



MuSA
museum sector alliance

R5.1 – Specialisation Training Course



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Specialisation Training Course

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Abstract

The report “Specialisation Training Course” is the description of the blended and work based learning in Mu.SA training programme provided from September 2019 until April 2020 by the Mu.SA consortium. Includes a study work plan, a selection of digital content modules for the special competences that have been selected for the specialization course uploaded to the e-learning platform, work based learning, assessment techniques.

Here are described the four Specialisation Courses, each developed for one of the four role profiles. The Mu.SA – Museum Sector Alliance project resulted in four emerging role – profiles: **Digital Strategy Manager, Digital Collections Curator, Digital Interactive Experience Developer and Online Community Manager**, which were updated and revised according to the needs of museum professionals.



1 Introduction

As detailed in the Mu.SA Methodology (R3.2), a set of competences was identified as “common” for the four different VET curricula; these competences were proven as essential for the four different job role profiles, therefore they were delivered to all through a MOOC (Massive Open Online Course). The MOOC was **online learning** while the specialization course employed **blended learning** and **work-based learning**. The candidates who have completed successfully the MOOC entitled “Essential Skills for Museum Professionals” were able to go through an application procedure, so to apply for the Specialization Course and select a Role profile.

Totally, about 120 candidates were selected to continue with the Specialization Course in the Mu.SA project countries (Greece, Portugal and Italy). The specialization course for each different job role profile implemented, included online, face-to-face and work based learning. The access for the registered learners to the Specialisation course Platform was available through the link: <https://mooc.cti.gr/musa.html>.

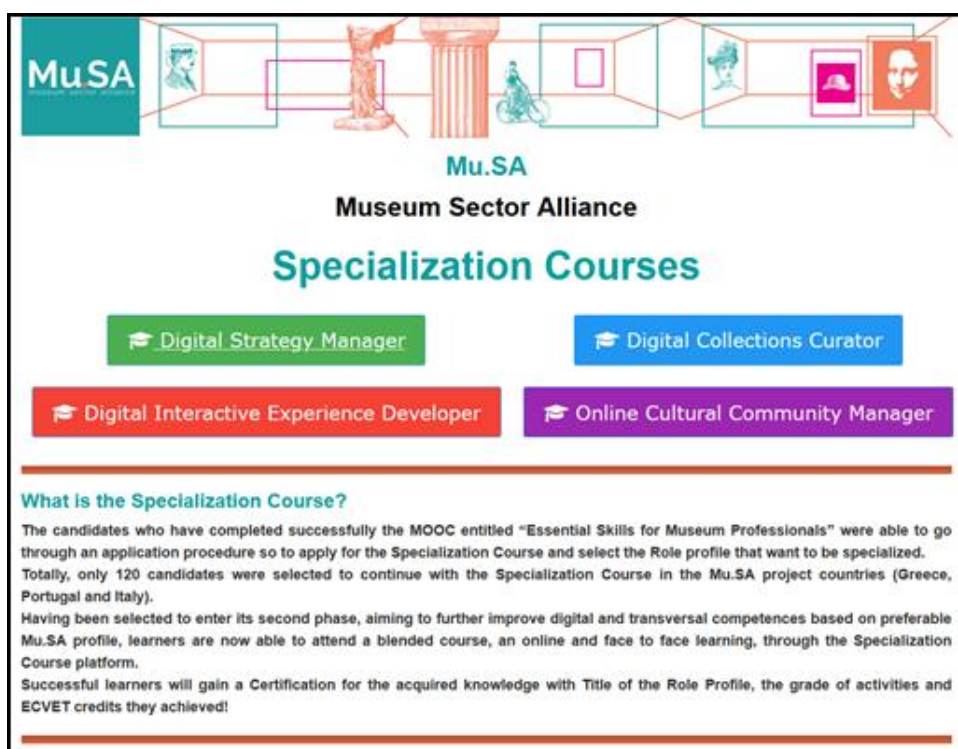


Figure 1. Entrance page of the Mu.SA specialization course platform

Each learner was able to get access only to the preferred course and the selected role profile, in which s/he would like to be specialised.

Having been selected to enter its second phase, aiming to further improve digital and transversal competences based on preferable Mu.SA profile, learners were now able to attend a blended course, an online and face to face learning, through the Specialization Course platform.

Successful learners would gain a Certification for the acquired knowledge with Title of the Role Profile, the grade of activities and ECVET credits they achieved!

In detail, each specialization course included (see Table 1):

(A) Blended training course lasted 24 weeks (6 months) with an extension of 1 month, with an effort of approximately 15h of study / week (totally 360h of study)

- A1: Online and self-study (288h) (material)
- A2: Face-to-face sessions (24h = 6 x 4h) (once a month) (incl. Skype sessions)
- A3: Assessment (48h)

(B) Work-based learning lasted 10 weeks, approximately 20,5h of work in the placement / week (totally 205h)

- B1: Work placement (200h)
- B2: Assessment (5h)

(C) Training activities with face to face sessions in partner countries.

The Blended training course has foreseen 336h of educational material (in total for all Job Role profiles) for the online and self-study components, plus the assessment components. The online learning – divided into competence modules – included mainly online learning materials in the forms of presentations, texts, additional readings and videos. They were built following a coherent methodology, ensuring the quality through multiple rounds of technical

and scientific reviews. Obviously, there were some common competences for more than one Specialisation course

The learning resources were developed following pre-defined learning outcomes, supporting the implementation of various EU tools (e.g. ECVET, recognition of occupation profiles, etc). These (learning) outcomes were also used to define the assessment objects (through online quizzes).

In order to bridge the gap with the practice, the competence modules were also including practical assignments, typically essays and case studies, submitted by the learners to the tutors for grading.

Last, a set of indicative work-based learning activities was delivered to the learners to support them for their work-based learning. The work-based learning was assessed through a report and a presentation (predefined formats) also submitted for grading (by the local VET provider – Mu.SA partner).

The final grade was estimated automatically by the platform, taking into account the grades per competence module, and the grade of the work-based learning.

Mu.SA Specialization Course	
<i>Blended Learning</i>	
(A)	Blended training course will last 24 weeks (6 months), with an effort of approximately 15h of study / week (totally 360h of study) <ul style="list-style-type: none"> A1: Online and self-study (288h) (material) A2: Face-to-face sessions (24h = 6 x 4h) (once a month) (incl. skype sessions) A3: Assessment (48h)
<i>Work-Based Learning</i>	
(B)	Work-based learning will last 10 weeks, approximately 20,5h of work in the placement / week (totally 205h) <ul style="list-style-type: none"> B1: Work placement (200h) B2: Assessment (5h)
<i>Additional training activities (T5.3)</i>	
(C)	Additional training (f2f) activities for Trainers, Employers and Learners <ul style="list-style-type: none"> C1: A 2-days seminar for training the Trainers that will take place in a period of 16 week (duration and timing not specified). C2: A 1-day course for training the Employers that will take place in a period of 16 week (duration not specified, to be delivered early before the WBL so as to inform employers and collect their agreement). C3: A 1-day course for training the Learners that will be delivered before they start the work-based learning (duration not specified, after the train the Employers and having their agreement).

Table 1: The fundamentals of Piloting the Specialization Course



The educational content Blended training course was developed using the existing Methodology (as described and implemented in the framework of WP3, see R3.2) with some modifications as shown below.

The table below presents the appropriate total amount of educational material that is delivered.

Educational material	Digital Competences (e-CF)		
	Level e-3	Level e-4	Level e-5
Core material ¹	4h (min)	5h (min)	6h (min)
Practical assignment	2h	3,5h	5h
Total	6h	8,5h	11h
Educational material	Digital Competences (DigComp)		
Core material	1,5h (min)		
Practical assignment	1,0h		
Total	2,5h		
Educational material	21st Century competences (Transferrable)		
Core material	3h (min)		
Practical assignment	2h		
Total	5h		

Table 2 – Educational material characteristics (spec. courses)

Core material consists of material similar to the one developed for the MOOC (Learning (educational) objects and Assessment Objects). The only difference is that, the e-learning material for the Specialization course mostly consists of lectures (self-running presentation – power point presentation with voice over) and additional material of any kind for self-study (papers, videos, e-books etc.). The design and development process is the same as it is for the MOOC.

Practical assignments can include one or more of educational material types as project, example or activity (case study, problem solving, text composition, open ended question) that can be assigned on the learner level, in order to

¹ Including assessment



enhance trainee engagement and the quality of learning. The design and development process is the same as this of the MOOC.

For each Job Role Profile a competence participates into, multiple practical assignments will be developed customized and adjusted for every profile (in collaboration with the local learning clusters or social partner or a museum professional / expert).

Based on the outcomes of WP2, each e-CF competence should be taught to a particular level that corresponds to the EQF.

- e-3 (e-CF) = Level 6 EQF
- e-4 (e-CF) = Level 7 EQF
- e-5 (e-CF) = Level 8 EQF

In the **4 MuSA Specialization Courses**, each course will specialize the participant in the following competences allocated to selected role profile, to **21 advanced competences from e-CF**, like: Service Level Management, Product / Service Planning, Application Design, Sustainable Development, Application Development, Testing, Solution Deployment, Documentation Production, User Support, Change Support, Service Delivery, Problem Management, Information Security Strategy Development, ICT Quality Strategy Development, Education and Training Provision, Purchasing, Information and Knowledge Management, Digital Marketing, Risk Management, Process Improvement, Business Change Management.

And to **6 basic DigComp competences**: Copyright and licenses, Programming, Solving technical problems, Protecting personal data and privacy, Identifying digital competences gaps and Managing digital identity.

Apart from the digital competences needed for the digital literacy of professionals in culture and museums, **transferable or so-called 21st century competences** also were selected for the MOOC and the Specialization courses. The 21st century learning is typically used to describe the types of competencies needed to thrive in today's complex and interconnected global landscape.

In the **Specialization courses**, the participants were specialized in: Mentoring/coaching skills, Analyze and synthesize information, Negotiation skills, Networking skills, Sense of initiative and entrepreneurship, Resilience, Decision making, Management skills, Interpersonal skills, Mediation skills, Influence/persuasion skills, Active listening skills, Storytelling, Fact-driven, Integrity/ethical skills.

In the next chapters, are listed the digital and the transferable competences, developed for the Mu.SA training programme, per role profile.

The Appendix gives the meanings for each of the competence provided on the e-CF, DigComp Frameworks and the 21st century skills as well as the estimation of the consortium based on the level of competence taught and the hours of the time effort needed for each competence in Mu.SA blended learning.

For more information related to the Trainers' Training, the Blended Learning and the Work based Learning, you may read the Reports 5.3, 5.4 and 5.5 respectively.



2 Mu.SA Specialisation Course 1: Digital Strategy Manager

2.1 Competences of the Digital Strategy Manager

Digital competences

# Competence	Competence Title	Course through which the competence is delivered	Type	Level (EQF)
1	Protecting personal data and privacy	Specialization course	DigComp	e-5 level
2	Product / Service Planning	Specialization Course	e-CF	e-3 level
3	Identifying digital competences gaps	Specialization Course	DigComp	e-5 level
4	Service Level Management	Specialization Course	e-CF	e-4 level
5	Protecting personal data and privacy (specialisation course)	Specialization Course	DigComp	e-8 level
6	Sustainable Development	Specialization Course	e-CF	e-4 level
7	Managing digital identity	Specialization Course	DigComp	e-6 level
8	Information Security Strategy Development	Specialization Course	e-CF	e-4 level
9	Copyright and licenses	Specialization Course	DigComp	e-6 level
10	Education and Training Provision	Specialization Course	e-CF	e-3 level
11	Programming	Specialization Course	DigComp	e-6 level
12	Information and Knowledge Management	Specialization Course	e-CF	e-4 level
13	Solving technical problems	Specialization Course	DigComp	e-7 level



14	Purchasing	Specialization Course	e-CF	e-4 level
15	Process Improvement	Specialization Course	e-CF	e-4 level
16	Risk Management	Specialization Course	e-CF	e-4 level
17	Business Change Management	Specialization Course	e-CF	e-4 level

2.2 Transversal competences

# Competence	Competence Title	Course through which the competence is delivered	Type
1	Mentoring / coaching skills	Specialization Course	Transferrable/ 21st Century
2	Decision making	Specialization Course	Transferrable/ 21st Century
3	Sense of initiative and entrepreneurship	Specialization Course	Transferrable/ 21st Century
4	Analyse and synthesize information	Specialization Course	Transferrable/ 21st Century
5	Networking skills	Specialization Course	Transferrable/ 21st Century
6	Negotiation skills	Specialization Course	Transferrable/ 21st Century
7	Resilience	Specialization Course	Transferrable/ 21st Century



3 Mu.SA Specialisation Course 2: Digital Collections Curator

3.1 Competences of the Digital Collections Curator

Digital competences

# Competence	Competence Title	Course through which the competence is delivered	Type	Level (EQF)
1	Product / Service Planning	Specialization Course	e-CF	e-3 level
2	Identifying digital competences gaps	Specialization Course	DigComp	e-5 level
3	Protecting personal data and privacy (specialisation course)	Specialization Course	DigComp	e-8 level
4	Managing digital identity	Specialization Course	DigComp	e-6 level
5	Documentation Production	Specialization Course	e-CF	e-3 level
6	Copyright and licenses	Specialization Course	DigComp	e-6 level
7	Service Delivery	Specialization Course	e-CF	e-3 level
8	Programming	Specialization Course	DigComp	e-6 level
9	Information and Knowledge Management	Specialization Course	e-CF	e-5 level
10	Solving technical problems	Specialization Course	DigComp	e-7 level
11	Problem Management	Specialization Course	e-CF	e-4 level
12	Purchasing	Specialization Course	e-CF	e-4 level
13	Risk Management	Specialization Course	e-CF	e-4 level



3.2 Transversal competences

# Competence	Competence Title	Course through which the competence is delivered	Type
1	Management skills	Specialization Course	Transferrable/ 21st Century
2	Influence/ persuasion skills	Specialization Course	Transferrable/ 21st Century
3	Mentoring / coaching skills	Specialization Course	Transferrable/ 21st Century
4	Decision making	Specialization Course	Transferrable/ 21st Century
5	Sense of initiative and entrepreneurship	Specialization Course	Transferrable/ 21st Century
6	Interpersonal skills	Specialization Course	Transferrable/ 21st Century
7	Networking skills	Specialization Course	Transferrable/ 21st Century
8	Active listening skills	Specialization Course	Transferrable/ 21st Century
9	Mediation skills	Specialization Course	Transferrable/ 21st Century

4 Mu.SA Specialisation Course 3: Digital Interactive Experience Developer

4.1 Competences of the Digital Interactive Experience Developer

Digital competences

# Competence	Competence Title	Course through which the competence is delivered	Type	Level (EQF)
1	Product / Service Planning	Specialization Course	e-CF	e-3 level
2	Identifying digital competences gaps	Specialization Course	DigComp	e-5 level
3	Application Design	Specialization Course	e-CF	e-3 level
4	Protecting personal data and privacy (specialisation course)	Specialization Course	DigComp	e-8 level
5	Application Development	Specialization Course	e-CF	e-3 level
6	Managing digital identity	Specialization Course	DigComp	e-6 level
7	Testing	Specialization Course	e-CF	e-3 level
8	Documentation Production	Specialization Course	e-CF	e-3 level
9	Copyright and licenses	Specialization Course	DigComp	e-6 level
10	Change Support	Specialization Course	e-CF	e-3 level
11	Programming	Specialization Course	DigComp	e-6 level
12	User Support	Specialization Course	e-CF	e-3 level
13	Solution Deployment	Specialization Course	e-CF	e-3 level
14	Problem Management	Specialization Course	e-CF	e-4 level
15	Solving technical problems	Specialization Course	DigComp	e-7 level



16	Risk Management	Specialization Course	e-CF	e-4 level
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4.2 Transversal competences

# Competence	Competence Title	Course through which the competence is delivered	Type
1	Decision making	Specialization Course	Transferrable/ 21st Century
2	Fact - driven	Specialization Course	Transferrable/ 21st Century
3	Sense of initiative and entrepreneurship	Specialization Course	Transferrable/ 21st Century
4	Analyse and synthesize information	Specialization Course	Transferrable/ 21st Century
5	Interpersonal skills	Specialization Course	Transferrable/ 21st Century
6	Mediation skills	Specialization Course	Transferrable/ 21st Century
7	Networking skills	Specialization Course	Transferrable/ 21st Century
8	Negotiation skills	Specialization Course	Transferrable/ 21st Century
9	Active listening skills	Specialization Course	Transferrable/ 21st Century
10	Resilience	Specialization Course	Transferrable/ 21st Century
11	Storytelling	Specialization Course	Transferrable/ 21st Century



5 Mu.SA Specialisation Course 4: Online Community Manager

5.1 Competences of the Online Community Manager

Digital competences

# Competence	Competence Title	Course through which the competence is delivered	Type	Level (EQF)
1	Product / Service Planning	Specialization Course	e-CF	e-3 level
2	Identifying digital competences gaps	Specialization Course	DigComp	e-5 level
3	Protecting personal data and privacy (specialisation course)	Specialization Course	DigComp	e-8 level
4	Managing digital identity	Specialization Course	DigComp	e-6 level
5	Documentation Production	Specialization Course	e-CF	e-3 level
6	Copyright and licenses	Specialization Course	DigComp	e-6 level
7	Programming	Specialization Course	DigComp	e-6 level
8	User Support	Specialization Course	e-CF	e-3 level
9	Problem Management	Specialization Course	e-CF	e-4 level
10	Solving technical problems	Specialization Course	DigComp	e-7 level
11	ICT Quality Strategy Development	Specialization Course	e-CF	e-5 level
12	Digital Marketing	Specialization Course	e-CF	e-4 level
13	Business Change Management	Specialization Course	e-CF	e-5 level

5.1 Transversal competences

# Competence	Competence Title	Course through which the competence is delivered	Type
1	Management skills	Specialization Course	Transferrable/ 21st Century
2	Influence/ persuasion skills	Specialization Course	Transferrable/ 21st Century
3	Mentoring / coaching skills	Specialization Course	Transferrable/ 21st Century
4	Integrity/ethical	Specialization Course	Transferrable/ 21st Century
5	Decision making	Specialization Course	Transferrable/ 21st Century
6	Sense of initiative and entrepreneurship	Specialization Course	Transferrable/ 21st Century
7	Analyse and synthesize information	Specialization Course	Transferrable/ 21st Century
8	Interpersonal skills	Specialization Course	Transferrable/ 21st Century
9	Networking skills	Specialization Course	Transferrable/ 21st Century
10	Negotiation skills	Specialization Course	Transferrable/ 21st Century
11	Active listening skills	Specialization Course	Transferrable/ 21st Century
12	Resilience	Specialization Course	Transferrable/ 21st Century
13	Mediation skills	Specialization Course	Transferrable/ 21st Century



1 Appendix

1.1 List of ALL Competences of Specialisation Courses

Competence	Course through which the competence is delivered
Product/ Service Planning (e-CF) Analyses and defines current and target status. Estimates cost effectiveness, points of risk, opportunities, strengths and weaknesses, with a critical approach. Creates structured plans; establishes time scales and milestones, ensuring optimisation of activities and resources. Manages change requests. Defines delivery quantity and provides an overview of additional documentation requirements. Specifies correct handling of products, including legal issues, in accordance with current regulations.	Spec. course
Identifying digital competences gaps (DigComp) To assess needs and to identify, evaluate, select and use digital tools and possible technological responses and to solve them. To adjust and customise digital environments to personal needs (e.g. accessibility).	Spec. course
Service Level Management (e-CF) Defines, validates and makes applicable service level agreements (SLAs) and underpinning contracts for services offered. Negotiates service performance levels taking into account the needs and capacity of stakeholders and business.	Spec. course
Management skills (Transferrable/ 21st Century) The knowledge and ability of the individuals in a managerial position to fulfil some specific management activities or tasks.	Spec. course
Application Design (e-CF) Analyses, specifies, updates and makes available a model to implement applications in accordance with IS policy and user / customer needs. Selects appropriate technical options for application design, optimising the balance between cost and quality. Designs data structures and builds system structure models according to analysis results through modelling languages. Ensures that all aspects take account of interoperability, usability and security. Identifies a common reference framework to validate the models with representative users, based upon development models (e.g. iterative approach).	Spec. course
Protecting personal data and privacy (DigComp) To protect personal data and privacy in digital environments. To	Spec. course

understand how to use and share personally identifiable information while being able to protect oneself and others from damages. To understand that digital services use a "Privacy policy" to inform how personal data is used.	
Sustainable Development (e-CF) Estimates the impact of ICT solutions in terms of eco responsibilities including energy consumption. Advises business and ICT stakeholders on sustainable alternatives that are consistent with the business strategy. Applies an ICT purchasing and sales policy which fulfils eco-responsibilities.	Spec. course
Managing digital identity (DigComp) To create, and manage one or multiple digital identities, to be able to protect one's own reputation, to deal with the data that one produces through several digital tools, environments and services.	Spec. course
Application Development (e-CF) Interprets the application design to develop a suitable application in accordance with customer needs. Adapts existing solutions by e.g. porting an application to another operating system. Codes, debugs, tests and documents and communicates product development stages. Selects appropriate technical options for development such as reusing, improving or reconfiguration of existing components. Optimises efficiency, cost and quality. Validates results with user representatives, integrates and commissions the overall solution.	Spec. course
Influence/ persuasion skills (Transferrable/ 21st Century) Persuasion skills refer to the talent of changing the attitudes, beliefs, or behaviors of a person or group towards another person, group, event, object, or idea. It is usually done by conveying, in a message, some feelings, information, reasoning, or a combination. Influencing skills are reliant on good soft skills and the ability to communicate effectively, engage stakeholders which involves the art of storytelling. In the podcast we look at negotiation techniques which focus on the ability to influence.	Spec. course
Information Security Strategy Development (e-CF) Defines and makes applicable a formal organisational strategy, scope and culture to maintain safety and security of information from external and internal threats, i.e. digital forensic for corporate investigations or intrusion investigation. Provides the foundation for Information Security Management, including role identification and accountability. Uses defined standards to create objectives for information integrity, availability, and data privacy.	Spec. course
Documentation Production (e-CF) Produces documents describing products, services, components or applications to establish compliance with relevant documentation	Spec. course

requirements. Selects appropriate style and media for presentation materials. Creates templates for document-management systems. Ensures that functions and features are documented in an appropriate way. Ensures that existing documents are valid and up to date.	
Testing (e-CF) Constructs and executes systematic test procedures for ICT systems or customer usability requirements to establish compliance with design specifications. Ensures that new or revised components or systems perform to expectation. Ensures meeting of internal, external, national and international standards; including health and safety, usability, performance, reliability or compatibility. Produces documents and reports to evidence certification requirements.	Spec. course
Mentoring/ coaching skills (Transferrable/ 21st Century) Mentoring as an act of giving advice to less experienced people, is a powerful tool for developing personal qualities and obtaining new skills, coaching is largely understood as a tool for improvement of professional performances in order to achieve addressed goals.	Spec. course
Copyright and licenses (DigComp) To understand how copyright and licenses apply to data, digital information and content.	Spec. course
Education and Training Provision (e-CF) Defines and implements ICT training policy to address organisational skill needs and gaps. Structures, organises and schedules training programmes and evaluates training quality through a feedback process and implements continuous improvement. Adapts training plans to address changing demand	Spec. course
Service Delivery (e-CF) Ensures service delivery in accordance with established service level agreements (SLA's). Takes proactive action to ensure stable and secure applications and ICT infrastructure to avoid potential service disruptions, attending to capacity planning and to information security. Updates operational document library and logs all service incidents. Maintains monitoring and management tools (i.e. scripts, procedures). Maintains IS services. Takes proactive measures.	Spec. course
Solution Deployment (e-CF) Following predefined general standards of practice carries out planned necessary interventions to implement solution, including installing, upgrading or decommissioning. Configures hardware, software or network to ensure interoperability of system components and debugs any resultant faults or incompatibilities. Engages additional specialist resources if required, such as third party network providers. Formally hands over fully operational solution to user and completes	Spec. course

documentation recording all relevant information, including equipment addressees, configuration and performance data.	
Integrity/ ethical (Transferrable/ 21st Century) Ethics is understood to be a system of principles that guide how people make decisions and lead their lives. In contrast to ethics, integrity is understood as a consistent application of ethical principles, particularly honesty.	Spec. course
Programming (DigComp) To plan and develop a sequence of understandable instructions for a computing system to solve a given problem or perform a specific task.	Spec. course
Information and Knowledge Management (e-CF) Identifies and manages structured and unstructured information and considers information distribution policies. Creates information structure to enable exploitation and optimisation of information. Understands appropriate tools to be deployed to create, extract, maintain, renew and propagate business knowledge in order to capitalise from the information asset.	Spec. course
User Support (e-CF) Responds to user requests and issues, recording relevant information. Assures resolution or escalates incidents and optimises system performance in accordance with predefined service level agreements (SLAs). Understands how to monitor solution outcome and resultant customer satisfaction.	Spec. course
Decision making (Transferrable/ 21st Century) Increasing a professional's decision-making competence enhances his/her ability to make better decisions leading to better life outcomes for individuals, an improved atmosphere in the museum community and downstream benefits to society as a whole.	Spec. course
Change Support (e-CF) Implements and guides the evolution of an ICT solution. Ensures efficient control and scheduling of software or hardware modifications to prevent multiple upgrades creating unpredictable outcomes. Minimises service disruption as a consequence of changes and adheres to defined service level agreement (SLA). Ensures consideration and compliance with information security procedures.	Spec. course
Solving technical problems (DigComp) To identify technical problems when operating devices and using digital environments, and to solve them (from trouble-shooting to solving more complex problems).	Spec. course

Purchasing (e-CF) Applies a consistent procurement procedure, including deployment of the following sub processes: specification requirements, supplier identification, proposal analysis, evaluation of the energy efficiency and environmental compliance of products, suppliers and their processes, contract negotiation, supplier selection and contract placement. Ensures that the entire purchasing process is fit for purpose, adds business value to the organisation compliant to legal and regulatory requirements.	Spec. course
Problem Management (e-CF) Identifies and resolves the root cause of incidents. Takes a proactive approach to avoidance or identification of root cause of ICT problems. Deploys a knowledge system based on recurrence of common errors. Resolves or escalates incidents. Optimises system or component performance.	Spec. course
Process Improvement (e-CF) Measures effectiveness of existing ICT processes. Researches and benchmarks ICT process design from a variety of sources. Follows a systematic methodology to evaluate, design and implement process or technology changes for measurable business benefit. Assesses potential adverse consequences of process change.	Spec. course
ICT Quality Strategy Development (e-CF) Defines, improves and refines a formal strategy to satisfy customer expectations and improve business performance (balance between cost and risks). Identifies critical processes influencing service delivery and product performance for definition in the ICT quality management system. Uses defined standards to formulate objectives for service management, product and process quality. Identifies ICT quality management accountability.	Spec. course
Fact-driven (Transferrable/ 21st Century) Using fact-driven design can save one's company. It forces everyone to focus on what's important to business/organization.	Spec. course
Sense of initiative and entrepreneurship (Transferrable/ 21st Century) The individual's ability to identify and seize opportunities, turn ideas into action, and to plan and manage processes to achieve objectives.	Spec. course
Analyze and synthesize information (Transferrable/ 21st Century) It is often related to critical thinking, creative thinking, innovation, managing information, and is driven from the need of solving problems and making informed decisions. Analysing and synthesizing information	Spec. course

is part of the critical and creative thinking.	
Risk management (e-CF) Implements the management of risk across information systems through the application of the enterprise defined risk management policy and procedure. Assesses risk to the organisation's business, including web, cloud and mobile resources. Documents potential risk and containment plans.	Spec. course
Digital Marketing (e-CF) Understands the fundamental principles of digital marketing. Distinguishes between the traditional and digital approaches. Appreciates the range of channels available. Assesses the effectiveness of the various approaches and applies rigorous measurement techniques. Plans a coherent strategy using the most effective means available. Understands the data protection and privacy issues involved in the implementation of the marketing strategy.	Spec. course
Business Change Management (e-CF) Assesses the implications of new digital solutions. Defines the requirements and quantifies the business benefits. Manages the deployment of change taking into account structural and cultural issues. Maintains business and process continuity throughout change, monitoring the impact, taking any required remedial action and refining approach.	Spec. course
Interpersonal skills (Transferrable/ 21st Century) Interpersonal skills are the behaviors and tactics a person uses to interact with others effectively. Interpersonal skills range from communication and listening to attitude and deportment.	Spec. course
Networking skills (Transferrable/ 21st Century) Networking is the exchange of information and ideas among people with a common profession or special interest, usually in an informal social setting. Networking is the process of building and maintaining a network of contacts.	Spec. course
Negotiation skills (Transferrable/ 21st Century) Negotiation is a type of discussion used to settle disputes and reach agreements between two or more parties. Generally, a negotiation results in a compromise where each party makes a concession for the benefit of everyone involved.	Spec. course
Active listening skills (Transferrable/ 21st Century) Active listening is a skill that can be acquired and developed with practice. Active Listening requires effort, self-awareness, and practice.	Spec. course
Resilience (Transferrable/ 21st Century)	Spec. course

Resilience relies on different skills and draws on various sources of help, including rational thinking skills, physical and mental health, and the relationships with others. To face challenges and respond appropriately can require us to draw on all our resources, both internal and external, including our personal relationships.	
Mediation skills (Transferrable/ 21st Century) Mediation is a means to resolve disputes without resorting to litigation or other adversarial modes of dealing with conflict.	Spec. course
Storytelling (Transferrable/ 21st Century) Storytelling is the conveying of events in words, and images, often by improvisation or embellishment. Stories or narratives have been shared in every culture as a means of entertainment, education, cultural preservation, and to instil moral values. Crucial elements of stories and storytelling include plot, characters, and narrative point of view.	Spec. course

1.2 Competences per Job Role Profile (level and hours of effort)

DIGITAL COMPETENCES	TYPE	Digital Strategy Manager (Level)	Digital Collections Curator (Level)	Digital Interactive Experience Developer (Level)	Online Cultural Community Manager (Level)	Core material (hours)	Practical assignment (hours)
Service Level Management	e-CF	e-4				5	3,5
Product / Service Planning	e-CF	e-3	e-3	e-3	e-3	4	2
Application Design	e-CF			e-3		4	2
Sustainable Development	e-CF	e-4				5	3,5
Application Development	e-CF			e-3		4	2
Testing	e-CF			e-3		4	2
Solution Deployment	e-CF			e-3		4	2
Documentation Production	e-CF		e-3	e-3	e-3	4	2
User Support	e-CF			e-3	e-3	4	2
Change Support	e-CF			e-3		4	2
Service	e-CF		e-3			4	2



Delivery							
Problem Management	e-CF		e-4	e-4	e-4	5	3,5
Information Security Strategy Development	e-CF	e-4				5	3,5
ICT Quality Strategy Development	e-CF				e-5	6	5
Education and Training Provision	e-CF	e-3				4	2
Purchasing	e-CF	e-4	e-4			5	3,5
Information and Knowledge Management	e-CF	e-4	e-5			6	3,5 (level e-4) 5 (level e-5)
Digital Marketing	e-CF				e-4	5	3,5
Risk Management	e-CF	e-4	e-4	e-4		5	3,5
Process Improvement	e-CF	e-4				5	3,5
Business Change Management	e-CF	e-4			e-5	6	3,5 (level e-4) 5 (level e-5)
Copyright and licenses	DigComp	✓	✓	✓	✓	1,5	1
Programming	DigComp	✓	✓	✓	✓	1,5	1
Solving technical problems	DigComp	✓	✓	✓	✓	1,5	1
Protecting personal data and privacy	DigComp	✓	✓	✓	✓	1,5	1
Identifying digital competences gaps	DigComp	✓	✓	✓	✓	1,5	1
Managing digital identity	DigComp	✓	✓	✓	✓	1,5	1

21 ST CENTURY SKILLS	TYPE	R1 (Level / hours)	R2 (Level/ hours)	R3 (Level/ hours)	R4 (Level/ hours)	Core material (hours)	Practical assignment (hours)
Mentoring / coaching skills	21st Cent	✓	✓		✓	3	2
Analyse and synthesize information	21st Cent	✓		✓	✓	3	2
Negotiation skills	21st Cent	✓		✓	✓	3	2
Networking skills	21st Cent	✓	✓	✓	✓	3	2
Sense of initiative and entrepreneur ship	21st Cent	✓	✓	✓	✓	3	2
Resilience	21st Cent	✓		✓	✓	3	2
Decision making	21st Cent	✓	✓	✓	✓	3	2
Management skills	21st Cent		✓		✓	3	2
Interpersonal skills	21st Cent		✓	✓	✓	3	2
Mediation skills	21st Cent		✓	✓		3	2
Influence / persuasion skills	21st Cent		✓		✓	3	2
Active listening skills	21st Cent		✓	✓	✓	3	2
Storytelling	21st Cent			✓	✓	3	2
Fast-driven	21st Cent			✓		3	2
Integrity / ethical	21st Cent				✓	3	2
		N. competences	N. competences	N. competences	N. competences		
SUM		23	22	27	26		