Advancing Higher Education in Maldives
Through
E-learning Development

AM**e**D

2.1 Draft study programme structure and course syllabuses developed

EXECUTIVE SUMMARY

This document's first aim is to present a draft version of the study programme structure (credits, timeframe, learning outcomes and so on) and procedures based on the finding and observations resulting from WP1.

It includes three main parts.

The first part "Programme Module Design Methodology" presents the methodology used for the creation of the Study Programme. It starts with an overview of the process and the main features and then goes through the presentation of the partners' design meetings organised in chronological order.

The second part "Draft of the study programme structure and course syllabuses" presents the study programme's structure and syllabus's draft organised on the basis of 2 learning paths: the first one is directed at decision-makers and is made up of 2 modules and 1 capstone project and the second one for lecturers with 3 modules and 1 capstone project.

The third part "Assessment and certification" describes the assessment procedures and the types of certification and badges to be issued within the AMED study programme piloting. As such, the section is fully aligned with D5.1 Certification Plan.

CONTENTS

PROGRAMME MODULES DESIGN METHODOLOGY

Introduction

One of the specific objectives of the AMED project is the co-creation and piloting of a new study programme for professional development focusing on the use of ICT in education.

The design of the Study Programme started with the identification of the **training needs.** This was a task undertaken by FOI, CARNET and UOC with the support of the MNU in the WP1 and presented in the **deliverable 1.3 AMED Needs Analysis**. The training needs detection targeted students, teachers and institutional readiness for online learning and provided in-depth information on the perception of each group.

An in depth analysis of this information provided enough details to design and develop the Study Programme curriculum.

For each training need, a **set of topics** was identified and assigned to each study programme module. In this line a complementary concept map was developed based on these findings. The map was used as a starting point in the process of co-design of this study programme curriculum.

A **draft version of the study programme** was proposed and presented to all partners, it included the following modules:

1. "Foundations of e-learning" (core and common module to all stakeholders: decision-makers and lecturers) (core)

2. "Leadership and management of e-learning" (MNU decision-makers)

3. "Designing digital learning" (lecturers)

4. "The networked teacher" (lecturers).

The expected deadlines to finalise the study programme design were confirmed: D2.1 February 2020, D2.2 September 2020.

Discussion with MNU representatives and the interviews and focus groups during the kick-off meeting revealed the need for creating a Study Programme that would adapt to lecturers and senior-level staff schedules in terms of workload and flexibility. After analysing different possible scenarios, it was concluded that:

- each module would have 2,5 MNU credits, which correspond to 25 hours

- **Decision-makers** will do modules 1 and 2, each module representing 25 hours of work (50 hours in total). The modules are followed by a capstone project of 50 hours (faculty/institutional eLearning implementation action plan). TOTAL: 100 hours (10 MNU credits)
- **Lecturers** will do modules 1, 3 and 4, each module represents 25 hours of work (75 hours in total). The modules are followed by a capstone project of 65 hours (Design a blended learning activity / learning experience blueprint / prototype including the facilitation plan and implementation.). TOTAL: 140 hours (14 MNU credits)
- The first two modules (1 and 2) will be implemented from September until November 2020 during 10 weeks (5 weeks per module). And modules 1, 3 and 4 (just for lecturers) will be implemented during 15 weeks from September to mid-December 2020, approximately.

The co-design of the Study Programme envisaged 6 Meetings attended by all the members of the design team and was held from May to November 2019.

These regular meetings were scheduled to discuss the design of the modules (description, topics, competences and learning outcomes, activities, resources, assessment and environment), ensure their coherence and dynamism, and avoid duplication of contents and activities.

Moreover, a protocol to structure the work dynamics for the co-creation of the SLP was set up by UOC envisaging all the issues to be tackled in the group online meetings. Among the issues tackled in the online meetings were

a) the assignment of roles (lead, contributor and reviewer), b) the discussion of the first draft of the topics, competences, learning outcomes and description of each module, c) the improvement of the content and style, d) the elaboration of guidance targeted to the facilitators of the program, e) the consolidation of the module design and, f) the implementation of the final modifications after the review of the partners and the relevant target group representatives. Capstone projects were directly connected to the modules and had to be designed in parallel with them.

The result of this co-design process led to the deployment of the AMED e-Learning Study Programme which is currently being piloted at the Maldives National University with 75 lecturers and decision-makers. The summary of each meeting is reported in Annex I.

CONCLUSION

The 2.1 Draft version of the study programme structure is ready on schedule.

The 4 modules were revised by the designated reviewers. As agreed during the last meeting "Sixth DTOM Meeting" on the 20th of november, they were also tested by a relevant target group representative (decision maker and lecturer). Their feedback was generally positive and useful. The last refinements were added taking into account these two feedbacks.

The capstone projects were due for M14 (February 2020), but as they are ready we have included them. They are a practical activity which provides learners with the opportunity to put into practice the competences developed in the modules of the Study Programme.

The implementation within Moodle will be done by UOC and MNU by June 2020.

A F2F training session is prevised in The Maldives on M19/20 (TBC).
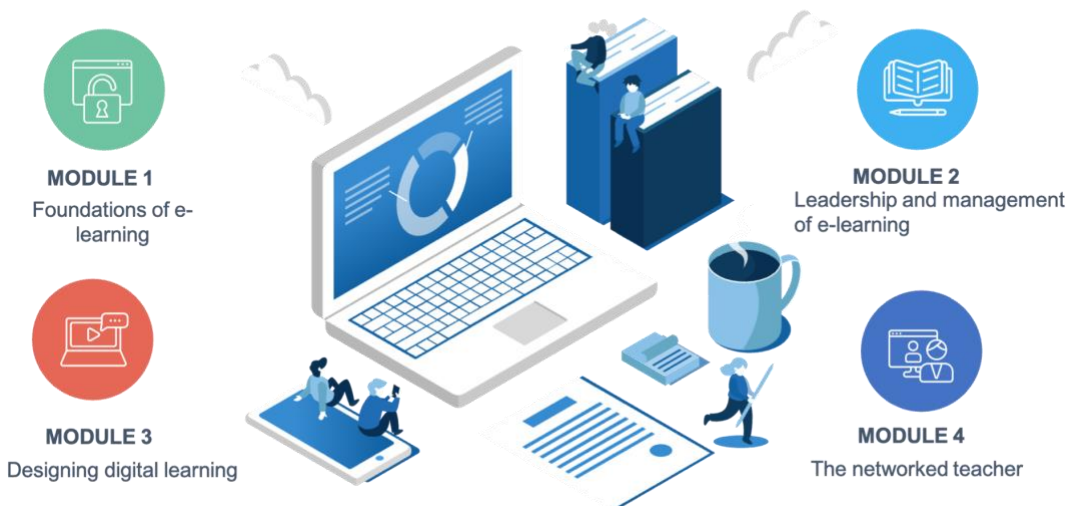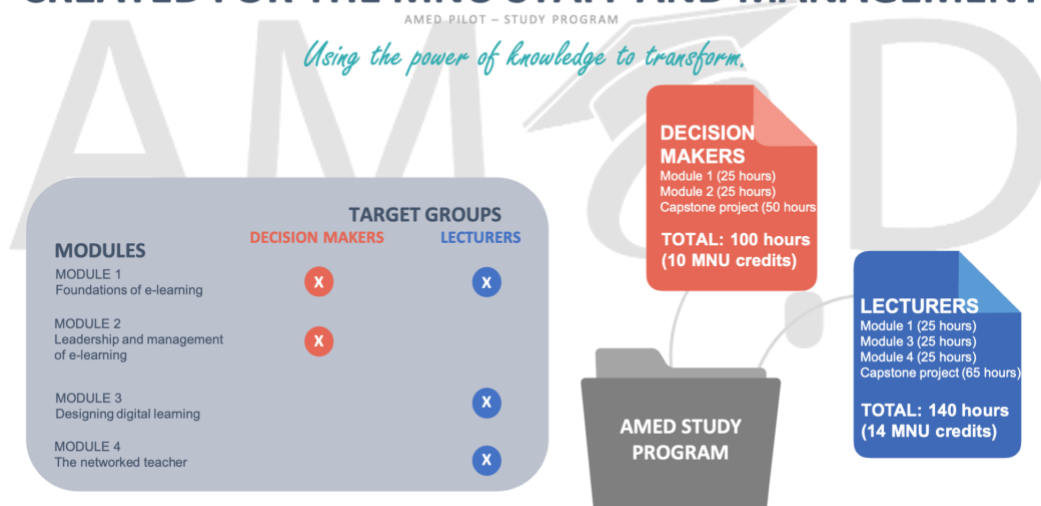

Figure 1. AMED study programme scheme

DRAFT OF THE STUDY PROGRAMME STRUCTURE AND COURSE SYLLABUSES

Study Programme Overall Objective

Contribute to the professional development of MNU academic staff for the transition to a bi-modal university through:

- → The provision of the foundations of e-learning and of different blended learning approaches,
- → The training of lecturers in design, planning and implementation of competency-based blended learning,
- → The training of university decisions makers on blended learning strategic management and action plans.

Learning paths and credits

The Study Programme is divided into two learning paths (1 and 2). Learning Path 1 is addressed to decision-makers while learning path 2 is for lecturers.

The first learning path is made up of 2 modules (M1 and M2) and 1 capstone project (CP1). The capstone projects is a practical activity which provides course participants with the opportunity to put into practice the competences developed in the modules. The Capstone Project 1 aims to develop a faculty/institutional e-learning implementation action plan.

The second learning path has 3 modules (M1, M3, and M4) and 1 capstone project (CP2). The Capstone Project 2 requires course participants to design a blended learning activity/learning experience blueprint/prototype including the facilitation plan and its implementation.

Each module corresponds to 25 hours of participant work (M1 and M2 for decision-makers: 50 hs in total/M1, M3 and M4 for lecturers: 75 hs in total).

CP1 corresponds to a maximum of 50 hs.
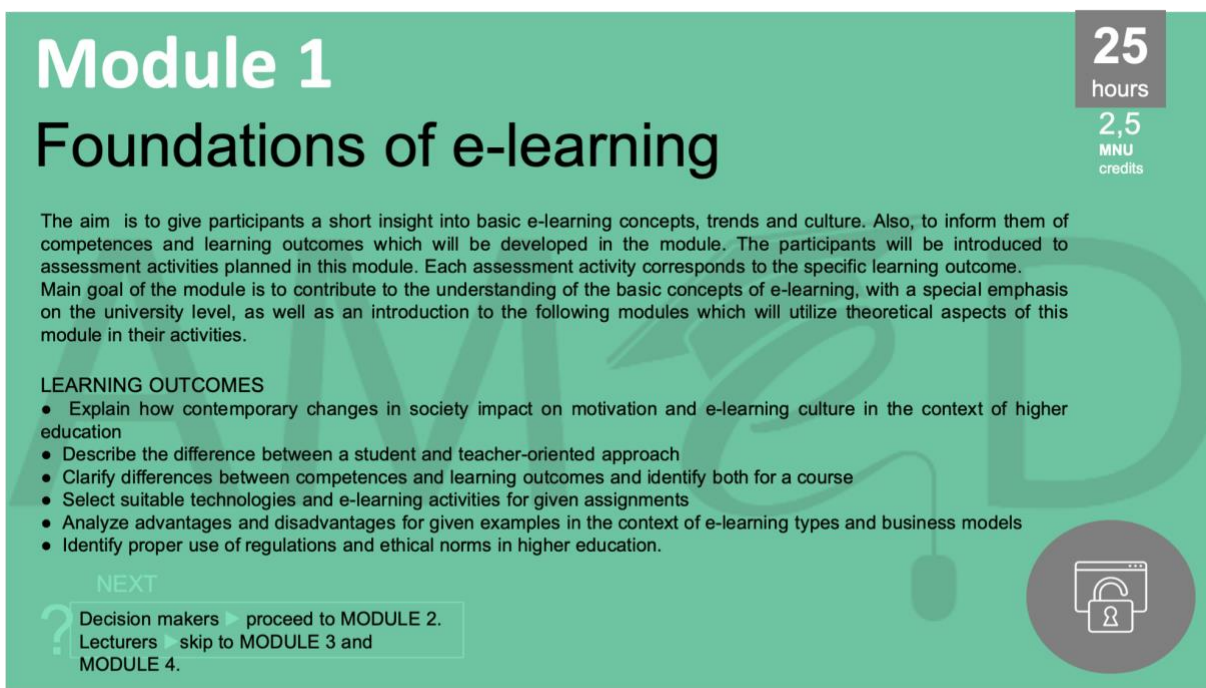
CP2 corresponds to a maximum of 65 hs.

Lecturers Study Programme total workload is 100 hours for Decision-makers and 140 hs for Lecturers.

Structure of the Study Programme:

- M1: "Foundations of e-learning" (core and common module to all stakeholders: decision-makers and lecturers) (core)
- M2: "Leadership and management of e-learning" (MNU decision-makers)
- M3: "Designing digital learning" (lecturers)
- M4: "The networked teacher" (lecturers).
- Capstone project (per lecturer and per decision-maker).

Module 1 - Foundations of e-learning (Decision makers & Lecturers)

Lead: FOI - Contributor/s: MNU - Reviewer: CARNET

Figure 2. AMED Module 1 overview

Module description	Introduce participants with module structure as a basic foundation for e-learning. The intention of this module is to give participants a short insight into basic e-learning concepts, trends and culture. Furthermore, inform them of competences and learning outcomes which will be developed in the module. Introduce participants to assessment activities planned in this module. Each assessment activity corresponds to the specific learning outcome. Main goal of the module is to contribute to the understanding of the basic concepts of e-learning, with a special emphasis on the university level, as well as an introduction to the following modules which will utilize theoretical aspects of this module in their activities. This module corresponds to 2,5 credits (25 hs) of participant work distributed along 5 weeks.
Competences	● Comprehend the use of contemporary pedagogical, cultural and technological aspects in e-learning context for higher education. ● Define possible implementation characteristics for an e-learning study programme, including applicable regulations.
Learning outcomes	● Explain how contemporary changes in society impact on motivation and e-learning culture in the context of higher education. ● Describe the difference between a student and teacher oriented approach. ● Clarify differences between competences and learning outcomes and identify both for a course. ● Select suitable technologies and e-learning activities for given assignments. ● Analyze advantages and disadvantages for given examples in the context of e-learning types and business models. ● Identify proper use of regulations and ethical norms in higher education.
Activity	*Introduction to and basic concepts of e-learning*

The activity goal is to obtain insight in theoretical concepts, ICT and pedagogical aspects which influence contemporary e-learning context within higher education. Activity is organized around six tasks where each of them is accomplished through an assignment:

Task 1: Introduction to e-learning

Task 2: Basic concepts of e-learning

Task 3: Competency based learning

Task 4: Types of e-learning activities and use of technology

Task 5: Advantages and disadvantages of e-learning business models and types of e-learning

Task 6: Regulations and quality standards

Module 2 - Leadership and Management of e-learning (Decision makers)

Lead: MNU - Contributor/s: CARNET - Reviewer: UOC

Figure 3. AMED Module 2 overview

Module description	Successful e-learning implementation occurs only when e-learning is an integral part of institutional vision for learning. This module introduces decision makers to the major categories/concepts that need to be addressed in managing and leading e-learning at faculty and institutional level. It further guides the decision makers in planning, managing, implementing and providing quality e-learning with hands-on activities.

E-Learning includes the exploration and use of diverse ICT strategies and tools to expand teaching and learning possibilities in ways that lead to improved student learning outcomes. There needs to be cohesion across all elements of e-learning planning to ensure that infrastructure and resources are used to re-conceptualize teaching and learning, in order to maximize the benefits of the digital age.

Module 2 in context: The first module "**Foundations of e-learning**" provided you with an insight into basic e-learning concepts, this second module "**Leadership and Management of e-learning**" is meant to introduce you to the major categories/concepts that need to be addressed while managing and leading e-learning at faculty and institutional level. Importance will be given to prepare yourself as a leader in e-learning to face the change with proper planning for successful implementation of e-learning.

Module 2's aim and contents: Being an e-learning leader, this module will assist you to be competent in evaluating the need for technology integration in education on a strategic level and lead for change. Furthermore, this module will ensure that you develop the competency of

planning and overseeing actions for successful implementation of e-learning in higher education with the establishment of quality measures and standards to provide quality e-learning.

By the end of this module, it is intended that you will have deepened your understanding about the considerations that need to be undertaken to lead and manage e-learning at your faculty and institution as a whole.

The module covers topics such as leading and managing change, planning e-learning, managing resources, organising e-learning support and quality assurance in e-learning.

This module corresponds to 2,5 credits (25 hs) of participant work distributed along 5 weeks. |

Competences	- Evaluate the need for the integration of technology in education on a strategic level, and lead for change. - Plan and oversee actions for successful implementation of e-learning in higher education. - Establish quality measures and standards to provide quality e-learning.
Learning outcomes	- Evaluate institutional / faculty readiness to change by identifying effective change management concepts. - Examine the current context in relation to the institution's/faculty's strengths, weaknesses, opportunities and threats. - Recognise the factors affecting successful implementation of e-learning in higher education. - Estimate the availability of resources to be managed and types of support required for sustainability of e-learning at institutional/faculty level. - Assess current quality assurance tool considering the necessary quality measures and standards to provide quality e-learning.
Activity	***Planning to lead and manage the change from traditional methods to e-learning implementation*** The aim of this activity is to provide you with conceptual knowledge and practical information for the planning for the implementation of e-learning at your faculty and institution by considering necessary actions based on your current state to change from traditional methods to e-learning. This hands-on approach is organized as a sequence of interrelated tasks that support a progressive design of an e-learning implementation action plan: Task 1: Analyse current state of faculty/institution for the readiness to change from traditional methods to e-learning Task 2: Determining the critical success factors for implementation of e-learning in higher education Task 3: Analysis of existing and missing support and resources to sustain e-learning at faculty/institution

	Task 4: Evaluate current rubrics/tools used and course syllabus against quality standards to assure quality e-learning.

Module 3 - Designing digital learning (Lecturers)

Lead: UOC - Contributor/s: FOI - Reviewer: MNU

Figure 4. AMED Module 3 overview

Module description	This module is set up to contribute to the development of the MNU blended learning strategy. It is part of the development of your course, supporting your professional development (developing teacher competences), it provides clues to develop and introduce blended learning into your courses, and concludes with an advanced outline of a solution that will be further developed in the capstone project.
	Module 3 in context: The first module "**Foundations of e-learning**" provided you with an insight into basic e-learning concepts, this second module "**Designing digital learning**" is meant to develop some of these

	concepts into a tangible understanding of blended learning design. The third and last module "**The Networked Teachers**" will further develop your practice as a blended learning lecturer. The completion of these three modules will equip you with the necessary knowledge and skills to develop your capstone project. Module 3 enables you to begin to draft the part of your activity, which you will carry on in module 4. This drafted activity will be reviewed, refined and finalised in your capstone project. Module 3's aim and contents: This third module will assist you in the development of two main competences. You will learn to design a competency-based blended learning activity and to use a model with constructive alignment in blended learning design. By the end of this module, it is intended that you will have deepened your experience in designing a blended learning activity identifying generic and/or specific competences; that you will have developed competences in designing focusing on the alignment of the learning outcomes, the learning methodologies, and the assessments; and that you will have acquired awareness of a meaningful use of Moodle. The module covers topics such as Competency-based design, blended learning design: F2F/online, activity design, digital resources and constructive alignment. This module corresponds to 2,5 credits (25 hs) of participant work distributed along 5 weeks.
Competences	● Design a competency-based blended learning scenario ● Apply constructive alignment in blended learning design
Learning outcomes	● Identify generic and/or specific competences for a blended activity. ● Align learning outcomes, learning methodologies, and assessment in a blended learning activity. ● Select a blended learning model according to contextual circumstances and learning needs. ● Design a blended activity based on a meaningful use of Moodle and/or other ICT tools
Activity	*Resolve a F2F issue or improve a learning experience with blended*

learning

The aim of this activity is to provide you with conceptual knowledge and practical information for the design or redesign of your course embracing a blended learning approach.

This hands-on approach is organised as a sequence of interrelated tasks that support a progressive design of a blended learning solution.

The activity is divided into 3 main areas of work:

- Analysing

    Task 1: Review your existing F2F course to highlight issues and identify potential situation for blended

    Task 2: Rewrite learners' needs according to a blended learning situation

    Task 3: Identify competences and learning outcomes to be addressed in a blended learning context

- Approaching,

    Task 4: Blended approach: choose one issue to address or learning experience to improve and the blended model to be implemented

- Designing,

    Task 5: Design the activity or learning sequence for your blended learning addressing what has been diagnosed and identify pertinent resources.

Module 4 - The networked teacher (Lecturers)

Lead: CARNET - Contributor/s: UOC - Reviewer: FOI

Module 4
The networked teacher

25 hours
2,5 MNU credits

This module is set up to contribute to the development of the MNU blended learning strategy. It is a part of the development of your course, supporting your professional development (developing lecturer competences), it provides clues in the outline of a solution that will be further developed in the capstone project.

This module provides you with the necessary competences to place yourself into your new blended learning lecturer role, to define and implement a communication and assessment strategy, and finally, to implement activities on a Moodle Learning Management System.

LEARNING OUTCOMES
- Identify your own role in the blended learning course
- Define a critical friendship with another lecturer(s)
- Design a synchronous and asynchronous communication strategy for a blended learning activity
- Maximize digital tools affordance in a blended learning context
- Design formative and summative assessment for a blended learning activity.

NEXT
Lecturers ▶ proceed to CAPSTONE Project for lecturers

Figure 5. AMED Module 4 overview

Module description	This module, just as the previous one (M3), is set up to contribute to the development of the MNU blended learning strategy. It is a part of the development of your course, supporting your professional development (developing lecturer competences), it provides clues in the outline of a solution that will be further developed in the capstone project.
	Module 4 in context: The first module "Foundations of e-learning" provided you with an insight into the basic e-learning concepts, the second module "Designing digital learning" assisted you in the development of some of these concepts into a tangible understanding of a blended learning design. This third and last module "The Networked Teachers" will further develop your practice as a blended learning lecturer. The completion of these three modules will equip you with the necessary knowledge and the skills to develop your capstone project.
	Although you will be designing your activity during modules 3 and 4, their outcome is only a draft of your blended activity. That draft will be a good start for the capstone project. During your capstone project you will finish to design and to implement your blended activity, and it will be ready to use by your students once you have completed it.
	Module 4's aims and contents: This module provides you with the necessary competences to place yourself into your new blended learning

	lecturer role, to define and implement a communication and assessment strategy, and finally, to implement activities on a Moodle Learning Management System.

This module corresponds to 2,5 credits (25 hs) of participant work distributed along 5 weeks. |
| **Competences** | ● Define a teaching strategy in a blended learning course.

● Design a communication strategy for a blended learning course.

● Create assessment strategies for a blended learning course.

● Implement courses on the Moodle Learning Management System |
| **Learning outcomes** | ● Identify own role in the blended learning course.

● Define a critical friendship with another lecturer(s).

● Design a synchronous and asynchronous communication strategy for a blended learning activity.

● Maximise digital tools affordance in a blended learning context.

● Design formative and summative assessment for a blended learning activity. |
| **Activity** | ***Implement, facilitate and assess your blended learning activity.***

The aim of this activity is to help you acquire knowledge and skills to complete design and implement your blended learning course on a Learning Management System.

This activity is organised as a sequence of tasks that provides support in finalising the design of your blended programme you started in the previous module. At each step of this activity you will find selected resources and methodological instruments which will help you complete the tasks. Each task has a forum available for any kind of exchange with your peers relevant to that task. |

CAPSTONE PROJECTS

Figure 6. AMED Module 5 overview

Capstone Project 1 (Decision makers)

Lead: MNU - Contributor/s: UOC / Carnet

Title	Develop a faculty/institutional e-learning implementation action plan.
Description	All participants are expected to conduct a capstone project during the course of the curriculum. The capstone experience is the final requirement of the e-learning course for decision makers. It is designed to help you integrate the learning delivered in Module 1 and Module 2 of the curriculum. Through the completion of the tasks within the module - Leadership and Management of e-learning, you now have analysed your current context, identified missing support and resources within your institution/faculty for successful implementation of e-learning.

	This project will guide you in developing an action plan to implement e-learning at your faculty/institution with respect to e-learning planning elements and your current context. The project needs to be carried out to achieve the following milestones: ● **Milestone 1:** Formulate an e-learning vision ● **Milestone 2:** Apply an e-learning planning matrix to determine your current stand in relation to elements of e-learning practice ● **Milestone 3:** Plan your actions to improve e-learning implementation at your faculty/institution ● **Milestone 4:** Identify required policies and/or amendments required to current policies to implement your action plan.
Learning Outcomes	● Formulate an e-learning vision for an institution / faculty in relation to elements of an e-learning practice. ● Develop an action plan to implement quality e-learning by identifying current institutional/faculty status in relation to the elements of e-learning practice. ● Examine required policies/procedures for sustainability of e-learning at faculty/institution with the recommendations of necessary amendments.

Capstone Project 2 (Lecturers)

Lead: UOC - Contributor/s: MNU / CARNET

Title	Design a blended learning activity/ learning experience blueprint/ prototype including the facilitation plan and implementation.
Description	Design a blended learning activity/ learning experience blueprint/ prototype including the facilitation plan and implementation. All participants are expected to conduct a capstone project during the course of the curriculum. The capstone experience is the final requirement of the e-learning course for lecturers. It is designed to help you integrate

	the learning delivered in Module 1, Module 3 and Module 4 of the curriculum.

In module 3 and 4 you have begun to outline an activity, the capstone project provides you with the space and time to develop this activity and deliver a complete design. You will reuse what you have done already in the past modules, review it and refine it.

There are 3 milestones in this project: The first one is the "Activity overview" where you have to explain the macro design of your activity; the second one is the "Micro design", where you detail each task and finally, the third one is the "Implementation", where you finish to implement your complete and reviewed blended learning activity on the Moodle learning platform and redact the materials and the plan for the F2F part of the activity. |
| **Learning Outcomes** | • Develop an outline of a blended syllabus highlighting the balance between synchronous and asynchronous learning.
• Align learning outcomes, learning methodologies, and assessment in a blended learning activity.
• Design a blended activity based on a meaningful use of Moodle and/or other ICT tools
• Design formative and summative assessment for blended learning activity. |

ASSESSMENT AND CERTIFICATION

Assessment

The Study programme assessment is organised as follows:

Module 1

Strategy: self-assessment

- Assessment 1:

  - summative assessment,

  - criteria: answer successfully (5 or more points) to validate module 1. A maximum of 3 attempts to succeed are allowed.

- Assessment 2:

  - summative assessment,

  - criteria: answer successfully (5 or more points) to validate module 1. A maximum of 3 attempts to succeed are allowed.

Module 2

Strategy: self-assessment and teacher assessment

- Assessment 1 (self-assessment):

  - summative assessment (Multiple Choice Questions)

  - criteria: the test admits 3 attempts, achievement is based on a score of 50% (completion), second attempt reduces 10% of the final score, and third attempt reduces 20% of the final score. The score of the last attempt will be considered.

- Assessment 2 (teacher assessment):

  - summative assessment (5 open-ended questions related to analysis of current faculty/institution context with respect to resources, support and quality assurance for the sustainability of successful e-learning implementation).

  - criteria: answers are required to score overall at least Satisfactory (3 points) to validate module 2. Each question will be assessed based on the following criteria:

- Exceptional (5 points)
- Good (4 points)
- Satisfactory (3 points)
- Developing (2 points)
- Needs Improvement (1 point)

Module 3

Strategy: teacher assessment.

This Module 3 is assessed by the facilitator based on 1 deliverable consisting of three parts as follows:

Part 1: "Justification of decisions report".
Part 2: "Presentation and analysis table"
Part 3: "Learning outcome-driven plan"

The achievement, thus completion, of this module is based on a score of at least 50 points.

There are four mains criteria for assessment, as follows:

- Identify generic and/or specific competences for a blended activity: 25 points
- Align learning outcomes, learning methodologies, and assessment in a blended learning activity: 15 points
- Select a blended learning model according to contextual circumstances and learning needs: 20 points
- Design a blended activity based on a meaningful use of Moodle and/or other ICT tools: 40 points

Module 4

Strategy: teacher assessment.

This Module 4 is assessed by the facilitator based on 1 deliverable consisting of three parts as follows:

Part 1: Determine role, tasks and responsibilities as a lecturer in the blended learning activity.
Part 2: Assess your activity.
Part 3: Implement the activity on Moodle.

The achievement, thus completion, of this module is based on a score of at least 50 points.

There are five mains criteria for assessment, as follows:

- Identify own role in the blended learning course - 20 points
- Define a critical friendship with another lecturer(s) - 15 points
- Design a synchronous and asynchronous communication strategy for a blended learning

activity - 25 points
- Maximise digital tools affordance in a blended learning context - 15 points

Design formative and summative assessment for a blended learning activity - 25 points

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Capstone 1

Assessment strategy: peer review (formative feedback), teacher assessment (summative assessment)

Description:

➔ Per review: the Capstone project implements a peer review approach for formative feedback. It aims at improving the capstone project.

➔ Teacher assessment: the Capstone project is assessed by the facilitator and requires for approval a score of 50 points or more.

The grading criteria of both peer review and teacher assessment are based on 4 major areas representing the milestones of the project:

- M1: Formulate e-learning vision (15 points)
- M2: Determine faculty/institutional current stand in relation to elements of e-learning practice (20 points)
- M3: Actions to improve e-learning implementation at faculty/institution (50 points)
- M4: Identification of required policies and/or amendments required to current policies (15 points).

Capstone 2

Assessment strategy: peer review (formative feedback), teacher assessment (summative assessment)

Description:

➔ Per review: the Capstone project implements a peer review approach for formative feedback. It aims at improving the capstone project.

➔ Teacher assessment: the Capstone project is assessed by the facilitator and requires for approval a score of 50 points or more.

The grading criteria of both peer review and teacher assessment are based on 4 major areas representing the milestones of the project:

- M1: Develop an outline of a blended syllabus highlighting the balance between synchronous and asynchronous learning (25 points)
- M2: Align learning outcomes, learning methodologies, and assessment in a blended

learning activity (25 points)
- M3: Design a blended activity based on a meaningful use of Moodle and/or other ICT tools (25 points)
- M4: Design formative and summative assessment for blended learning activity (25 points).

Certification

AMED Study programme badges

In order to help AMED learners to better understand the context of AMED learning paths and to provide them with a visual and validated form of the achieved skills and competences, the AMED consortium supported the study programme with digital badges for learners. Therefore, the AMED digital badges provide **evidence** of a learner's **acquired skills and competences** as a result of study and active participation in AMED study programme modules and capstone projects.

AMED learners may use digital badges to demonstrate that they have acquired a particular competence, or add the badges to their portfolio in order to keep a record of the competences acquired. Since digital badges are dynamic - they can be automatically published and updated unlike CVs which should be continually updated by an individual.

The AMED badges are uniquely designed and except the static image, each AMED digital badge contains metadata about the earner, issuer and badge itself - as described below.

In that way, a badge cannot be copied or stolen because it is connected to the name and email address of an individual used to complete the study programme and can be verified at a later stage.

In line with the modern innovative trends in online learning, AMED partners decided to add badges to the Study programme learning experience also as a motivation element since digital badges may encourage learners to engage more actively in modules and achieve better results. As also shown below, AMED badges may also assist our learners in the learning process in terms of visually indicating the criteria that need to be met if a particular competence is to be acquired or a learning path concluded.

Finally, digital badges will help promote the project results, as learners can add them to their social media accounts (export to other systems).

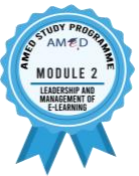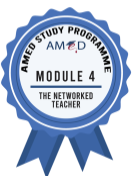## Types of AMED Badges

According to the AMED study programme scheme and its target groups there are two types of badges issued:

1. Module and capstone project badges

2. Master badge for the study programme

1. MODULE AND CAPSTONE PROJECT BADGES

Within AMED, the badges are awarded to learners after successful completion of each module or capstone project according to the defined criteria at the level of each module/capstone project:

TABLE 1. AMED MODULE BADGES						
TITLE	Module 1 Foundations of e-learning	Module 2 Leadership and management of e-learning	Module 3 Designing digital learning	Module 4 The networked teacher	Lecturers Capstone Project	Decision Makers Capstone Project
DURATION/ MNU CREDITS	25 hours/ 2,5	25 hours/ 2,5	25 hours/ 2,5	25 hours/ 2,5	65 hours/ 6,5	50 hours/ 5
IMAGE						

2. MASTER BADGES FOR THE COMPLETION OF THE AMED STUDY PROGRAMME

Master badges are awarded to learners who successfully complete one of the learning paths of the AMED study programme. The badges are automatically awarded to the learners based on the module and capstone project badges previously awarded to them.

TABLE 2. AMED CERTIFICATE BADGES		
TITLE	Decision makers Certificate of completion	Lecturers Certificate of completion
DURATION/ MNU CREDITS	100 hours 10	140 hours 14
IMAGE		

Learning path schemes

According to the AMED study programme learning paths and its target groups, two possible schemes of badges are possible:

1. DECISION MAKERS learning path scheme

Decision makers are required to get awarded with Module 1, Module 2 and the Capstone project badges for decision makers before they are issued a master badge that represents a Certificate of completion for the Decision makers study programme.

TABLE 3. DECISION MAKERS LEARNING PATH BADGES				
TITLE	Module 1 Foundations of e-learning	Module 2 Leadership and management of e-learning	Decision Makers Capstone Project	Decision Makers Certificate of completion
DURATION/ MNU CREDITS	25 hours/ 2,5	25 hours/ 2,5	50 hours/ 5	100 hours/ 10
IMAGE				

2. LECTURERS learning path scheme

Lecturers are required to get awarded with Module 1, Module 3, Module 4 and the Capstone project badges for lecturers before they are issued a master badge that represents a Certificate of completion for the Lecturers study programme.

TABLE 4. LECTURERS LEARNING PATH BADGES					
TITLE	Module 1 Foundations of e-learning	Module 3 Designing digital learning	Module 4 The networked teacher	Lecturers Capstone Project	Lecturers Certificate of completion
DURATION/ MNU CREDITS	25 hours/ 2,5	25 hours/ 2,5	25 hours/ 2,5	65 hours/ 6,5	140 hours/ 14

| IMAGE | | | | | |

AMED Badge meta-data

BADGE DETAILS

Name: Module <x: title>

Description: The badge is issued within the project "AMED - Advancing higher education in Maldives through E- learning Development" (amed-project.eu) funded by the European Commission within Erasmus+ programme. It is awarded to successful learners having completed XXX hours of training and earned XXX MNU credits.

Image: see Badges for Decision makers / Lecturers

Expiry date: Never

ISSUER DETAILS (Endorsement)

Endorser name: AMED project
Email: amed@foi.hr
Issuer URL: https://amed-project.eu/
Claim URL: https://mnu.edu.mv/

CRITERIA

All of the following activities are completed:
- Quiz X
- Quiz Y

Criteria: criteria in LMS describing what needed to be accomplished to earn a badge

ALIGNMENTS

Learners are capable of:

- list of learning objectives per module

Message for badge awardees

Dear Colleague,

We are pleased to award you with an AMED Study Programme Badge "%badgename%" in order to appreciate and acknowledge your active participation and successful completion of Module X that included XX working hours resulting with X MNU credits.

This badge is a digital image designed by AMED Project team to represent a certain accomplishment. Behind the badge, there is a collection of meta-data about that can be found on the %badgelink% badge information page.

You, as a badge earner, can manage and download the badge from your Manage badges page.

AMED project team

amed-project.eu

AMED Study programme certificate

All AMED study programme learners that were issued master badges that represent a Certificate of completion for the Lecturers/Decision makers will receive a printed version of the AMED Study programme certificate.

Figure 1. AMED Certificate
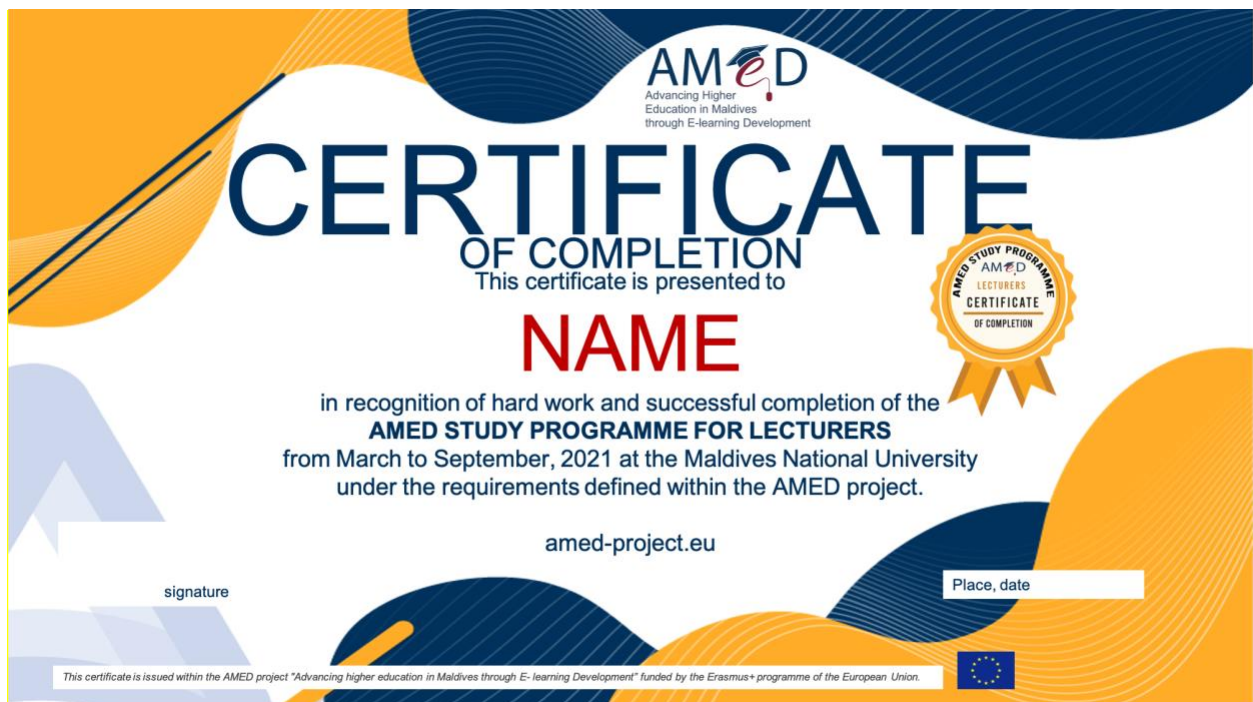
STUDY PROGRAMME REVIEW

With the aim to provide valuable input for the sustainability plan development and acceptance, during the piloting phase of the project the project partners performed Study programme evaluation resulting with recommendations for improvements. The evaluation process and the developed tools are explained in detail in delivery D4.3 Quality control and evaluation of the study pilot implementation.

STUDY PROGRAMME ACCREDITATION

The process of accreditation of the AMED Study Programme within the MNU is defined in the 5.2 AMED Sustainability Plan. As such, the document presents a comprehensive sustainability plan to ensure long term benefits for the study programme developed through the AMED project. Among the main sustainability solutions considered for the project during and after the project completion activities it is included in the accreditation of the programme.

ANNEX I

A **study programme outline** was created in order to start with the design. The document aimed to collect information regarding the description of the context, the programme (differentiating both target groups), the certification and the personas (lecturer and decision-maker profiles).

For the co-creation of the Study programme, UOC set up a protocol to structure the **work dynamics**. It described the actions to be taken when they should be enacted as well as a set of basic rules to follow.

Protocol:

DTOMs (**Design team online meetings)** were set once a month (with approximate dates to be confirmed later). Each meeting served to discuss the module design and its elaboration (description, topics, competences and learning outcomes, activities, resources, assessment and environment). :

1. May 14 - Initial agreement - Assign roles (Lead, contributor and reviewer)

2. June 19 - Module design: Advanced elaboration: description, topics, competences and learning outcomes - First ideas for: activities, resources, assessment and environment - without Guidance for facilitation.

3. July 18 - Module design: Refining: description, topics, competences and learning outcomes - Advanced elaboration: activities, resources, assessment and environment - without Guidance for facilitation

4. September 19 - Module design: Refining: description, topics, competences, learning outcomes, activities, resources, assessment and environment - without Guidance for facilitation

5. October 15 - Module design: Refining: description, topics, competences and learning outcomes, activities, resources, assessment and environment - Elaborating: Guidance for facilitation

6. November 18/22 - Module design: Consolidation of the module design

7. November 28 - Module design: Last modifications after reviews (partners review and testers review).

A **peer design process** was followed in which every pair worked on a module (the leader and the contributor) through online working sessions. The latest progression was submitted to a

reviewer who gave feedback on the work done, before the following DTOM (from June to December).

UOC proposed to also organise small **co-designers working meetings (COM)** through Hangouts where two partners (learning partner and contributor partner) would resolve specific issues and work together on their assigned module. These meetings were organised according to emerging needs and left to the discretion of each co-design pairs.

For the **modules design**, four documents were created for each pair of designers. They collected information regarding the modules description, topics, competences and learning outcomes, activities, resources, assessment and environment.

UOC also set up a **scheduled design progress** document, where UOC exposed the progress of each element (description, topics, competences and learning outcomes, activities, resources, assessment and environment) of each module, for partners to check their advancement in the design against their expected achievements.

A set of principles were identified in order to focus on active learning, encourage autonomy, introduce just-in-time facilitator intervencion, and foresee sustainability and scalability of the programme.

- Hands-on: while familiarizing with new concepts, views and practices, participants should be able to anchor their activities into their current practices and concerns.
- Scaffolded: activities should be accompanied with guidelines and provided with templates.
- Autonomy and empowerment: to the methodological instruments supporting scaffolded learning, the programme should combine active participation, self-reflection and regulation, self- and peer assessment, and formative feedback.
- Up-to-date: learning resources should reflect best and most up to day developments on the subjects and be able to be easily updated.
- Customized: while inspiring from diverse perspectives and practices, local (national) and institutional policies and strategies should be integrated as part of the modules study materials. Some of them are being developed throughout the course of the project like the e-learning policy and university e-learning roadmap, as well as the new institutional strategic plan.
- Learner-centred and activity driven: focus on learning activities oriented by learning outcomes, aligned with competences, and assigning participants their key role in their own development.
- Sustainable: on one hand, a flexible programme with principles of a core development (emphasis on development of modules and tooling the activities) and the affordable and easy to update/upgrade corpus of knowledge (Wordpress-based handbook); on the other hand, a substantive development of methodological tools supporting activities development, self-reflection and self-assessment, community building and peer review while coherently proposing the transition of the teacher role to that of the facilitator of learning.

- Fully online and asynchronous: the programme modules are delivered online on an asynchronous basis.
- Cohort based: a group of participants follow a pre-established schedule of activities and interact with the facilitators and other participants in the virtual environment.

SECOND DTOM MEETING   19/06/19

The first draft of the topics, competencies, learning outcomes and a short description of each module was reviewed and commented. UOC assumed the responsibility to ensure that each module was coherent within its learning path. The learning path 1, for decision makers, includes module 1, module 2 and the capstone project 1 and the learning path 2, for lecturers, includes module 1, module 3, module 4 and the capstone project 2.

UOC ensured that the **design methodology** was clear for each partner and recommended to each module leader to check other modules to monitor that there were no overlap of topics, competencies, learning outcomes and content.

UOC began to comment on the first proposals for the activities, resources, assessment and working environment of each module.

It was explained that the **capstone projects** were directly connected to the modules (the capstone project one is connected to modules 1 and 2, the capstone project 2 is connected to modules 1, 3 and 4). This meant that the activities in the respective modules were either a small part of the big project or were there to guide the learner in their project. Both the modules and the capstone project were to be designed in parallel, designers should have an idea of the final outcome of the project when designing the modules.

Capstone project 1 was led by MNU.

Capstone project 2 was led by UOC.

A task list was set up and partners were asked to review and update it once a week.

It was mentioned that MNU could record short videos of lecturers already using moodle for blended learning as examples that demonstrate their potential and viability.

CARNET made additions to the training needs based on their own data collection during the kick-off meeting, each partner reviewed these additions to see how their module was affected and reviewed the competencies and learning outcomes.

THIRD DTOM MEETING   18/07/19

All module leaders reworked on the competencies, learning outcomes and topics of their module to finalise them. This was done after reading the review provided by UOC and after making sure there are no overlaps with other modules.

UOC reminded partners to aim at the **harmonisation of competences** and **learning outcomes**.

FOURTH DTOM MEETING   19/09/19

Each module was **reviewed** and detected issues were addressed.

FOI and MNU proposed providing learners with an **introduction to Moodle as a user**, after a discussion it was decided to provide a guide (MNU had one, already created, MNU put it in the shared folder) this guide was to be made available to the learners at the beginning of the course.

CARNET proposed a **workshop** on facilitation on the platform for the pilot programme to be done in Croatia.

We had an exchange on **assessments** (a work which is handed in by the learner and evaluated by the facilitator) as some questions were raised about its need, and the time it would take for both learners and facilitators. MNU said that they do need some form of assessment. A proposal was made by the UOC and accepted by partners: Modules 1 and 2 would include self-corrected quizzes and modules 3 and 4 assessments, which would take the form of 1 formative assessment with a rubric and one qualitative feedback.

FIFTH DTOM MEETING   15/10/19

UOC commented that in general modules were being designed according to schedule and were on track, except for Module 4. Each module needed to refine its style: they should address the learners as if they talked to them (you), like a dialogue, insert questions to which they can come back to at the end of the module or introduce reflections or provide guidelines. The text describing the tasks together with the resources, methodological instruments, assessments should serve as a guide for the learners.

The modules reviews were discussed and issues explained.

SIXTH DTOM MEETING   20/11/19

All 4 modules were revised and tested by a relevant target group representative (a decision maker for learning path 1 and a lecturer for learning path 2). The last refinements were added ready to be reviewed by partners on 09/12/19. The drafted 4 modules had to be ready in december 2019.

An outline of the video testimonies produced by MNU would be written by UOC and MNU, their production will take place in February and the post production in March 2020

The capstone projects will be reviewed by partners on the 20th of january, it was decided that the assessment would take the form of a peer review with additional feedback from the facilitator. UOC should review CP1 and MNU should review CP2, and all partners could make suggestions too. They should be ready in February 2020.

FOI and MNU will set up the Moodle platform for the study programme, UOC will implement module 1, MNU will implement the other 3 modules and the 2 capstone projects, as well as the Moodle tutorial provided by MNU - The implementation should be ready in june 2020.