TEAL2.0
TECHNOLOGY ENABLED ACTIVE LEARNING

TEAL 2.0 User Guide

Year of last update: 2023

Improving Access to Science and Technology Higher Education in Resource-Poor Institutions through an Open Platform for Technology Enabled Active Learning Environment

CONTENTS

TEAL 2.O is a platform that brings together all the means needed for an e-learning system. The platform has three main sections, accessible from the main panel.

To use the platform, it must be accessed by means of an account. Please note that only the users with rights of administrators are enabled to create user accounts.

Logging in to the platform redirects the user to the main screen - the interface enabling access to the platform's different facilities. The interface is presented in the next sections of this document.

For the common user, the interface displays three main buttons, each of which leading to a subsection. The next picture shows the general map of the platform, as it is accessible to the common user. Please note that the interface displayed by TEAL 2.O will be different depending on the role the user has been granted.
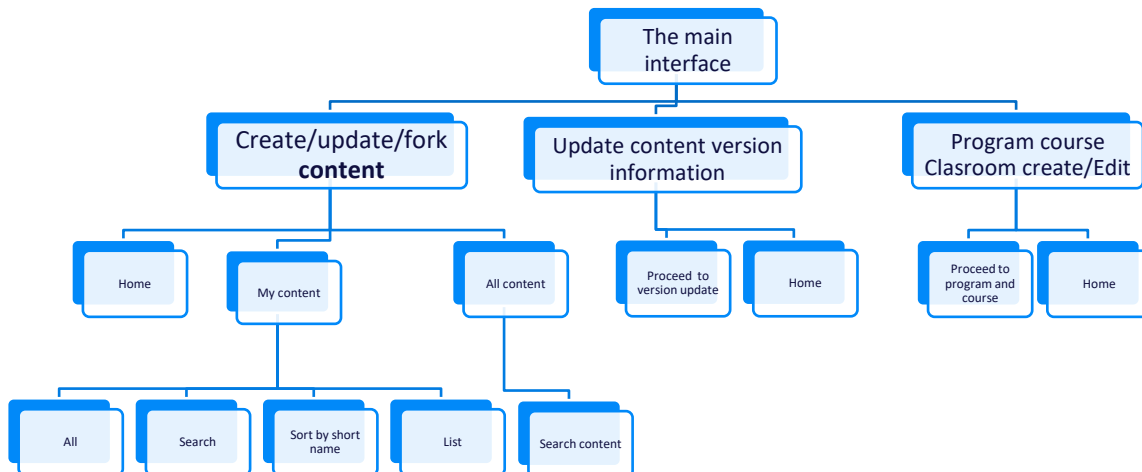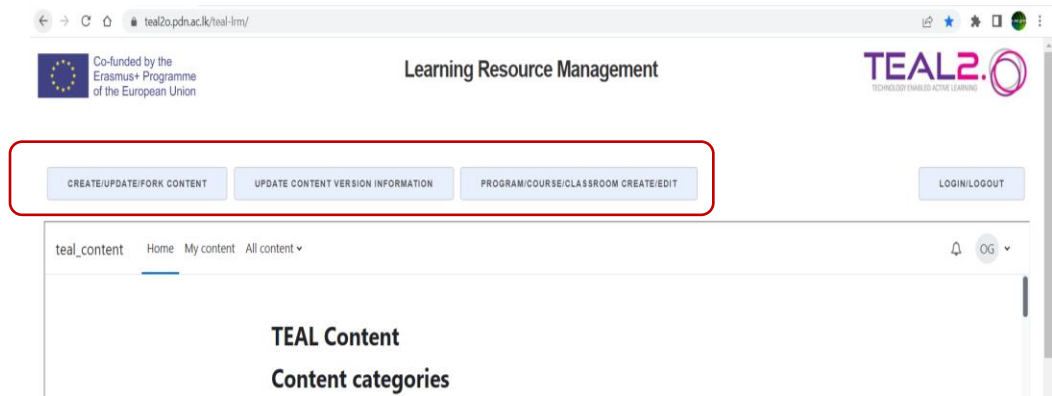

This guide is designed to provide an introduction and explanation of the TEAL 2.0 platform. The primary focus of the guide is on the navigation and features that support the user point of view.
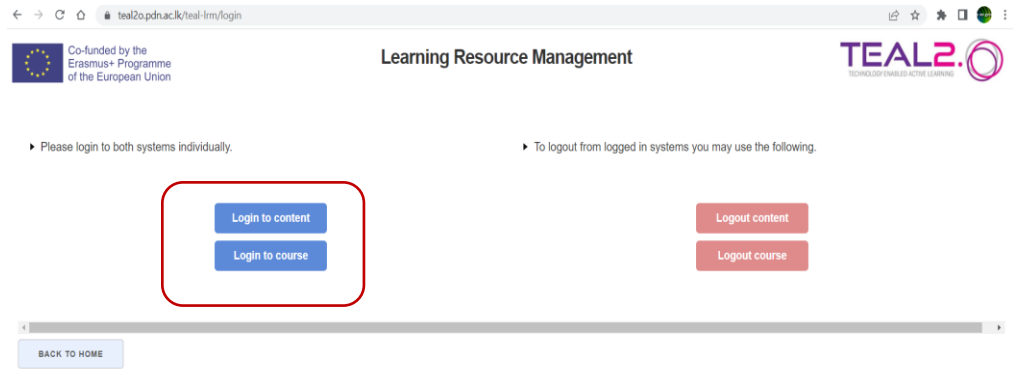
The start page can be found at https://teal2o.pdn.ac.lk/index/

The platform address is https://teal2o.pdn.ac.lk/teal-lrm/.

The interface of the platform is as follows

These functionalities are available after user login. The login interface is as follows:

The TEAL 2.0 platform consists of three modules:

- Content creation/ fork/ update;
- Course creation/ fork/ update;
- Program creation/ fork/ update.

1. Create / Update / Fork content

After login, the user can opt to creation, update and fork the content.

Content is characterized by classification label, Intended Learning Outcomes (ILOs), no. of hours, author. It contains resources, activities and assessments.

1.1. Create content

➔ **The user has to create the content. The following selections from drop-down lists need to be made:**

- o *Domain (e.g. (CAH10) engineering and technology)*
- o *Subdomain (e.g. (CAH10-01) engineering)*
- o *Sub subdomain (e.g. (CAH10-01-04) aeronautical and aerospace engineering).*

➔ **Next, selection of category/name/ competency has to be made:**

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Learning Resource Management

| PROCEED TO UPDATE FORK CREATE | HOME |

User: gh.oancea@unitbv.ro

○ Update ○ Fork ● Create

‣ Create learning resource

Please pick domain

| Select... |

Pick sub domain from Dropdown list

| Select... |

Pick sub sub domain from Dropdown list

| Select... |

| PROCEED |

Selected Category Name/Competancy

| (CAH10-01-04) aeronautica |

| CONFIRM |

Category Name/Competancy

| (CAH10-01-04) aeronautica |

Author

| gh.oancea@unitbv.ro |

Please complete the following required fields.

Content Short Name

| |

Content Name

| |

➔ **The content short name and the content name should be filled, too.**

➔ **After this general information, the intended learning outcomes (according to SOLO taxonomy), the specific verbs and the number of hours should be selected:**

ILO

Pick solo level

SOLO-02-MULTISTRUCTURAL   ✕ ▾

to do (pick action verb)

calculate   ✕ ▾

Select expected number of hours

Hours
4

➔ **A template can be used for interactive content creation:**

Example: A video can be inserted into the interactive presentation

1.2. Update content

Once content is created, it can be updated (by its author) or forked (by other users).

➔ **As a first step, the user has to look up existing content that they want to update:**

➔ **The next step is to actually update the content using the platform functionalities.**

1.3. Fork content

An option to fork the existing content is available for users who want to use someone else's content. Once the user has forked the content, they are the author and can edit and update it as needed:

The common modules can be set:

1.4. Content version information update

The option to update version information is also available:

1.5. My content option

The My content option includes all the contents created by the logged user:
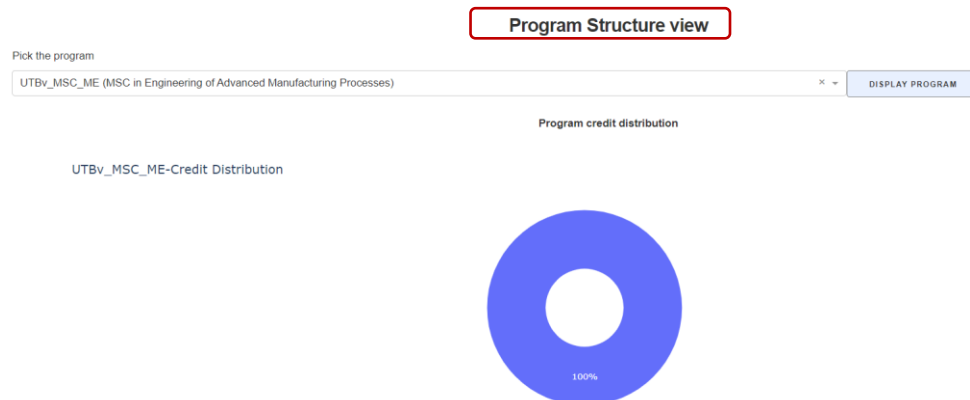
➔ **To begin, the user has to create a new course.**
➔ **View Program Structure is the first option.**
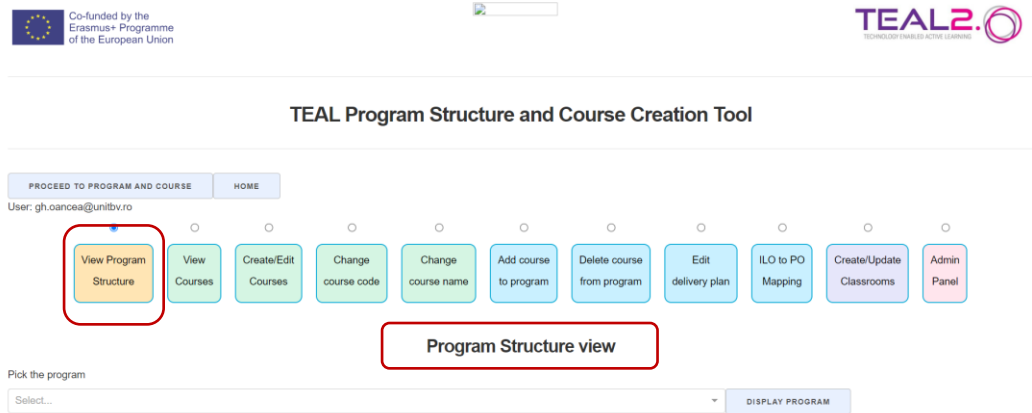
2.1. Program structure

The Program structure view includes:
➔ **Program credit distribution**

➔**Program depth vs breadth matrix**

→ The outcomes of study programs

Program outcomes

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9
Engineering Knowledge: operate with concepts and methods in the field of Industrial Engineering	Ability of use of specific processes, flows, principles, methods and tools (including software) for the development of new products and technologies / innovation	Ability to use advanced design of technologies, equipment and manufacturing systems using processes, flows, principles, methods and tools specific to Industrial Engineering.	Ability to use of metal and plastic parts manufacturing processes	Ability to in-depth analyse, design and implement of enterprise management, quality management, as well as industrial project management	Ability to apply of methods, procedures and tools for process planning, control and quality improvement, as well as the use of dedicated software products	Responsible execution of professional tasks, respecting the values of morality and ethics, in conditions of autonomy and professional independence, based on efficient documentation, following a logical reasoning, evaluation and decision analysis, with practical applicability and assuming responsibility for activities undertaken in the spirit of integrating any engineering process with the economic, social, legislative and administrative environment, in the conditions of a sustainable production and sustainable development.	Ability to carrying out activities and carrying out specific roles of teamwork, with the distribution of tasks for subordinate levels and with the application of interpersonal communication techniques with equivalent levels, adopting a positive attitude and respect for others, showing entrepreneurship, initiative and creativity, but aware the limitations imposed, with the recognition of diversity and multiculturalism and with the use of a feedback system to improve one's professional training.	Ability to objective self-assessing of the need for continuing vocational training and openness to lifelong learning and all that is new, as well as the efficient use of language skills, knowledge of information technology and communication for personal and professional development, in order to labor market and adaptation to the dynamics of its requirements.

→ Competencies mapping

Competency Depth and Breadth Map
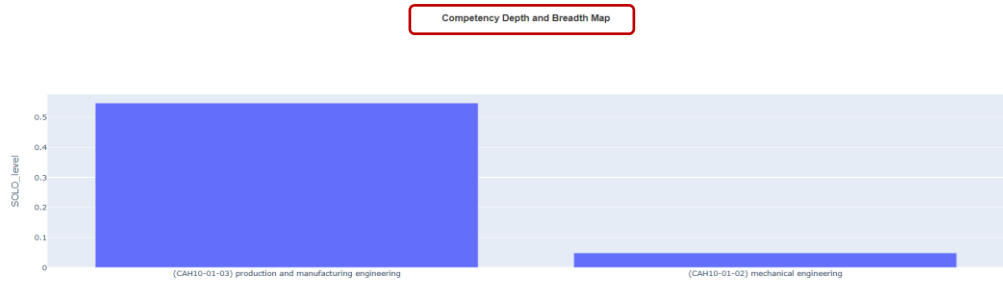
→ Delivery plan of the program

Program delivery plan

Semester	S1	S2	S3	S4	S5	S6	S7	S8
Credits	0	0	0	0	0	0	0	0

→ Program structure (describes beginner, intermediate and advanced courses)

Program structure

Beginner courses - total credits = 0.0

course_code	course_name	course_credits	program_course_pre_requisites	program_course_semester	program_structure_updated_on	program_structure_updated_by

→ A list of program courses

Program course list

					effects of diversity in small groups.				
CAH1013CR3X2198	Polymer Chemistry	(CAH10-01-03) production and manufacturing engineering	3	Advanced	additives, applicability, limits, materials, performance, polymer, properties	1.0, 1.0, 1.0	#characterize# polymeric materials	#identify# the limits of applicability and performance of polymeric materials.	#compare# additives to improve polymer properties	1.33	3.33	gh.oanc
CAH1013CR4X5408	Design of Bearings	(CAH10-01-03) production and manufacturing engineering	4	Advanced	bearings, criteria, design, failures, friction, lubrication, mechanisms,	1.0, 1.0, 1.0, 1.0	#design# bearings	#explain# mechanisms of friction	#acquire# parameters of friction, wear and lubrication	#calculate# rolling bearings (failures, design criteria, calculus	2.5	3.5	gh.oanc

Advanced courses - total credits = 57.0

CAH1013CR4X8688	Quality Management in Industry	3			01-08-2023-11:09:46	gh.oancea@unitbv.ro
CAH1013CR4X3289	Project Management	4			01-08-2023-11:09:46	gh.oancea@unitbv.ro
CAH1013CR3X2198	Polymer Chemistry	3			01-08-2023-11:09:46	gh.oancea@unitbv.ro
CAH1013CR4X5488	Design of Bearings	4	EAPF01		01-08-2023-11:09:46	gh.oancea@unitbv.ro
CAH1013CR3X8979	Organizational Management	3			01-08-2023-11:09:46	gh.oancea@unitbv.ro
CAH1013CR4X1759	Process Management and Improvement	4	EAPF03		01-08-2023-11:09:46	gh.oancea@unitbv.ro
CAH1013CR4X1884	Injection Moulding	4	EAPF08		01-08-2023-11:09:46	gh.oancea@unitbv.ro
CAH1013CR4X2772	Advanced Manufacturing Technologies for Bearings	4	EAPF09		01-08-2023-11:09:46	gh.oancea@unitbv.ro
CAH1013CR4X4594	Manufacturing Technologies for Plastic Parts	4	EAPF05		01-08-2023-11:09:46	gh.oancea@unitbv.ro
CAH1013CR4X2792	Production Process Simulation	4	EAPF04		01-08-2023-11:09:46	gh.oancea@unitbv.ro

2.2. Course view

➔ **The option *View courses* lists all existing courses.**

By clicking on a course, all information about it will be displayed:

2.3. Course creation/edit

➔ **This button allows the user to create, update and view a course**
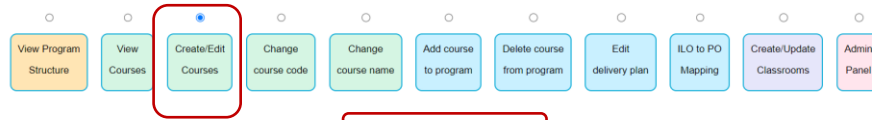
Course creation/view

Search for course

Please select search mode

Select...

Update course

Select course to update

Select...

PROCEED

Create course

Enter course code to create

ROBO1

Enter course name to create

Robotics

Select classification

Course code should not contain any special characters or spaces.
Only allowed A-Z, a-z, 0-9.

Domain	(CAH10) engineering and technology	× ▾
Sub domain	(CAH10-01) engineering	× ▾
CAH3 skill classification	(CAH10-01-04) aeronautical and aerospace engineering	× ▾

CREATE

→**A course can be updated after it has been created.**
→**The course creation is completed after the ILOs specification (update section).**

Update course

Select course to update

ROBO1

PROCEED

Editing as: gh.oancea@unitbv.ro
Course to be updated: ROBO1

Course update history

course_code	course_name	CAH3_skill_classification	course_credits	course_level	course_objective	course_keywords	credit_to_ILO_map	ILO1	ILO2	ILO3	ILO4	ILO5	ILO6	SOLO_level	BLOOMS_level	course_updated_by	course_updated_on	course_rating
ROBO1	Robotics	(CAH10-01-04) aeronautical and aerospace engineering	0													gh.oancea@unitbv.ro	05-13-2023-01-52-42	0

→**The ILOs can be selected from a list.**

Select classification

Domain	(CAH10) engineering and technology	× ▾
Sub domain	(CAH10-01) engineering	× ▾
CAH3 skill classification	(CAH10-01-04) aeronautical and aerospace engineering	× ▾

Enter ILOs

ILO-1

Pick solo level

SOLO-02-MULTISTRUCTURAL
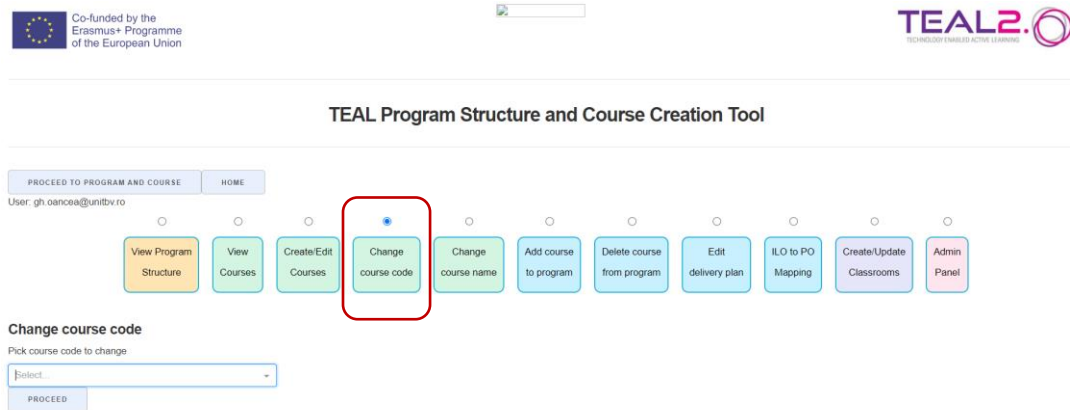
what? (statement)

to do (pick action verb)

calculate

Select ILO credits

Credits
1.05

2.4. Course code/name change

➔ **Option to change course code**

➔ **Option to change course name**

2.5. Add/delete course to/from program

➔ **An existing course can be added to a study program**

➔ Deleting an existing course

2.6. Delivery plan

➔ The summary of credits for each semester is available at Edit delivery plan option.

TEAL Program Structure and Course Creation Tool

2.7. ILO to PO Mapping

➔ **Mapping intended learning outcomes to program objectives is available at:**

➔**The detailed view of ILO to PO mapping is as follows**

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ILO to PO Mapping

Pick the program

UTBv_MSC_ME (MSC in Engineering of Advanced Manufacturing Processes)　　　　× ▾　PROCEED

Please select course code

CAH1012CR4X3094　　　　× ▾　PROCEED

Existing ILO to PO mapping

course_code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15
CAH1012CR4X3094	1,2		4		3				3,4		3	3		4	

PO information

PO2 Ability of use of specific processes, flows, principles, methods and tools (including software) for the development of new products and technologies / innovation

PO3 Ability to use advanced design of technologies, equipment and manufacturing systems using processes, flows, principles, methods and tools specific to Industrial Engineering.

PO4 Ability to use of metal and plastic parts manufacturing processes

PO5 Ability to in-depth analyse, design and implement of enterprise management, quality management, as well as industrial project management

PO6 Ability to apply of methods, procedures and tools for process planning, control and quality improvement, as well as the use of dedicated software products

PO7 Responsible execution of professional tasks, respecting the values of morality and ethics, in conditions of autonomy and professional independence, based on efficient documentation, following a logical reasoning, evaluation and decision analysis, with practical applicability and assuming responsibility for activities undertaken in the spirit of integrating any engineering process with the economic, social, legislative and administrative environment, in the conditions of a sustainable production and sustainable development.

PO8 Ability to carrying out activities and carrying out specific roles of teamwork, with the distribution of tasks for subordinate levels and with the application of interpersonal communication techniques with equivalent levels, adopting a positive attitude and respect for others, showing entrepreneurship, initiative and creativity, but aware the limitations imposed, with the recognition of diversity and multiculturalism and with the use of a feedback system to improve one's professional training.

PO9 Ability to objective self-assessing of the need for continuing vocational training and openness to lifelong learning and all that is new, as well as the efficient use of language skills, knowledge of information technology and communication for personal and professional development, in order to labor market and adaptation to the dynamics of its requirements.

→**The program information section presents a short description of program objectives**

ILO to PO Mapping

Pick the program

UTBv_MSC_ME (MSC in Engineering of Advanced Manufacturing Processes)　　　　× ▾　PROCEED

Please select course code

CAH1013CR4X7351　　　　× ▾　PROCEED

Existing ILO to PO mapping

course_code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14	PO15

PO information

PO	Description
PO1	Engineering Knowledge
PO2	Ability of use of specific processes, flows, principles, methods and tools (including software) for the development of new products and technologies / innovation
PO3	Ability to use advanced design of technologies, equipment and manufacturing systems using processes, flows, principles, methods and tools specific to Industrial Engineering.
PO4	Ability to use of metal and plastic parts manufacturing processes
PO5	Ability to in-depth analyse, design and implement of enterprise management, quality management, as well as industrial project management
PO6	Ability to apply of methods, procedures and tools for process planning, control and quality improvement, as well as the use of dedicated software products
PO7	Responsible execution of professional tasks, respecting the values of morality and ethics, in conditions of autonomy and professional independence, based on efficient documentation, following a logical reasoning, evaluation and decision analysis, with practical applicability and assuming responsibility for activities undertaken in the spirit of integrating any engineering process with the economic, social, legislative and administrative environment, in the conditions of a sustainable production and sustainable development.
PO8	Ability to carrying out activities and carrying out specific roles of teamwork, with the distribution of tasks for subordinate levels and with the application of interpersonal communication techniques with equivalent levels, adopting a positive attitude and respect for others, showing entrepreneurship, initiative and creativity, but aware the limitations imposed, with the recognition of diversity and multiculturalism and with the use of a feedback system to improve one's professional training.
PO9	Ability to objective self-assessing of the need for continuing vocational training and openness to lifelong learning and all that is new, as well as the efficient use of language skills, knowledge of information technology and communication for personal and professional

→**The course information section presents course code, course name, credits and intended learning outcomes**

Course information

course_code	course_name	course_credits	ILO1	ILO2	ILO3	ILO4	ILO5	ILO6
CAH1012CR4X3094	Advanced Materials	4	#explain# the variants of technological processes	#classify# composite materials	#design# products from advanced materials	#analyze# the structure of glass fibers using a microscope		

Map PO to ILO1

PO2:Ability of use of specific processes, flows, principles, methods and tools (including software) for the development of new products and technologies / innovation　　× ▾

Map PO to ILO2

PO2:Ability of use of specific processes, flows, principles, methods and tools (including software) for the development of new products and technologies / innovation　　× ▾

Map PO to ILO3

PO2:Ability of use of specific processes, flows, principles, methods and tools (including software) for the development of new products and technologies / innovation　　× ▾

Map PO to ILO4

Select...　　▾

2.8. Classroom creation/update

➔ **A classroom can be created or updated**

➔ **A classroom classification list (domain, subdomain and skill classification) is available**

➔ **A list of existing content is available**

2.9. Admin panel

Some specific rights are available only for the platform administrator, after the login:

TEAL Program Structure and Course Creation Tool

➔ **A logout option is available at the home page of the TEAL 2.0 platform**

➔ **Back to home option returns the starting page of teal2o.pdn.ac.lk**