

2.1.4 Module development M04 Distributed Teams

Module Specification:

Within the Erasmus+ KA2 Capacity Building Project (CBHE)

WORK4CE – Cross-domain competences for healthy and safe work in the 21st century

619034-EPP-1-2020-1-UA-EPPKA2-CBHE-JP

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Version 1.0, 19.05.2021

Actual version 1.1, 10.11.2021

Actual version 1.2, 04.01.2022

Actual version 1.3, 14.12.2023

1. Summary

Overall Learning Outcome: The students will become familiar with approaches for the creation and working in distributed teams; based on the managerial, technological, and psychological aspects. The students will receive both theoretical and practical. Teaching processes are designed for a digital educational environment (DEE). Lectures and practices will be conducted in situ similar to distributed work.

Target Group Analysis:

- Characteristics – The students in MSc programs in Computer Science, Project Management, and Organization administration.
- Previous competence and Prerequisites – none, however, basic knowledge in Intercultural Communication, Social Competence, Communication, Psychology is recommended.
- Needs (content, didactics, formats, time budget, ...) – 1 semester, 60 contact hours, online lectures, case-study, workshops, practices, and homework in online mode, the theory is based on the practice
- Competence Goals – organize work environment, ability to organize goal-oriented work in the digital area, and provide scientific research is concerning the work in the digital world
- Prospective Job Field – IT industry, Project management, Research, Business Administration, International Business, Entrepreneurial, Outsourcing, Finance

Competences & Learning Outcomes: The main competencies according to European Qualification Framework (EQF) Level 7 (Master):

Overall Learning Outcome:

- The student will learn what is a distributed team and how to organize effective work in it
- The students get knowledge on the key approaches for launch and performance, and how to prepare the team for disbanding
- The student will learn about the main influences factors for successful work: trust, hiring, regulation rules, motivation, control, and leadership

Selection of Content: The main topics of the module:

- *Introduction to a distributed team* (history of distributed teams, Distributed teams – pros and cons, Distributed Team's lifecycle model)
- *Preparation phase:* describes how to hire an effective distributed team.
- *Team development phase:* explains how to create an effective team.
- *Launch phase:* defines how to begin working with a distributed team.
- *Performance management phase:* illustrates the work performance management in a distributed team
- *Disbanding phase:* express the work is ended and how to support the team.

Activities and Teaching/Learning Methods:

- Distance learning materials
- Virtual lectures
- E-books and scientific articles
- Tests
- Case-study
- Individual Homework
- Presentation (reports)
- Workshop
- Teamwork

A mixture of all the above-mentioned methods is used to address all competencies.

The Activity Plan (see below in Section 3) during one semester includes theory classes and practical works (total 37 contact hours), homework, and self-study (90 hours).

The student will read the learning materials, attend lectures, work in a distributed team for preparing homework, create a presentation for a case study and take part in the virtual discussions.

Teaching Materials/Literature/Media/Technical Requirements/Lab Equipment:

- Communication software for collaboration work (for example, Microsoft Teams, Zoom)
- Communication technologies for online learning (for example, Big Blue Button)
- Software for presentation (Microsoft PowerPoint, Google Slides, CANVA)
- High-Speed Internet Connection
- Microphone, web camera, stream projector
- Hardware and software for the learning process (presentation materials, cooperation work, communication, JIRA)
- Learning Management System (Moodle)

Tailoring & Educational Tracks (Practical, Entrepreneurial, Scientific):

- Practical to practice work in a distributed team based on the scientific study
- Scientific to study the approaches and methods for creation and managing of a distributed team

Competence Assessment:

- Written Exam - 10%
- Workshops - 90%

Curricula Integration:

- Course characteristics: elective
- Course frequency: every year - summer/spring semester
- Course admittance prerequisites: none
- Skills trained in this course: theoretical, practical, and scientific skills and competences
- Course targets: Master's curricula in Informational Technology, Computer Science, Project management, Business Administration, Software Development, Digital Transformation, International Business

Quality Evaluation: The module evaluation is based on:

- Pilot teaching in the frame of the project;
- OpenCops' evaluation;
- Feedback from Users;
- Feedback in the frame of the Train-the-trainer learning implementation;
- On the base of the module implementation in the learning process;

Table of Content

1. [Summary](#)
2. [Introduction to the module](#)
3. [Module Description](#)
 - [3.1 Overall Learning Outcomes](#)
 - [3.2 Target Group Analysis](#)
 - [3.3 Competences & Learning Outcomes](#)
 - [3.4 Content](#)
 - [3.5 Teaching & Learning Activity Plan](#)
 - [3.6 Teaching & Learning Resources](#)
 - [3.7 Tailoring & Educational Tracks](#)
 - [3.8 Assessment Methods](#)
 - [3.9 Curricula Integration](#)
 - [3.10 Quality Assurance - Evaluation](#)
 - [3.10.1 Blablaba](#)
4. [Syllabus/Module Handbook](#)
5. [References](#)

2. Introduction to the module

The informational technologies' growth and development are the basis of the new world's appearance around us. We live in a virtual digital world. The new technologies provide us with opportunities of receiving new products and services that were not available in the physical world. We started a non-stop journey in the virtual world.

This world opens new opportunities and creates new challenges. If our competencies are suitable, we can work in any place even without having an "official office". We might be at any location in the world and at the same time working. This feature of the virtual environment breaks many borders around us, e.g. borders between countries or learning in specific universities in one country. However, it needs new competencies, and one of them is how to work in a new work environment which is called the digital environment.

- How to work in it?
- How to find responsible and goal-oriented people?
- How to create a trust and comfortable working atmosphere during performing work?

- How to organize work with a team which members are from the opposite sides of the Earth?
- Do you work with people who have different working approaches based on cultural diversity?
- How to avoid appearing conflicts, and manage the team for constructive work organization?
- How to hire a competent employee who can be listening to other people and be in the process of decision creation?
- How to present ourselves in the digital environment?

Those are only a little bit of part of questions and problems that come to mind when people start to work in the digital environment. Do you know the answers to these questions? If you know, you should be in our teachers' team, but if you don't know you can be our The student, and we will try to open doors in this world to make you feel more comfortable and calm.

Our module was created for all people who want to know how to organize, manage and work in the online environment, be able to create suitable results, and receive a fruitful working team.

The module content concerns the organizational, psychological, social, cultural, and management aspects of working in the digital world. As well, we touch on the technical aspects of using popular software for communication. If you don't know how to manage the working area for involving all your employees in the working processes, we will present some useful techniques. And of course, the module touches the communication in the aspects of constructive communication and argumentation.

3. Module Description

3.1 Overall Learning Outcomes

- Technical Competence: know and use software for the organization of the communication and work processes in online environmental
- Professional Competence: manage the distributed team from the organization (hiring) to disbanding, motivation aspects, control and communication approaches, conflict avoiding, and leadership using
- Global Competence: use cultural diversity, social awareness, involvedness, pay attention to language differences

3.2 Target Group Analysis

The students:

Needs:

- to gain knowledge, competence, and skills of management and collaboration work with workmates (team members) in on-line environmental based on the state-of-the-art informational-communication technologies in the digitalization era for set goals and successful projects implementation

Prerequisites and previous competencies:

- The students should have technological knowledge on technology (general), basic knowledge on office applications, and main principles of business communicative, Intercultural Communication, Social Competence, Psychology (are recommended)

Prospective Job Field:

- IT industry, Project management, Research, Business Administration, International Business, Outsourcing, Finance

3.3 Competences & Learning Outcomes

	Knowledge	Skills	Competence
	In the context of EQF, knowledge is described as theoretical and/or factual	In the context of EQF, skills are described as cognitive (involving the use of logical, intuitive, and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools, and instruments)	In the context of EQF, competence is described in terms of responsibility and autonomy
Level 7 The learning outcomes relevant to Level 7 are	<ul style="list-style-type: none"> - highly specialized knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research - critical awareness of knowledge issues in a field and at the interface between different fields 	<ul style="list-style-type: none"> - specialised problem- solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields 	<ul style="list-style-type: none"> - manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches - take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams

Distributed teams (Core course, obligatory)

Knowledge

- The student will know the basic characteristics of a distributed team and it differs from offline teams
- The student will know distributed team life-cycle
- The student will know the organization and work in/with a distributed team
- The student will know how to define manage tasks and processes for distributed team members

Skills

- The student will be able to organize a distributed team and create the effective work environmental
- The student will be able to choose appropriate software for a working environment

General competence

- The student will be able to integrate knowledge and skills for an organization working environmental for a distributed team

Elective course I. Hiring (Managerial course: elective)

Knowledge

- The student will know the special aspects of hiring for distributed teams and what specialists should be added to the interview team

Skills

- The student will be able to prepare the interview for evaluation of the soft skills and technical skills
- The student will be able to provide the interview

General competence

- The student will be able to find employees and choose appropriate for the team based on the soft and technical skills

Elective course II. Using software for virtual communication (Technical course: elective)

Knowledge

- The student will know what special software is for distributed teams used
- The student will know the main pros and cons of the various software for distributed work

Skills

- The student will be able to work in different software for distributed work

General competence

- The student will be able to choose appropriate software based on tasks of the distributed team

Elective course III. Psychological type (Managerial course: elective)

Knowledge

- The student will know what the psychological types are and how they influence the work

Skills

- The student will be able to work with different psychological types
- The student will be able to match distributed team members based on the people's trait of character

General competence

- The student will be able to organize effective and constructive communication in the distributed team based on the team members personalities

Elective course IV. Cultural diversity (Managerial course: elective)

Knowledge

- The student will know how cultural diversity influences the work

Skills

- The student will be able to work in cultural diversity and use intercultural communication

General competence

- The student will be able to organize fruitful work in the intercultural environment

Elective course V. Time management (Managerial course: elective)

Knowledge

- The student will know about what time management is and how it influences distributed work

Skills

- The student will be able to use the special techniques and approaches for time management

General competence

- The student will be able to organize personal fruitful work in a distributed team based on the tasks and deadlines

Elective course VI. Motivation aspects (Managerial course: elective)

Knowledge

- The student will know what motivation is, what types of motivation are
- The student will be know how motivation influences the personal productivity

Skills

- The student will be able to use approaches for increasing the motivation

General competence

- The student will be able to motivate employees and create the motivation system in the frame of the team

Elective course VII. Personal productivity (Managerial course: elective)

Knowledge

- The student will know about burnout and understand what the productivity time is

Skills

- The student will be able to organize the productivity in and out of a team and organize him/her working space in distributed teams

General competence

- The student will be able to 'be in the resource'

Elective course VIII. Constructive communication (Managerial course: elective)

Knowledge

- The student will know about what constructive communication is, principles of constructive communication, and the algorithm of the constructive confrontation

Skills

- The student will be able to apply the algorithm of constructive communication for solving problems in the work

General competence

- The student will be able to understand problems, that are appeared in the team, and find their solution based on the business communication

Elective course IX. Facilitation (Managerial course: elective)

Knowledge

- Student will know about facilitation and how to use it the distributed team

Skills

- Student will be able to use the principles and approaches of facilitation

General competence

- Student will be able to manage team cooperation using methods and approaches of facilitation

3.4 Content

Main teaching idea — learning on the base of practice: a small practical example before learning material, the example discussion with The students, learning material supports the example, case-study/homework/practice

*In any case in the future (after the quarantine will be finished) - the learning process has to be **in online mode***

It is planned that the theoretical material and practice (homework/case study) will be presented in the module handbook for The students and lecturers.

Core courses (3 ECTS)

0. Pre-testing for self-evaluation of knowledge

Test, online, before learning start

I. Introduction

1. Definition and context.
2. History of distributed teams.
3. Distributed teams – pros and cons.
4. Distributed Team's lifecycle model.

II. Preparation

1. Hiring (base aspects).
2. Trust.
3. Using software for virtual communication (only Jira and Zoom, according to the survey's results)(Workshop)

III. Team development

1. The team creation models
2. Distributed Team training
3. Reward system

IV. Launch

1. Kick-off organization
2. Distributed jobs between the team members
3. Organizational management (main aspects)
4. Regulation of the communication (main aspects)
5. Topic presentation (Workshop)

V. Performance

1. Leadership
2. Control management
3. Motivation aspects (some important approaches)
4. Conflicts in the distributed team
5. Key success factors of the Distributed Team vs Major challenges
6. Discussion (Workshop)

VI. Disbanding

1. Recognition of achievements
2. Re-integration of team members

VII. Post-testing for self-evaluation of knowledge (Contact hours - 2, Self-study - 2 hours, Total - 4 hours)

Test+ discussion results on the basis of the pre-test and post-test

Elective courses: Techniques, methods, and approaches for distributed team management

Elective course I. Hiring (1 ECTS)

- special aspects of hiring for distributed teams
- how to prepare for the interview (how to assess the soft skills and technical skills)
- how to provide the interview

Elective course II. Using software for virtual communication (2 ECTS)

- other software for the communication - pros and cons with practice

Elective course III. Psychological type (2 ECTS)

- how psychological types of the team members influence the work
- what the psychological types are
- how to work with different psychological types

Elective course IV. Cultural diversity (2 ECTS)

- how the cultural diversity influences the work
- how to work in a team with cultural diversity
- how to organize team members to understand and communicate in the cultural diverse environmental

Elective course V. Time management (2 ECTS)

- what time management is
- how the time management influence the work in the distributed teams
- the techniques and approaches for time management

Elective course VI. Motivation aspects (1 ECTS)

- what the motivation is in distributed teams
- how the motivation influence the personal productivity
- approaches for increasing the motivation

Elective course VII. Personal productivity (1 ECTS)

- how to understand itself
- how to organize your working space in distributed teams
- understanding the productivity time
- how to organize the productivity in and out a team
- how to 'be in the resource'

Elective course VIII. Constructive communication (2 ECTS)

- what the constructive communication is
- principles of the constructive communication
- algorithm of the constructive confrontation

Elective course XI. Facilitation (2 ECTS)

- what facilitation is
- the principles and approaches of facilitation
- how to use facilitation in distributed teams

3.5 Teaching & Learning Activity Plan

A) Select Teaching/learning methods per competence

- Theoretical knowledge - distance learning materials, self-study, virtual lectures, discussions, tests
- Practical skills - training, case-study, teamwork, presentations
- Scientific work - workshop, homework, essay

B) Define didactic concept: e.g. choose from:

- Distance learning materials
- Virtual lectures
- E-books and scientific articles
- Case-studies
- Homework
- Problem-based
- Presentation (reports)
- Workshop
- Challenge-based

C) Define an Activity Plan, e.g. semester schedule

The core courses start at the beginning of the semester.

The electives can run parallel, and depending on the availability of labs, some electives can be concentrated in a block week.

Core courses (Contact hours - 37, Self-study - 53 hours, Total - 90 hours):

Activity 1. Pre-test (2 h)

Using the suggested test, The students assess their competencies (behavioral traits of character) for the future job (a project manager, freelancer, or workmate in the distributed team). The students will be divided into teams based on the test's results.

Activity 2: Theory classes of a distributed team base and the main aspects for a distributed team organization/management/control/disbanding **(58 h)**

The theory classes are complemented with virtual lectures and reading materials prepared by lecturers (distance learning materials, online tutorials, handbook, scientific articles)

Activity 3. Workshop "Software tools for organization work in distributed teams" on the base of the Homework (Team presentation) "Pros and cons of software tools for organization work in distributed teams" **(10 h)**

The students break up into teams, organize teamwork in one of the software tools and create a presentation with an assessment of the work in it

Activity 4. Workshop «Kick-off meeting» (8 h)

Each team group provides the kick-off meeting before a project starts based on the Topic knowledge. It presents what The students' knowledge and practice their skills. A Lecturer takes part and catch all pros and cons, and then discusses.

The students can choose a topic for the project themselves or topics can be suggested by a lecturer (project topics may differ for each university)

Activity 5. Discussion «Key success factors of the Distributed Team vs Major challenge» (8 h)

Each team presents how they used the topic's knowledge during project implementation

Activity 6. Post-test (4 h)

Using the suggested test, The students assess their competencies change under the module knowledge influence.

Elective courses

Elective course I. Hiring (1 ECTS) (Contact hours - 8, Self-study - 22 hours, Total - 30 hours)

- **Activity 1:** Theory classes (20 h)
 - The theory classes are complemented with distance learning materials (knowledge clips, reading materials).
 - Homework: reading selected papers.
- **Activity 2: Workshop** 'Hiring team members' (10 h)

The students divide into teams. Each team prepares a proposal to find a future employee to work in a distributed team: a list of questions will be prepared that will be asked to the candidate for a more in-depth study of whether he is suitable for work in a distributed team. The results will be presented in the workshop and discussed with all The students.

Elective course II. Using software for virtual communication (2 ECTS)

- **Activity 1:** Theory classes (30 h)
 - The theory classes are complemented with distance learning materials (knowledge clips, reading materials).
 - Homework: reading selected papers.
- **Activity 2: Workshop** 'Pros and cons different software' (30 h)

The students break up into teams, using software and organize teamwork in one of the software tools and create a presentation with an assessment of the work in it

Elective course III. Psychological type (2 ECTS)

- **Activity 1:** Theory classes (40 h)
 - The theory classes are complemented with distance learning materials (knowledge clips, reading materials).
 - Homework: reading selected papers.
- **Activity 2: Case-study** 'Discussion practical situation' (20 h)

Some case-studies situations are prepared, and The students should describe them from the psychological type's point of view

Elective course IV. Cultural diversity (2 ECTS)

- **Activity 1:** Theory classes (40 h)

- The theory classes are complemented with distance learning materials (knowledge clips, reading materials).
- Homework: reading selected papers.

- **Activity 2: Workshop** (team presentation about cultural diversity — pros and cons) (20 h)

The students prepare information about cultural diversity based on themselves (for international groups) or articles/papers/open sources (for The students from the same culture)

Elective course V. Time management (2 ECTS)

- **Activity 1:** Theory classes (40 h)
 - The theory classes are complemented with distance learning materials (knowledge clips, reading materials).
 - Homework: reading selected papers.
- **Activity 2: Workshop** (Personal presentation of the use of some time management techniques) (20 h)

The students should use some time management techniques in their life and present the results in the class. A small discussion about the pros and cons techniques and the field of the implementation.

Elective course VI. Motivation aspects (1 ECTS)

- **Activity 1:** Theory classes (10 h)
 - The theory classes are complemented with distance learning materials (knowledge clips, reading materials).
 - Homework: reading selected papers.
- **Activity 2: Workshop** (How to motivate employees) (20 h)

Based on the theoretical classes The students should create the motivation system for employees. The results will be presented in the workshop and discussed with a lecture and other Students.

Elective course VII. Personal productivity (1 ECTS)

- **Activity 1:** Theory classes (15 h)
 - The theory classes are complemented with distance learning materials (knowledge clips, reading materials).
 - Homework: reading selected papers.
- **Activity 2: Discussion** (My personal productivity: what I know about me) (15 h)

Discussion with The students about personal productivity, what from the theoretical classes were new, what can be used, their opinion, etc.

An alternative offer is the course "Personal Productivity, Time Management and Prioritization" from Coursera (<https://www.coursera.org/learn/personal-productivity-time-management-and-prioritization>).

Elective course VIII. Constructive communication (2 ECTS)

- **Activity 1:** Theory classes (20 h)
 - The theory classes are complemented with distance learning materials (knowledge clips, reading materials).
 - Homework: reading selected papers.
- **Activity 2: Workshop** 'Constructive communication and argumentation' (40 h)

A lecturer prepares the non-constructive communication practical situation. The students should describe what a problem is and what approaches should be used for solution non-constructive communication.

- **Alternative for Activity 2. Discussion club** (40 h)

A lecturer prepares a problem topic for discussion. The students divide into two teams. The first team should prepare argumentation for support /disproof of the topic. Another team should assess the argumentation and decision making about with arguments agreement or rejection.

Elective course IX. Facilitation (2 ECTS)

- **Activity 1:** Theory classes (20 h)
 - The theory classes are complemented with distance learning materials (knowledge clips, reading materials).
 - Homework: reading selected papers.
- **Activity 2: Workshops** 'How to be a facilitator of the meetings' (40 h)

3.6 Teaching & Learning Resources

- Communication software for collaboration work (for example, Microsoft Teams, Zoom)

- Communication technologies for online learning (for example, Big Blue Button)
- Software for presentation (Microsoft PowerPoint), Google Slides, CANVA
- High-Speed Internet Connection
- Microphone, web camera, stream projector
- Hardware and software for the learning process (presentation materials, cooperation work, communication, JIRA)
- Learning Management System (Moodle)

3.7 Tailoring & Educational Tracks

Educational Tracks:

- students: take the core course and 1-2 electives (it depends on the educational approach at the university)

3.8 Assessment Methods

Assessment, Self-Assessment, Peer-Assessment

FORM	%	REMARK
Exam	20	Based on theory classes
Team presentation 1 for software using (activity 3)	20	
Teamwork 1 for project kick-off simulation (activity 4)	30	Project kick-off presentation
Team presentation 2 for performance management (activity 5)	30	Project implementation

3.9 Curricula Integration

The module can be integrated into the Master's programs as an elective module (core course) (for example, the Project Management Curricula, Informational Technologies Curricula, Digital Transformation curricula, etc.). Moreover, the elective courses can be integrated into other curricula as additional topics or as curricula extensions.

The module will be imparted by professors from any partner's university using the handbook and after the train-the-trainers module teaching in the frame of the project.

KNUCA has implemented the module in the Master's curricula "Computer Science. Project Management" (as an elective course, 4 ECTS, Ukrainian) in the second semester for The student s who took the Master's curricula "Computer Science. Project Management" from 2020-2021 academic year.

According to the project results and based on the university's requirements for the elective courses, the Master's curricula "Computer Science. Project Management" was updated. The course "Distributed teams" is implemented into the curricula as an elective course, 6 ECTS, English, starting from the 2020-2021 academic year.

3.10 Quality Assurance - Evaluation

The module evaluation is based on:

- Pilot teaching in the frame of the project;
- OpenCops' evaluation;
- Feedback from students;
- Feedback in the frame of the Train-the-trainer learning implementation;
- State-of-the-art research articles
- Survey for professionals

3.10.1 Pilot teaching in the frame of the project

The pilot teaching is planned in the frame of the project. Developed the module's parts (topics, case studies, practices) are used in a pilot teaching, evaluated, and then – based on the experiences and feedback during delivery – it is adapted or even changed in defined parts. Pilot teaching allows evaluating some topics or issues because conducting "full" learning is not planned during the pilot teaching.

Frequency: It is defined by the project description.

3.10.2 OpenCops' evaluation

In the frame of the project, the Quality Plan will be created. This plan aims at the creation criteria for quality evaluation of all project deliverables. Additional performance indicators for the module development and surveys amongst project participants will add further information.

Frequency: during the project implementation

3.10.3 Feedback from students

This quality assurance can be divided into two points:

1. feedback in the frame of the pilot teaching. Each pilot teaching session will include the evaluation survey that will be mandatory for all The students. The survey will evaluate different aspects: the learning process, organization, learning materials, practices, and case studies. All data from the survey will be collected and processed. The result will indicate problems (mistakes, possibilities ...) for changing, improving, and adaptations. *Frequency: during the project implementation, it is defined by the project description.*
2. feedback in the frame of the university's learning. A survey will be created for receiving the complex evaluation of all aspects of the module during the learning process. KNUCA has the possibility of receiving this evaluation from the full-time The students and from the part-time The students whose requirements for the knowledge, skills, and competencies are higher because their solution about entering the university is based on a clear understanding of what they need to know and for what professional goals. *Frequency: for each learning group.*

3.10.4 Feedback in the frame of the Train-the-trainer learning implementation

The module train-the-trainer is planned in the project. The module aims to prepare lecturers from the OpenCops community to use each module learning material during the learning process in their universities. Presentation of the learning materials and learning approach is a chance to receive the lecturers' feedback. Moreover, it is planned to create the module handbook where the teaching approach and the case studies, practices, and discussions will be described from the lecturers' point of view.

Frequency: it is defined by the module "Train-the-Trainer" learning schedule according to the project description.

3.10.5 State-of-the-art research articles

The learning materials will be improved using state-of-the-art studies that reflect the module's topics concerning. Sources of the studies' results are the professional magazines, conferences' proceedings, the results that are published in famous newspapers.

Frequency: during the module creation and pilot teaching, and also all-time while the module will be included in the curriculum.

3.10.6 Survey for professionals

A survey for professionals will be created. It can be used as a support or correction of the module content before the learning materials creation. It will be in a google-form. The LinkedIn network will be used for dissemination. The survey is two-staged. The first stage with about 10 questions about problems during working in a distributed team. The second stage will be based on the results of the first stage. Three or four main problems will be chosen, and then they will be used in a short survey with a line of smile reaction for their evaluation.

Frequency: one-time after the module specification creation and before the module learning materials creation.

4. Syllabus/Module Handbook

Entry for the Syllabus/Module Handbook

Managing Digital Change (MOD-E0x)					
Module Owner	Workload	Credits	Semester	Frequency	Duration
P05	90 h - 240 h, Foreseen 25-30hours/credit	3 core ECTS from min 1*1 ECTS electives till max 2*2 ECTS electives	2	summer/spring semester	1 Semester
1	Course Title Distributed Teams	Contact hours min 2 weeks, 15 hours per week max 5 weeks, 15 hours per week	Self-Study min 53 h max 141 h	Planned Group Size 15-25 students	
2	Course Description The digital transformation is to a relevant extent a change process with a huge impact on organizations, processes, business models, the socio-economic environment, and finally the affected hum beings. Managing digital change means doing change management in a very specific context by implementing change projects. The module intends to give The students a scientific insight into the relevant underlying mechanisms of the digital change process.				
3	Core Course Structure 0.Pre-testing				

I. Introduction

1. Definition and context.
2. History of distributed teams.
3. Distributed teams – pros and cons.
4. Distributed Team's lifecycle model.

LIFECYCLE

II. Preparation

1. Hiring (base aspects).
2. Trust.
3. Using software for virtual communication (only Jira and Zoom, according to the survey's results)(Workshop)

III. Team development

1. The team creation models
2. Distributed Team training
3. Reward system

IV. Launch

1. Kick-off organization
2. Distributed jobs between the team members
3. Organizational management (main aspects)
4. Regulation of the communication (main aspects)
5. Topic presentation (Workshop)

V. Performance

1. Leadership
2. Control management
3. Motivation aspects (some important approaches)
4. Conflicts in the distributed team
5. Key success factors of the Distributed Team vs Major challenges
6. Discussion (Workshop)

VI. Disbanding

1. Recognition of achievements
2. Re-integration of team members

VII. Post-testing for self-evaluation of knowledge

Elective courses:

Elective course I. Hiring (1 ECTS)

- special aspects of hiring for distributed teams
- how to prepare for the interview (how to assess the soft skills and technical skills)
- how to provide the interview

Elective course II. Using software for virtual communication (2 ECTS)

- other software for the communication - pros and cons with practice

Elective course III. Psychological type (2 ECTS)

- how psychological types of the team members influence the work
- what the psychological types are
- how to work with different psychological types

Elective course IV. Cultural diversity (2 ECTS)

- how the cultural diversity influences the work
- how to work in a team with cultural diversity
- how to organize team members to understand and communicate in the cultural diverse environmental

Elective course V. Time management (2 ECTS)

- what time management is
- how the time management influence the work in the distributed teams
- the techniques and approaches for time management

Elective course VI. Motivation aspects (1 ECTS)

- what the motivation is in distributed teams
- how the motivation influence the personal productivity
- approaches for increasing the motivation

Elective course VII. Personal productivity (1 ECTS)

- how to understand itself
- how to organize your working space in distributed teams
- understanding the productivity time
- how to organize the productivity in and out a team
- how to be in resource

Elective course VIII. Constructive communication (2 ECTS)

- what the constructive communication is
- principles of the constructive communication
- algorithm of the constructive confrontation

Elective course IX. Facilitation (2 ECTS)

- what facilitation is
- the principles and approaches of facilitation
- how to use facilitation in distributed teams

4 Application Focus

The students will make all tasks and a case study in distributed teams. The students will be guided through received knowledge implementation during the module's learning process, where they create and manage their groups for the module's tasks solutions.

5 Scientific Focus

Literature review and analysis. Deductive own research based on the literature. Scientific reflection and discussion in the teams. Presentation of their research results in the frame of the international conferences (for example, International Conferences in Bilbao (in February), in Kyiv (in May), and in Dortmund (in June)).

6 Parameters

- ECTS: 3-7
- Hours of study in total: 90 - 210
- Weekly hours per semester: 2-5
 - Contact hours: 37 - 77
 - Self-Study hours: 53 - 141
- Course characteristics: elective
- Course Frequency: every year - summer/spring semester
- Maximal capacity: 25 students
- Course admittance prerequisites: none
- Skills trained in this course: theoretical, practical, and scientific skills and competences
- Assessment of the course: Test - 20%, Workshops - 80%
- Teaching staff: teachers from Open Community of Practice

7 Learning outcomes

Distributed teams (Core course, obligatory)

Knowledge

- The student will know the basic characteristics of a distributed team and it differs from offline teams
- The student will know distributed team life-cycle
- The student will receive knowledge of the organization and working in/with a distributed team
- The student will receive knowledge of how to define manage tasks and processes for distributed team members

Skills

- The student will be able to organize a distributed team and create the effective work environmental
- The student will be able to choose appropriate software for a working environment

General competence

- The student is able to integrate knowledge and skills for an organization working environmental for a distributed team

Elective course I. Hiring (Managerial course: elective)

Knowledge

- The student will know the special aspects of hiring for distributed teams and what specialists should be added to the interview team

Skills

- The student will be able to prepare the interview for evaluation of the soft skills and technical skills
- The student will be able to provide the interview

General competence

- The student can find employees and choose appropriate for the team based on the soft and technical skills

Elective course II. Using software for virtual communication (Technical course: elective)

Knowledge

- The student will know what special software is for distributed teams used
- The student will know the main pros and cons of the various software for distributed work

Skills

- The student will be able to work in different software for distributed work

General competence

- The student will be able to choose appropriate software based on tasks of the distributed team

Elective course III. Psychological type (Managerial course: elective)

Knowledge

- The student will know what the psychological types are and how they influence the work

Skills

- The student will be able to work with different psychological types
- The student will be able to match distributed team members based on the people's trait of character

General competence

- The student will be able to organize effective and constructive communication in the distributed team based on the team members personalities

Elective course IV. Cultural diversity (Managerial course: elective)

Knowledge

- The student will know how cultural diversity influences the work

Skills

- The student will be able to work in cultural diversity and use intercultural communication

General competence

- The student will be able to organize fruitful work in the intercultural environment

Elective course V. Time management (Managerial course: elective)

Knowledge

- The student will know about what time management is and how it influences distributed work

Skills

- The student will be able to use the special techniques and approaches for time management

General competence

- The student will be able to organize personal fruitful work in a distributed team based on the tasks and deadlines

Elective course VI. Motivation aspects (Managerial course: elective)

Knowledge

- The student will know what motivation is, what types of motivation are
- The student will be know how motivation influences the personal productivity

Skills

- The student will be able to use approaches for increasing the motivation

General competence

- The student will be able to motivate the members of a distributed team and create the motivation system in the frame of the team

Elective course VII. Personal productivity (Managerial course: elective)

Knowledge

- The student will know about burnout and understand what the productivity time is

Skills

- The student will be able to organize the productivity in and out of a team and organize him/her working space in distributed teams

General competence

- The student will be able to 'be in the resource'

Elective course VIII. Constructive communication (Managerial course: elective)

Knowledge

- The student will know about what constructive communication is, principles of constructive communication, and the algorithm of the constructive confrontation

Skills

- The student will be able to apply the algorithm of constructive communication for solving problems in the work

General competence

- The student will be able to understand problems, that are appeared in the team, and find their solution based on the business communication

Elective course IX. Facilitation (Managerial course: elective)

Knowledge

- The student will know about facilitation and how to use it the distributed team

Skills

- The student will be able to use the principles and approaches of facilitation

General competence

- The student will be able to manage team cooperation using methods and approaches of facilitation

Distributed teams (Core course, obligatory)

Knowledge

- The student will know the basic characteristics of a distributed team and it differs from offline teams
- The student will know distributed team life-cycle
- The student will receive knowledge of the organization and working in/with a distributed team
- The student will receive knowledge of how to define manage tasks and processes for distributed team members

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- The student will be able to organize a distributed team and create the effective work environmental
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- The student will be able to match distributed team members based on the people's trait of character

General competence

- The student will be able to organize effective and constructive communication in the distributed team based on the team members personalities

Elective course IV. Cultural diversity (Managerial course: elective)

Knowledge

- The student will know how cultural diversity influences the work

Skills

- The student will be able to work in cultural diversity and use intercultural communication

General competence

- The student will be able to organize fruitful work in the intercultural environment

Elective course V. Time management (Managerial course: elective)

Knowledge

- The student will know about what time management is and how it influences distributed work

Skills

- The student will be able to use the special techniques and approaches for time management

General competence

- The student will be able to organize personal fruitful work in a distributed team based on the tasks and deadlines

Elective course VI. Motivation aspects (Managerial course: elective)

Knowledge

- The student will know what motivation is, what types of motivation are
- The student will be know how motivation influences the personal productivity

Skills

- The student will be able to use approaches for increasing the motivation

General competence

- The student will be able to motivate employees and create the motivation system in the frame of the team

Elective course VII. Personal productivity (Managerial course: elective)

Knowledge

- The student will know about burnout and understand what the productivity time is

Skills

- The student will be able to organize the productivity in and out of a team and organize him/her working space in distributed teams

General competence

- The student will be able to 'be in the resource'

Elective course VIII. Constructive communication (Managerial course: elective)

Knowledge

- The student will know about what constructive communication is, principles of constructive communication, and the algorithm of the constructive confrontation

Skills

- The student will be able to apply the algorithm of constructive communication for solving problems in the work

General competence

- The student will be able to understand problems, that are appeared in the team, and find their solution based on the business communication

Elective course IX. Facilitation (Managerial course: elective)

Knowledge

- The student will know about facilitation and how to use it the distributed team

Skills

- The student will be able to use the principles and approaches of facilitation

General competence

- The student will be able to manage team cooperation using methods and approaches of facilitation

8

- lectures introducing concepts, methods, and tools, own literature reading
- group work in the case study to practice concepts and methods, to develop skills, and to work on case studies
- presentations to communicate results and do a scientific discussion and reflection

9

Curricula Integration

KNUCA: The master's curricula "Computer Science. Project management" from the 2020/2021 academic year (as an elective course) with improvements in the next years
..... (for others participants)

10 References

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4. Katzenbach, John R., Smith, Douglas K. 2001. Discipline of Teams. *Harvard Business Review*, Vol: 71, Issue 2p: 111-120
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7. M.Wilkinson *The secrets of facilitation: the SMART guide to getting results with group*, J.Willey&Sons.Inc, 2012

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[3] Gruen, G.; Tritscher-Archan, S.; Weiß, S.: Guidelines for the Description of Learning Outcomes, ZOOM partnership (www.zoom-eqf.eu), 2009

[4] Rajala, S.A.: Beyond 2020: Preparing Engineers for the Future. *Proceedings of the IEEE*, Vol. 100, pp. 1376-1383, DOI 10.1109/JPROC.2012.2190169, 2012

[5] European Institute of Innovation and Technology (EIT), "Quality for learning" EIT Quality Assurance and Learning Enhancement Model, https://eit.europa.eu/sites/default/files/eit_label_handbook.pdf, 2016