

TRAINING WEEK

KU Leuven, campus De Nayer 27 - 31 March 2023

KA2 Work4Ce

**“Cross-domain competences
for healthy and safe work
in the 21st century.”**

AGENDA.

Chairs:

Dr ing Peter Arras, Prof h.c.

Prof. Dr. ir. Jan Ivens

Ir arch Dennie Jansen

Agenda

Sunday, 26 March 2023 :

- Arrival of training participants to Belgium and transfer to the accommodation (City Center Mechelen or Antwerp)

Venue for the meetings:

KU Leuven, campus De Nayer, J. De Nayerlaan 5, 2860 Sint Katelijne Waver

Monday 27 March 2023		
9.15 – 9.45	Registration of the consortium meeting participants coffee	Room F114
9.45 -10.15	Welcome to the participants by local Work4Ce- coordinator Dr ing Peter Arras, Prof h.c. An introduction to KU Leuven and the faculty of engineering technology. Agenda of the week	Room F114 Dr ing Peter Arras
10.15-12.00	Seminar 1: M02 Digital Technologies	Room F114 Dr Babak Abbasov, Dr. Elvin Mejidov, Dr. Alirzayev
12.00-12.45	Lunch	campus restaurant
12.45-14.15	Seminar 2: M06 Safe Workplaces.	Room F114 Isa Madurov
14.15-14.30	break	Room F114
14.30-15.30	Workgroups on course contents	Room F114
	Free evening	
Tuesday 28 March 2023		
9.15-10.30	Seminar 3: M07 Managing Digital Change: Managing digital transformation projects	Room K103 Prof Sergiy Bushuyev
10.30-11.45	Seminar 4: M07 Managing Digital Change	Room K103 Ilgar Rzayev

11.45-12.30	Lunch	campus restaurant
12.30-13.45	Seminar 5: M09 Developing Digital Business Ecosystems	Room K103 Kanan Hasanov
13.45-15.15	Seminar 6: “The importance of innovation and entrepreneurship for engineers”	Room K103 Prof Jan Ivens
	Free evening	
Wednesday 29 March 2023		
9.15-11.45	Seminar 7 : M08 Life Cycle Thinking and Sustainable Management	Room G120 Maider Iturrondobeitia
12.45-13.30	Lunch	campus restaurant, campus
13.30-15.30	Consortium meeting : New workplan Re-budgetting Partner reports (UA and AZ) on project status. (Partner presentation 5 slides : 1) the project team; 2) pilot teaching results (teachers, student pool, online/offline teaching); 3) co-production lab installment and usage; 4) teaching for companies; 5) dissemination&sustainability&accreditation.)	Room K104 Prof G. Tabushchyk Dr ing P. Arras Anna Badasian Ekatharina Hermann
15.30-16.00	Certification	Anatoly Sachenko
19.00	Social event: Consortium dinner	Restaurant De Krone Mechelsebaan 249 2570 Duffel
Thursday 30 March 2023		
9.15-10.45	Consortium meeting : Quality: learning and teaching materials External expert : assessment of teaching materials	Room G120 Dr ing Peter Arras Ing Dirk Van Merode, Msc Prof Galina Tabunshchyk
10.45-12.15	Seminar 8:	Room G120

	M03 Industry 4.0 Efficient communication in a BIM environment	Dennie Jansen
12.15-13.00	Lunch	campus restaurant, campus De Nayer
13.00-14.15	Seminar 9: M05 Work 4.0	Room K103 WUNU
14.15-15.45	Seminar 10: M04, Distributed teams	Room K103 Olena Verenysh
14.45-16.45	Campus tour at campus De Nayer	Peter Arras
	Free evening	
Friday 31 March 2023		
9.15-11.15	Seminar 11: M03: Industry 4.0. Elective course: Digital Twins	Room F114 Prof Tegoeh Tjahjowidodo
10.45-12.00	Seminar 12: M03: Industry 4.0. Elective course: Digital Twins, assignment	Room F114 Dr ing Peter Arras
12.00-12.30	Seminar 13: M01: Data Analytics for Work	Room F114 Prof Sergey Subbotin
12.30-13.15	Lunch	campus restaurant, campus De Nayer
13.15-15.00	Final discussion & goodbye Certificates of attendance	Room F114
17.00-19.00	Guided walk through Mechelen. Departure at train station of Mechelen Neckerspoel.	

Every seminar on a module is structured:

- Short introduction to the module

- Overview of the materials developed for the module with special attention for finalised digital media which is ready to use in the classroom.
- Sample lecture on a topic from the module with the use of the developed digital materials.
- Question and answer/discussion on the materials.

Abstracts:

Seminar 1, Monday : M02 Digital Technologies.

- By ASCCA, Dr Babak Abbasov, Dr. Elvin Alirzayev

Content:

Introduction to the module.

Digital Technologies module is designed to understand, communicate, and adapt to the era of digital transformation, through education and training on the Work 4.0 and Industry 4.0 DT.

The presentation will focus on all aspects of M02, also elaborating on the teaching and learning resources and methods.

Seminar 2, Monday: M06 Safe Workplaces.

- **By AzHUAC, Kanan Hasanov, Isa Madurov**

Participants of this module will consider traditional & modern occupational health and safety philosophies for effective control and health protection purposes, and evaluate risk management systems for specific workplace environments in the digital era.

Seminar 3: M07 Managing Digital Change

- **By KNUBA, Sergiy Bushuyev**

Managing digital transformation projects based on an integrated intellectual model requires the creation of tools for evaluating the performance of creating value. A conceptual model is proposed that evaluates the entrepreneurial energy and competence of the project team. Such estimates are normalized and reduced to a scale of 1-10. The developed structure of assessments of competence contains three groups - models of creative thinking, behavioural traits, attitudes and self-realization. The proposed model is based on the general structure of competencies of the P2M knowledge system. The research of the developed tools was carried out on one of the digital transformation projects by a group of ten experts. The analysis carried out confirmed the adequacy of the models and tools proposed by the authors.

Seminar 4 : M07 Managing Digital Change

- **By ASOUI, Ilgar Rzayev**

The importance of research in the field of Managing digital changes. Audit of vulnerabilities of Sustainable Information Systems in Smart Cities Projects.

The importance of research in the field of Managing digital changes and information security issues.

Seminar 5: M09 Developing Digital Business Ecosystems

- **By AzHUAC, Kanan Hasanov, Isa Madurov Kanan Hasanov, Isa Madurov, 45 min**

This module will enable you to understand how ecosystems are changing the fundamentals of the business world and introduces a common language, a way of thinking and a methodology to help you address the challenges and opportunities in this space.

Seminar 6: The importance of innovation and entrepreneurship for engineers”

- **By KU Leuven, Prof Jan Ivens,**

Seminar 7: M08 Life Cycle Thinking and Sustainable Management

- **By EHU: Mainer Iturronodbeitia**

The module starts with an introduction to the reasons for discussing sustainability. Climate change and materials scarcity are some of the problems already affecting the economy and well-being. The design phase of new products and processes is affected by material scarcity - current and foreseen - and should also consider the impact that those products will have on climate change. Furthermore, the design phase should not be considered the starting phase of a linear process, but as an entry point for a circular one. Cradle to Grave linear paradigm has already been converted to a circular Cradle to Cradle one. In March 2020 the European Union adopted the Circular Economy Action Plan; another institutional effort to create growth while reducing environmental impact.

Seminar 8: M03 Industry 4.0.

Elective course BIM: Efficient communication in a BIM environment

- **By KU Leuven, Dennie Jansen.**

Management of building construction related projects is still in need of improvement and efficiency. BIM (Building Information Management) offers a solution by creating a virtual twin of the project combined with a CDE (Common Data Environment). Although the use of a CDE is widely accepted, most of the well known commercial environments don't meet the needs of a BIM process flow. In this workshop you will work with a specific BIM related CDE (Autodesk Construction Cloud). Some specific problems related to organizing the information flows and how to communicate the info to the stakeholders is the objective of the workshop.

The Autodesk Construction Cloud is a protected environment. In order to get access to the CDE you need to create an account at Autodesk. A login + manual to the procedure will be provided by e-mail. Please use your university-mail address, since this is an educational license.

Seminar 9: M05 Work 4.0.

- **By WUNU, Pavlo Bykovyy**

Course Assessment Questionnaire for Pilot and Normal Teaching. Assessment Methodology. Question categories. Available Questions and Answers.

How to use the questionnaires, data analytics on it, link to the readymade questionnaires for students and staff.

Collected data so far.

- By WUNU, Mykhailo Dombrovskiy

During the seminar the module concept regarding work organisation and digital technological innovations impact on work-related outcomes will be presented to students to study. The discussion assignment as presented coexistence of humans and technology in the digitalised production environment from a human-cyber-physical systems (HCPS) perspective. Socio-technical approach opportunities towards work system digital innovation and human-technology integration projects has been choose the objective of the workshop.

Seminar 10: M04, Distributed teams

- By KNUBA, Olena Verenysh

During the seminar, the module's concept will be presented, with emphasis on the structure and developers' approach to material presentation. The digital learning resources are described and presented.

Seminar 11: M03 Industry 4.0

Elective course: Digital Twins

- By KU Leuven, Tegoeh Tjahjowidodo

Seminar 12: M03: Industry 4.0. Peter Arras

Elective course: Digital Twins, assignment

During the seminar the assignment as presented to students to study and elaborate a digital twin will be explained.

Result of the pilot run of this assignment is shown (virtual prototypes), with a discussion on time spent by students and lessons learned.

Seminar 13: M01 Data Analytics for Work

- By NUZP, Sergiy Subbotin.

OpenCop discussion:

As for the current situation for this module at the present moment we have:

- there is NO ANY EU Partner involved to out module;
- there is NO ANY materials developed and submitted by AZ Partners;
- the ONLY UA Partners have developed and submitted their materials.

All developed materials are in Confluence under the Module syllabus.

Participants list: (name as on the namebadge)

	Name	Partner	email	
1	Peter Arras	KU Leuven	Peter.arras@kuleuven.be	Mechanical Department
2	Dennie Jansen	KU Leuven	Dennie.jansen@kuleuven.be	Civil Construction
3	Jan Ivens	KU Leuven	Jan.ivals@kuleuven.be	Material Sciences
4	Kenneth Segers	KU Leuven	Kenneth.segers@kuleuven.be	Mechanical Department
5	Ekatherina Hermann	FH Dortmund	ekaterina.hermann@fh-dortmund.de	
6	Anna Badasian	FH Dortmund	anna.badasian@fh-dortmund.de	project management
7	Tegoeh Tjahjowidodo	KU Leuven	tegoeh.tjahjowidodo@kuleuven.be	Automation and control
8	Galyna Tabunshchik	Zaporizhzhia Polytechnic National University	galina.tabunshchik@gmail.com	Software Tools Department
9	Vadim Shalomiev	Zaporizhzhia Polytechnic National University	shalomeev@radiocom.net.ua	Vice-rector for scientific work and international activities
10	Olexiy Kuzkin	Zaporizhzhia Polytechnic National University	horz@ukr.net	Transportation and Logistics
11	Andrii Karpenko	Zaporizhzhia Polytechnic National University	karpenko.a.v2@gmail.com	Economy and Custom Department
12	Elvin Mejidov	ASCCA, Academy of the State Customs Committee of the Republic of Azerbaijan	elvin.mejidov@ascca.edu.az	International Cooperation
13	Babak Abbasov	ASCCA	babek.abbasov@ascca.edu.az	Head of Information technology and technical sciences department
14	Elvin Alirzayev	ASCCA	elvin.alirzayev@ascca.edu.az	Department of Customs and Management
15	Kanan Hasanov	AzUAC, Azerbaijan University of Architecture and Construction, Azerbaijan.	kananhasanovv@gmail.com	Department of Economic Theory and Marketing
16	Isa Madurov	AzUAC	samuradov@azmiu.edu.az	Department of PR and Marketing Center
17	Farhad Alyev	AzUAC	farhad.aliyev@azmiu.edu.az	International Relations Department
18	Yashar Haiyev	Asoiu, Azerbaijan	yasharhm@gmail.com	
19	Ilgar Rzayev	Asoiu, Azerbaijan	ilgar.rzayev@asoiu.edu.az	Faculty of Information Technologies and Control
20	Leyla Naghiyeva	Azerbaijan State Oil and Industry University P08	l.naghiyeva@asoiu.edu.az	International Projects Division
21	Maider Iturrondobeitia	EHU	maider.iturrondobeitia@ehu.eus	
22	Pello Jimbert	EHU	pello.jimbert@ehu.eus	
23	Sergiy Bushuyev	Kyiv National University of Construction and Architecture	SBushuyev@ukr.net	project management
24	Olena Verenysh	Kyiv National University of Construction and Architecture	verenysh@ukr.net	
25	Viktorii Shovkiska	Kyiv National University of Construction and Architecture	Vika.vs@ukr.net	project management
26	Anatoliy Sachenko	West Ukrainian National University	as@wunu.edu.ua	Administration
27	Pavlo Bykovyy	West Ukrainian National University	pb@wunu.edu.ua	
28	Grygorii Hladiy	West Ukrainian National University	hladiy@yahoo.com	
29	Mykhailo Dombrovskiy	West Ukrainian National	m.dombrovskiy@wunu.edu.ua	

		University		
30	Taras Lendyuk	West Ukrainian National University	tl@wunu.edu.ua	
31	Dirk Van Merode	External expert	Dirkvanmerode@hotmail.com	External expert

Practical matters:

Transfer to hotels and campus by train:

- Mechelen, Antwerp and Sint Katelijne Waver are easy to reach by train. There is a good railway connection between Brussels (airport) and Mechelen. Mechelen is a cross road for some of the most important rail tracks in Belgium.

Please check the timetables on <http://www.belgianrail.be/en/Default.aspx>.

- Cheapest tickets from Mechelen to Sint Katelijne Waver is with a “key card”, a 10-single ride cards sold in the train station. Info can be found on <http://www.belgianrail.be/en/travel-tickets/passes-cards/key-card.aspx>

HOTELS :

Recommended hotels in Mechelen: (train 2 or 1 stops = 6 min) (from Mechelen or Mechelen-Neckerspoel)

- Hotel: hotel 3 Peerdekens, hotel Elizabeth, NH hotel, Den Groten Wolsack

Hotels in Antwerp: (train 4-5 stops = 25 min)

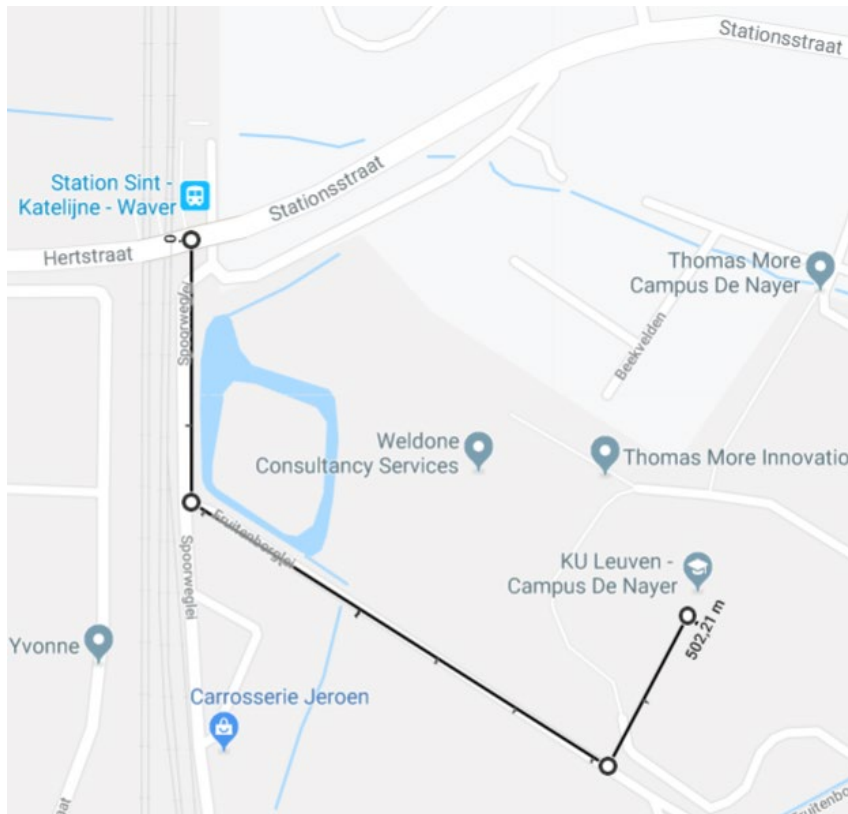
- IBIS Style Astrid Plein
- Hostel Yust www.yust.com/antwerp/ (train Antwerpen-Berchem)

VENUE:

KU Leuven, campus De Nayer, J. De Nayerlaan 5, 2860 Sint Katelijne Waver

Train :

- **Station “Sint-Katelijne-Waver”**
- **Map and address:**
 - o KU Leuven, campus De Nayer, J. De Nayerlaan 5, 2860 Sint Katelijne Waver



Contacts:

Faculty of engineering technology
Campus De Nayer Sint- Katelijne-Waver
KU Leuven | www.iw.kuleuven.be/denayer
J. P. De Nayerlaan 5
BE2860 Sint Katelijne Waver | Belgium
Tel. + 32 (0)15 31 69 44

Dr ing Peter Arras

International Relations Officer
Mob. + 32 (0)486 528 196
Email: peter.arras@kuleuven.be

Ir arch Dennie Jansen

Lecturer in civil construction.
Email: dennie.jansen@kuleuven.be
Mob. +32 471258178