



# MCAST

Malta College of Arts, Science & Technology

MQF Level 4

TC4-A2-19

**MCAST Advanced Diploma in Cultural Heritage**

**Course Specification**

## **Course Description**

The MCAST Advanced Diploma in Cultural Heritage is designed to address skills shortages in the heritage sector and to form skilled persons who support the management, conservation and preservation of cultural heritage.

The first year of the programme will provide the necessary applied theoretical and ethical background for further training in technical aspects of cultural heritage and heritage skills during the second and third year. Possible options in the second and third year of the programme will be heritage skills in stone and metals. Another option will be in books, paper and textiles. Such training will be carried out in workshops, laboratories and sites. There will also be the opportunity for practical on-the-job and off-the-job training as part of an apprenticeship or work placement. The third year of the programme will build on the previous year and will largely focus on the development of heritage skills in one material, whilst developing technical aspects of cultural heritage further.

Depending on the chosen option, successful candidates will have the knowledge, skills and competences to ethically collaborate with curators, librarians, archivists, and sites managers, documentation specialists, conservation scientists and/or conservator-restorers, and would normally work under the supervision of one of these. Typical employment settings include employment in museums, libraries, archives, churches, palaces, stately homes, and on sites as a key person supporting their conservation and preservation.

## **Programme Learning Outcomes**

At the end of the programme the learner will be able to:

- 1. Follow and communicate procedures and processes in the cultural heritage workplace*
- 2. Demonstrate skills linked to the understanding of collections and/or sites*
- 3. Demonstrate technical and/or craft-based skills to support cultural heritage professionals*
- 4. Apply knowledge, skills and competences in cultural heritage ethically.*

## **Entry Requirements**

MCAST L3 Certificate or Diploma  
or  
4 SEC/O-Level/SSC&P (Level 3) passes

Preferred: English, Physics, Chemistry

### **Other Entry Requirements**

Applicants are asked to sit for an interview.

### **Current Approved Programme Structure**

<b>Unit Code</b>	<b>Unit Title</b>	<b>ECVET/ECT S</b>
CACLH-403-1601	Cultural Heritage: Theory & Ethics	3
CACLH-406-1602	Contextual Studies	6
CACLH-403-1603	Understanding Collections & Sites I	3
CACLH-406-1604	Documentation Techniques	6
CACLH-406-1605	Exhibition Preparation	6
CACLH-403-1606	Prevention and Maintenance	3
CACLH-409-1607	Science for Cultural Heritage I	9
CACLH-406-1608	Care of Collections	6
CACLH-403-1609	Introduction to Materials, Processes and Technical Skills	3
CAH&S-403-1602	Health and Safety at Work	3
CACLH-406-1610	Understanding Collections & Sites II	6
CACLH-406-1624	Science for Cultural Heritage II	6
CACLH-406-1611	Storage and Exhibition Skills I *	3
CACLH-403-1615	Books, Paper and Textiles Heritage Skills *	3
CACLH-406-1613	Wood Heritage Skills *	6
CACLH-406-1614	Stone Heritage Skills *	6
CACLH-406-1615	Metal Heritage Skills*	6
CACLH-406-1616	Understanding Collections & Sites III	6
CACLH-406-1617	Science for Cultural Heritage III	6
CACLH-403-1618	Storage and Exhibition Skills II **	3
CACLH-409-1619	Books & Paper Heritage Skills **	9
CACLH-409-1620	Textiles Heritage Skills **	9
CACLH-412-1621	Wood Heritage Skills II **	12
CACLH-412-1622	Stone Heritage Skills II **	12
CACLH-412-1623	Metal Heritage Skills II **	12
CDKSK-406-1604	English	6
CDKSK-406-1601	IT	6
CDKSK-406-1603	Entrepreneurship	6
CDKSK-406-1520	Malti	6
<b>Total ECVET/ECTS</b>		<b>120</b>

\* During the second year of the programme students are to choose from 2 possible options :

- **Option 1**- Storage and Exhibition Skills + Books, Paper and Textiles Heritage Skills + Wood Heritage Skills
- **Option 2**- Stone Heritage Skills+Metal Heritage Skills

The above units will fall under the Apprenticeship Scheme

\*\* During the third year of the programme, students are to choose from 5 possible options

- **Option 1**- Storage and Exhibition Skills II+Books & Paper Heritage Skills
- **Option 2**- Storage and Exhibition Skills II+Textiles Heritage Skills
- **Option 3**- Wood Heritage Skills II
- **Option 4**- Stone Heritage Skills II
- **Option 5**- Metal Heritage Skills II

The above units will fall under the Apprenticeship Scheme

## Unit: CACLH-409-1607 Science for Cultural Heritage I

Unit level (MQF): 4

Credits: 9

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### Unit description

This unit introduces the basics of chemistry, physics and biology relevant to cultural heritage.

It discusses the principles of chemistry including atoms, molecules, the periodic table, Relative Atomic Mass and Relative Molecular Mass, and atomic structure, together with an introduction to chemical formulae and equations, structure and bonding, states of matter, and reactions. The unit also outlines facts of chemistry, namely pure substances and mixtures, gases in air, together with water and solutions. A basic introduction to organic chemistry might also be provided.

The physics component of the unit introduces basics of motion (including linear motion) and forces (properties of forces and pressure exerted by forces), together with waves (light and optics), and matter (states of matter, density, heat transfer, conductors and emitters of heat, expansion, and evaporation).

The biology part of the unit introduces the living world (living and non-living organisms, the cell, and unicellular and multicellular organisms), and makes reference to the different types of plants associated with cultural heritage.

Whilst providing the underpinning science for Unit 16, this unit serves as the foundation upon which Units 22 and 32 are built.

### Learning Outcomes

On completion of this unit learners should be able to:

1. *Explain theory and basics of chemistry relevant to cultural heritage.*
2. *Explain theory and basics of physics relevant to cultural heritage.*
3. *Explain theory and basics of biology relevant to cultural heritage.*
4. *Relate science to damage and prevention in cultural heritage.*

## Unit: CACLH-403-1609 Introduction to Materials, Processes and Technical Skills

Unit level (MQF): 4

Credits: 3

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### Unit description

This unit will briefly introduce learners to various materials, techniques and processes, with particular reference to those materials that compose cultural heritage objects. Such materials, techniques and processes will be the focus of in-depth study and practice in the second and third years of the programme. Hence, this unit will support learners in their choice of area of study, for the second year.

Learners will familiarise themselves with a small range of different types of traditional textiles, paper, wood, metal and stone. They will be introduced to their essential properties and characteristics, as well as be taught how to use basic and machine tools and equipment, and simple techniques in order to perform simple practical tasks related to each of these materials.

Such tasks could include the manipulation of different metals such as brass, copper, cast and wrought iron, mild steel and aluminium, the carving of a profile in stone, the crafting of a wood carving/sculpted engraving in wood, together with lino printing and basic weaving, embroidery, macramé, fine hand stitching and printing on fabric.

### Learning Outcomes

On completion of this unit learners should be able to:

1. *Record a variety of materials, techniques and processes related to textiles, paper, wood, metal and stone.*
2. *Use basic tools and simple techniques related to textiles, paper, wood, metal and stone.*
3. *Compare and contrast a variety of materials and their properties.*
4. *Evaluate the result of own practical tasks.*

## Unit: CACLH-406-1624 Science for Cultural Heritage II

**Unit level (MQF):** 4

**Credits:** 6

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### Unit description

This study unit is designed to develop the learner's understanding of science for cultural heritage.

Special attention will be given to the science of materials used in heritage skills in order to support learning in such areas of study. Apart from outlining the origin of various traditionally used materials and how they are used in the making of books, and paper and textile artefacts, wooden and/or metal frames, apertures and fixtures, and stone sculptures and structures, this unit also provides basic information on the materials used to bind, adhere, repair, decorate, coat, finish and/or protect such artefacts/structures.

The unit also addresses scientific aspects related to the understanding of collections and sites; building on unit 17, the effects of light, humidity and temperature (and their fluctuations) on cultural property will be discussed in greater detail from a physical and chemical perspective, in order to provide underpinning knowledge for a team assessment of a building and its collection to identify risk and possible consequences on a macro and micro scale.

This unit builds on Unit 17, and is directly related to Units 21 and 24-27. Unit 32 will build upon material covered in this unit.

### Learning Outcomes

**On completion of this unit the learner will be able to:**

- 1. Define a variety of materials from a physical and chemical perspective;*
- 2. Relate scientific aspects of materials to manufacturing techniques in heritage skills;*
- 3. Describe the basic composition and properties of binders, adhesives, pigments, dyes, coatings and finishings used in cultural property;*
- 4. Explain the scientific relationship between light, humidity and temperature and the well-being of cultural property.*

## Unit: CACLH-406-1613 Wood Heritage Skills \*

Unit level (MQF): 4

Credits: 6

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### Unit description

This unit provides an introduction to the vocational aspect of wood heritage skills, particularly wood types and their provenance, their processing, the basics of local carpentry and joinery, and wood carving, inlaying and marquetry. The unit also covers decoration on wood including gilding, and introduces historical surface coatings and finishes. The study of materials, technology and manufacturing processes also forms part of the unit.

In this unit knowledge and skills related to the above will be applied under supervision within the context of the management, understanding and preservation of a historic building/framed artefact. Ethical standards, teamwork, research and documentation, and health and safety issues will be given due importance.

This unit builds on Units 11, 12, 14, 19 and 20 and is directly related to Units 21 and 22. Unit 36 will build upon material covered in this unit.

### Learning Outcomes

On completion of this unit learners should be able to:

- 1. Describe wood heritage skills.*
- 2. Select wood appropriately according to construction and manufacturing technique.*
- 3. Illustrate technology and manufacturing processes associated with wood heritage skills.*
- 4. Apply basic wood heritage skills under supervision with attention to competence, ethics and safety.*

## Unit: CACLH-406-1616 Understanding Collections & Sites III

Unit level (MQF): 4

Credits: 6

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### Unit description

This unit discusses the roles, collaborative processes, and considerations involved in the interpretation of collections and sites. It evaluates the different possibilities in interpreting collections and sites of cultural heritage importance through narrative/s developed by the presentation of specific objects and corresponding onsite information. It discusses criteria for choices of works of art and recommendations for their storage/exhibition, taking into consideration their conservation, accessibility and public understanding, and the effective use of available space. Case studies will be used to illustrate the above and to facilitate discussion on ethical and cultural issues, and the communication of values and understanding.

This unit further treats the management of collections and sites in terms of basis of preventive care. It gives importance to the teamwork involved in the assessment of a building and its collection within various contexts with a view to rating risk and possible consequences on a macro and micro scale. In this unit, although particular importance will be given to dust, pollutants and biological pests, other risk factors treated in earlier units will be taken into consideration for a more integrated approach to risk management.

Learners will learn how to propose, as part of a team engaged in the management and protection of a collection and the building within which it is housed, an integrated risk management plan.

This unit builds on Units 21 and 23, and is directly related to Unit 33.

### Learning Outcomes

On completion of this unit the student will be able to:

- Evaluate, as part of a team, the different possibilities in interpreting collections and sites of cultural heritage importance through narrative/s developed by the presentation of specific objects and corresponding onsite information;*
- Compare and contrast the interpretation of collections of cultural heritage value and the dilemmas that arise in terms of exhibition and storage;*

7. *Rate, as part of a team, risks identified on a macro and micro level to a building and its collection;*
8. *Propose, as part of a team, a risk management plan for a building and its collection.*

## Unit: CACLH-406-1617 Science for Cultural Heritage III

Unit level (MQF): 4

Credits: 6

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### Unit description

This study unit is designed to develop the learner's understanding of science for cultural heritage further.

Special attention will be given to the science of damage caused to materials used in heritage skills in order to support learning in such areas of study. Apart from outlining the damage caused to materials used in the making of books, and paper and textile artefacts, wooden and/or metal frames, apertures and fixtures, and stone sculptures and structures, and the materials used to bind, adhere, repair, decorate, coat, finish and/or protect such artefacts/structures, this unit also provides some basic scientific principles associated with their care, especially in relation to object movement, display, packaging and storage.

The unit also addresses scientific aspects related to the understanding of collections and sites; building on unit 17, dust, pollutants and biological pests and their effect on cultural property will be discussed in greater detail from a physical, chemical and biological perspective as appropriate, in order to provide underpinning knowledge for the proposal of a risk management plan for a building and its collection as part of a team.

This unit builds on Units 17 and 22, and is directly related to Units 31 and 34-38.

### Learning Outcomes

On completion of this unit the student will be able to:

9. *Explain damage caused to a variety of materials from a physical and chemical perspective;*
10. *Discuss scientific aspects of damage to materials and manufacture in cultural heritages;*
11. *Describe basic scientific principles associated with the care of materials used in cultural property;*
12. *Explain the impacts of dust, pollutants and biological pests on the well-being of cultural property.*

## Unit: CACLH-403-1618 Storage and Exhibition Skills II \*\*

Unit level (MQF): 4

Credits: 3

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### Unit description

This study unit further develops learners' knowledge and skills on the procedures and tasks involved in storage and exhibitions in collaboration with and under the supervision of professionals in the field. Skills will be developed in accordance with standards in occupational health and safety.

This unit will develop more complex box-making techniques, conservation mounting and framing (including the preparation of mounts of under supports for clothes to be mounted on mannequins), housing of both two-dimensional and three-dimensional objects, correct packing and handling of artefacts during moving and transport.

This unit will also strengthen learners' knowledge and skills in house-keeping methods. It further covers reporting and documentation techniques, and helps develop skills in designing housekeeping plans, policies and procedures in collaboration with professionals.

This unit builds on Units 20 and 23 and is directly related to Unit 31.

### Learning Outcomes

On completion of this unit the student will be able to:

1. *Apply procedures, methods and techniques used in the protection of single or multiple items;*
2. *Construct complex mounts and custom-fit enclosures to support and protect a variety of artefacts;*
3. *Perform handling, packing, moving and transport activities that ensure the well-being of cultural property;*
4. *Prepare and apply documented housekeeping procedures that ensure preservation and safety in facilities that contain cultural property.*

## Unit: CACLH-409-1620 Textiles Heritage Skills \*\*

Unit level (MQF): 4

Credits: 9

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### Unit description

sewing, weaving (including traditional lacemaking) and dying techniques, and basic care and preservation techniques. The study of associated traditional materials, technology and processes (including the visual understanding of damage) also forms part of the unit.

In this unit knowledge and skills related to the above will be applied under supervision within the context of the management, understanding, maintenance and preservation of textile collections. Legal issues, ethical standards, teamwork, research and documentation, and health and safety issues will be given due importance. Furthermore, the learner will acquire the fundamentals of workshop and studio maintenance.

### Learning Outcomes

On completion of this unit the student will be able to:

1. *Describe basic traditional textiles technology;*
2. *Compare and contrast materials, technology, techniques and damage processes related to textiles heritage skills;*
3. *Apply textiles heritage skills under supervision with attention to competence, ethics and safety;*
4. *Formulate a report to document the damage, care and preservation of textiles.*

## Unit: CACLH-412-1621 Wood Heritage Skills II \*\*

Unit level (MQF): 4

Credits: 12

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### Unit description

This unit provides an introduction to traditional woodworking technology. It covers wooden frames, apertures and fixtures found in historical buildings, and form work. The unit also further develops carpentry and joinery, and decorative and basic repair techniques. The study of associated traditional materials, technology and processes (including the visual understanding of damage) also forms part of the unit.

In this unit knowledge and skills related to the above will be applied under supervision within the context of the management, understanding, maintenance and preservation of frames, apertures and fixtures. Legal issues, ethical standards, teamwork, research and documentation, and health and safety issues will be given due importance. Furthermore, the learner will learn the fundamentals of site, workshop and studio maintenance.

This unit builds on Unit 25 and is directly related to Units 31 and 32.

### Learning Outcomes

On completion of this unit the student will be able to:

5. *Describe basic local traditional woodworking technology;*
6. *Compare and contrast materials, technology, techniques and damage processes related to wood heritage skills;*
7. *Apply wood heritage skills under supervision with attention to competence, ethics and safety;*
8. *Formulate a report to document the repair and maintenance of traditional/historic wooden frames, apertures and fixtures.*

## Unit: CACLH-412-1622 Stone Heritage Skills II \*\*

**Unit level (MQF):** 4

**Credits:** 12

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### Unit description

This unit provides an introduction to local traditional construction technology. It covers stereotomy, plasters and mortars. The unit also further develops stone dressing techniques and introduces pointing and repair of limestone structures (such as piecing in and dowelling). The study of associated traditional materials, technology and processes (including the visual understanding of damage) also forms part of the unit.

In this unit knowledge and skills related to the above will be applied under supervision within the context of the management, understanding, maintenance and preservation of a traditional building/historic construction. Legal issues, ethical standards, teamwork, research and documentation, and health and safety issues will be given due importance. Furthermore, the learner will learn the fundamentals of site, workshop and studio maintenance.

This unit builds on Unit 26 and is directly related to Units 31 and 32.

### Learning Outcomes

**On completion of this unit the student will be able to:**

1. *Describe basic local traditional construction technology;*
2. *Compare and contrast stone materials, and construction and manufacturing technology, techniques and damage processes;*
3. *Apply stone heritage skills under supervision with attention to competence, ethics and safety;*
4. *Formulate a report to document the repair and maintenance of traditional/historic limestone structures.*

## CAC LH-412-1623 Metal Heritage Skills II

**Guided Learning hours: 300**

**Unit level (MQF):4**

**Credits: 12**

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### **Unit description**

This unit provides an introduction to traditional metalworking technology. It covers metal apertures and fixtures found in historical buildings, wrought iron work, and metal casting techniques. The unit also further develops blacksmithing and decorative techniques, and introduces protection of metal structures (such as corrosion inhibitors and protective coatings). The study of associated traditional materials, technology and processes (including the visual understanding of damage) also forms part of the unit.

In this unit knowledge and skills related to the above will be applied under supervision within the context of the management, understanding, maintenance and preservation of metalwork of traditional buildings/historic monuments. Legal issues, ethical standards, teamwork, research and documentation, and health and safety issues will be given due importance. Furthermore, the learner will learn the fundamentals of site, workshop and studio maintenance.

This unit builds on Unit 27 and is directly related to Units 31 and 32.

### **Learning Outcomes**

**On completion of this unit the student will be able to:**

- 1. Describe basic local traditional construction technology;*
- 2. Compare and contrast materials, technology, techniques and damage processes related to metal heritage skills;*
- 3. Apply metal heritage skills under supervision with attention to competence, ethics and safety;*
- 4. Formulate a report to document the repair and maintenance of traditional/historic metal apertures and fixtures.*