal communication within Office 365 (Outlook) from an e-mail account working through POP3/IMAP and SMTP servers.

Visegrad Fund

DIGSTEM

An e-mail in Outlook can be addressed and sent to any numer of recipients within Lublin University of Technology organization. The maximum size of an attachment to the e-mail in Outlook is 35MB.

Outlook Video Training

https://support.microsoft.com/en-us/office/outlook-training-8a5b816d-9052-4190-a5eb-494512343cca

Visegrad Fund

DIGSTEM

Teams

Teams app plays the most important role in conducting on-line classes. Students have to make an effort to keep in contact with the lecturer and receive the information from him/her on the groups on Teams they should be assigned to.

Visegrad Fund

DIGSTEM

A group on Teams app is a group of students with whom the lecturer is conducting a specific subject.

Through Teams app the lecturer:

- **conducts on-line lectures,**
- **conducts on-line consultations,**
- **shares teaching materials to students,**
- **assigns tasks to students and grades them.**

Visegrad Fund

DIGSTEM

Microsoft Teams Video Training

https://support.microsoft.com/en-us/office/microsoft-teams-video-training-4f108e54-240b-4351-8084-b1089f0d21d7

Meetings in Microsoft Teams

https://docs.microsoft.com/en-us/microsoftteams/tutorial-meetings-in-teams

Get started with Microsoft Teams

https://www.youtube.com/watch?v=jKnV6H6wbNA

Visegrad Fund

DIGSTEM

Microsoft Teams Tutorial
https://www.youtube.com/watch?v=2zB2jiCxxuQ

Microsoft Teams Full Student Guide. Remote Learning & Teaching
https://www.youtube.com/watch?v=aO9LE6ZKnUM

How to Use Microsoft Teams - Beginner's Guide
https://www.youtube.com/watch?v=dPYZ05EYai0

Connecting with Microsoft Teams as a student
https://www.youtube.com/watch?v=PasT3Q1ZR_I

Visegrad Fund

DIGSTEM

THANK YOU FOR YOUR ATTENTION

Visegrad Fund

DIGSTEM

Improving STEM Teaching Process using Digital Transformation - DIGSTEM

Project Meeting

Lublin University of Technology, Lublin, Poland

03-04 October 2023

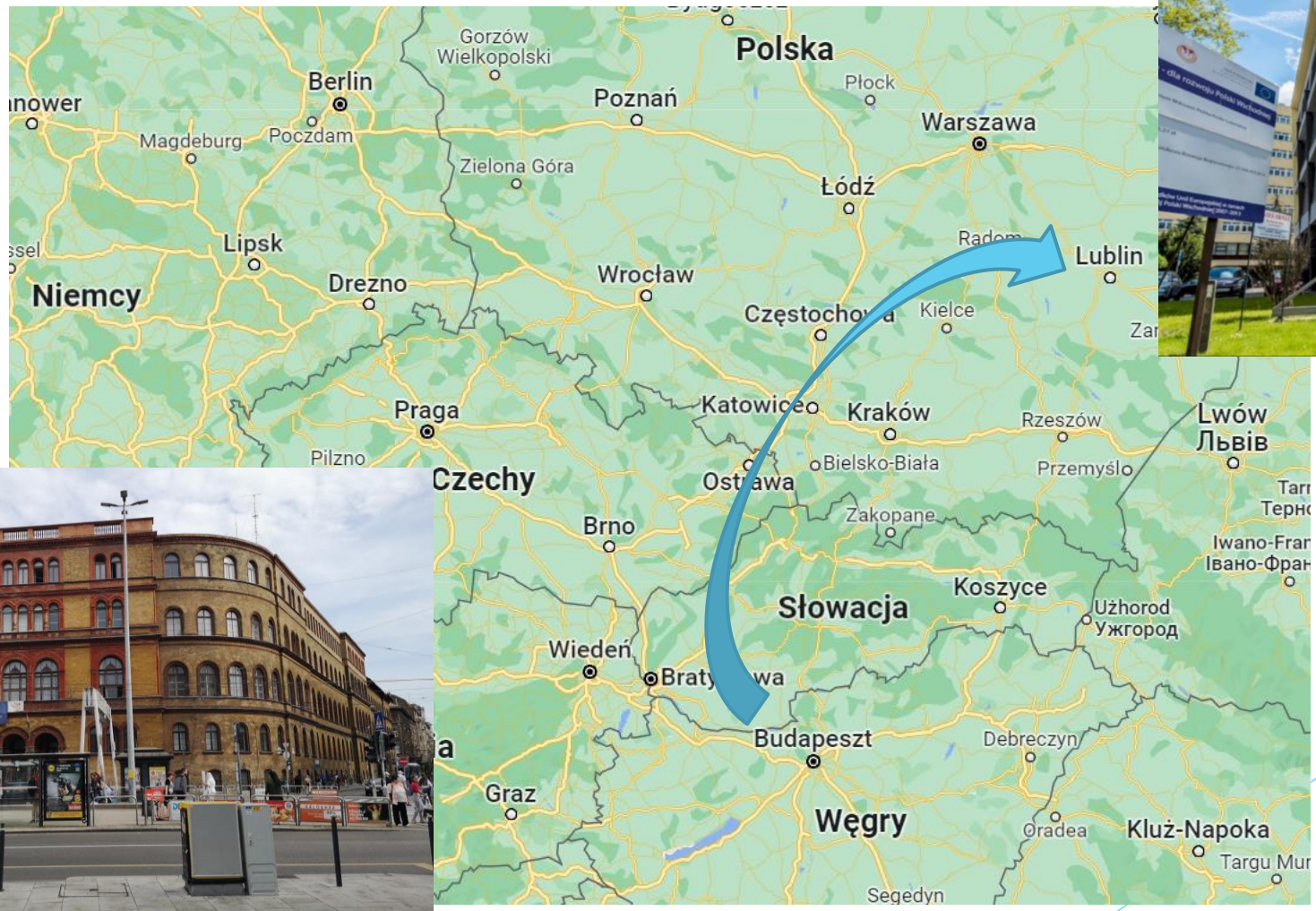
Creation of an Online Facilitate and Engaging Workshop Practice for Students

Béla Mészáros
Óbuda University, Budapest, Hungary

Visegrad Fund

DIGSTEM

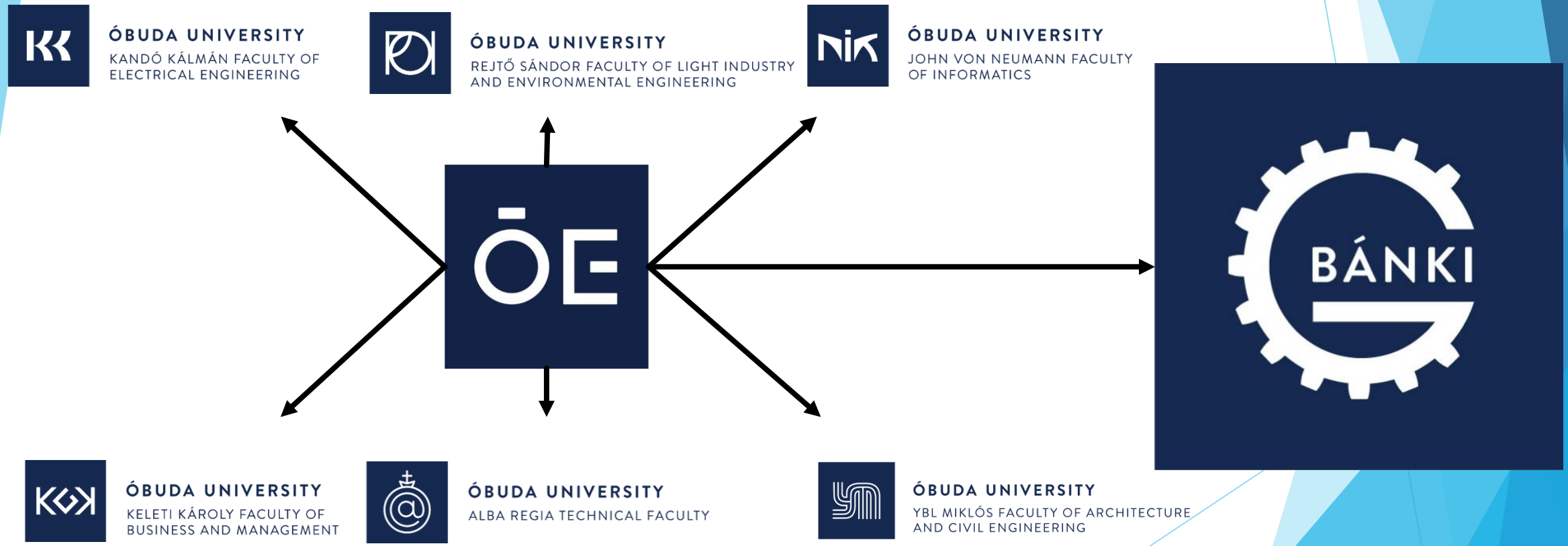
Óbuda University to Lublin University



Visegrad Fund

DIGSTEM

Banki Donat Faculty of Mechanical and Safety Engineering



Visegrad Fund

DIGSTEM

Machining workshop

- Experiments
- Tools tests
- Investigation of cutting technology
- Scientific Students' Associations

Visegrad Fund

DIGSTEM

Beginnings

- First try → live stream → result → not the best ☺
- Long duration video
- Poor sound quality
- Shaky image quality

Visegrad Fund

DIGSTEM

Technical problems

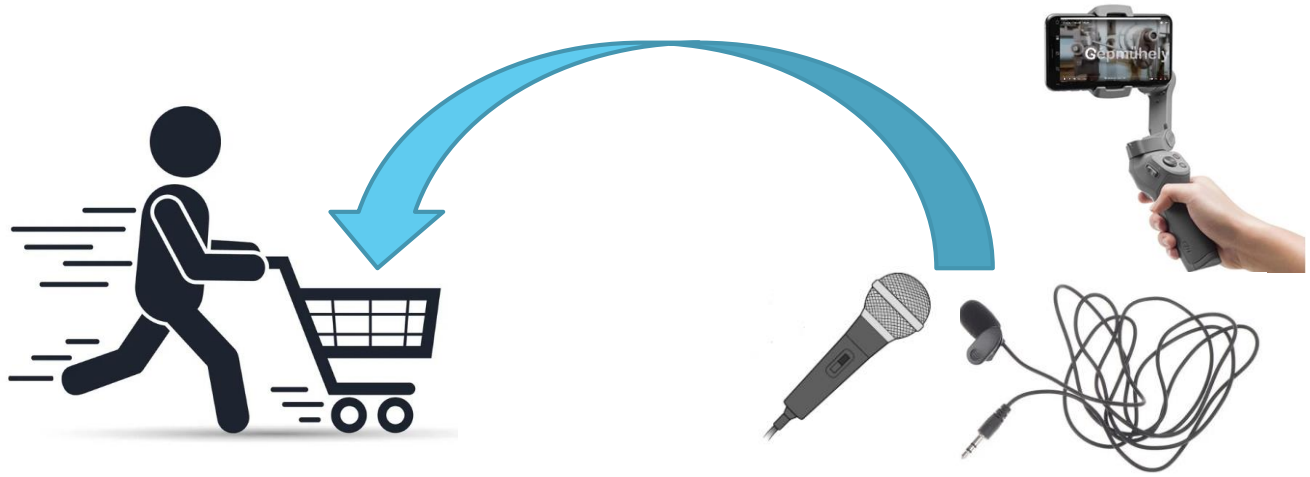
- Bad quality video (picture and sound)
- How can we show the small details
- Cameras from the several sides

Visegrad Fund

DIGSTEM

Solutions

- NO LIVE STREAM
- Short videos (30min. max.)
- Just essential
- DJI OSMO Mobile equipment (best image sharpness)
- External microphone (good quality of sounds)

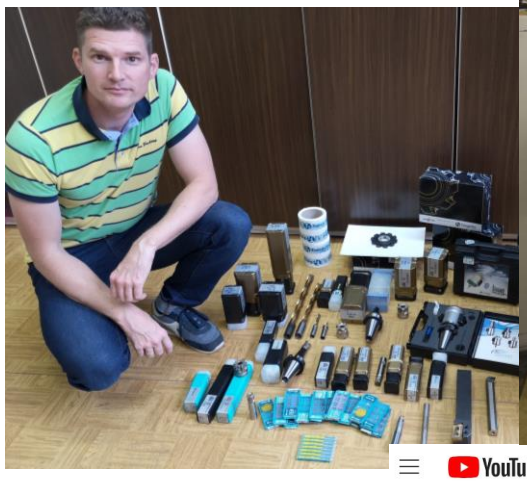


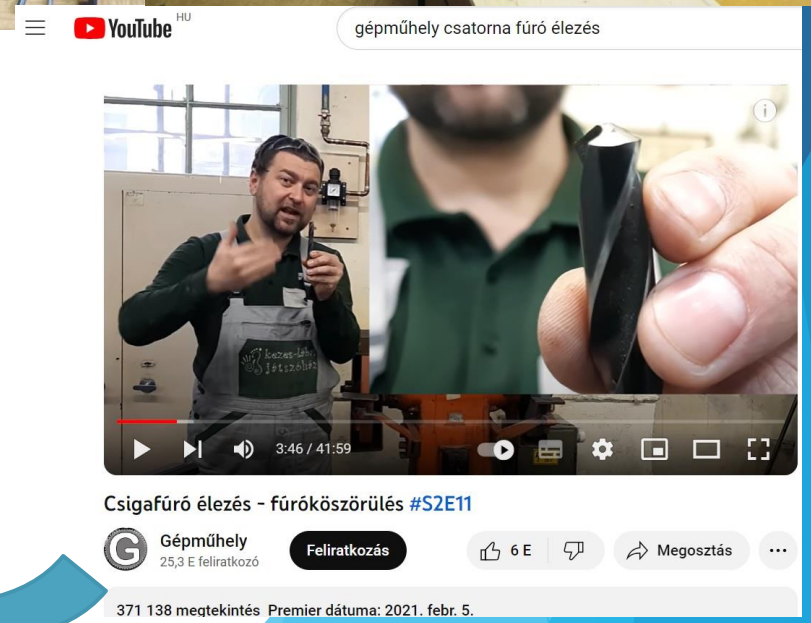
Visegrad Fund

DIGSTEM

Results and Consequences

- How many students saw it → ~2000 students
- Machining tools promotions
- Base material promotions
- Financial support
- How to sharpen drill bits video → 370.000 viewers





Visegrad Fund

DIGSTEM

THANK YOU FOR YOUR ATTENTION

Visegrad Fund

DIGSTEM

Improving STEM Teaching Process using Digital Transformation - DIGSTEM

Project Meeting

Lublin University of Technology, Lublin, Poland

03-04 October 2023

HMI-LAB and its usage for support of student

prof. Ing. Radovan Madleňák, PhD.
University of Zilina

Visegrad Fund

DIGSTEM

HMI-LAB

- **HMI-LAB** is the unique laboratory within the University Science Park, University of Žilina
- Laboratory enables its user to carry out testing for the human–machine interaction in various conditions.
- Laboratory suggests changes leading to the increase in the efficiency and safety of this investigation based on an analysis of obtained data.

Visegrad Fund

DIGSTEM

Human – Machine Interaction

Human - machine interaction can be characterized as mutual communication and interaction between human and machine.

„The place where technology meets with human“

Visegrad Fund

DIGSTEM

Neuroscience and its core principles

- The utilization of neuroscience to analyse consumer responses and decision-making.
  - Brain Imaging
  - Eye Tracking
  - Facial Expression Analysis
  - Physiological Measurements
- Adapting Neuroscience to Education
  - Attention and Engagement
  - Emotional Engagement
  - Content Optimization
  - Feedback and Assessment

Visegrad Fund

DIGSTEM

HMI-LAB equipment

Laboratory Hardware Equipment:

- **Eyetracking Analysis:**
  - Eye Tracking Glasses 2 Wireless Analysis, iView X™ RED500 Laptop System, REDn Scientific System (60Hz), PupilLabs Pupil Core Eyetracking Glasses (binocular), **Tobii Pro Glasses 3, Tobii Pro Fusion**
- **Brain Activity Analysis:**
  - Emotiv EEG Neuroheadset, EMOTIV Insight EEG Neuroheadset, Muse 2 Neuroheadset, **Advanced Brain Monitoring Headset X24**
- **Biosensors - Physical Activity Analysis:**
  - Telemetric System BIOHARNESS, BIOPAC Sensors for Blood Pressure, Pulse, Temperature, and Skin Resistance, Mindfield-Biosystems – eSense Skin Response (GSR), Mindfield-Biosystems – eSense Respiration, **Shimmer3 GSR, Shimmer3 EXG**

Laboratory Software Equipment:

- SMI Scientific Center Premium Edition
- SMI BeGaze
- EMOTIV Enterprise Plus Edition
- EMOTIV EPOC Brain Activity Map
- MP36R ENTERPRISE SYSTEM
- **iMotions All Modules (Eyetracking, FEA, GSR, EEG, EMG, ..)**
- **Tobii Pro Studio**

Visegrad Fund

DIGSTEM

HMI-LAB research areas

- Impact analysis of external conditions on the human factor when interacting with the machine in real or simulated environment (reaction time behaviour in crisis situations, etc.)
- Analysis of the impact of mental condition of a human on his ability to use machines and devices
- Analysis of the transport infrastructure in point of view of user of transport infrastructure
- Audit of road signs of road infrastructure
- Analysis of visual smog (billboards) on road safety
- Ergonomic design of machinery and equipment (vehicles)
- Ergonomics' work activities in production cycles
- Product placement strategy in the business units
- User experience testing of websites
- User experience testing of internet ads

Visegrad Fund

DIGSTEM

Realised research – HMI-LAB

- UX testing of eshop and websites
- Email Newsletter testing
- A/B advertising testing
- Testing customer flow in eshop
- Influence of visual smog on driver
- Passportisation of visual smog and traffic signs on selected road
- Visibility of traffic signs on road infrastructure during the day and night
- Comparison of eye tracking measurement in real and laboratory conditions
- Testing of driver in laboratory conditions – road simulator (sharing the knowledge)
- Impact of mobile phones and GPS usage on driver – safety of road transport (laboratory conditions)
- Sharing of knowledge of train driver in real conditions
- Pilot testing in airplane simulator
- Driver testing in rally simulator
- Research of driver's reactions on pedestrian behaviour in real conditions
- ...

Visegrad Fund

DIGSTEM

Student´s thesis - examples

- **Bachelor thesis:**
  - Analytical
    - Analysis of tools human-computer interaction (2016) https://opac.crzp.sk/?fn=detailBiblioForm&sid=DFA67B8070F30CA1EF97C200DAEA
    - Potential of neuromarketing as a standard marketing tool in Slovakia (2017) https://opac.crzp.sk/?fn=detailBiblioForm&sid=998D604438B59F55B5825FFC0D22
  - Experimetal
    - Analysis of e-shops purchasing process by neuroscience (eye-tracking) (2022) https://opac.crzp.sk/?fn=detailBiblioForm&sid=D6903242A3B61C7D24CEEFD68D19

Visegrad Fund

DIGSTEM

Student´s thesis - examples

- **Master thesis:**
  - Marketing oriented
    - The use of marketing communication tools within the discount portal (2016) https://opac.crzp.sk/?fn=detailBiblioForm&sid=7A24B9B1E4B8C85D5489497807C5
    - A/B Internet Advertising Testing under the Terms of Selected E-commerce Shop (2017) https://opac.crzp.sk/?fn=detailBiblioForm&sid=B7A4F0D5DE0EE4D8F95578CD7EE5
    - Measurement of the impact of visual advertisement of mobile operators on potential customers (2017) https://opac.crzp.sk/?fn=detailBiblioForm&sid=0CE18B4C4079C60D2846A52DB261
    - Effectiveness of sales promotion in e-commerce terms. (2018) https://opac.crzp.sk/?fn=detailBiblioForm&sid=CB745B58B0F7E53C005FC26F3E25
    - The impact of external factors on online shopping behavior. (2018) https://opac.crzp.sk/?fn=detailBiblioForm&sid=CB745B58B0F7E53C005FC36F3E25
    - The impact of customer product reviews on the shopping behavior of e-commerce customers (2021) https://opac.crzp.sk/?fn=detailBiblioForm&sid=6327E39BEACEDA03010C0F820365
    - Design of PPC advertising and its A/B testing for the promotion of studies at the Department of Communications (2021) https://opac.crzp.sk/?fn=detailBiblioForm&sid=6327E39BEACEDA0307050E820365
    - The influence of outdoor advertising on purchasing decisions made online https://opac.crzp.sk/?fn=detailBiblioForm&sid=7950E184AA7EAF4CBE82F543086F

Visegrad Fund

DIGSTEM

Student´s thesis - examples

- **Master thesis:**
  - Webdesign oriented
    - Suggestion to increase the conversion rate of a selected e-shop based on identifying factors of leaving the purchase process (2017) https://opac.crzp.sk/?fn=detailBiblioForm&sid=B7A4F0D5DE0EE4D8F95579CD7EE5
    - Optimize the elements of the selected ecommerce website (2018) https://opac.crzp.sk/?fn=detailBiblioForm&sid=B73135A61A1C578FAD858F3CADA1
    - Eyetracking testing of UNIZA faculties web pages (2020) https://opac.crzp.sk/?fn=detailBiblioForm&sid=201CE56335A527AB070E96791929
    - Research of web page usability by using eye tracking camera (2020) https://opac.crzp.sk/?fn=detailBiblioForm&sid=F50A3640C856E51086E2B961DB62

Visegrad Fund

DIGSTEM

Student´s thesis - examples

- **Master thesis:**
  - Technicaly oriented
    - Design of driving simulator (2017) https://opac.crzp.sk/?fn=detailBiblioForm&sid=B7A4F0D5DE0EE4D8F05272CD7EE5
    - Proposal of experimental testing methodology at a selected post office workplace (2020) https://opac.crzp.sk/?fn=detailBiblioForm&sid=F50A3640C856E51086E2B861DB62

Visegrad Fund

DIGSTEM

Student´s thesis - examples

- **Doctoral thesis:**
  - Evaluation and optimization of selected forms of marketing communication in the Internet environment (2016) https://opac.crzp.sk/?fn=detailBiblioForm&sid=394581B55BAE63AC61ACB86F4926
  - Economic impacts of visual smog in transport (2017) https://opac.crzp.sk/?fn=detailBiblioForm&sid=877A1C170D2F97A1DB3BA42BFB25

Visegrad Fund

DIGSTEM

Additional action to promote Science and Technology education

- Christmas at the University 2017 - Presentation Stand
- University Open 2019 - Laboratory Presentation to the Public
- Researchers' Night 2019 - Presentation Stand
- ITExpo 2019 - Xth ITEXPO 2019
- Night of Researchers 2022 - Presentation Stand
- European Researchers' Night 2023 - Presentation Stand
- Open Days of UNIZA and FPEDAS - Science and Technology Presentations
- Collaboration with Schools
- Public Lectures and Workshops

Visegrad Fund

DIGSTEM

THANK YOU FOR YOUR ATTENTION

ANY QUESTIONS?

Visegrad Fund

DIGSTEM

Improving STEM Teaching Process using Digital Transformation - DIGSTEM

Project Meeting

Lublin University of Technology, Lublin, Poland

03-04 October 2023

The use of e-learning tools in the teaching of technical subjects at the University of Zilina (practical presentation)

Jiří Tengler
University of Žilina

Visegrad Fund

DIGSTEM

An idea for reflection

Visegrad Fund

DIGSTEM

Content

- E-learning tools at the University of Žilina
- Education students portal
- LMS Moodle
- Sample channel on the subject of database design - Moodle LMS
- Sample channel on the subject of database design - Oracle LMS
- APEX – application express
- MS TEAMS

E-learning tools in the University of Žilina

- Education student portal
- Moodle LMS
- MS Teams
- and more

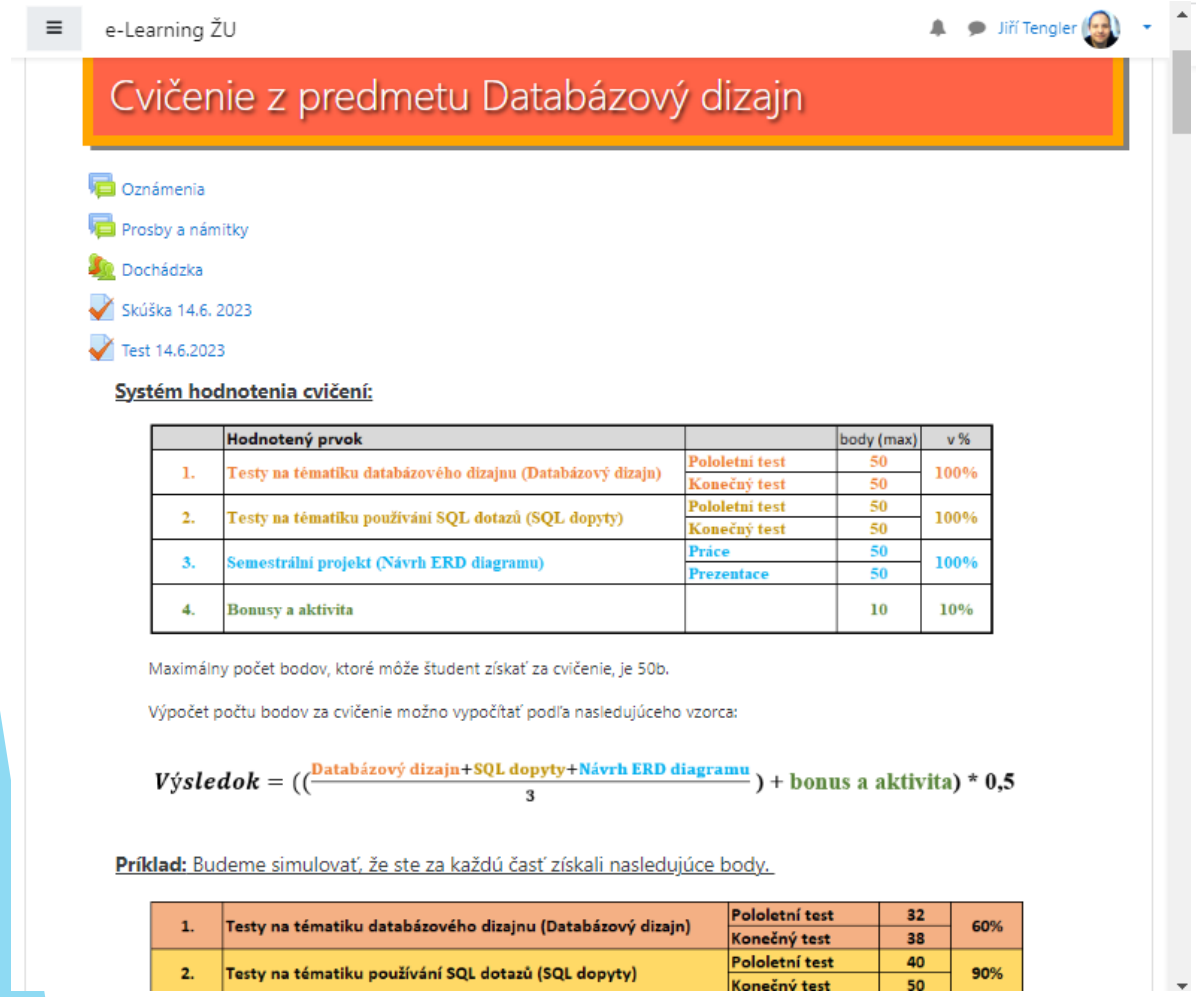
Education student portal

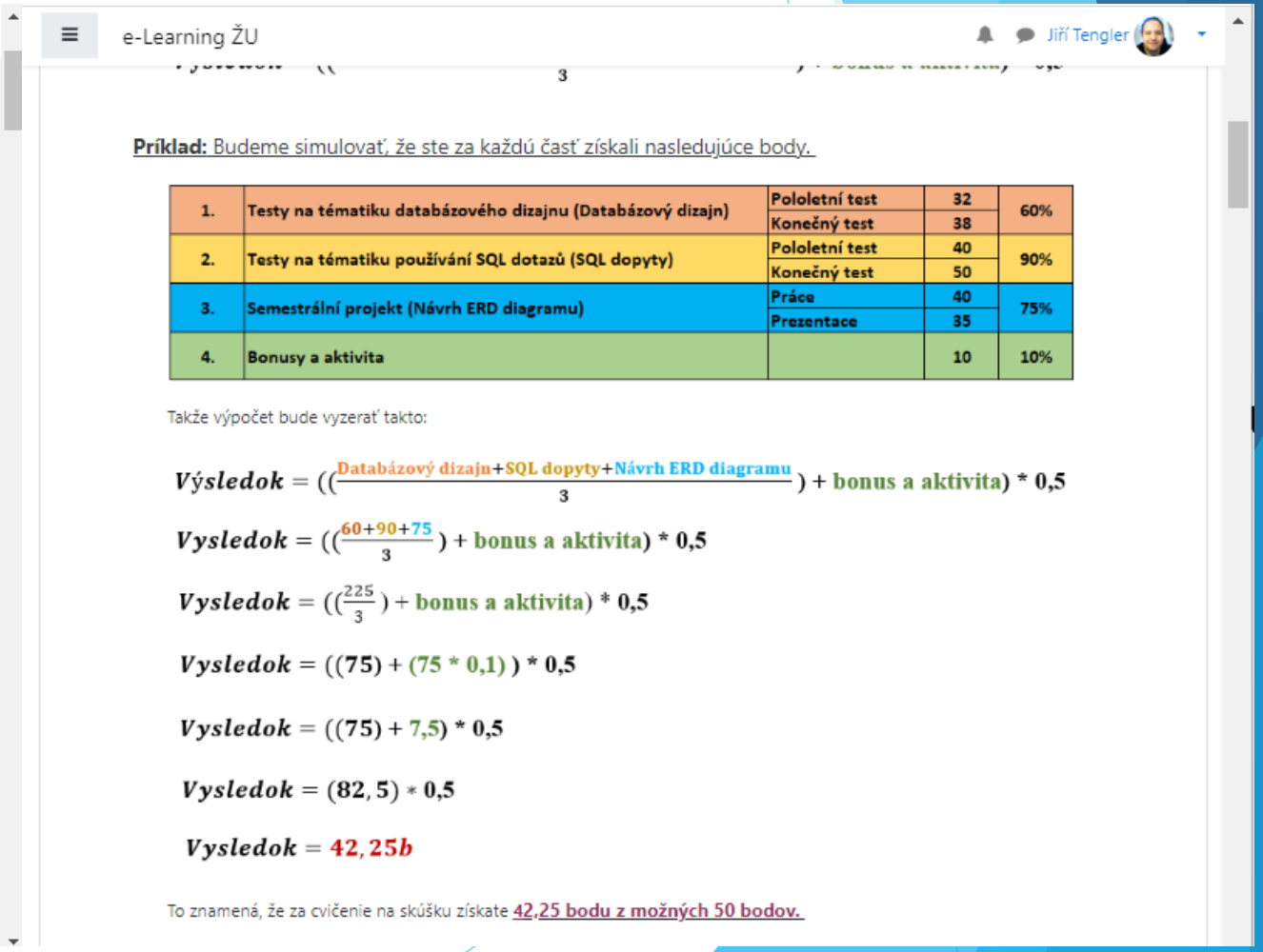
- Information lists
- Student evaluation
- Enrolling for the exam
- Access to the LMS moodle
- Course evaluation by students

LMS Moodle

- For providing information to students - together with MS Teams
- As means of getting feedback of students
- For checking attendence
- For providing study materials
- For assigning and submitting homeworks and projects
- For providing manuals of softwares
- To provide information regarding the planned topic area (content, motivation and objective)
- For testing and student evaluation

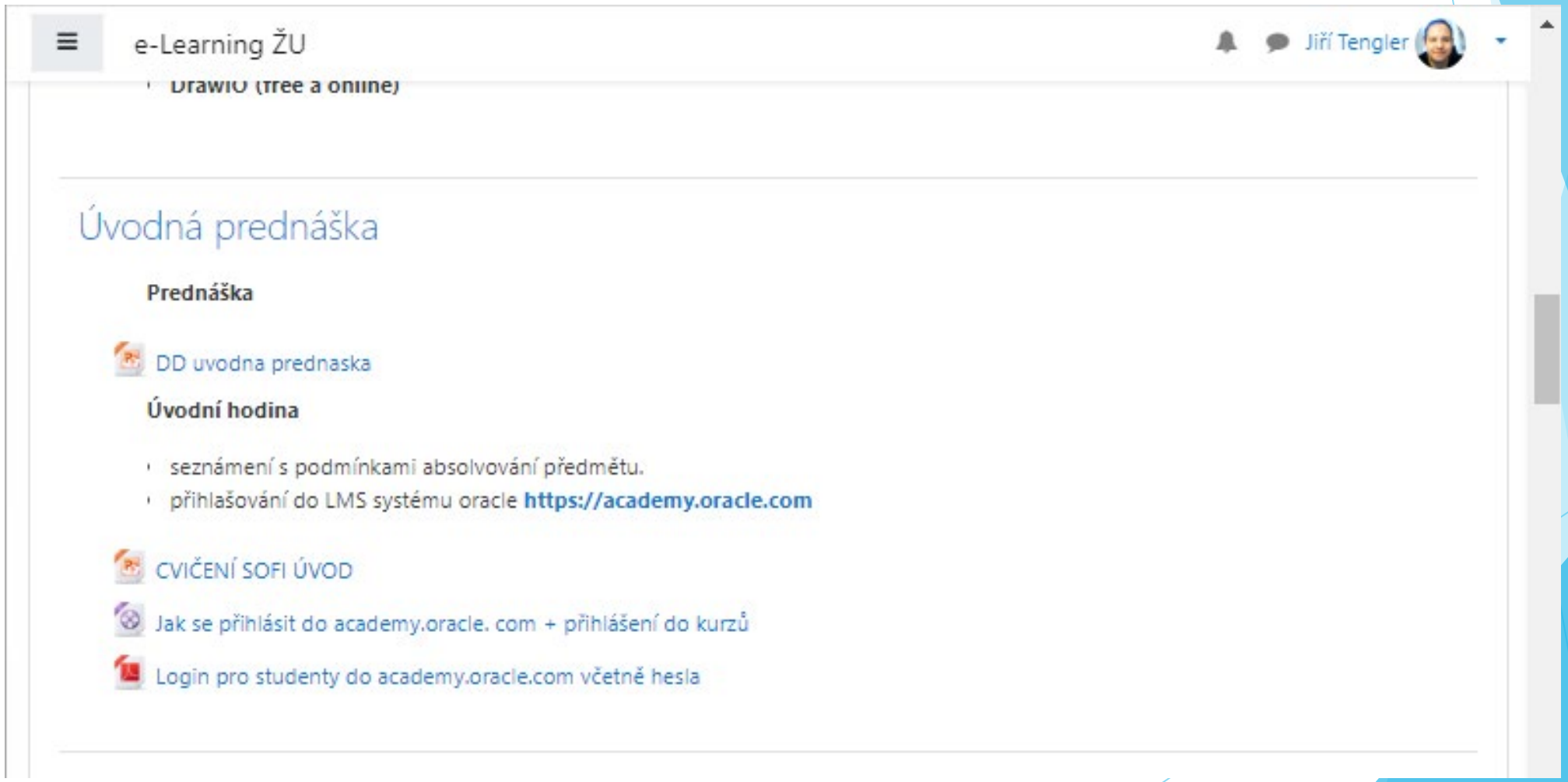
Example of moodle channel „Database design“



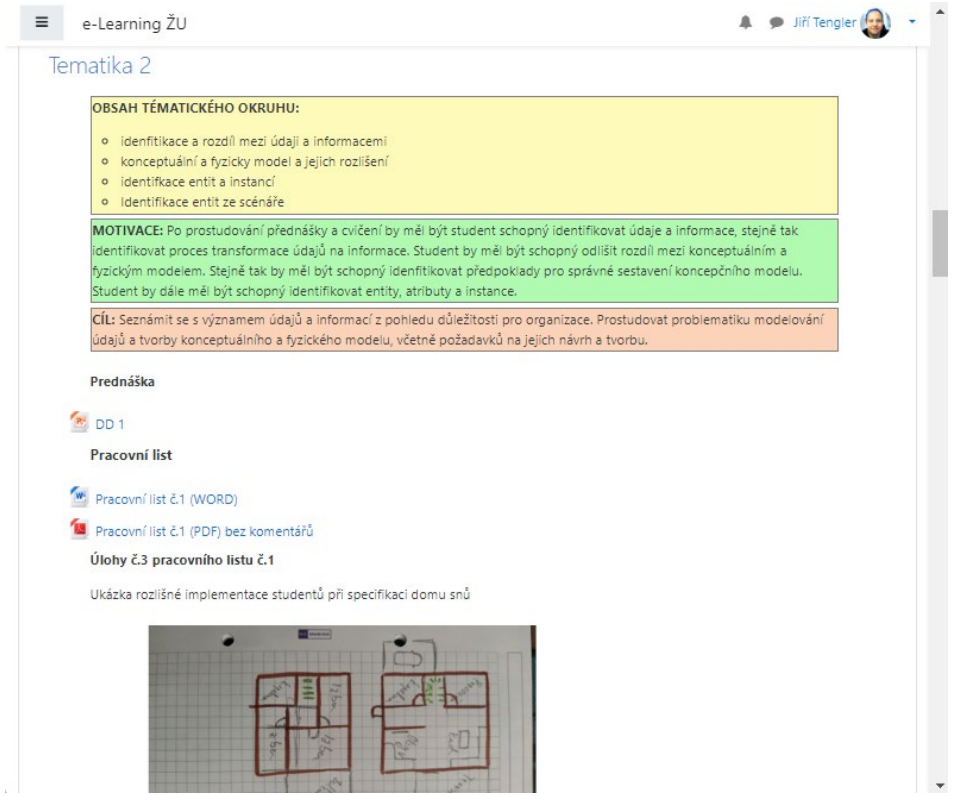


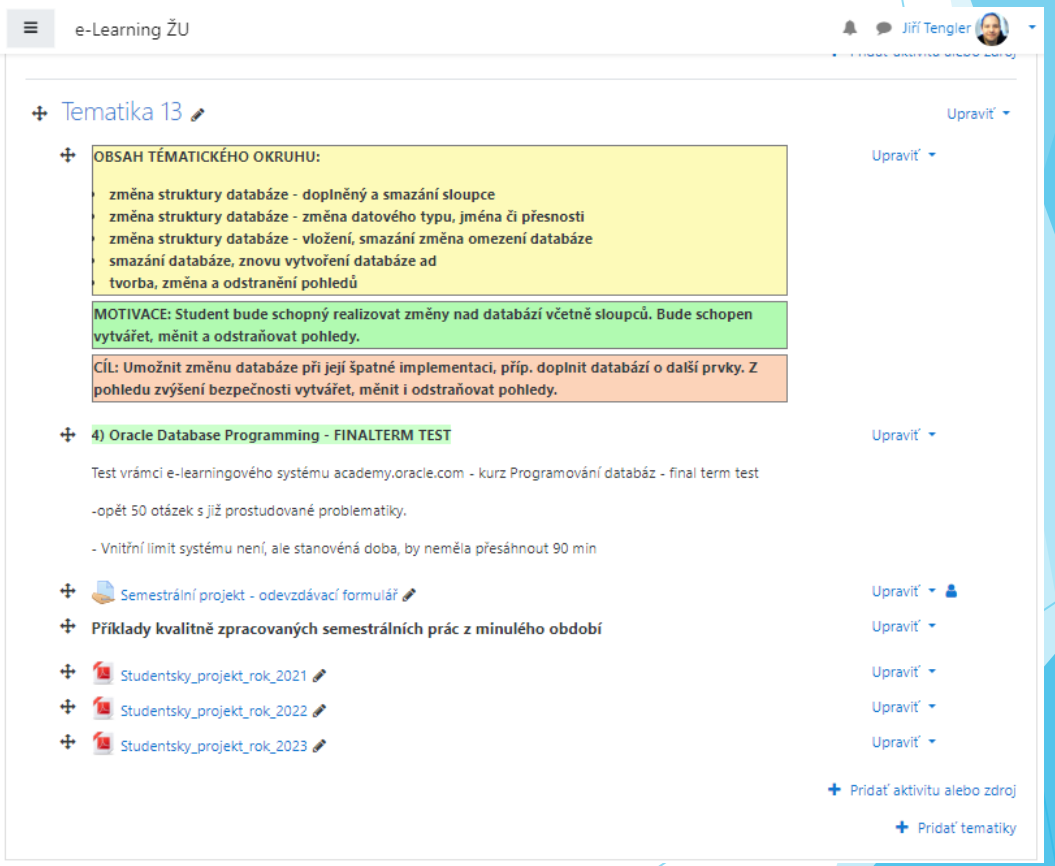
Example of moodle channel „Database design“

Example of moodle channel „Database design“

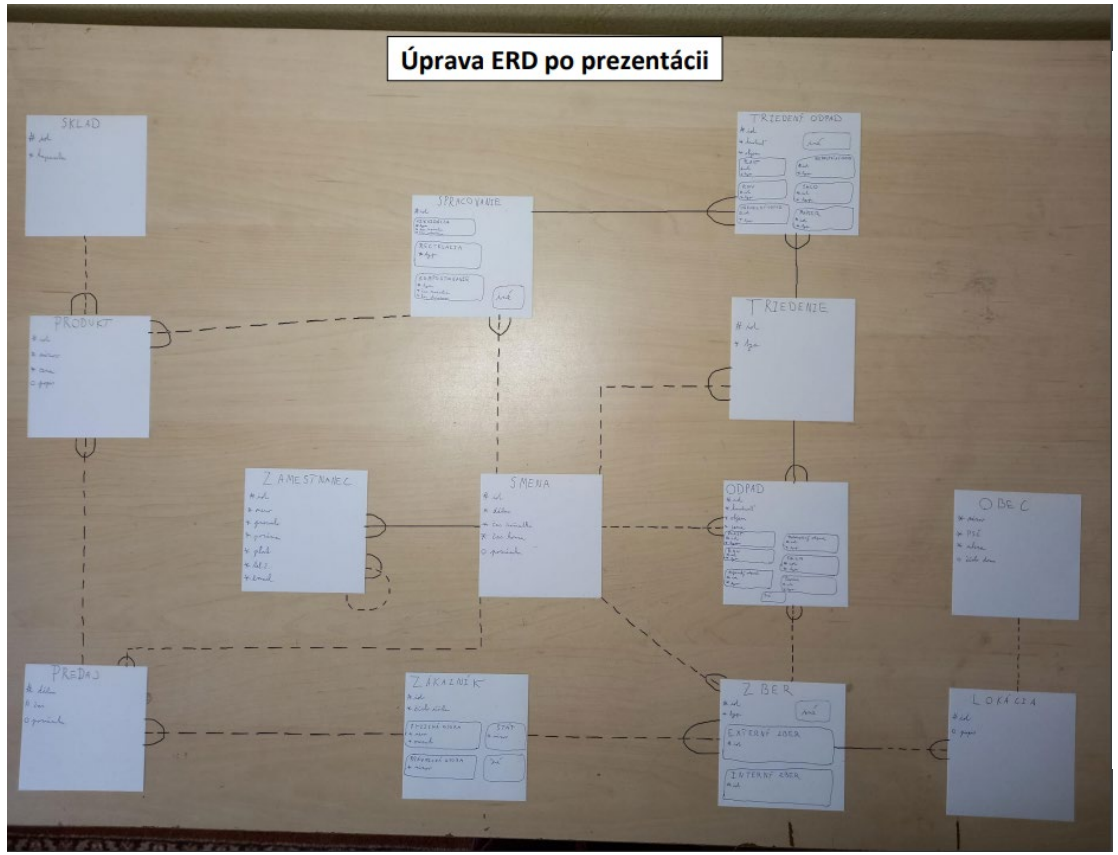


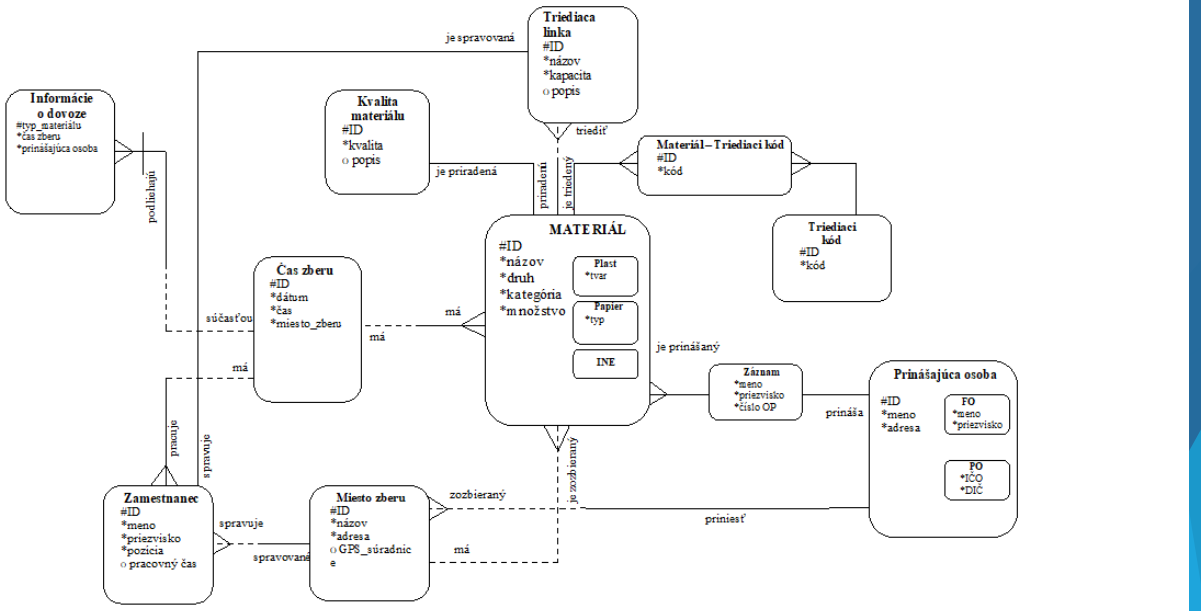
Example of moodle channel „Database design“



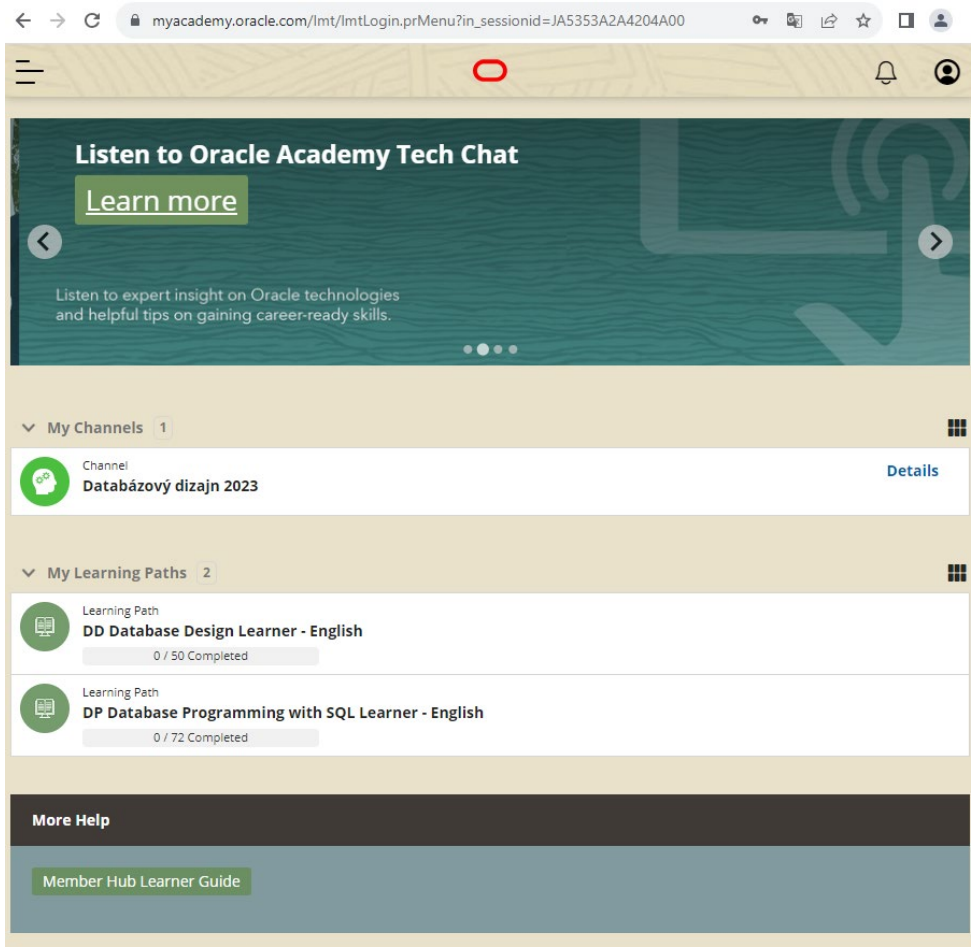


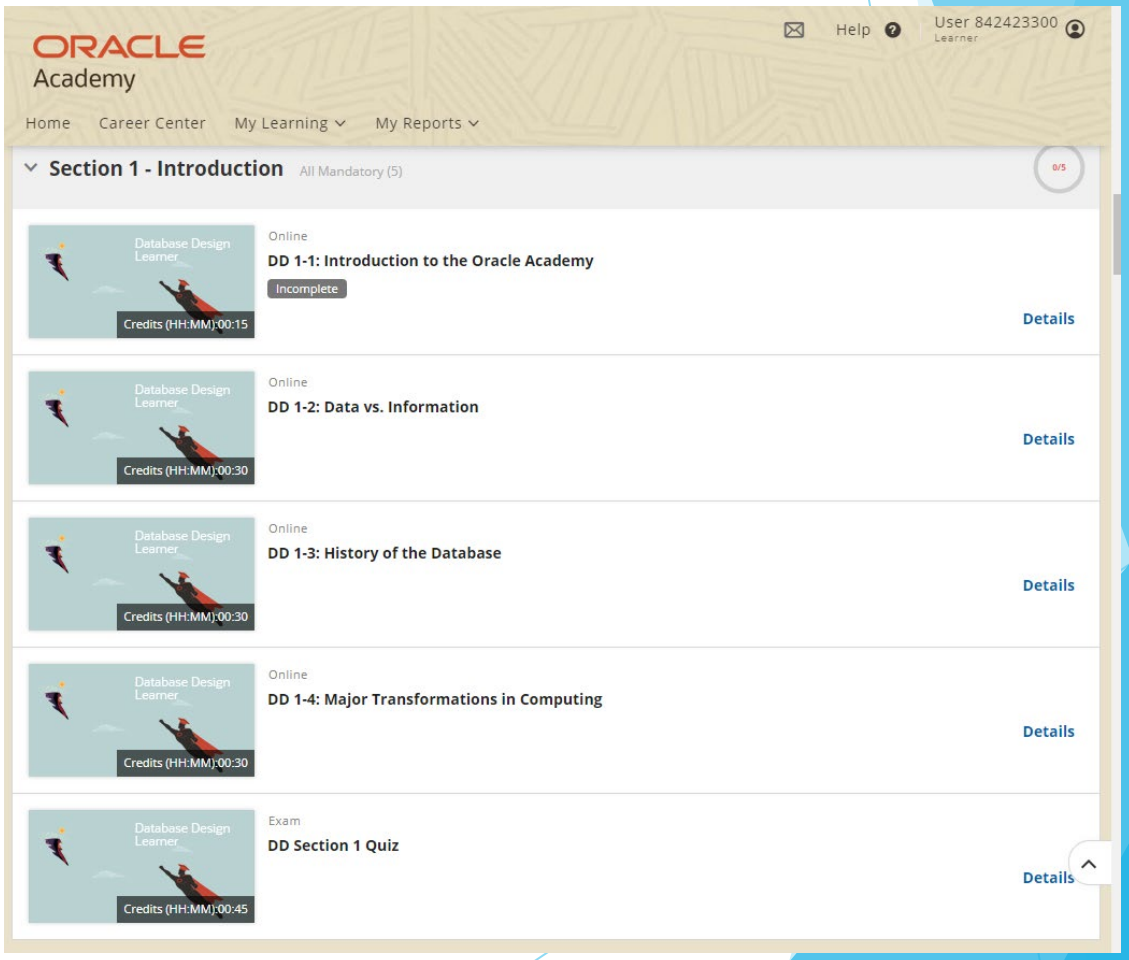
Example of moodle channel „Database design“



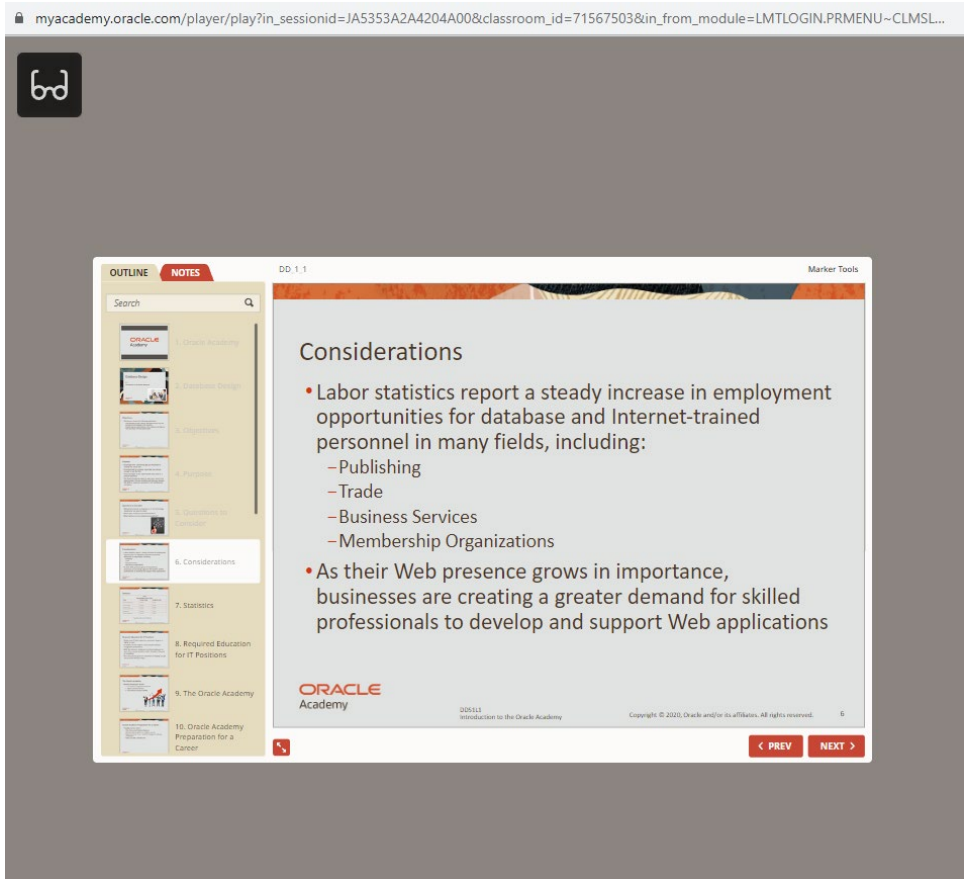


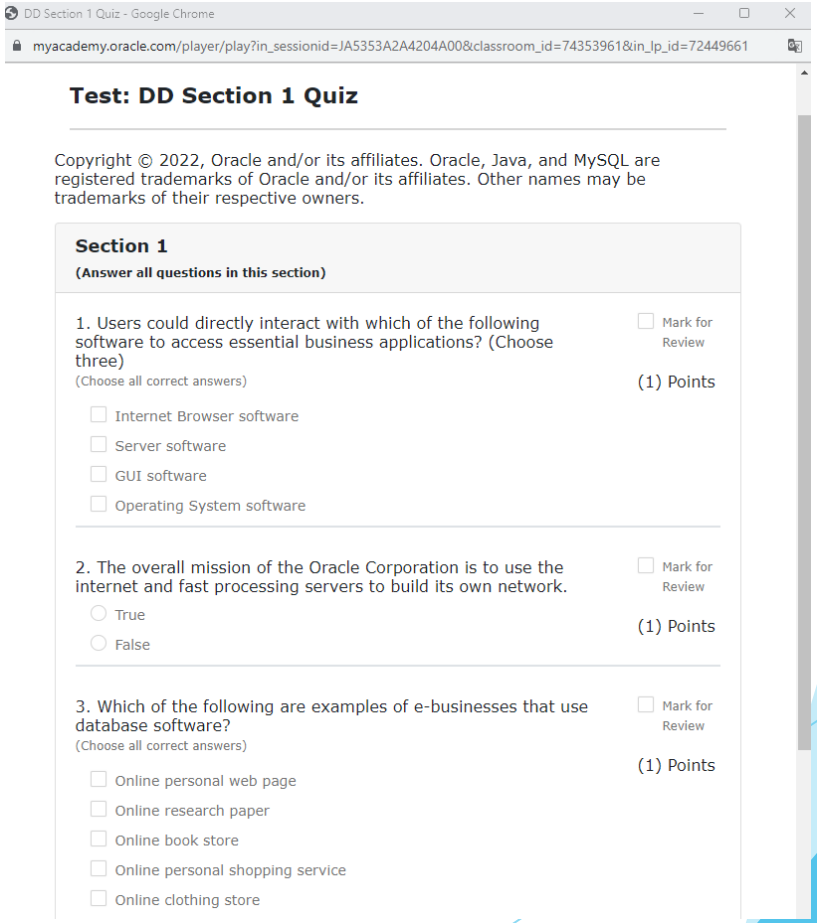
Sample channel on the subject of database design - Oracle LMS





Sample channel on the subject of database design - Oracle LMS





Sample channel on the subject of database design - Oracle LMS

1. Users could directly interact with which of the following software to access essential business applications? (Choose three) (1/1 Points)

(Choose all correct answers)

- [x] Internet Browser software (*)
- [ ] Server software
- [x] GUI software (*)
- [x] Operating System software (*)

✔Correct

2. The overall mission of the Oracle Corporation is to use the internet and fast processing servers to build its own network. (1/1 Points)

- ( ) True
- (•) False (*)

✔Correct

3. Which of the following are examples of e-businesses that use database software? (0/1 Points)

(Choose all correct answers)

- [x] Online personal web page
- [x] Online research paper
- [x] Online book store (*)
- [x] Online personal shopping service (*)
- [x] Online clothing store (*)

✖Incorrect. Refer to Section 1 Lesson 4.

Test: DD Section 1 Quiz

Note your score.

Percentage Scored:

93.3 %

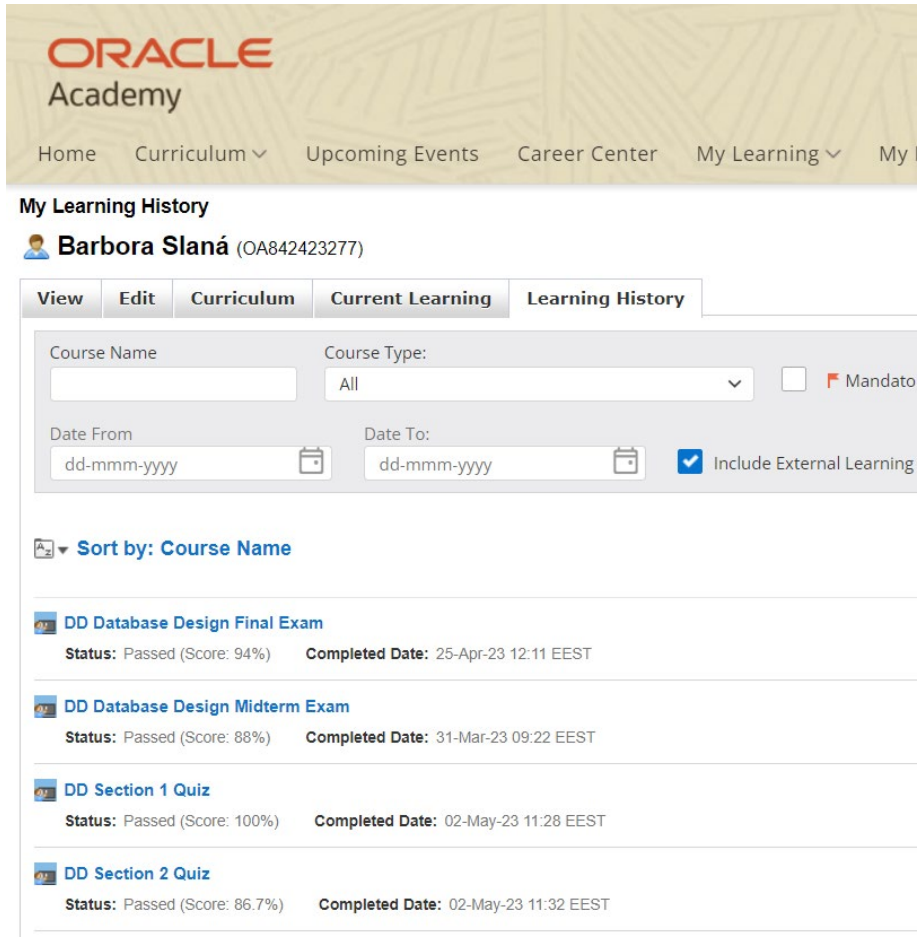
Score: 14 out of 15

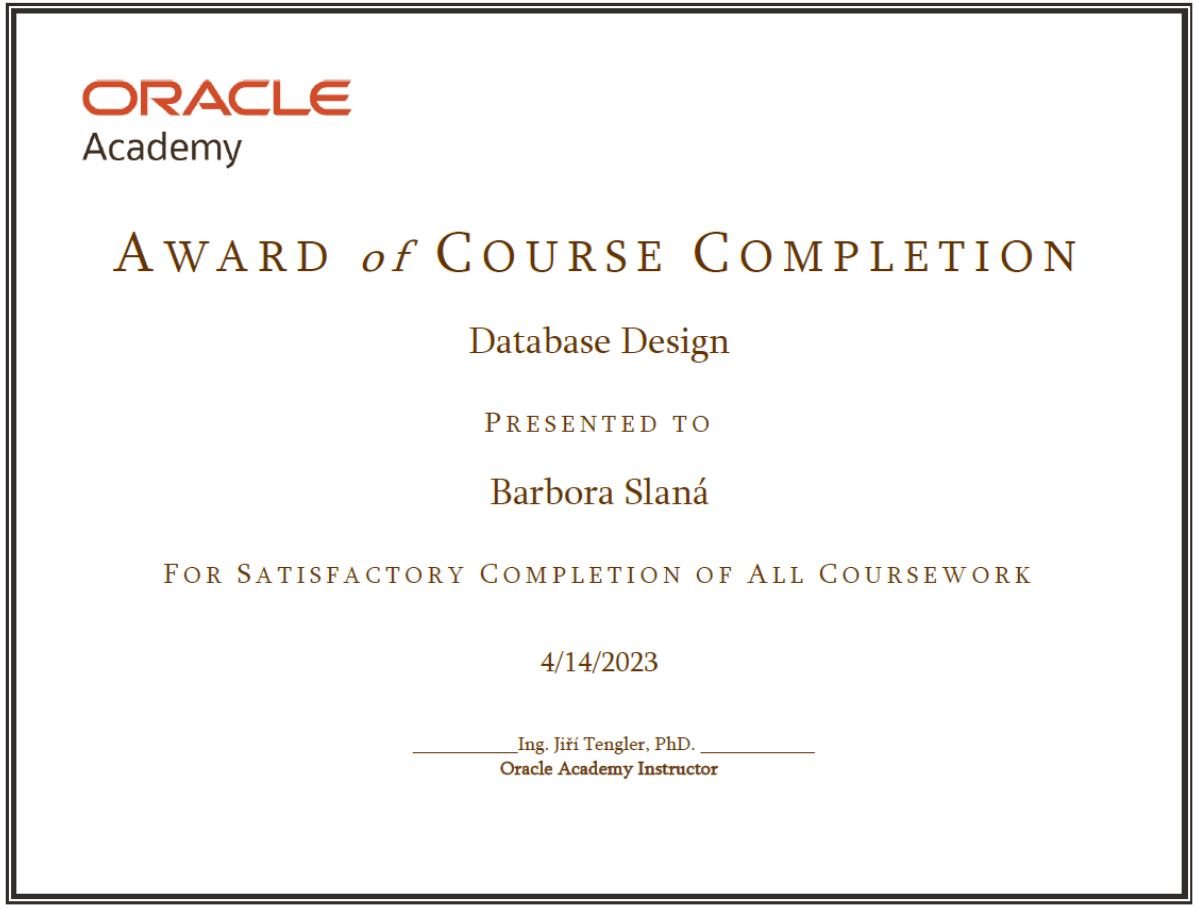
Mastery Score: 70.0 %

To return to your home page, close this window.

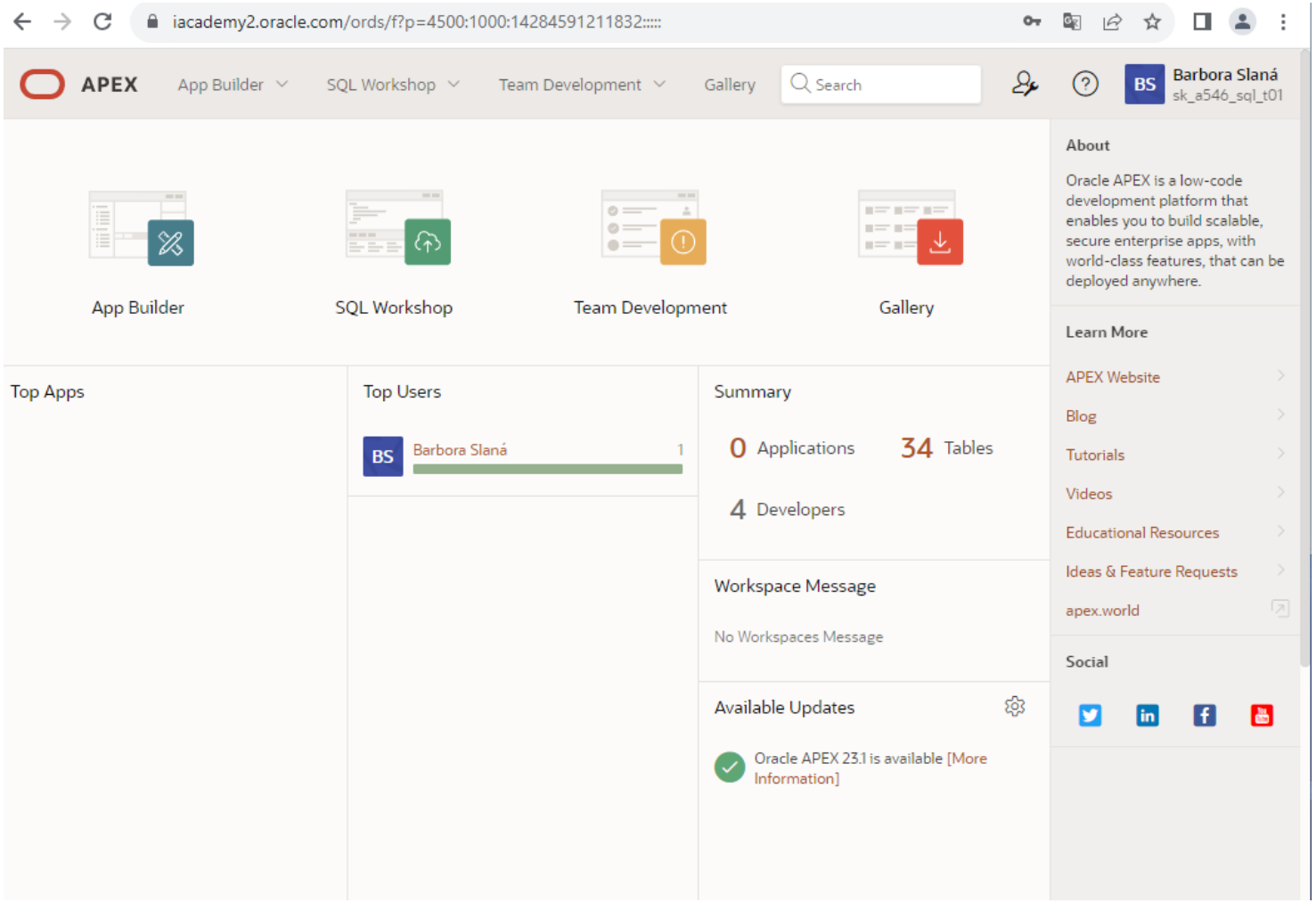
View Feedback

Sample channel on the subject of database design - Oracle LMS

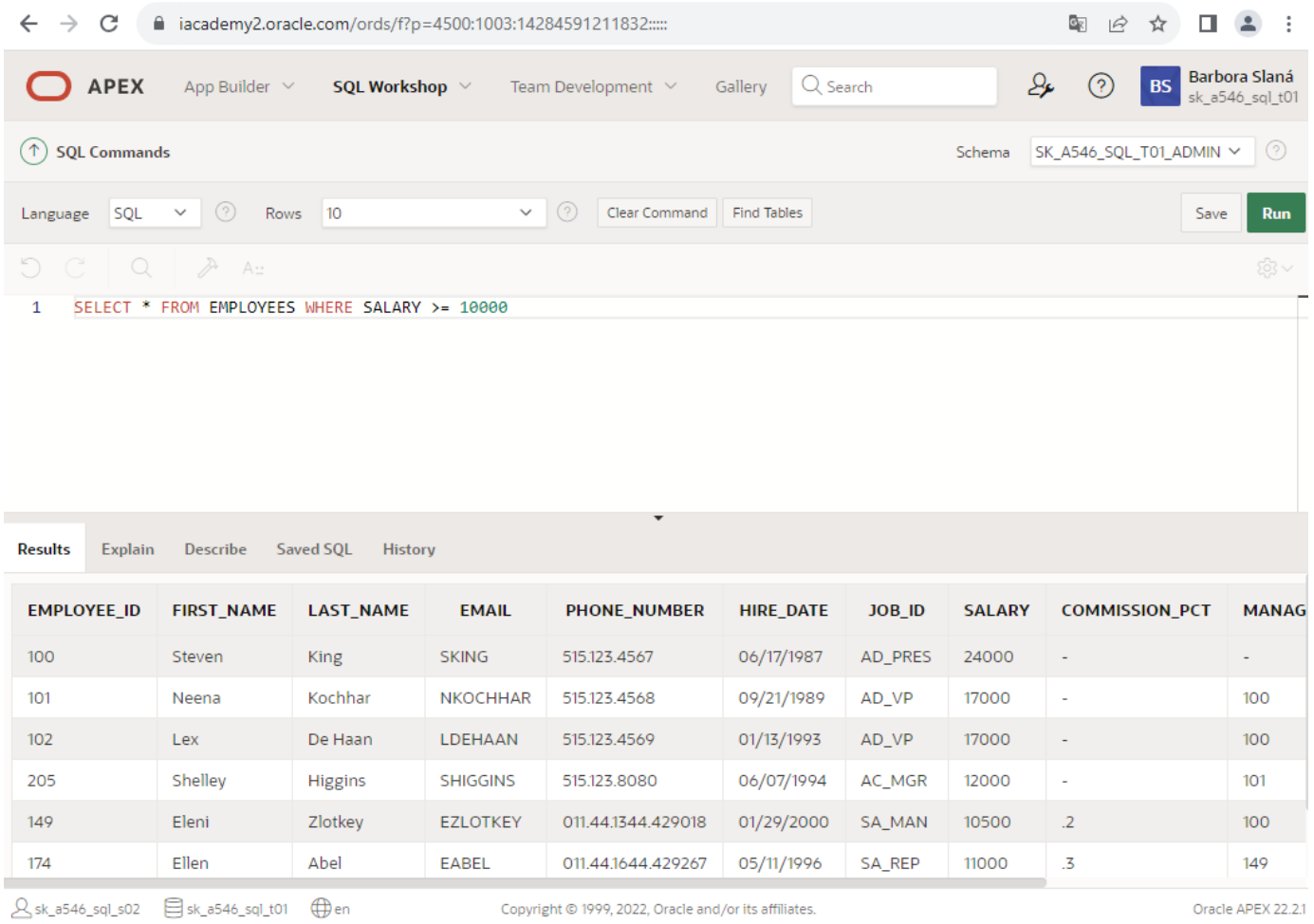




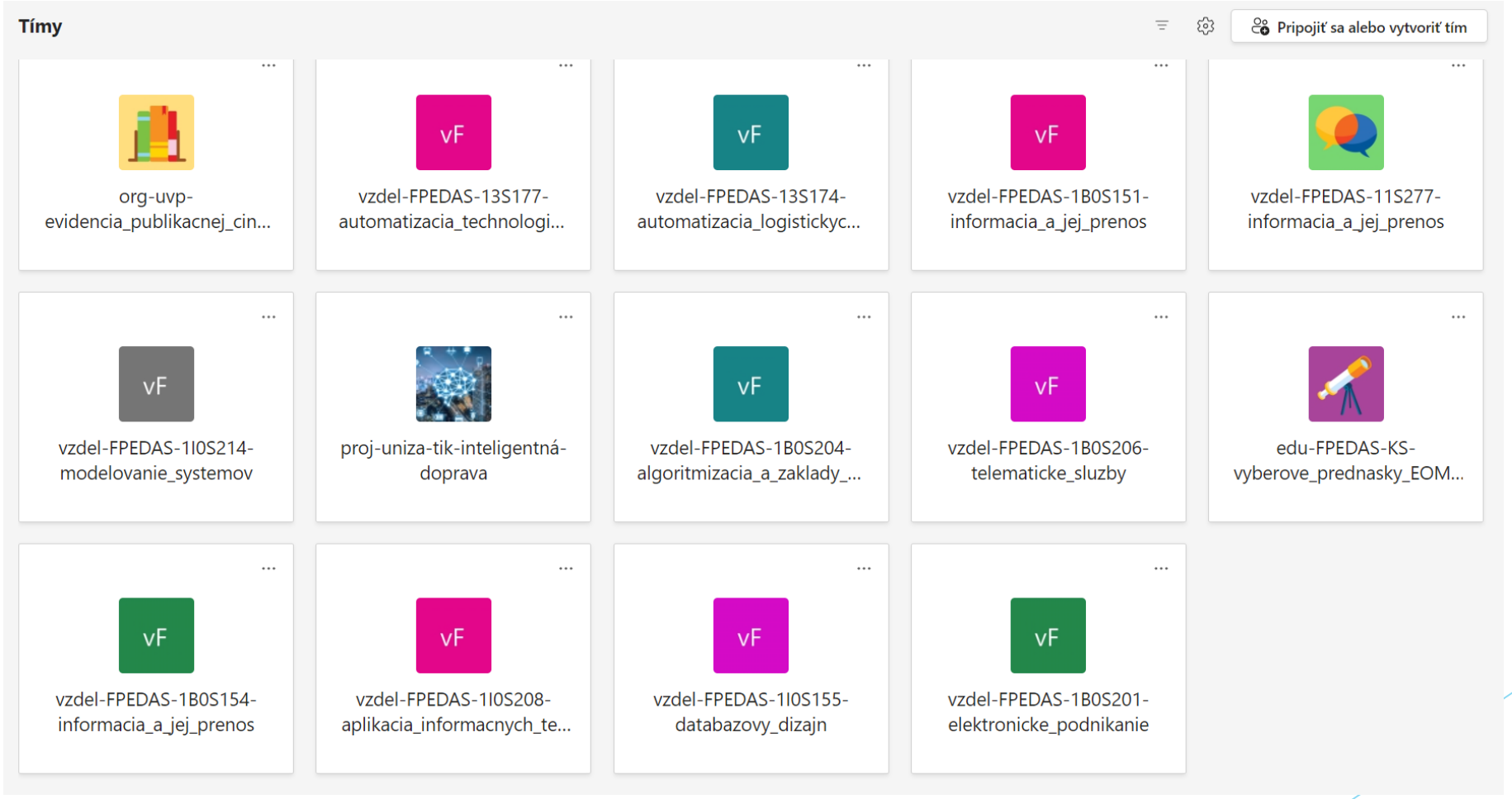
APEX – application express



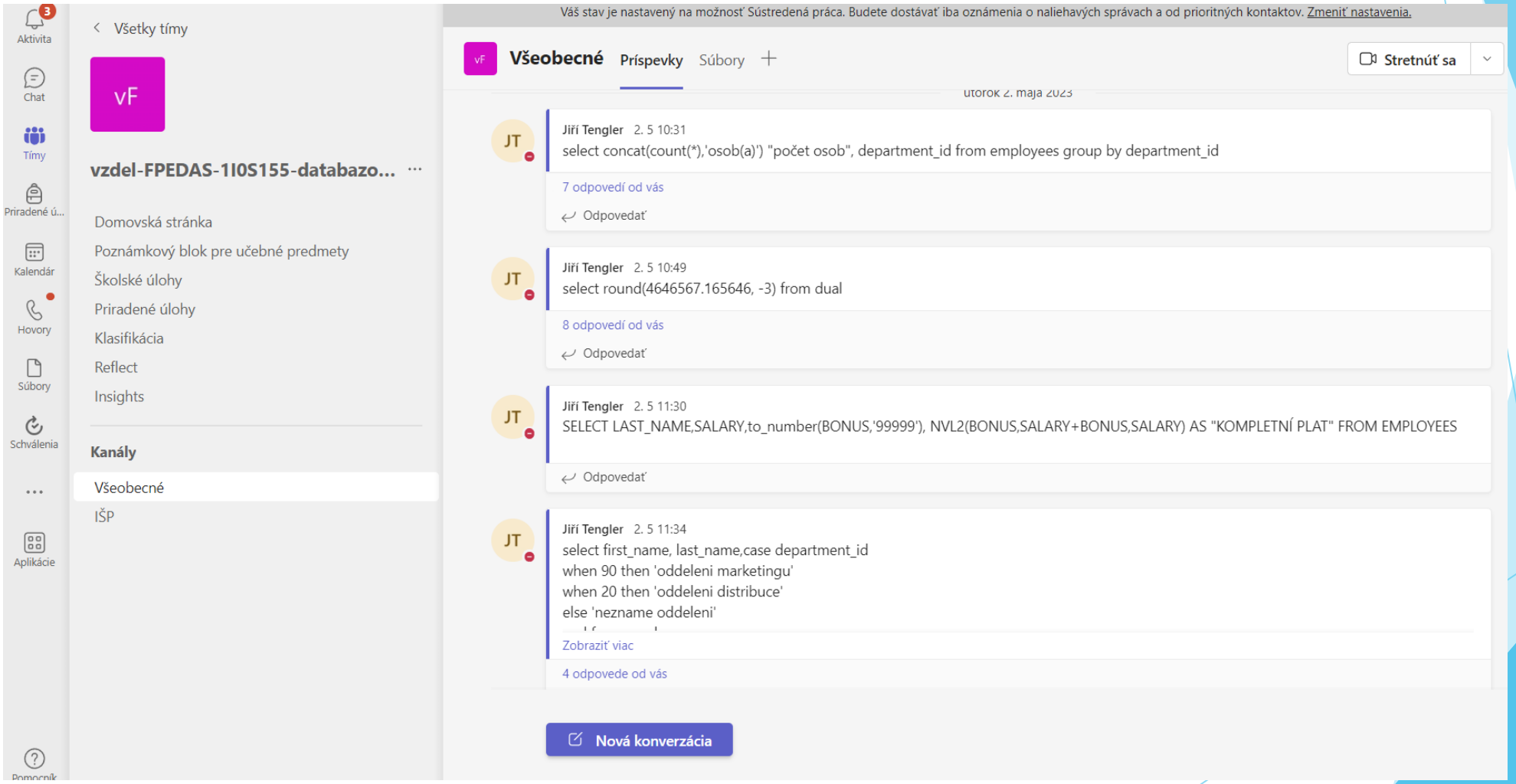
APEX – application express



MS TEAMS


Tímy
Pripojiť sa alebo vytvoriť tím
org-uvp-evidencia_publikacnej_cin...
vzdel-FPEDAS-13S177-automatizacia_technologi...
vzdel-FPEDAS-13S174-automatizacia_logistickyc...
vzdel-FPEDAS-1B0S151-informacia_a_jej_prenos
vzdel-FPEDAS-11S277-informacia_a_jej_prenos
vzdel-FPEDAS-1I0S214-modelovanie_systemov
proj-uniza-tik-inteligentná-doprava
vzdel-FPEDAS-1B0S204-algoritmizacia_a_zaklady_...
vzdel-FPEDAS-1B0S206-telematicke_sluzby
edu-FPEDAS-KS-vyberove_prednasky_EOM...
vzdel-FPEDAS-1B0S154-informacia_a_jej_prenos
vzdel-FPEDAS-1I0S208-aplikacia_informacnych_te...
vzdel-FPEDAS-1I0S155-databazovy_dizajn
vzdel-FPEDAS-1B0S201-elektronicke_podnikanie

MS TEAMS


Aktivita
Chat
Tímy
Priradené ú...
Kalendár
Hovory
Súbory
Schválenia
Aplikácie
Pomocník
Všetky tímy
vF
vzdel-FPEDAS-1I0S155-databazo...
Domovská stránka
Poznámkový blok pre učebné predmety
Školské úlohy
Priradené úlohy
Klasifikácia
Reflect
Insights
Kanály
Všeobecné
IŠP
Váš stav je nastavený na možnosť Sústredená práca. Budete dostávať iba oznámenia o naliehavých správach a od prioritných kontaktov. Zmeniť nastavenia.
Všeobecné
Príspevky
Súbory
Stretnúť sa
utorok 2. mája 2023
JT
Jiří Tengler 2. 5 10:31
select concat(count(*),'osob(a)') "počet osob", department_id from employees group by department_id
7 odpovedí od vás
Odpovedať
JT
Jiří Tengler 2. 5 10:49
select round(4646567.165646, -3) from dual
8 odpovedí od vás
Odpovedať
JT
Jiří Tengler 2. 5 11:30
SELECT LAST_NAME,SALARY,to_number(BONUS,'99999'), NVL2(BONUS,SALARY+BONUS,SALARY) AS "KOMPLETNÍ PLAT" FROM EMPLOYEES
Odpovedať
JT
Jiří Tengler 2. 5 11:34
select first_name, last_name,case department_id
when 90 then 'oddeleni marketingu'
when 20 then 'oddeleni distribuce'
else 'nezname oddeleni'
Zobraziť viac
4 odpovede od vás
Nová konverzácia

Visegrad Fund

DIGSTEM

THANK YOU FOR YOUR ATTENTION