



EPICUR

European Partnership for an InnovativeCampus Unifying Regions

EPICUR Inter University Campus (EIUC)

Introduction

This document is presenting the EPICUR Inter University Campus (EIUC) and it is an output of the pilot phase of EPICUR Alliance¹ (2019-2022).

The EPICUR Inter-University Campus is a central online gateway (Figure 1) for supporting flexible virtual, physical and hybrid mobilities for all students and staff across the alliance. One of its unique features is its fully digitalized, paper-free process for student admissions that is supported by a secure, scalable and transparent solution based on free and open-source software. Furthermore, EIUC offers innovative functionality to monitor mobilities, issue and recognize certifications (including ECTS and micro-credentials).

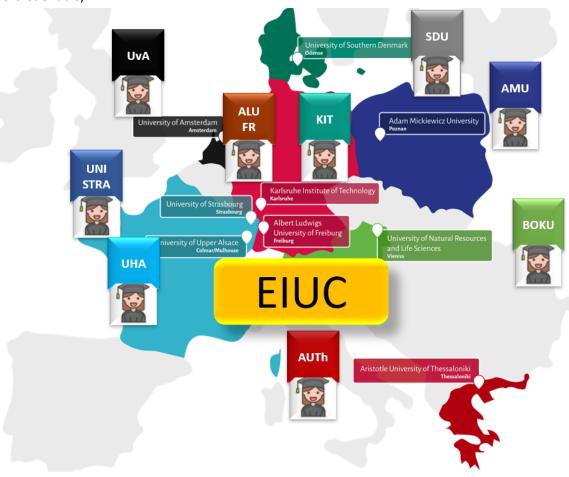


Figure 1: EPICUR Inter-University Campus is a central online gateway

This guide has been written to provide a general introduction to the EPICUR Inter-University Campus design and functionalities. The intended target audience includes experts on digitalization of Higher Education Institutions as well as learning technology experts.

The following sections are presenting the high-level architecture of the EPICUR Inter-University Campus and its main components (a) the Virtual University Registrar System (VURS) and (b) the Virtual Campus Learning Platform (VCLP).

¹ EUIC has been developed in the context of Work Package 4 "WP4-Pave the way for an Inter-University Campus, using a student (and staff) centred approach" lead by Aristotle University of Thessaloniki (AUTh) and especially by the following tasks and deliverables: (a) Task 4.2.1 – Initial design and creation of the Virtual Campus Learning Platform (VCLP), D4.1.2: Procedures for evaluating courses and monitor mobility (led by KIT); (b) Task 4.2.3: Guidelines and design for a Virtual University Registrar System (VURS), D4.2.3: Guidelines and design for a Virtual University Registrar System (VURS) (lead by AUTh).

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1 High level EIUC architecture

This paragraph is presenting a high-level architecture of the EPICUR Inter-University Campus and the main VURS components.

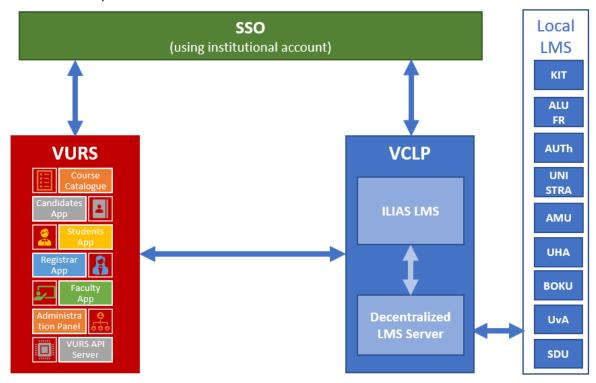


Figure 2: EIUC high level architecture

The main EIUC components are the following (Figure 2):

- Single Sign On (SSO) Services in order for the users to have access with their institutional account.
- Virtual University Registrar System (**VURS**): Centralised Campus Management System/Student Information System (CMS/SIS) keeping the necessary information for the students' mobilities and services. The main VURS Components are the following:
 - Course Catalogue (https://courses.epicur.auth.gr): Public course catalogue of all learning pathways offered to the EPICUR students.
 - Candidates App (https://register.epicur.auth.gr/): The application for the prospective students to apply for participation in the EPICUR learning pathways.
 - Students App (https://students.epicur.auth.gr/): The application for the selected students attending the EPICUR learning pathways.
 - Registrar App (https://registrar.epicur.auth.gr/): The application for the administrative staff to monitor EPICUR learning pathways and students mobilities.
 - Faculty App (https://faculty.epicur.auth.gr/): The application for the teaching staff delivering a course that is part of an EPICUR learning pathway.
 - Admin Panel (https://registrar.epicur.auth.gr/): A specific part of the application for the Registrar App to admin the rights and roles of the rest of the users.
 - VURS API Server: The core service interacting with all the apps above and the VCLP component.
- Virtual Campus Learning Platform (VCLP) accessible at https://learn.epicur.education: It is the Learning Management System (LMS) of EPICUR along with a Decentralised LMS server acting as gateway to local LMSs of the partners. The VCLP is a full Learning Management System, which is

based on ILIAS. ILIAS² is an open-source and free Learning Management System, which is popular in Germany and Switzerland. Both German universities of the EPICUR alliance are using ILIAS as their main Learning Management System. ILIAS is completely web-based, hence requires only a web browser on the client side to use it. It supports learning content management and tools for collaboration, communication, evaluation and assessments. It is published under the GNU General Public License. The functionality of ILIAS can also be extended with Plug-Ins. There exists a variety of free and commercial Plug-Ins for ILIAS, adding missing functionality for specific cases. As the VCLP is a complete Learning Management System, courses can be directly hosted on the VCLP itself. However, since the VCLP is based on ILIAS, it can also be integrated with other LMS by connecting the LMS to one or more "Decentralized LMS servers".

The following sections are presenting the functionality supported by VURS and VCLP.

2 Virtual University Registrar System (VURS)

2.1 Introduction

As described before VURS has the following main components that can be accessed by its specific webpage (Figure 3):

- Course Catalogue
- Candidates App
- Students App
- Registrar App
- Faculty App
- Admin Panel



Figure 3: VURS components

Table 1 presents and overview of VURS Roles and Rights per Component.

Table 1: Overview of VURS Roles and Rights per Component

Component	Roles/Rights	
Course Catalogue	Guest / Open access to everyone	
Candidates App	Candidate /Every user of the local partner universities; S/he can apply fo mobility	

² https://www.ilias.de/

Students App	EPICUR student / Student that has been selected to at least one EPICUR mobility and can track his records and communicate with the professors.
Registrar App	Administrative staff / Creation of mobilities and courses; admission of students
Faculty App	Teaching staff / Grading and communication with the students
Admin Panel	Administrator / Responsible for: data consistency; bug fixes; analytics reports; site reliability.

This section presents the most important VURS interfaces as they have been already developed according to the required functionality. Along with the system interfaces the specific system functionality are described using the template presented in Table 2.

Table 2: Template for Functionalities

Functionality Name	ne Name of the functionality	
Actors	Users or system components that will use this functionality	
Input Data	Data needed for the implementation	
Description	Process that will be followed for the achievement of the functionality	
Output Data	Expected result	

2.2 Access and Registration / Login

2.2.1 Access to the VURS

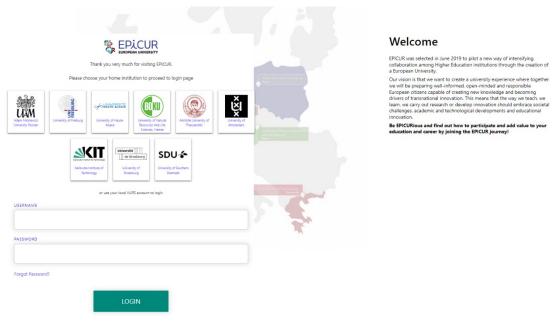


Figure 4: Access to the VURS functionality

Table 3: Access to the VURS functionality

Functionality Name	Access to the VURS
--------------------	--------------------

Actors	All Users
Input Data	Credentials in any institution of EPICUR partners
Description	 visits the application of EPICUR VURS that corresponds to the user group to which he/she belongs is being redirected to Authorization Server of VURS in order to get access to the VURS functionalities where there are buttons icons of all the EPICUR partners' institutions and a login form selects the institution in which has an account, and he/she is being redirected to the login page of the selected institution After filling the correct credentials, is being redirected to the main page of VURS
Output Data	When the user clicks on an institution the message "Redirecting, please wait." appears until he/she is being redirected to the institution's login page. After validating user's credentials, the loading page displays to redirect the user to the main page (dashboard) of the VURS EPICUR. If the user puts invalid credentials in the login form, the message "Invalid username or password." appears.

2.3 Registrar

2.3.1 Preview Main Information

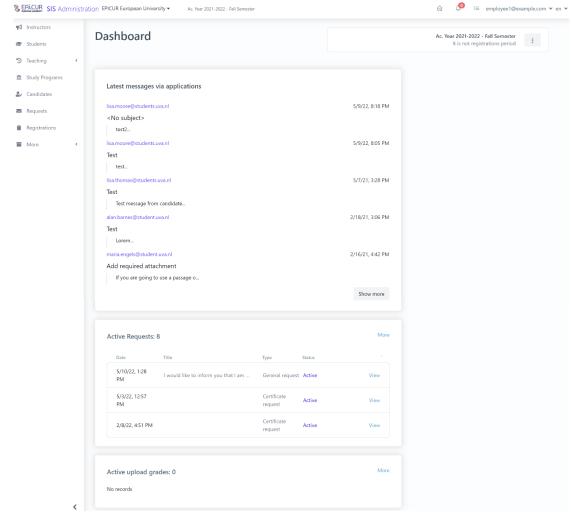


Figure 5: Preview Main Information functionality
Table 4: Preview Main Information functionality

Functionality Name	Preview Main Information
Actors	Administrators, Registrar Users
Input Data	-
Description	The user can view main entities of EPICUR VURS by selecting the home icon from the VURS's menu bar
Output Data	The page with the main entities of EPICUR VURS is loaded which are: latest messages via applications, active requests, exam participate requests, active upload grades.

2.3.2 Search Lecturer

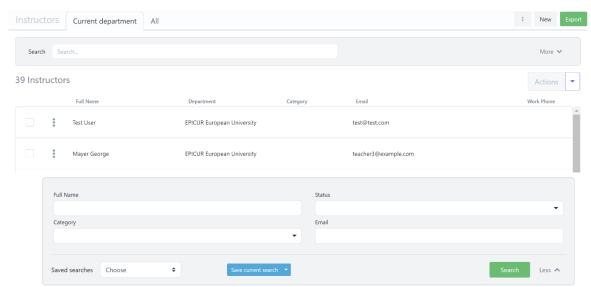


Figure 6: Search Lecturers functionality: a) List of Lecturers, b) Full search criteria

Table 5: Search Lecturers functionality

Functionality Name	Search Lecturers
Actors	Administrators, Registrar Users
Input Data	Optional: Full name, Status, Category. Email Send message action: Required: Subject, Write a short message
Description	 The user can search a group of lecturers or a specific lecturer by following the steps: selects the Instructors option from the VURS's sidebar menu selects between current department lecturers (default option) and all lecturers from the tabs section finds the group of lecturers or a specific lecturer on the list of instructors by searching/filtering lecturers (by Full name, Status, Category. Email) and by sorting them (by Full name, Department, Category. Email, Work Phone)
	To communicate with lecturer(s):
	 check box next to each lecturer clicks arrow button next to Actions selects Send message option completes the message form (Subject, Write a short message) and sends it
Output Data	The list of the lecturers that satisfy the defined requirements appears in the Instructors page. For "Send message" action, a loading bar appears and after the completion the popup form closes.

2.3.3 Preview Lecturer

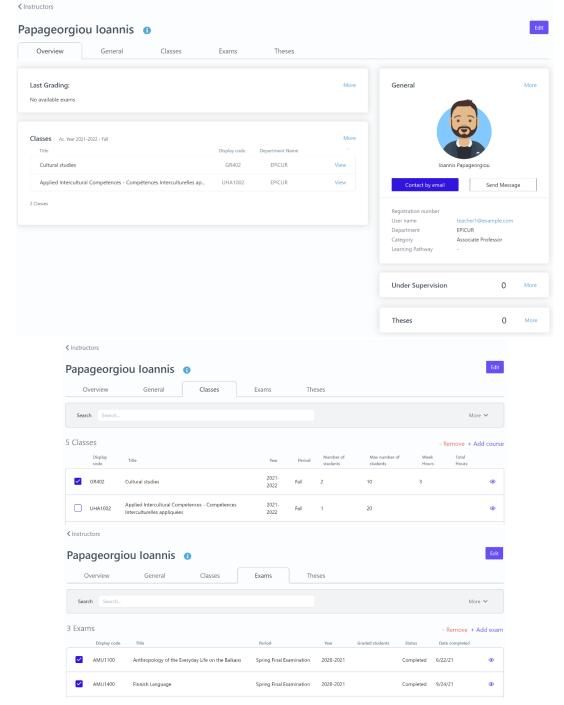


Figure 7: Preview Lecturer functionality: a) Overview tab, b) Classes tab, c) Exams tab
Table 6: Preview Lecturer functionality

Functionality Name	Preview Lecturer
Actors	Administrators, Registrar Users
Input Data	Optional: Full name, Status, Category. Email
Description	The user can view a lecturer's information by following the steps: 1. searches for a specific lecturer on Instructors page 2. clicks on the 3 dots next to the lecturer's name 3. selects Preview option

Add class action: 4. selects Classes tab 5. clicks + Add course button 6. selects course(s) by checking box(es) and clicks **Apply** button Remove class action: 4. selects Classes tab 5. selects course(s) by checking box(es) 6. clicks - Remove button 7. clicks **OK** button on the confirmation popup window Add exam action: 4. selects Exams tab 5. clicks + Add exam button 6. selects exam(s) by checking box(es) and clicks **Apply** button Remove exam action: 4. selects Exams tab 5. selects exam(s) by checking box(es) and click Apply button 6. clicks - Remove button 7. clicks **OK** button on the confirmation popup window The page with all the lecturer's information is loaded where there are four **Output Data** tabs: Overview, General, Classes, Exams, Theses. Upon adding or removing classes/exams to a lecturer, a completion message appears and the list of classes/exams is updated.

2.3.4 Insert Lecturer

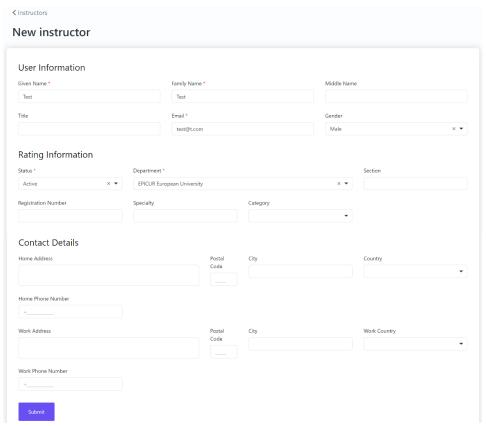


Figure 8: Insert Lecturer functionality

Table 7: Insert Lecturer functionality

Functionality Name	Insert Lecturer
Actors	Administrators, Registrar Users
Input Data	 User Information: Required: Given Name, Family Name, Email Optional: Middle Name, Title, Gender Rating Information: Required: Status, Department Optional: Section, Registration Number, Specialty, Category Contact Details: Optional: Home Address, Postal Code, City, Country, Home Phone Number, Work Address, Postal Code, City, Work Country, Work Phone Number
Description	The user can add a lecturer by following the steps: 1. selects the Instructors option from the VURS's sidebar menu 2. clicks the button New 3. completes the new instructor form and submits it To be enabled the submit button, at least the required fields of the form needs to be completed.
Output Data	A completion popup message is shown after the user's submission and the lecturer would be in the instructors list. If the user has given an invalid email, he/she cannot process to the submission and an indication "Email must be a valid email." appears.

2.3.5 Edit Lecturer

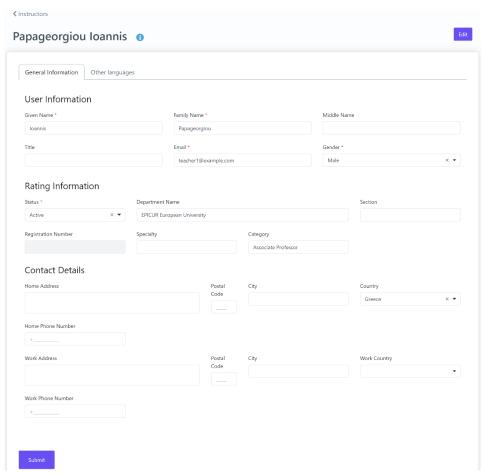


Figure 9: Edit Lecturer functionality
Table 8: Edit Lecturer functionality

Functionality Name	Edit Lecturer
Actors	Administrators, Registrar Users
Input Data	 User Information: Required: Given Name, Family Name, Email Optional: Middle Name, Title, Gender Rating Information: Required: Status, Department Optional: Section, Registration Number, Specialty, Category Contact Details: Optional: Home Address, Postal Code, City, Country, Home Phone Number, Work Address, Postal Code, City, Work Country, Work Phone Number
Description	The user can change a lecturer's information by following the steps: 1. searches for a specific lecturer on Instructors page 2. clicks on the 3 dots next to the lecturer's name 3. selects Edit option. There is also an Edit button in the lecturer's preview page. 4. changes lecturer's information by editing his/her form and submits it

Output Data

A completion popup message is shown after the user's submission and the lecturer's preview page appears.

2.3.6 Search Students

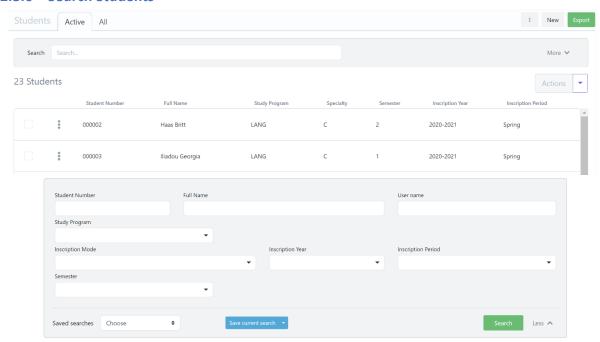


Figure 10: Search Students functionality: a) List of Students, b) Full search criteria

Table 9: Search Students functionality

Functionality Name	Search Students
Actors	Administrators, Registrar Users
Input Data	Optional: Student number, Full name, User name, Study program, Inscription mode, Inscription year, Inscription Period, Semester Send message action: Required: Subject, Write a short message
Description	 The user can search a group of lecturers or a specific lecturer by following the steps: selects the Students option from the VURS's sidebar menu selects between active students (default option) and all students from the tabs section finds the group of students or a specific student on the list of students by searching/filtering students (by Student number, Full name, User name, Study program, Inscription mode, Inscription year, Inscription Period, Semester) and by sorting them (by Student number, Full name, Study program, Specialty, Semester, Inscription year, Inscription Period) To communicate with student(s):
	 check box next to each student clicks arrow button next to Actions selects Send message option completes the message form (Subject, Write a short message) and sends it

	The user can also perform the actions for student(s) (by selecting student(s) and clicking arrow button next to Actions): Calculate semester Change study program, Change specialty, Add program group, Request document.
Output Data	The list of the students that satisfy the defined requirements appears in the Students page.
	For "Send message" action, a loading bar appears and after the completion, the popup form closes.

2.3.7 Preview Student

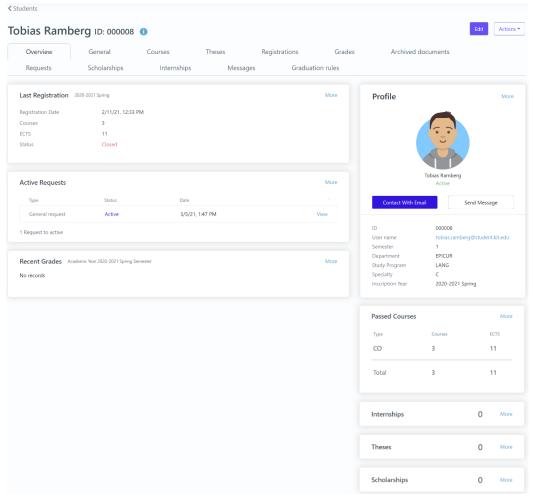


Figure 11: Preview Student functionality
Table 10: Preview Student functionality

Functionality Name Preview Student

Actors Administrators, Registrar Users

Input Data Optional: Student number, Full name, User name, Study program, Inscription mode, Inscription year, Inscription Period, Semester Send message action:

• Required: Subject, Body
• Optional: Attach files

Description The user can view a student's information by following the steps:

1. searches for a specific student on Students page

	2. clicks on the 3 dots next to the student's name
	3. selects Preview option
	To communicate with student:
	 clicks Send message button on Profile section completes the message form (Subject, Body, Attach files) and sends it clicks OK button on confirmation window. There is the option to send email to student by clicking Contact With Email button, too
	The user can also perform the actions (by clicking Actions button): Preview study program, Request for student removal, Request for student suspension, Export report, New internship, Request document.
Output Data	The page with all the student's information is loaded where there are twelve tabs: Overview, General, Courses, Theses, Registrations, Grades, Archived documents, Requests, Scholarships, Internships, Messages, Graduation rules.
	For "Send message" action, a completion popup message shows up.

2.3.8 Edit Student

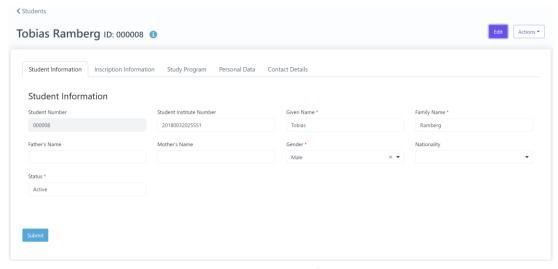


Figure 12: Edit Student functionality Table 11: Edit Student functionality

Functionality Name	Edit Student
Actors	Administrators, Registrar Users
Input Data	 Student Information: Required: Given Name, Family Name, Gender, Status Optional: Student Institute Number, Father's Name, Mother's Name, Nationality Inscription Information:
	 <u>Required</u>: Inscription Year, Inscription Period, Inscription semester, Inscription date, Inscription mode <u>Optional</u>: Inscription Mode Category, Inscription index, Inscription decision, Inscription Number, Inscription points, Home institute, Home department/faculty, Home department/faculty description, Inscription Comments

	Study Program:
	 Required: Department Optional: Study Program
	Personal Data:
	 <u>Optional</u>: Citizen Information (Identity Card, Identity Type, Identity Date, Identity Authority, Citizen Registrar, Citizen Registrar Place, Citizen Registrar Region, Vat Number, Vat Office, SSN), Personal Information (Birth Date, Birth Place, Country, Birth Place Region, Spouse Name, Family Status, Military Status)
	Contact Details:
	 Optional: Home Contact Details (Country, Region, Postal Code, City, Address, Phone, Mobile Phone, Email), Temporary Contact Details (Country, Region, Postal Code, City, Address, Phone)
Description	The user can change a student's information by following the steps:
	1. searches for a specific student on Students page
	2. clicks on the 3 dots next to the student's name
	3. selects Edit option. There is also an Edit button in the student's preview page.
	 changes student's information by editing his/her form and submits it
Output Data	A completion popup message is shown after the user's submission and the student's preview page appears.

2.3.9 Document request on behalf of student

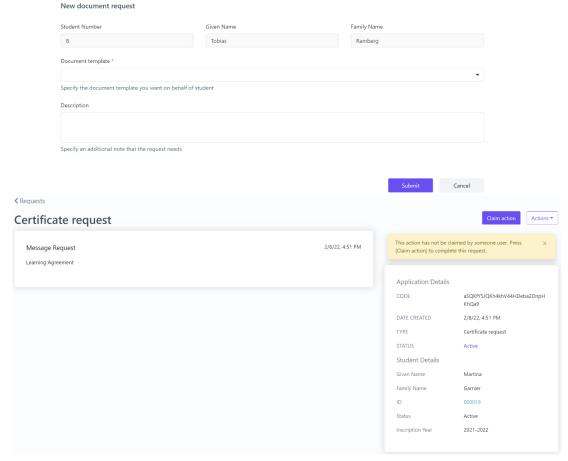


Figure 13: Document request on behalf of student functionality: a) request form, b) incomplete request

Table 12: Document request on behalf of student functionality

Functionality Name	Document request on behalf of student	
Actors	Administrators, Registrar Users	
Input Data	 Required: Document Template Optional: Description 	
Description	The user can request for a document on behalf of a student by following the steps:	
	 searches for a specific student on Students page clicks on the 3 dots next to the student's name selects Preview option selects Request document option from Actions button completes the form and submits it 	
Output Data	If the user has not selected the document template which is necessary, the message "Document type is missing" appears and the submission is not completed. Otherwise, the request page is loaded and the message "This action has not be claimed by someone user. Press [Claim action] to complete this request." is shown. Claim action button finalize the document request.	

2.3.10 Export student's report

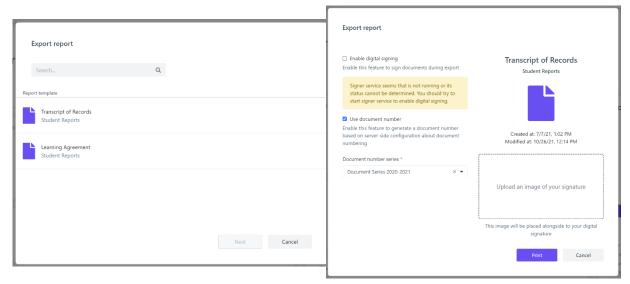


Figure 14: Export student's report functionality
Table 13: Export student's report functionality

Functionality Name	Export student's report
Actors	Administrators, Registrar Users
Input Data	 Required: Report Template, Document number series Optional: Digital signing, Document number, Image of signature
Description	 searches for a specific student on Students page clicks on the 3 dots next to the student's name selects Preview option selects Export report option from Actions button selects report template and the Next button is enabled chooses if wants to enable digital signing, use of document number and upload an image of signature. Then, clicks Print button to export the report. If the feature use document number is enabled the document number series is required and the print button is disabled.
Output Data	The report is loaded and there are three options: download file, print file or close it to return in the previous page.

2.3.11 Search Courses

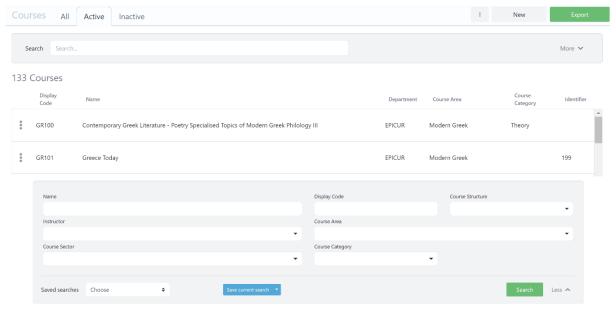


Figure 15: Search Courses functionality: a) List of Courses, b) Full search criteria
Table 14: Search Courses functionality

Functionality Name	Search Courses
Actors	Administrators, Registrar Users
Input Data	Optional: Name, Display Code, Course Structure, Instructor, Course Area, Course Sector, Course Category
Description	 The user can search a group of courses or a specific course by following the steps: selects the Teaching->Courses option from the VURS's sidebar menu selects between all courses, active courses (default option) and inactive courses from the tabs section finds the group of courses or a specific course on the list of courses by searching/filtering courses (by Name, Display Code, Course Structure, Instructor, Course Area, Course Sector, Course Category) and by sorting them (by Display Code, Name, Department, Course Area, Course Category, Identifier)
Output Data	The list of the courses that satisfy the defined requirements appears in the Courses page.

2.3.12 Preview Course

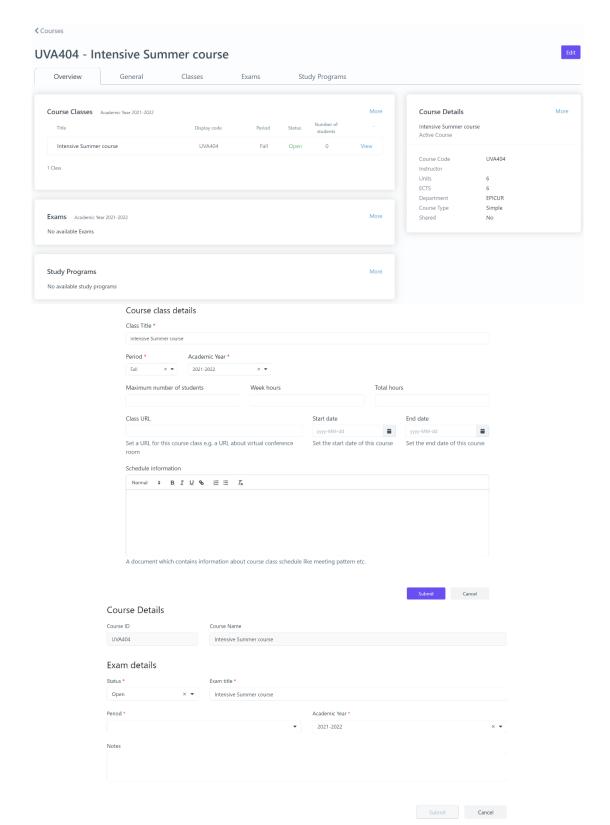


Figure 16: Preview Course functionality: a) Overview tab, b) Add class form, c) Add exam form
Table 15: Preview Course functionality

Functionality Name	Preview Course
Actors	Administrators, Registrar Users

Optional: Name, Display Code, Course Structure, Instructor, Course Area, Course Sector, Course Category,
Add class action:
 Required: Class Title, Period, Academic Year Optional: Maximum number of students, Week hours, Total hours, Class URL, Start date, End date, Schedule information
Add exam action:
 Required: Status, Exam title, Period, Academic Year Optional: Notes
The user can view a course's information by following the steps:
 searches for a specific course on Courses page clicks on the 3 dots next to the course selects Preview option
Add class action:
 selects Classes tab clicks + Add class button completes course class details form and clicks Submit button
Add exam action:
 selects Exams tab clicks + Add exam button completes exam details form and clicks Submit button
The page with all the course's information is loaded where there are five tabs: Overview, General, Classes, Exams, Study Programs. Upon adding classes/exam, a completion message appears and the list of classes/exams is updated.

2.3.13 Create Course

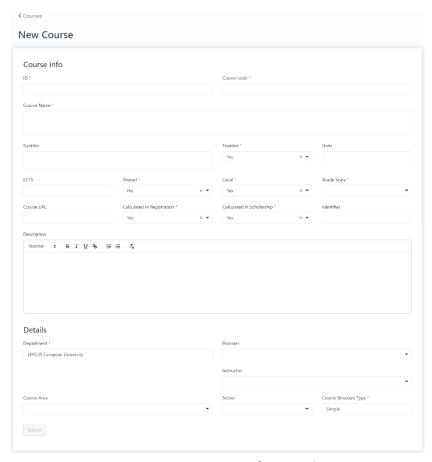


Figure 17: Create Course functionality
Table 16: Create Course functionality

Functionality Name	Create Course
Actors	Administrators, Registrar Users
Input Data	 Course info: Required: ID, Course code, Course Name, Enabled, Shared, Local, Grade Scale, Calculated In Registration, Calculated In Scholarship Optional: Subtitle, Units, ECTS, Course URL, Identifier, Description Details: Required: Department, Course Structure Type Optional: Provider (Provider department/faculty), Instructor, Course Area, Sector
Description	The user can create a new course by following the steps: 1. selects the Teaching->Courses option from the VURS's sidebar menu 2. clicks the button New 3. completes the new course form and submitting it To be enabled the submit button, at least the required fields of the form needs to be completed.
Output Data	A completion popup message is shown after the user's submission and the course would be in the courses list.

2.3.14 Edit Course

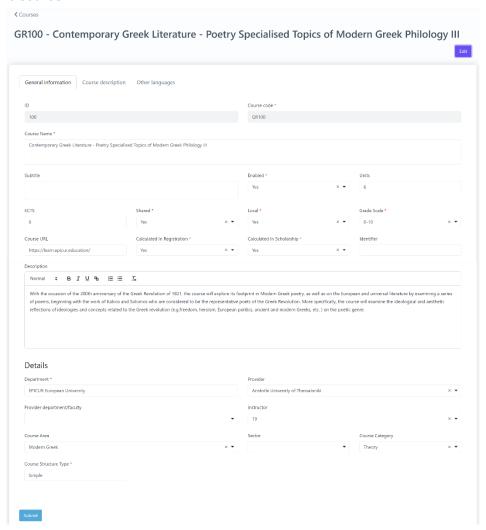


Figure 18: Edit Course functionality
Table 17: Edit Course functionality

Functionality Name	Edit Course
Actors	Administrators, Registrar Users
Input Data	 General information: Required: ID, Course code, Course Name, Enabled, Shared, Local, Grade Scale, Calculated In Registration, Calculated In Scholarship, Details (Department, Course Structure Type) Optional: Subtitle, Units, ECTS, Course URL, Identifier, Description, Details (Provider, Instructor, Course Area, Sector) Course description:
	 Optional: Course syllabus, Learning outcome, General competencies, Additional information, Additional course url, Language of instruction, Focus language, Bibliography
Description	The user can change a course's information by following the steps:
	 searches for a specific course on Courses page clicks on the 3 dots next to the specific course selects Edit option. There is also an Edit button in the course's

	preview page. 4. changes course's information by editing the form and submits it
Output Data	A completion popup message is shown after the user's submission and the course's preview page appears.

2.3.15 Search Classes

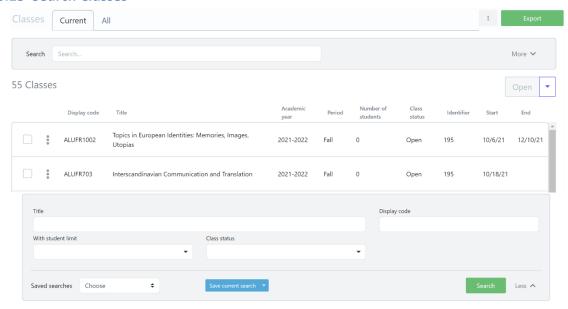


Figure 19: Search Classes functionality: a) List of Classes, b) Full search criteria
Table 18: Search Classes functionality

Functionality Name	Search Classes
Actors	Administrators, Registrar Users
Input Data	Optional: Title, Display Code, With student limit, Class status
Description	 The user can search a group of classes or a specific class by following the steps: selects the Teaching->Classes option from the VURS's sidebar menu selects between current classes (default option) and all classes from the tabs section finds the group of classes or a specific class on the list of classes by searching/filtering classes (by Title, Display Code, With student limit, Class status) and by sorting them (by Display Code, Title, Academic year, Period, Number of students, Class status, Identifier, Start, End) The user can also perform the actions for class(es) (by selecting class(es) and clicking arrow button next to Open): Open, Close, Copy, Delete, Create
	exams.
Output Data	The list of the classes that satisfy the defined requirements appears in the Classes page.

2.3.16 Preview Class

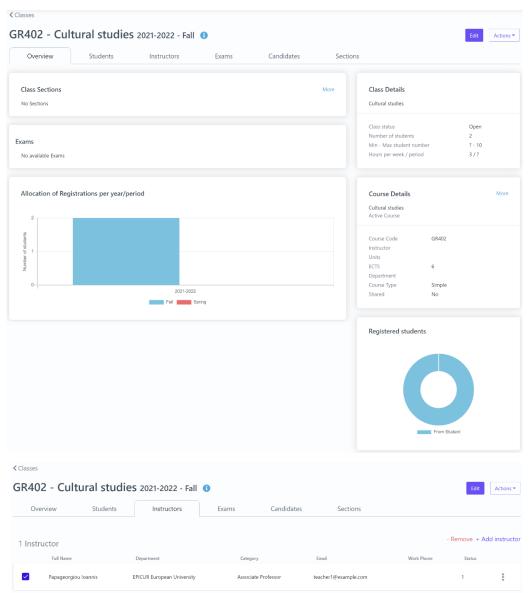


Figure 20: Preview Class functionality: a) Overview tab, b) Instructors tab
Table 19: Preview Class functionality

Functionality Name	Preview Class
Actors	Administrators, Registrar Users
Input Data	Optional: Title, Display Code, With student limit, Class status
Description	The user can view a class's information by following the steps: 1. searches for a specific class on Classes page 2. clicks on the 3 dots next to the class 3. selects Preview option
	Add lecturer action:
	4. selects Instructors tab 5. clicks + Add instructor button 6. selects lecturer(s) by checking box(es) and clicks Apply button Remove lecturer action:
	Remove lecturer action:

	 selects Instructors tab selects lecturer (s) by checking box(es) clicks - Remove button clicks OK button on the confirmation popup window
Output Data	The page with all the class's information is loaded where there are six tabs: Overview, Students, Instructors, Exams, Candidates, Sections. Upon adding or removing lecturers to a class, a completion message appears and the list of lecturers is updated.

2.3.17 Edit Class

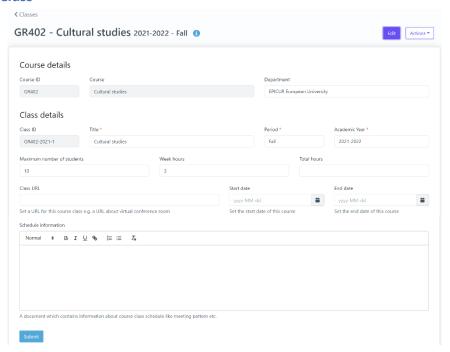


Figure 21: Edit Class functionality Table 20: Edit Class functionality

Functionality Name	Edit Class
Actors	Administrators, Registrar Users
Input Data	Class Details:
	 Required: Title Optional: Maximum number of students, Week hours, Total hours, Class URL, Start date, End date, Schedule information
Description	The user can change a class's information by following the steps:
	searches for a specific course on Classes page
	2. clicks on the 3 dots next to the specific class
	selects Edit option. There is also an Edit button in the class's preview page.
	4. changes class's information by editing the form and submits it
Output Data	A completion popup message is shown after the user's submission and the class's preview page appears.

2.3.18 Search Course Exams

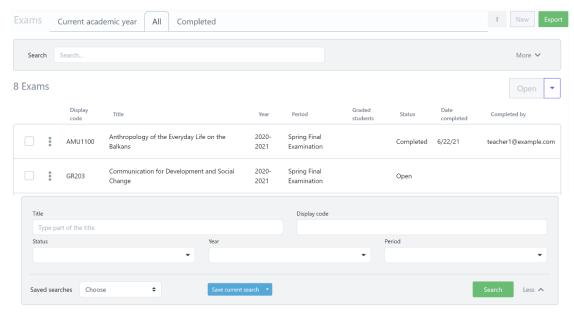


Figure 22: Search Course Exams functionality: a) List of Course Exams, b) Full search criteria
Table 21: Search Course Exams functionality

Functionality Name	Search Course Exams
Actors	Administrators, Registrar Users
Input Data	Optional: Title, Display Code, Status, Period
Description	The user can search a group of course exams or a specific course exam by following the steps:
	 selects the Teaching->Exams option from the VURS's sidebar menu selects between current academic year exams (default option), completed exams and all exams from the tabs section finds the group of course exams or a specific course exam on the list of course exams by searching/filtering exams (by Title, Display Code, Status, Period) and by sorting them (by Display Code, Title, Year, Period, Graded students, Status, Date completed, Completed by)
	The user can also perform the actions for exam(s) (by selecting exam(s) and clicking arrow button next to Open): Open, Close, Delete.
Output Data	The list of the course exams that satisfy the defined requirements appears in the Exams page.

2.3.19 Preview Course Exam

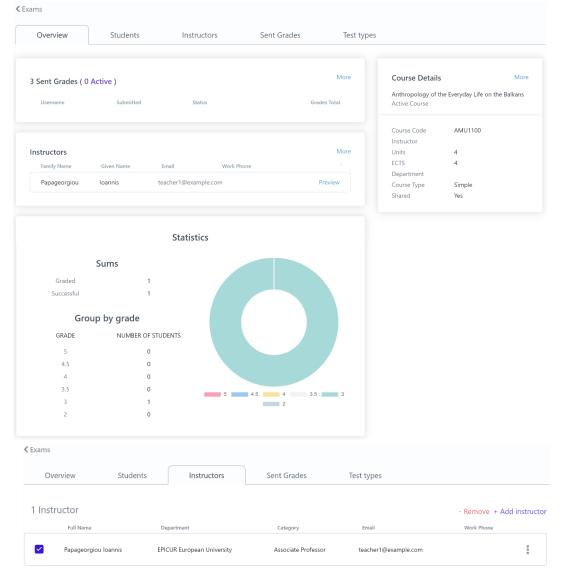


Figure 23: Preview Course Exam functionality a) Overview tab, b) Instructors tab
Table 22: Preview Course Exam functionality

Functionality Name	Preview Course Exam
Actors	Administrators, Registrar Users
Input Data	Optional: Title, Display Code, Status, Period
Description	The user can view a course exam's information by following the steps:
	 searches for a specific course exam on Exams page clicks on the 3 dots next to the class selects Preview option
	Add lecturer action:
	 selects Instructors tab clicks + Add instructor button selects lecturer(s) by checking box(es) and clicks Apply button
	Remove lecturer action:
	 selects Instructors tab selects lecturer (s) by checking box(es)

	6. clicks - Remove button7. clicks OK button on the confirmation popup window
Output Data	The page with all the course exam's information is loaded where there are five tabs: Overview, Students, Instructors, Sent Grades, Test types.
	Upon adding or removing lecturers to a course exam, a completion message appears and the list of lecturers is updated

2.3.20 Edit Course Exam

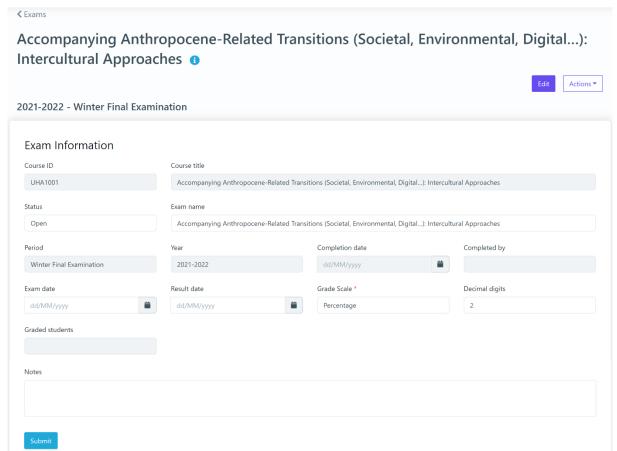


Figure 24: Edit Course Exam functionality Table 23: Edit Course Exam functionality

Functionality Name	Edit Course Exam
Actors	Administrators, Registrar Users
Input Data	Exam Information:
	Optional: Exam name, Exam date, Result date, Decimal digits, Notes
Description	 The user can change a course exam's information by following the steps: searches for a specific course on Exams page clicks on the 3 dots next to the specific course exam selects Edit option. There is also an Edit button in the course exam's preview page. changes course exam's information by editing the form and submits it
Output Data	A completion popup message is shown after the user's submission and the

course exam's preview page appears.

2.3.21 Grade Submission action

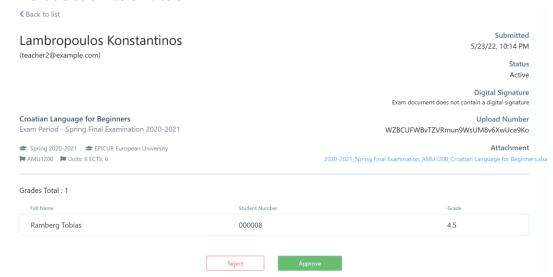


Figure 25: Grade Submission action functionality
Table 24: Grade Submission action functionality

Functionality Name	Grade Submission action
Actors	Administrators, Registrar Users
Input Data	-
Description	 The user can accept/reject a grade submission by following the steps: visits the preview page of a specific course exam selects Sent Grades tab clicks on grades submission with an active status by selecting More option and Show button in Submitted Grades category. clicks Approve or Reject button clicks YES button on confirmation popup window
Output Data	A completion message shows up. If the user selects to approve the grades submission, the status changes to Completed . Otherwise, the status changes to Failed .

2.3.22 Search Mobilities

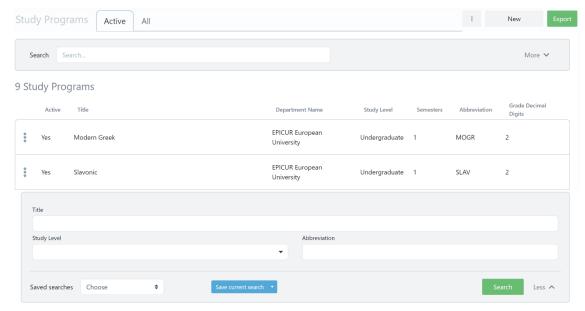


Figure 26: Search Mobilities functionality: a) List of Mobilities, b) Full search criteria
Table 25: Search Mobilities functionality

Functionality Name	Search Mobilities
Actors	Administrators, Registrar Users
Input Data	Optional: Title, Study Level, Abbreviation
Description	The user can search a group of mobilities or a specific mobility by following the steps:
	 selects the Study Programs option from the VURS's sidebar menu selects between active mobilities (default option) and all mobilities from the tabs section finds the group of mobilities or a specific mobility on the list of study programs by searching/filtering mobilities (by Title, Study Level, Abbreviation) and by sorting them (by Active, Title Department Name, Study Level, Semesters, Abbreviation, Grade Decimal Digits)
Output Data	The list of the mobilities that satisfy the defined requirements appears in the Study Programs page.

2.3.23 Preview Mobility

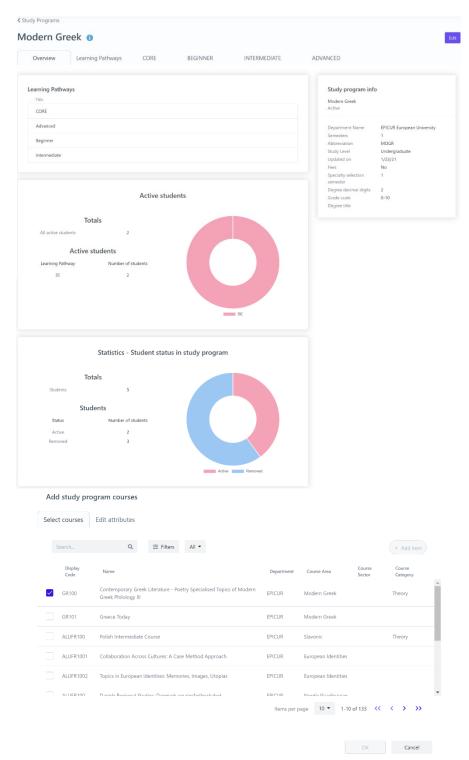


Figure 27: Preview Mobility functionality: a) Overview tab, b) add course form Table 26: Preview Mobility functionality

Functionality Name	Preview Mobility
Actors	Administrators, Registrar Users
Input Data	Optional: Title, Study Level, Abbreviation • Add/Edit learning pathway action:
	 Required: Name, Abbreviation Optional: Write a short description for this learning pathway

	Add/Edit course action:
	Required: Type, Units, Coefficient, ECTS
	Optional: Semester
Description	The user can view a mobility's information by following the steps:
	 searches for a specific mobility on Study Programs page
	2. clicks on the 3 dots next to the mobility
	3. selects Preview option
	Add learning pathway action:
	 selects Learning Pathways tab clicks + New button
	6. completes new learning pathway form and clicks Submit button
	Remove learning pathway action:
	4. selects Learning Pathways tab
	5. selects learning pathway(s) by checking box(es)
	6. clicks – Remove item button
	7. clicks OK button on the confirmation popup window
	Edit learning pathway action:
	4. selects Learning Pathways tab
	5. clicks edit icon next to the learning pathway
	changes learning pathway's information by editing learning pathway form and clicks Submit button
	Add course action:
	4. selects a specific learning pathway tab
	5. clicks arrow button next to Edit
	6. selects Add course option7. selects courses
	8. selects Edit attributes tab
	9. completes attributes form and clicks OK button
	Remove course action:
	4. selects a specific learning pathway tab
	5. selects course(s) by checking box(es)
	6. clicks arrow button next to Edit
	7. selects Remove course option
	8. clicks YES button on the confirmation popup window
	Edit course action:
	4. selects a specific learning pathway tab5. clicks edit icon next to the learning pathway or selects course by
	checking box and clicks Edit button
	6. changes course's attributes by editing study program course form
	and clicks Submit button
Output Data	The page with all the mobility's information is loaded where there are some
	tabs: Overview, Learning pathways and a tab for each learning pathway.
	Upon adding, removing or editing learning pathways/courses to a mobility, the list of learning pathways/courses and the tabs are updated.

2.3.24 Create Mobility

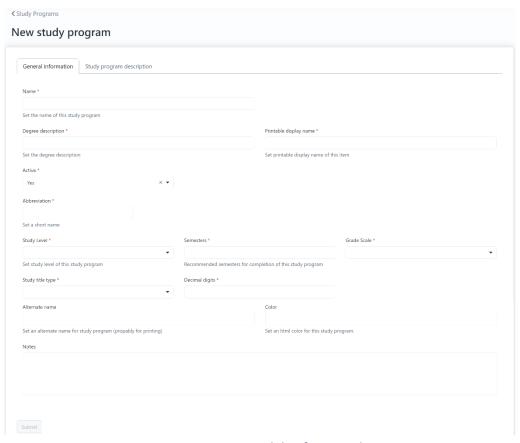


Figure 28: Create Mobility functionality Table 27: Create Mobility functionality

Functionality Name	Create Mobility
Actors	Administrators, Registrar Users
Input Data	 General Information: Required: Name, Degree description, Printable display name, Active, Abbreviation, Study Level, Semesters, Grade Scale, Study title type, Decimal digits Optional: Alternate name, Color, Notes Study program description:
	 Optional: Official duration, Access requirements, Mode of study, Grading system, Degree requirements, Access to further study, Language of instruction, Additional information, Further information
Description	The user can create a mobility by following the steps: 1. selects the Study Programs option from the VURS's sidebar menu 2. clicks the button New 3. completes the new mobility form and submits it To be enabled the submit button, at least the required fields of the form needs to be completed.
Output Data	A completion popup message is shown after the user's submission and the mobility would be in the study programs list.

2.3.25 Edit Mobility

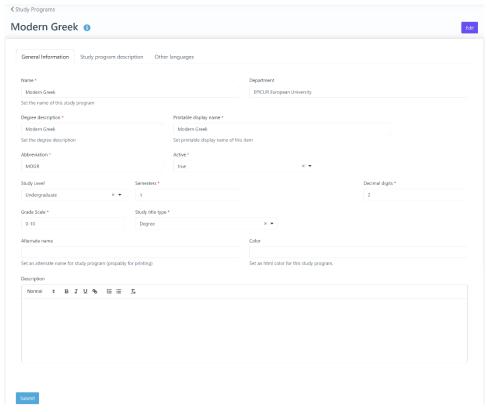


Figure 29: Edit Mobility functionality Table 28: Edit Mobility functionality

Functionality Name	Edit Mobility
Actors	Administrators, Registrar Users
Input Data	 General Information: Required: Name, Degree description, Printable display name, Abbreviation, Active, Semesters, Decimal digits, Study title type Optional: Study Level, Alternate name, Color, Description Study program description: Optional: Official duration, Access requirements, Mode of study, Grading system, Degree requirements, Access to further study,
	Language of instruction, Additional information, Further information
Description	 The user can change a mobility's information by following the steps: searches for a specific mobility on Study Programs page clicks on the 3 dots next to the mobility selects Edit option. There is also an Edit button in the mobility's preview page. changes mobility's information by editing his/her form and submits it
Output Data	A completion popup message is shown after the user's submission and the mobility's preview page appears.

2.3.26 Search Applications

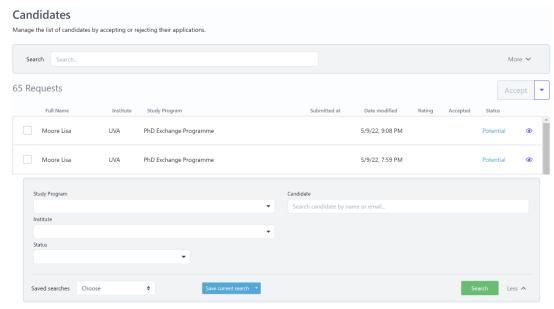


Figure 30: Search Applications functionality: a) List of Applications, b) Full search criteria
Table 29: Search Applications functionality

	Table 29. Search Applications junctionality
Functionality Name	Search Applications
Actors	Administrators, Registrar Users
Input Data	Optional: Study Program, Candidate (name or email), Institute, Status Send message action: Required: Subject, Write a short message
Description	 The user can search a group of applications or a specific application by following the steps: selects the Candidates option from the VURS's sidebar menu finds the group of applications or a specific application on the list of candidates by searching/filtering applications (by Study Program, Candidate (name or email), Institute, Status) and by sorting them (by Full Name, Institute, Study Program, Submitted at, Date modified, Rating, Accepted, Status)
	To communicate with student(s):
	 selects application(s) by checking box(es) clicks arrow button next to Accept selects Compose new message or Send a direct message to candidate completes the message form (Subject, Write a short message) and sends it by clicking Start button
	The user can also perform the actions for an application (by clicking arrow button next to Accept): Accept, Reject, Export.
Output Data	The list of the mobilities that satisfy the defined requirements appears in the Candidates page.
	For "Send message" action, a loading bar appears and after the completion the popup form closes.

2.3.27 Preview Application

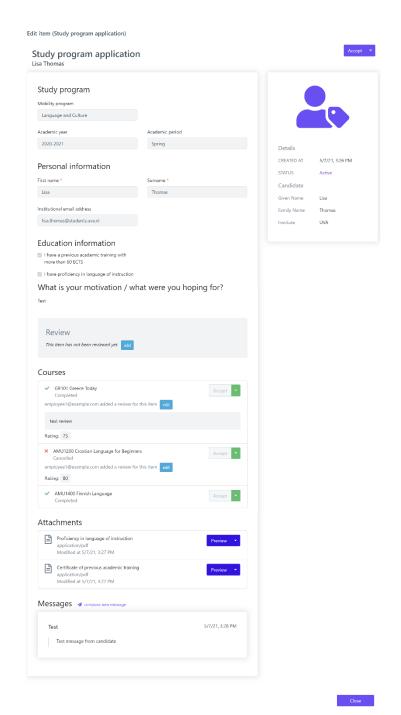


Figure 31: Preview Application functionality
Table 30: Preview Application functionality

Functionality Name	Preview Application
Actors	Administrators, Registrar Users
Input Data	Optional: Study Program, Candidate (name or email), Institute, Status
Description	The user can view an application by following the steps: 1. searches for a specific application on Candidates page 2. clicks on the eye button next to the application
Output Data	The page with all the application's information is loaded, including: Details, Study program, Personal information, Education information, What is your

motivation / what were you hoping for?, Courses, Attachments, Messages.

2.3.28 Application Actions

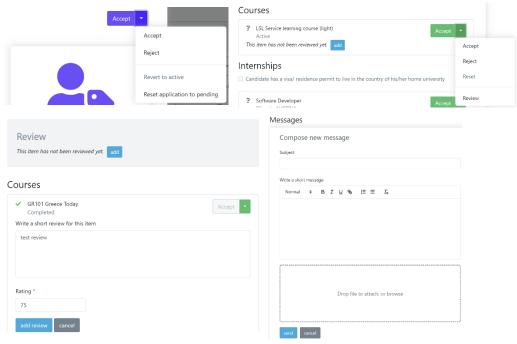


Figure 32: Application Actions functionality

Table 31: Application Actions functionality

Functionality Name	Application Actions
Actors	Administrators, Registrar Users
Input Data	Optional: Review (Write a short review for this item, Rating (Required)), Message (Subject, Write a short message, file)
Description	The user can review an application, update its status (accept, reject, revert to active, reset to pending) and communicate with the candidate by following the steps:
	To review an application:
	 visits the preview page of a specific application clicks add button next to the message "This item has not been reviewed yet." on Review section or on each course. For a course, there is the option to review it by selecting Review option on the arrow button next to Accept button. There is also, the option to edit an existing review completes the review form (Write a short review for this item, Rating) and submits it
	To update status:
	 visits the preview page of a specific application for a course, next to it, selects Accept, Reject or Reset option. For the whole application, next to "Study program application", selects Accept, Reject, Revert to active or Reset application to pending
	To communicate with the candidate:
	 visits the preview page of a specific application clicks compose new message on Message section

	completes the message form (Subject, Write a short message, attach file) and sends it
Output Data	For "Review" and "Send message" actions, the result is shown in the application. For "Change status" action, a confirmation box appears first to finalize this action.

2.3.29 Search Student Requests

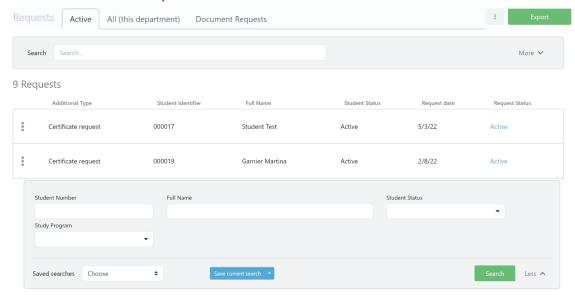


Figure 33: Search Student Requests functionality: a) List of Student Requests, b) Full search criteria

Table 32: Search Student Requests functionality

Functionality Name	Search Student Requests
Actors	Administrators, Registrar Users
Input Data	Optional: Student Number, Full Name, Student Status, Study Program
Description	The user can search a group of student requests or a specific student request by following the steps:
	 selects the Requests option from the VURS's sidebar menu selects between active requests (default option), all (this department) requests and document requests from the tabs section finds the group of student requests or a specific student request on the list of requests by searching/filtering student requests (by Student Number, Full Name, Student Status, Study Program) and by sorting them (by Additional Type, Student Identifier, Full Name, Student Status, Request date, Request Status)
Output Data	The list of the student requests that satisfy the defined requirements appears in the Requests page.

2.3.30 Preview Student Request

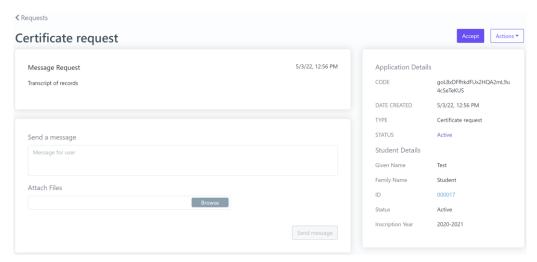


Figure 34: Preview Student Request functionality Table 33: Preview Student Request functionality

Functionality Name	Preview Student Requests
Actors	Administrators, Registrar Users
Input Data	Optional: Student Number, Full Name, Student Status, Study Program
	Send message action:
	Required: Message for userOptional: Attach files
Description	The user can view an application by following the steps:
	 searches for a specific student request on Requests page clicks on the 3 dots next to the request selects Preview option
	To communicate with student:
	4. completes the message form on Send a message section5. clicks Send message button
	The user can also perform the actions (by clicking Actions button): Accept, Reject, Release.
Output Data	The page with all the student request's information is loaded, including: all the available actions.
	For "Send message" action, the result is shown in the Response section. The other actions change requests' status.

2.3.31 Search Student Registrations

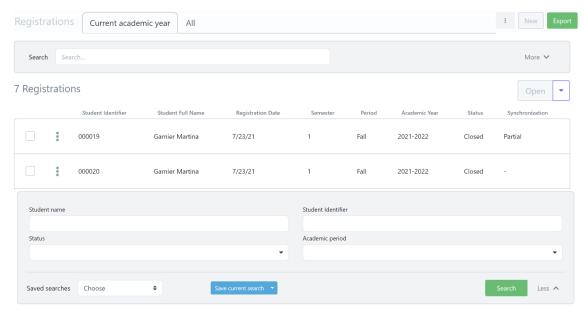


Figure 35: Search Student Registrations functionality: a) List of Student Registrations, b) Full search criteria

Table 34: Search Student Registrations functionality

Functionality Name	Search Student Registrations
Actors	Administrators, Registrar Users
Input Data	Optional: Student Name, Student Identifier, Status, Academic period
Description	 The user can search a group of student registrations or a specific student registration by following the steps: selects the Registrations option from the VURS's sidebar menu selects between current academic year registrations (default option) and all registrations from the tabs section finds the group of student registrations or a specific student registration on the list of registrations by searching/filtering student registrations (by Student Name, Student Identifier, Status, Academic period) and by sorting them (by Student Identifier, Student Full Name, Registration Date, Semester, Period, Academic Year, Status, Synchronization)
	The user can perform the actions for a student registration (by clicking arrow button next to Open): Open, Close, Synchronize data to VCLP.
Output Data	The list of the student registrations that satisfy the defined requirements appears in the Registrations page.

2.3.32 Search Internships

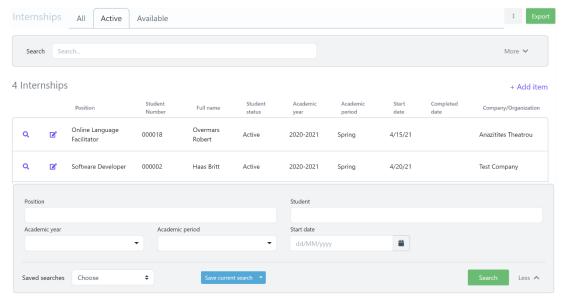


Figure 36: Search Internships functionality: a) List of Internships, b) Full search criteria

Table 35: Search Internships functionality

Functionality Name	Search Internships
Actors	Administrators, Registrar Users
Input Data	Optional: Position, Student, Academic year, Academic period, Start date
Description	The user can search a group of internships or a specific internship by following the steps:
	 selects the More->Internships option from the VURS's sidebar menu selects between all internships, active internships (default option) and available internships from the tabs section finds the group of internships or a specific internship on the list of internships by searching/filtering them (by Position, Student, Academic year, Academic period, Start date) and by sorting them (by Position, Student Number, Full name, Student Status, Academic year, Academic period, Start date, Completed dates)
Output Data	The list of the internships that satisfy the defined requirements appears in the Internships page.

2.3.33 Preview Internships

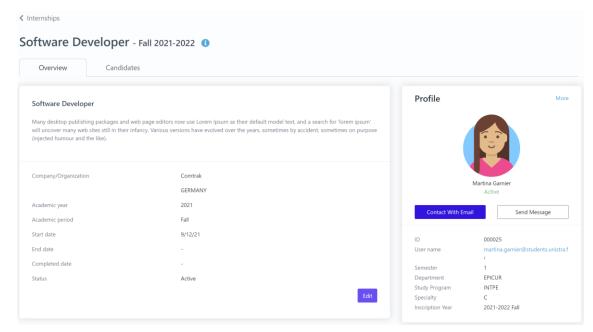


Figure 37: Preview Internships functionality Table 36: Preview Internships functionality

Functionality Name	Preview Internships
Actors	Administrators, Registrar Users
Input Data	Optional: Position, Student, Academic year, Academic period, Start date
Description	The user can view an internship's information by following the steps: 1. searches for a specific internship on Internships page 2. clicks on lens icon next to the internship
Output Data	The page with all the internship's information is loaded where there are some tabs: Overview, Candidates.

2.3.34 Create Internship

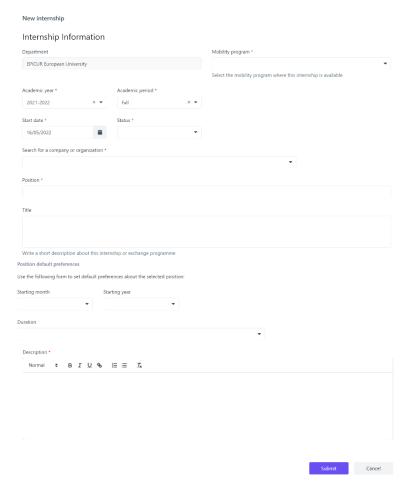


Figure 38: Create Internship functionality Table 37: Create Internship functionality

Functionality Name	Create Internship
Actors	Administrators, Registrar Users
Input Data	Internship Information: Required: Mobility program, Academic year, Academic period, Start date, Status, Search for a company or organization, Position, Description Optional: Title, Starting month, Starting year, Duration
Description	The user can create an internship by following the steps: 1. selects the More->Internship option from the VURS's sidebar menu 2. clicks the button + Add item 3. completes the new internship form and submits it To be enabled the submit button, at least the required fields of the form needs to be completed.
Output Data	A completion popup message is shown after the user's submission and the internship would be in the study programs list.

2.3.35 Edit Internship

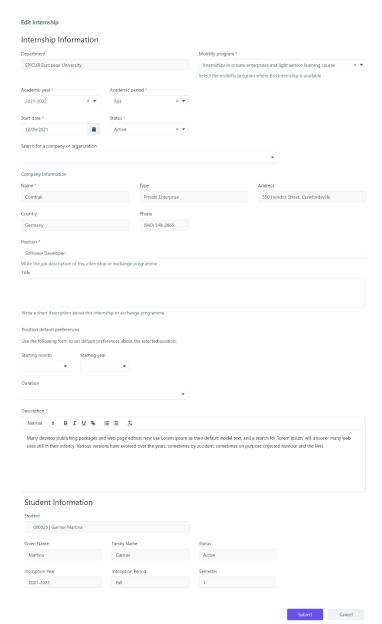


Figure 39: Edit Internship functionality
Table 38: Edit Internship functionality

Functionality Name	Edit Internship
Actors	Administrators, Registrar Users
Input Data	Internship Information: Required: Mobility program, Academic year, Academic period, Start date, Status, Position, Description Optional: Search for a company or organization, Title, Starting month, Starting year, Duration
Description	The user can change an internship's information by following the steps: 1. searches for a specific internship on Internships page 2. clicks on the edit icon next to the position of the internship 3. changes internship's information by editing the form and submits it
Output Data	After the user's submission the internships information changes.

2.3.36 Search Companies/Organizations

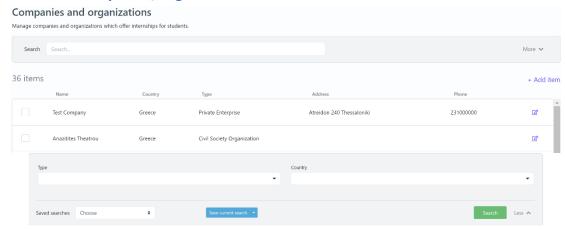


Figure 40: Search Companies/Organizations functionality: a) List of Companies/Organizations, b) Full search criteria

Table 39: Search Companies/Organizations functionality

Functionality Name	Search Companies/Organizations
Actors	Administrators, Registrar Users
Input Data	Optional: Type, Country
Description	The user can search a group of companies/organizations or a specific company/organization by following the steps:
	 selects the More->Settings option from the VURS's sidebar menu searches for Companies and organizations and clicks Expand button finds the group of companies/organizations or a specific company/organization on the list of companies and organizations by searching/filtering them (by Type, Country) and by sorting them (by Name, Country, Type, Address, Phone)
	Remove item action:
	 selects company(ies)/organization(s) by checking box(es) clicks – Remove item button clicks OK button on the confirmation popup window
Output Data	The list of the companies/organizations that satisfy the defined requirements appears in the Companies and organizations page.
	Upon removing companies/organizations, the list of companies/organizations is updated.

2.3.37 Add Company/Organization

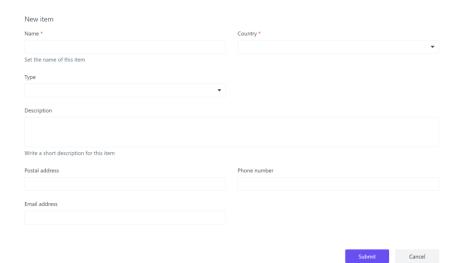


Figure 41: Add Company/Organization functionality Table 40: Add Company/Organization functionality

Functionality Name	Add Company/Organization
Actors	Administrators, Registrar Users
Input Data	 Required: Name, Country Optional: Type, Description, Postal address, Phone number, Email address
Description	The user can add a company/organization by following the steps: 1. selects the More->Settings option from the VURS's sidebar menu 2. searches for Companies and organizations and clicks Expand button 3. clicks the button + Add item 4. completes the new item form and submits it
Output Data	A completion popup message is shown after the user's submission and the company/organization would be in the companies and organizations list.

2.3.38 Edit Company/Organization

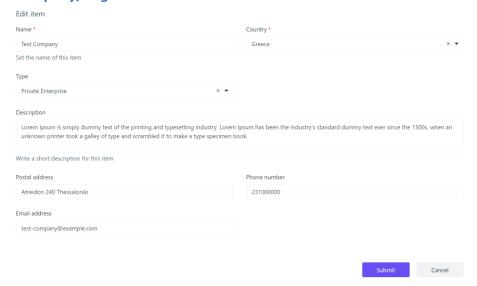


Figure 42: Edit Company/Organization functionality

Table 41: Edit Company/Organization functionality

Functionality Name	Edit Company/Organization
Actors	Administrators, Registrar Users
Input Data	 Required: Name, Country Optional: Type, Description, Postal address, Phone number, Email address
Description	The user could change the information of a company/organization by following the steps: 1. searches for a specific company/organization on Companies and organizations page 2. clicks on the edit icon next to the company/organization 3. changes company's/organization's information by editing the form
	and submits it
Output Data	A completion popup message is shown after the user's submission and the Companies and organizations page appears.

2.3.39 Search Company Types

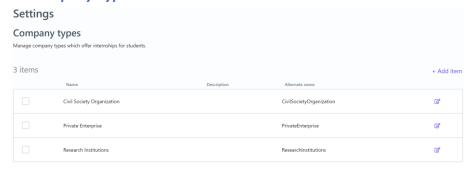


Figure 43: Search Company Types functionality Table 42: Search Company Types functionality

Functionality Name	Search Company Types
Actors	Administrators, Registrar Users
Input Data	-
Description	The user can search a group of company types or a specific company type by following the steps:
	 selects the More->Settings option from the VURS's sidebar menu searches for Company types and clicks Expand button finds the group of company types or a specific company type on the list of company types by sorting them (by Name, Description, Alternate name)
	Remove item action:
	 selects company type(s) by checking box(es) clicks – Remove item button clicks OK button on the confirmation popup window
Output Data	The sorted list of the company types appears in the Company types page. Upon removing company types, the list of company types is updated.

2.3.40 Add Company Type

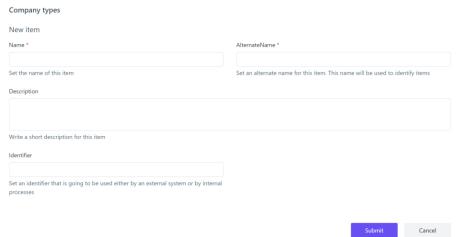


Figure 44: Add Company Type functionality
Table 43: Add Company Type functionality

Functionality Name	Add Company Type
Actors	Administrators, Registrar Users
Input Data	 Required: Name, Alternate Name Optional: Description, Identifier
Description	The user can add a company type by following the steps: 1. selects the More->Settings option from the VURS's sidebar menu 2. searches for Company types and clicks Expand button 3. clicks the button + Add item 4. completes the new item form and submits it
Output Data	A completion popup message is shown after the user's submission and the company type would be in the company types list.

2.3.41 Edit Company Type

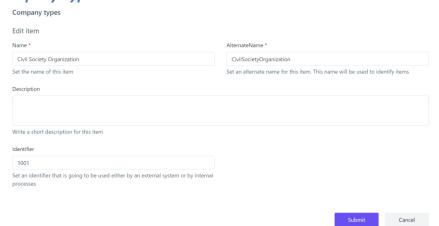


Figure 45: Edit Company Type functionality Table 44: Edit Company Type functionality

Functionality Name	Edit Company Type	
Actors	Administrators, Registrar Users	

Input Data	 Required: Name, Alternate Name Optional: Description, Identifier
Description	The user can change the information of a company type by following the steps: 1. searches for a specific company type on Company types page 2. clicks on the edit icon next to the company type 3. changes company type's information by editing the form and submits it
Output Data	A completion popup message is shown after the user's submission and the Company types page appears.

2.3.42 Search Archived Documents

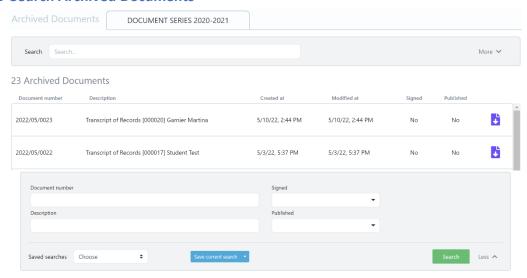


Figure 46: Search Archived Documents functionality: a) List of Archived Documents, b) Full search criteria

Table 45: Search Archived Documents functionality

Functionality Name	Search Archived Documents		
Actors	Administrators, Registrar Users		
Input Data	Optional: Document number, Signed, Description, Published		
Description	The user can search a group of archived documents or a specific archived document by following the steps:		
	 selects the More->Archived Documents option from the VURS's sidebar menu finds the group of archived documents or a specific archived document on the list of archived documents by searching/filtering them (by Document number, Signed, Description, Published) and by sorting them (by Document number, Description, Created at, Modified at, Signed, Published) 		
Output Data	The list of the archived documents that satisfy the defined requirements appears in the Archived Documents page.		

2.3.43 Search Lists/Enumerations

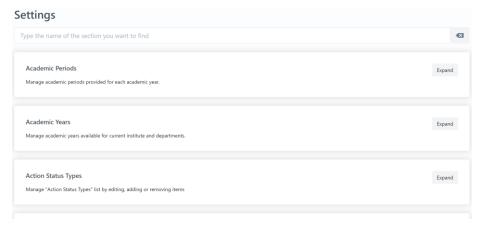


Figure 47: Search Lists/Enumerations functionality
Table 46: Search Lists/Enumerations functionality

Functionality Name	Search Lists/Enumerations		
Actors	Administrators, Registrar Users		
Input Data	Depends on the list/enumeration		
Description	The user can search lists and enumerations like academic years, academic period, course categories, course types etc. by following the steps: 1. selects the More->Settings option from the VURS's sidebar menu 2. searches for a list/enumeration and clicks Expand button 3. finds items on the list where the user can sort them, add a new item		
	and edit an existing one		
Output Data	For sorting items action, the sorted list appears in the page. For adding and editing an item, a completion popup message is shown after the user's submission.		

2.4 Students

2.4.1 Preview Main Information

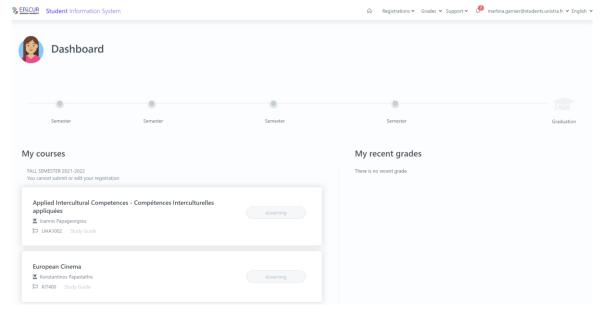


Figure 48: Preview Main Information functionality

Table 47: Preview Main Information functionality

Functionality Name	Preview Main Information
Actors	Students
Input Data	-
Description	The user can view his/her main personal data by selecting the home icon from the VURS's menu bar
Output Data	The page with the main user's information is loaded which are: study profile, registered courses, recent grades.

2.4.2 Check Grades

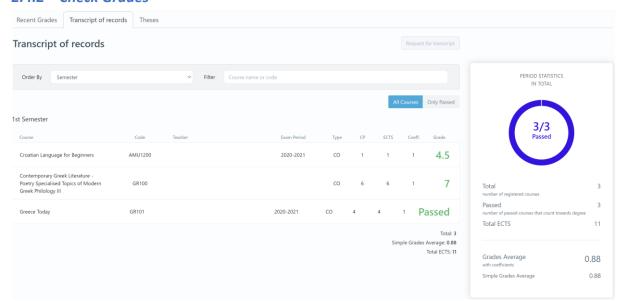


Figure 49: Check Grades functionality: All Grades
Table 48: Check Grades functionality

Functionality Name	Check Grades		
Actors	Students		
Input Data	Optional: Name, Code		
Description	The user can check his/her grades by following the steps:		
	For Recent Grades:		
	1. selects the More->Recent Grades option from the VURS's menu bar		
	There is the option to check for each course the statistics of grades regarding the number of students by clicking Statistics button on the specific course section.		
	For All Grades:		
	 selects the More->All Grades option from the VURS's menu bar selects between all courses (default option) and only passed courses checks courses grades by searching/filtering them (by name or code) and by sorting them (by Semester, Type) 		
	For Theses' Grades:		

	 selects the More->Theses option from the VURS's menu bar The user can also switch between categories by selecting one of the following tabs: Recent Grades, Transcripts of records (for all grades),
Output Data	Theses. The page with the grades is loaded with some statistics. If the user selects statistics within a specific course, a popup window with relevant information appears.

2.4.3 View Requests

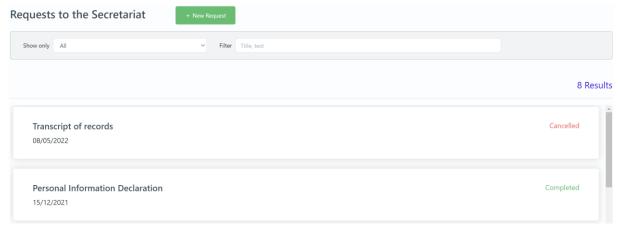


Figure 50: View Requests functionality
Table 49: View Requests functionality

Functionality Name	View Requests		
Actors	Students		
Input Data	Optional: Title, Text		
Description	The user can view his/her requests by following the steps:		
	 selects the Support->Requests option from the VURS's menu bar selects between all requests (default option), pending requests, approved requests and failed requests finds a group of requests or a specific request on the list of requests to the secretariat by searching/filtering them (by title, text) When there are files attached to a request, the user is able to download them by clicking the Download documents button. 		
Output Data	The list of requests that satisfy the defined requirements appears on the Requests to the Secretariat page where the user can see the status of each request and the secretariat's response. By clicking the Download documents button in a request, the attached files are downloaded to the user's computer.		





EPICUR European University

Transcript of Records

Academic Period: 2021-2022 Fall

DocNo: 2021/12/0017

Personal Information

Student last name: Ramberg Date of birth: 2000-10-20 Gender: Male

Place of birth: Munich Matriculation number: 20180032025551

Country of birth:

Name of sending institution: Karlsruhe Institute of Technology

Faculty:

Karlsruhe Institute of Technology Hermann-von-Helmholtz-Platz 1 76344

EPICUR Secretariat/ Lukas Schneider Coordinator:

Receiving Institution	Start mobility date	End mobility date	Form of study	Title of the course unit at the Receiving Institution	Local grade	Number of ECTS credits
AUTH	2021-02-02	2021-04-30	Theory	Contemporary Greek Literature - Poetry Specialised Topics of Modern Greek Philology III	7	6.0
AMU	2021-01-18	2021-05-13	-	Croatian Language for Beginners	4	1.0







EPICUR European University Learning Agreement

Academic Period: 2021-2022 Fall

DocNo: 2021/12/0016

Tobias Student last name: Ramberg First name: 2000-10-06 Date of birth: Male Gender:

Place of birth: Matriculation number: 20180032025555

Country of birth: Germany

Name of sending institution: Karlsruhe Institute of Technology

Faculty:

Address: Karlsruhe Institute of Technology Hermann-von-Helmholtz-Platz 1 76344 Eggenstein-

Receiving Institution Acronym	Receiving Institution Name	
UNISTRA	University of Strasbourg	
UVA	University of Amsterdam	
AUTH	Aristotle University of Thessaloniki	
воки	University of Natural Resources and Life Sciences	
KIT	Karlsruhe Institute of Technology	
UHA	University of Upper Alsace	
FREI	University of Freiburg	
AMU	Adam Mickiewicz University in Pozna	

2.4.4 Create Request

New request to the secretariat

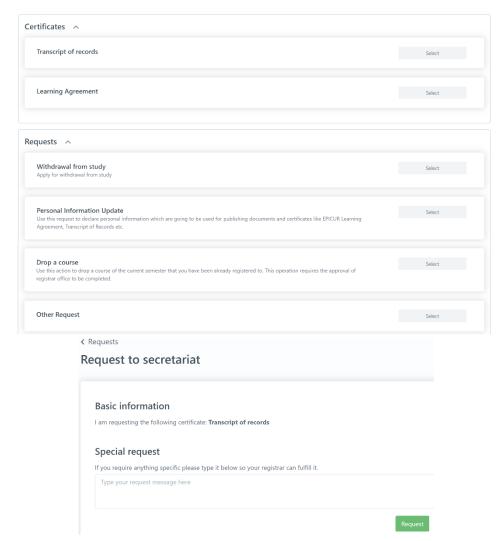


Figure 52: Create Request functionality: a) List of requests, b)Transcript of records request form
Table 50: Create Request functionality

Functionality Name	Create Request		
Actors	Students		
Input Data	Information about the request to the registrar (Depends on the request)		
Description	The user can view his/her requests by following the steps: 1. selects the Support->Requests option from the VURS's menu bar 2. clicks + New Request button 3. selects the type of request between Certificates (Transcript of records, Learning Agreement) and Requests (Withdrawal from study, Personal Information Update, Drop a course, Other Request) 4. completes the request form by providing information to the registrar and clicks Request button.		
Output Data	The Requests to the Secretariat is loaded and the request would be added		

as Active in the list of requests.

2.5 **Lecturers**

2.5.1 Preview Main Information

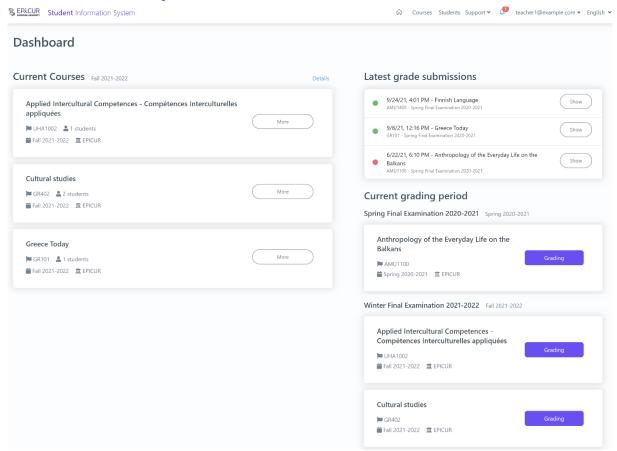


Figure 53: Preview Main Information functionality
Table 51: Preview Main Information functionality

Functionality Name	Preview Main Information	
Actors	Lecturers	
Input Data	-	
Description	The user can view the main information about his/her courses by following the steps: 1. selects the home icon from the VURS's menu bar	
Output Data	The page with the main user's information about courses is loaded which are: current courses, latest grade submissions, current grading period.	

2.5.2 Search Courses

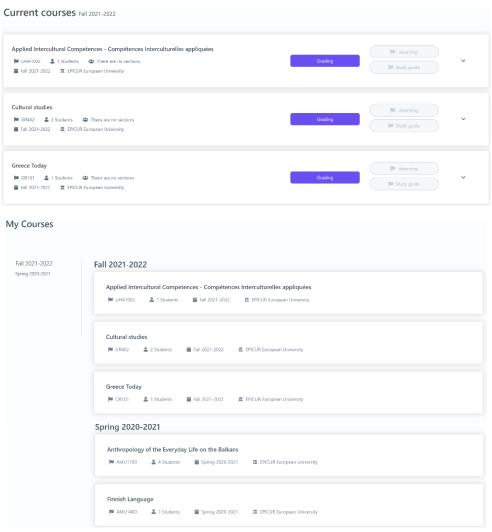


Figure 54: Search Courses functionality: a) Current courses, b) My courses
Table 52: Search Courses functionality

Functionality Name	Search Courses
Actors	Lecturers
Input Data	-
Description	The user can search for a group of his/her courses or a specific course by following the steps:
	For Current courses:
	 selects the Courses->Current courses option from the VURS's menu bar
	For My courses:
	1. selects the Courses->My courses option from the VURS's menu bar
	2. finds course by searching/filtering them by academic period
Output Data	A list of the courses that satisfy the defined requirements appears.

2.5.3 Preview Course Class



Figure 55: Preview Course Class functionality Table 53: Preview Course Class functionality

Functionality Name	Preview Course Class
Actors	Lecturers
Input Data	-
Description	The user can preview a course class by following the steps:
	From Current courses:
	 searches for a specific course on Current courses page clicks arrow icon selects More option
	From My courses:
	 searches for a specific course on My courses page clicks on the specific course
Output Data	The page with all the class's information is loaded where there are four tabs: General, Students, Grades, Candidates.

2.5.4 View Class Students

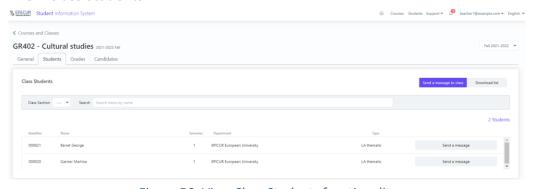


Figure 56: View Class Students functionality Table 54: View Class Students functionality

Functionality Name	View Class Students
Actors	Lecturers
Input Data	Communicate with students: Subject, Short message, Attach File (optional)
Description	The user can view the students of a class, communicate with them and download a list of their information by following the steps:
	 visits the preview page of a course class selects the Students tab
	To communicate with students:

	 clicks Send a message to class button to communicate with all the students or clicks Send a message button to a specific student to communicate with him/her. completes the message form (Subject, Write a short message, attach file) and sends it To download list of students: clicks Download list button
Output Data	The list with all the students of the class is loaded.
	For "Send message" action, a loading bar appears and after the completion the popup form closes.
	By clicking the Download list button, the file with students' information of the class is downloaded to the user's computer.

2.5.5 Grade students

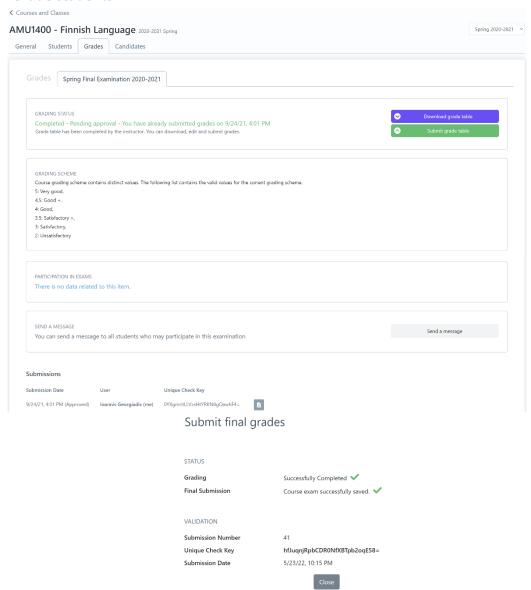


Figure 57: Grade Students functionality: a) Grades page of a course class, b) completion of submission

Table 55: Grade Students functionality

Functionality Name	Grade Students
Actors	Lecturers
Input Data	Grade table file
Description	 The user can grade the students of a class by following the steps: visits class students page clicks Download list button to download the list of students' information where there is a column with the name Grade. after preparing grade table file, selects Grades tab on the preview page of the course class clicks Submit grade table button uploads grades file and clicks Upload and continue button clicks Accept and finalize button to complete submission you will be informed about your submission status On the Grades page, the user can view the submission status under the Submissions section.
Output Data	Information about the status and proof of submission appears.

2.6 <u>Candidates</u>

2.6.1 View Mobility Applications

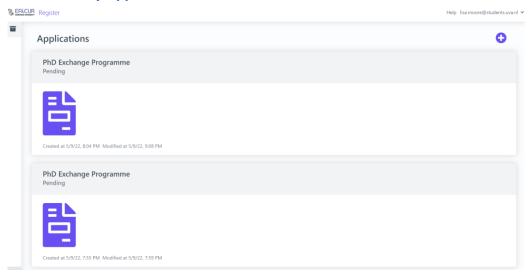


Figure 58: View Mobility Applications functionality Table 56: View Mobility Applications functionality

Functionality Name	View Mobility Applications
Actors	Candidates
Input Data	-
Description	The user can view his/her applications and their status by following the steps: 1. selects the home option from the VURS's sidebar menu
Output Data	The page with the list of user's applications and their status is loaded.

2.6.2 Submit Mobility Application

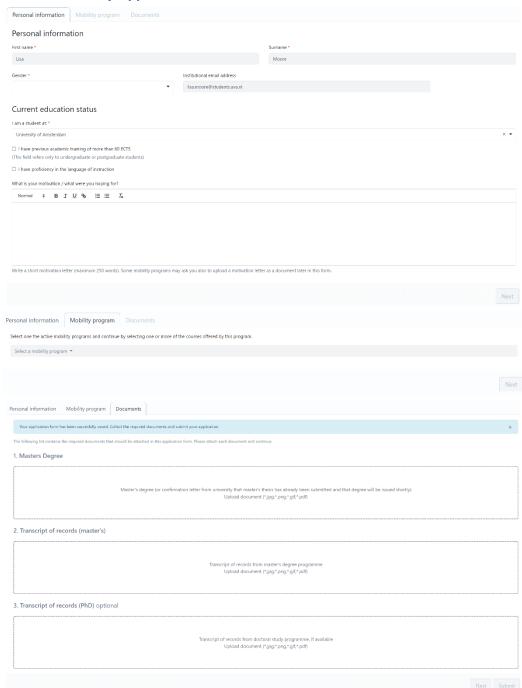


Figure 59: Submit Mobility Application functionality a) Personal Information tab, b) Mobility program tab, c) Documents tab

Table 57: Submit Mobility Application functionality

Functionality Name	Submit Mobility Application
Actors	Candidates
Input Data	Personal Information: Required: First Name, Surname, Gender, I am a student at (Current education status) Optional: (Current education status) I have previous academic training of more than 60 ECTS, I have a

	proficiency in the language of instruction, What is your motivation / what were you hoping for? • Mobility program: - Required: Select a mobility program, Select courses • Documents: - Required: Upload documents - Optional: Upload proficiency in focus language, Upload proof of enrolment
Description	The user can apply for a mobility program by following the steps: 1. selects plus sign button on the dashboard 2. completes the application where there are three tabs (clicks Next button to navigate to the next tab): Personal Information (completes a form), Mobility program (selects mobility and courses), Documents (upload documents). For some types of documents exist a template document that can be downloaded by clicking Download document template button. 3. submits the application 4. finalizes submission by clicking OK button on the confirmation popup window that is shown
Output Data	The user receives an email about his/her submission and the application is in the list of applications in dashboard.

2.6.3 Preview Mobility Application

Internships in civil society organisations and service learning course Active Created at 3/24/21, 105 PM Modified at 3/24/21, 118 PM Personal information Personal information Fist name* Sumame*	
Created at 3/24/21, 105 PM Modified at 3/24/21, 118 PM Personal information Mobility program Documents Q1 Messages Personal information	
Personal information	
Personal information	
rest name Summer Summer Moore	
Gender Institutional email address	
Male lisa.moore@students.uva.nl	
Education information	
Education information	
I am a student at: University of Amsterdam	
There previous academic training of more than 60 ECTS	
I have proficiency in the language of instruction	
What is your motivation / what were you hoping for?	
Personal information Mobility program Documents Q Messages	
Select one the active mobility programs and continue by selecting one or more of the courses offered by this program.	
Internships in civil society organisations and service learning course	
*	
The internships at civil society organisations are accompanied by the intercultural service-learning course, and both are fully virtual in the 2021 pilot run to enable innovative and inclusive student mobility. Participants of this internship format are required to attend learning course (includes the introductory, seminar and final sessions as well as two additional bridging trainings). During the internship, the students will work in one of the listed organisations of the third sector based in Karisruhe or Thessaloniki on a voluntary bar	
week). The internships provide not only practical work experience, but also strengthen the students' intercultural and soft skills and, thus, contribute to their employability.	
Enrollment period: Sep 20, 2021, 90000 AM - Jan 1, 2022, 12:59:00 AM	
Courses	
Positions	
There a visal residence permit to live in the country of my home university (only for non-EU citizens)	
Assist in content creation and polishing our social media image Boost our international recognition Data gathering and processing Organise events	
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Boost our international recognition Data gathering and processing Organise events	
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Bosts our international recognition Data spating and processing Organise events GREECE Personal information Mobility program Documents R2 Messages The following list contains the required documents that should be attached in this application form. Please attach each document and continue. 1. Declaration of consent Please download and use the available document template before upload Download document template Certificate 1.pdf (application/pdf) 2. Proof of Enrolment Cettificate 1.pdf (application/pdf)	
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Boats our international recognition Data synthering and processing Organise events GREECE Personal information Mobility program Documents Q Messages The following list contains the required documents that should be attached in this application form. Please attach each document and continue. 1. Declaration of consent Please download and use the available document template before upload Control of Account the region of Consent Certificate 1 perf (application/perf) 2. Proof of Enrolment Certificate 1 perf (application/perf) Certificate 1 perf (application/perf) About the control of Consent Program Documents Q Messages	
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Figure 60: Preview Mobility Application functionality a) Personal Information tab, b) Mobility program tab, c) Documents tab, d) Messages tab

Table 58: Preview Mobility Application functionality

Functionality Name	Preview Mobility Application
Actors	Candidates

Input Data	Personal Information:
	 Required: First Name, Surname, Gender, I am a student at
	(Current education status) I have provious
	 Optional: (Current education status) I have previous academic training of more than 60 ECTS, I have a
	proficiency in the language of instruction, What is your motivation / what were you hoping for?
	Mobility program:
	Required: Select a mobility program, Select courses
	Documents:
	Required: Upload documents (Depends on the mobility's
	requirements)
	 Optional: Upload documents (Depends on the mobility's
	requirements)
	Messages:
	 Required: Short message
	 Optional: Subject
Description	The user can preview a mobility application's information by following the
	steps:
	 selects an application from applications list by clicking it on the dashboard
	To complete a pending application:
	 changes the application's information where there are three tabs (clicks Next button to navigate to the next tab): Personal Information, Mobility program (changes courses), Documents (upload documents) submits the application
	 finalizes submission by clicking OK button on the verification popup window that is shown
	To communicate with registrar (pending and active applications):
	2. selects Messages tab
	3. clicks Compose a new message
	 completes the message form (Subject, Write a short message) and sends it
Output Data	The page with all the application's information is loaded where there are four tabs: Personal Information, Mobility program, Documents, Messages.
	For "Send message" action, the result is shown in the application's Messages tab.
	For "Complete a pending application" action, the user receives an email about his/her submission.

3 Virtual Campus Learning Platform (VCLP)

This section is presenting briefly the VCLP landing pages and the process of the decentralised course delivery in EPICUR using VCLP and the local (institutional) Learning Management Systems (LMSs).

3.1 Introduction

The VCLP is a full Learning Management System, based on ILIAS. It is completely web-based, hence requires only a web browser and no additional software to use it. Important information about the course offerings for students from the EPICUR partners are offered though the public available part of the VCLP (chapter 4.2). Login is possible with your existing university account (chapter 4.3). EPICUR courses can be directly hosted on the VCLP. However, the VCLP is also integrated with local LMS running at each university through a decentralized LMS server. In such a way the EPICUR courses offered can be hosted on local LMS servers. EPICUR students from other universities can access the courses though the VCLP (chapter 4.4)

3.2 VCLP landing page

The VCLP offers a comprehensive landing page, where the different mobility programs are offered in large tiles in the typical EPICUR colour scheme. There are also large buttons to log in, to apply for EPICUR courses via the VURS and a support and help page. Also, news are shown for upcoming EPICUR events. The page is designed in such a way, that it is also easily readable on mobile devices. With limited space the layout of the page is adjusted accordingly. The main landing page is available for every visitor of the VCLP, a login is not required.

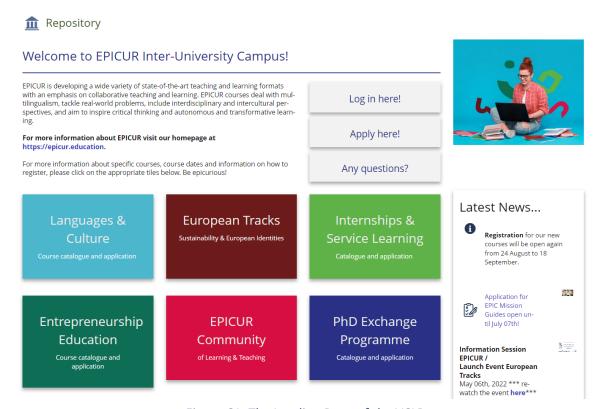


Figure 61: The Landing Page of the VCLP

By clicking on one of the large, coloured tiles of the mobility program, the course catalogue is displayed. This course information is directly fetched from the VURS system by using a request in the background. This has the advantage that the course information only must be entered once by the

EPICUR administrative stuff at the local university. Interested students can browse the course catalogue and if logged in find a direct link to register for those courses. In addition, the VCLP also provides a help forum for students.



Figure 62: Languages & Culture mobility program page

In order to maintain the clarity and a good overview of the available courses, the course catalogue in the VCLP is showing only a subset of all available attributes of a course, which consists of the most important information. If a student is interested in a course in detail, a link to the detailed course catalogue in the VURS is available.

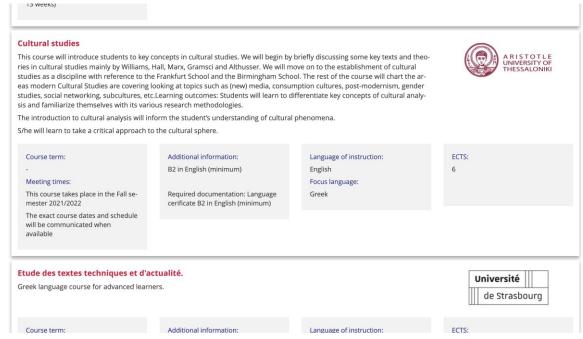


Figure 63: Example of one EPICUR course as displayed in the VCLP course catalogue

3.3 Single Sign On

To access your courses or use non-public functionalities of VCLP as a teacher or student it is required to log in. VCLP does not require to register a new account. Instead, VCLP offers a Single Sign On mechanism, where the existing local account each member already has at their university is used for authentication. In such a way it is not necessary to store passwords on the VCLP. In addition, due to the Single-Sign-On aspect of Shibboleth, entering your user credentials is not required if you have already signed in on the Identity Provider for using another university system.



Figure 64: Login Screen of the VCLP – Selection of the home institution

The VCLP stores no passwords, but other personal data of EPICUR members, like first name, last name and email address. Since the VCLP is self-hosted by the Karlsruhe Institute of Technology, the KIT is also the responsible party or so-called "Controller of Data Processing". The KIT hosts the VCLP on its own infrastructure at the "Steinbuch Centre for Computing" (SCC) and does not use any cloud storage outside the KIT facilities. The data privacy policy describes the rights for users according to the "General Data Protection Regulation" (GDPR) of the EU and states the technical measures the KIT has taken to protect the personal data from abuse.

3.4 Decentralized course delivery

Offering an EPICUR course directly on the VCLP requires the teachers in many cases to get familiar with a new Learning Management System. This requires additional training and support, which is time-consuming and might often costs money. This is especially true if you are not yet familiar with the ILIAS LMS. In addition, the same offered courses for EPICUR students are also offered as local courses at the university. In these cases, teachers would have to offer the same course on two different learning platforms (VCLP and local Learning Management System). Moreover, since both groups of students are in different LMS, they do not have the ability to communicate with the other student group via the platform (like chat, forums, comments etc.)

To overcome these limitations, the VCLP does use the feature to connect it to other LMS. This is achieved by bridging the VCLP to the other local LMS via a central middleware (Decentralized LMS server). This middleware is a message-based platform, which receives events as messages from one connected Learning Platform and routes this message to other Learning Platforms. This middleware platform is completely invisible to normal users and works in the background.

Any data exchange between the LMS and the Decentralized LMS server is done in a secured and encrypted way. The authentication of the LMS to the Decentralized LMS server is done by SSL client-certificates, so no third party gets access to the Decentralized LMS server or the connected LMS. Only client certificates issued by the KIT can be used to identify and authenticate an approved LMS. The encryption of the messages is done by standardized Transport Layer Security (TLS).

The Decentralized LMS server is used in the EPICUR context for two important features:

- Course sharing from local LMS to the VCLP
- Course access to the local course from the VCLP

3.4.1 Course sharing

A course on one LMS can be shared (or released) with other connected LMS. While this would technically allow any course on one LMS to appear on all other platforms, this feature is restricted by administrative settings in such a way that it is only possible to share courses from local LMS to the VCLP. In the connected local LMS course settings an additional option is provided. Using this setting course administrators can share (or "export", "release") an existing course to the VCLP. This can be set for each course individually.

If a course administrator chooses to share a course to the VCLP, the course will appear on the VCLP in the main category "My EPICUR courses". This category is linked directly from the landing page if the user is logged in. In addition to the name of the course a short description is also optional available. It also states the university on which the course is hosted.

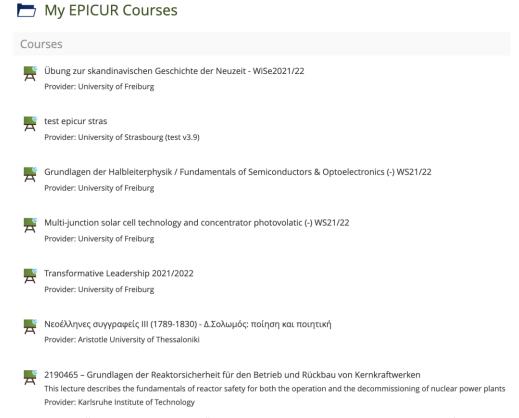


Figure 65: The "My EPICUR courses" category contains the available courses for a student

However, any shared course will be at first invisible to any user except VCLP administrators. Only students who have been approved for a course will be able to see the course link. This is achieved through the VURS transmitting the approved user accounts to the VCLP via a web service. In doing so

the students will have a better overview of their accessible courses and are not confused with a long list of inaccessible courses.

3.4.2 Course access

By clicking on a course that has been shared from a local LMS to the VCLP in the "My EPICUR courses" category, the logged in user will be directly forwarded to the local LMS and if necessary, a new user account on the local LMS will be created. This account is special in such a way, that it is for EPICUR students only and allows access to the local course. By Decentralized LMS server design it is always prefixed with the organization name set in the Decentralized LMS server, which is "EPICUR_" for the VCLP. For example, if a user has the VCLP account "john.doe@kit.edu", the username on the local LMS will be "EPICUR john.doe@kit.edu".

Technically the authentication between the VCLP and the local LMS is done via the Decentralized LMS server. On clicking a course link on the VCLP, a special random token combined with a computed value (hash) of several user attributes is generated by the VCLP and transmitted to the Decentralized LMS server. Then the user will be forwarded to the course on the local LMS. Thereby also user attributes, like username, first and last name and email address are transmitted in the URL. The local LMS reads also the VCLP token from the Decentralized LMS server, calculates the hash value again and compares it. If both values match, the user is successfully authenticated. This process happens in the background and usually takes less than a second, so it is completely transparent to the user and does not disturb the user experience.