



Università  
degli Studi  
di Ferrara

**DA** Dipartimento  
Architettura  
Ferrara



CALL FOR APPLICATION  
INTERNATIONAL SUMMER SCHOOL

**AFTER THE DAMAGES  
INTERNATIONAL ACADEMY**

An advanced training project to highlight recent innovations and advancements made in the post-disaster management.

**JULY 2022**

ONLINE EDITION

**SUBMISSION DEADLINE:**  
3<sup>RD</sup> JUNE 2022 23:00 CET

Partnership



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UNIVERSITÀ  
DI PARMA



UNIMORE  
UNIVERSITÀ DEGLI STUDI DI  
MODENA E REGGIO EMILIA



MINISTERO  
DELLA  
CULTURA



Regione Emilia-Romagna  
Settore Patrimonio culturale



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Italy - Croatia  
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European Regional Development Fund



Regione Emilia-Romagna

L'International Academy "After the Damages" rientra tra i progetti triennali di alta formazione in ambito culturale, economico e tecnologico ai sensi dell'art. 2 della legge regionale n. 25/2018 approvati e finanziati con deliberazione di Giunta regionale n. 1251/2019. The International Academy "After the Damages" project has received funding from the Emilia Romagna Region in the scope of the three-year higher education projects in the cultural, economic and technological fields pursuant to art. 2 of the regional law n. 25/2018 approved by resolution of the Regional Council n. 1251/2019.

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Art. 1 - GENERAL INFORMATION HEADQUARTER DIRECTION TECHNICAL-SCIENTIFIC COMMITTEE

The Summer School "After the Damages" 2022 Edition is an intensive two-week online program addressed to the participation of students and graduates, public administration managers, government agencies, international organizations, researchers, specialists and professionals according to an interdisciplinary view, aimed at training participants on risk management and reduction applied to built and cultural heritage.

- University of Parma, Department of Engineering and Architecture;
University of Modena and Reggio Emilia, "Enzo Ferrari" Engineering Department;
Agenzia per la Ricostruzione Sisma 2012 (Regional Agency for Reconstruction);
MIC, Soprintendenza Archeologica, Belle Arti e Paesaggio per la città metropolitana di Bologna e le province di Modena, Reggio Emilia e Ferrara (Authority for Archaeology, Fine Arts and Landscape);
MIC, Soprintendenza Archeologia, Belle Arti e Paesaggio per le province di Parma e Piacenza (Authority for Archaeology, Fine Arts and Landscape);
Cultural Heritage Area, Regione Emilia-Romagna

School Heads are:

Prof. Marcello BALZANI
Prof. Riccardo DALLA NEGRA
Prof. Roberto DI GIULIO

Technical-Scientific Committee:

- Cristina AMBROSINI, Cultural Heritage Area, Emilia-Romagna Region;
Lorenza BOLELLI, Cultural Heritage Area, Emilia-Romagna Region;
Enrico COCCHI, Regional Agency for Reconstruction - "Sisma 2012", Emilia-Romagna Region;
Antonino LIBRO, Regional Agency for Reconstruction - "Sisma 2012", Emilia-Romagna Region;
Alessandra QUARTO, MIC, Authority for Archaeology, Fine Arts and Landscape for the metropolitan city of Bologna and the provinces of Modena, Reggio Emilia and Ferrara;
Keoma AMBROGIO, MIC, Authority for Archaeology, Fine Arts and Landscape for the metropolitan city of Bologna and the provinces of Modena, Reggio Emilia and Ferrara;
Maria Luisa LADDAGO, MIC, Authority for Archaeology, Fine Arts and Landscape for the metropolitan city of Bologna and the provinces of Parma e Piacenza;

- Marcello BALZANI, University of Ferrara;
Riccardo DALLA NEGRA, University of Ferrara;
Roberto DI GIULIO, University of Ferrara;
Federica MAIETTI, University of Ferrara;
Manlio MONTUORI, University of Ferrara;
Fabiana RACO, University of Ferrara;
Alessandro CAPRA, University Modena and Reggio Emilia;
Cristina CASTAGNETTI, University Modena and Reggio Emilia;
Eva COÏSSON, University of Parma;
Chiara VERNIZZI, University of Parma.

Coordination for didactic and organisation:

- Claudia PESCOLIDO, University of Ferrara.

Art. 2 - EDUCATIONAL METHODS

The course is developed through distance learning method (asynchronous or synchronous lectures). The lessons will be held using the Zoom Platform.

For enrolment in the course the number of places available is 60.

Admission to the Summer School are based on a selection process. The registration procedures for the selection are explained in Articles 17-20 of this announcement.

Lectures will be in English, in Italian, in Portuguese, in Spanish, with simultaneous translation in english; the teaching material will be provided in English.

Art. 3 - COURSE DURATION

The course lasts two weeks and consists of 104 hours of educational activities as follows:

- lectures (frontal teaching activity) : 40 hours;
virtual tours and thematic visits on selected case studies: 20 hours;
seminar/workshop activities: 20 hours;
individual work aimed at the final workshop: 24 hours.

Art. 4 - CREDITS

Neither university nor professional training credits are foreseen.

Art. 5 - OBJECTIVES, AIMS AND PROFESSIONAL OPPORTUNITIES

OBJECTIVES

The course aims to promote the development of different awareness and skills:

- knowledge and sharing of international best practice cases related to risk management processes, first, and reconstruc-

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- tion phases, then, in relation to policies, urban and territorial planning tools, economic-financial tools and intervention techniques;
- knowledge of integrated technologies, procedures and tools for the survey and analysis of damage related to natural and anthropic disasters;
- ability to apply an integrated approach to risk management aimed at damage mitigation actions and more effective emergency management;
- ability to communicate with different target audiences (expert and non-expert) in the emergency management and reconstruction phases;
- ability to apply integrated monitoring tools and methods to the management of risks related to natural and anthropic disasters to which existing built assets are exposed.

**PURPOSES**

The course aims to train a wide range of technical and managerial skills supporting the upgrading of experts in the management and prevention of risks related to the effects of environmental and human disasters on the existing built heritage and Cultural Heritage. The Course supports both the development of the necessary knowledge of technical tools and the acquisition of cross-disciplinary skills and behavioural skills necessary to manage complex decision-making processes.

Among the knowledge and skills expected as a result of the Summer School are:

- integrated policies and tools for risk management and a more aware integrated risk management, both related to natural and anthropic events;
- good practices related to policy models to support emergency and risk management, sharing and accessibility of digital databases, definition of intervention strategies for historical architecture; models and databases aimed at preserving historical buildings; models for vulnerability assessment and prevention actions;
- integrated monitoring strategies for existing built heritage aimed at strengthening integrated risk management approaches learning from Faculty members experiences, including the impact of the application of advanced surveying and integrated diagnostics tools for the development of existing built heritage monitoring systems and the impact of the application of integrated technologies and platforms for predictive maintenance of built heritage;
- skills related to a holistic approach to complex and articulated issues related to disaster events, risk mitigation, documentation and monitoring activities;

- skills related to the analysis of the interactions between expected damage and conscious planning;
- coordination skills between the construction sector applied to refurbishment and restoration and the emergency management sector.

**PROFESSIONAL OPPORTUNITIES**

The skills acquired in the Summer School can be applied in public administrations, institutes and national and international agencies in the field of prevention and management of risks related to environmental and anthropic events on the built environment, as well as in engineering and architectural design firms, both nationally and internationally.

**Art. 6 - EDUCATIONAL ACTIVITIES CALENDAR**

The Summer School will start on **05<sup>th</sup> July, 2022**.

Lectures will take place every day, from Monday to Friday, according to the calendar provided by the course coordinator.

**Art. 7 - ATTENDANCE REQUIREMENTS**

In order to complete the Summer School and obtain the certificate of attendance and achievement of activities, it is mandatory to attend at least 75% of the lessons, synchronous or asynchronous.

**Art. 8 - TRAINING ACTIVITIES AND FINAL ASSESSMENT**

The description below is intended to provide an overview of the main contents of the educational activities of the course, designed to meet disaster risk-related training goals.

**COURSE TOPICS**

The Summer School is primarily aimed at deepening methodologies for the analysis, mitigation, and risk management, focusing on:

- built heritage, natural hazards and climate change;
- understanding of risk, strengthening decision-making in risk management and solutions in risk reduction;
- data collection for the documentation of the interventions necessary to risk reduction;
- built Cultural Heritage in the Disaster Risk Management (DRM) approach.

Training activities related to the construction site and new protocols for post-pandemic management: prevention, safety, and health issues.

- Keynotes, Lectures, and workshops on resilience, governance, legal, economic and socio-economic aspects, including:

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- post-disaster participatory governance tools supporting communities with a resilient attitude;
- highlight the local identity for the construction of intangible resilience in historic urban contexts;
- governance strategies aimed at environmental, social and economic resilience;
- community involvement in DRM to strengthen governance and stakeholder decision-making capacities in monitoring and reducing risks, towards predictive and reactive action in case of disaster.

Educational activities, workshops and seminars of interactive teaching on monitoring, survey and data modeling, integrated diagnostic survey, digitization of complex systems, Building Information Modeling, including:

- innovative methods of integrated survey by applying protocols and 3D modeling also in parametric environment for the conservation of the built Cultural Heritage;
- monitoring of deformations through continuous acquisitions and longtime series;
- deformation monitoring with fiber optic sensors;
- multispectral images to improve Urban Search And Rescue (USAR) operations in surveillance over large areas and for monitoring collapsed or cooperating buildings.

Knowledge sharing by deepening design solutions such as:

- tools for an aware design applied to the conservation of the historic built heritage;
- seismic vulnerability assessment and innovative solutions for the improvement of the anti-seismic behaviour of aggregated built heritage.

Virtual thematic visits aimed at in-depth study and discussion with experts and professionals working in the field of risk management and the safeguarding of existing built assets.

At the end of the two-week Summer School, a final assessment will be held, consisting of a design simulation, and related discussion of the strategies adopted, on the topics covered by the course.

The final design simulation consist in the proposal of intervention solutions, at different scales, for the management and mitigation of risk, on a specific area chosen by the participants, also with reference to the respective geographical areas of origin, or in the contexts of the proposed Italian case studies, and may have integrated interdisciplinary aspects consistent with the holistic approach proposed in the teaching activities.

**The final assessment is scheduled on Tuesday, 19<sup>th</sup> July 2022** and will take place in the virtual room of the **Zoom platform**.

#### Art. 9 - PREREQUISITES

Master of Science degree in one of the following areas is a prerequisite to the course when applying for the selection:

- Architecture and Civil engineering;
- Industrial and Information Engineering;
- Geophysical Sciences;
- Humanities;
- Economics and Statistics;
- Political and Social Sciences;
- Law Sciences;
- Mathematics and Computer Science;
- Historical and pedagogical sciences.

*Candidates with a Master of Science degree in other areas than those listed above will be admitted at the Committee' discretion.*

#### Art. 10 - PARTICIPANTS MINIMUM NUMBER AND WITHDRAWAL OF COURSE ACTIVATION

The activation of the Course is revoked if a minimum number of enrolments of at least 25 is not reached. In this case, it will be communicated by notice on the website

[www.afterthedamages.com](http://www.afterthedamages.com).

#### Art. 11 - SELF-CERTIFICATIONS

Please note that the person concerned is personally responsible for what they declare; if the Public Authority has a well-founded doubt on the truthfulness of what has been declared, then it shall perform suitable checks and adopt any measures where applicable.

#### Art. 12 - ENROLMENT FEES

The course is free of charge. It is funded by the Emilia-Romagna Region and is part of the three-year higher education projects in the cultural, economic and technological fields pursuant to art. 2 of the regional law n. 25/2018 approved and financed by Regional Council resolution no. 1251/2019.

#### Art. 13 - ENROLMENT ON OTHER INSTITUTIONS

Simultaneous enrolment in other university, post-graduate and continuing education courses (PhD programmes, Degree or Master programmes) is allowed.

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Art. 14 – ATTENDANCE CERTIFICATE

At the end of the course, the final certificate of participation in the International Summer School will be issued, together with the University of Parma and the University of Modena and Reggio Emilia. The certificate will attest the participation in the course activities. The achievement of the certificate of attendance of the Summer School "After the Damages" is under the fulfillment of the following criteria:

- Attendance of at least 75% of the activities;
Filling in of the initial motivation questionnaire and the final evaluation questionnaire;
Discussion of the final project simulation at the end of the course.

Art. 15 – PERSONAL DATA PROCESSING

Personal data shall be processed by the University of Ferrara lawfully, fairly and in a transparent manner in relation to the management of the "After the Damages" course activities as well as in compliance with the principles, conditions and more generally with the provisions of Regulation (EU) 2016/679 (General Data Protection Regulation, hereinafter GDPR).

The University of Ferrara shall take appropriate measures to provide all the information as to in Articles 13 and 14, as well as the communications provided for in Articles 15 to 22 and Article 34 of the GDPR, concerning the processing of personal data.

Personal data shall be collected for the specified purpose of the didactical activities and not further processed in a manner that is incompatible with those purposes and processed in a manner that ensures appropriate security of the personal data, including protection against unauthorized or unlawful processing and against accidental loss, destruction or damage, using appropriate technical or organizational measures ("integrity and confidentiality").

Art. 16 – INFORMAZIONE

The Coordination and Support Office can provide additional information | E-mail afterdamages@unife.it

Art. 17 – ADMISSION CRITERIA

Admission to the Summer School is based on a selection consisting on the assessment of scientific and professional qualifications and an online interview, as described below. Applicants must submit the required documents, as specified in Art. 18 of the present call including the Application Form, a copy of a valid identity document (i.e., identity card or passport), the Curriculum Vitae, and a Cover Letter. In particular:

- the Application form must be appropriately filled in, dated, and signed.
the Curriculum Vitae must comprehensively explain the candidate's achievements and qualifications by highlighting previous scientific and professional experiences, and must be dated and signed.
The Cover letter must describe personal motivations to attend the course, by explaining:
a. Motivations for participating in the course consistently with personal specialization areas, possible applicability and skills development;
b. Short and medium-long term objectives that contribute to the choice of the Summer School as a tool to achieve these goals;
c. Scientific-professional strengths, describing experiences, knowledge and skills highlighting particular attention to the strategic activities of the course.

The Selection Committee will assess the applications received on the basis of the following criteria:

Table with 2 columns: Qualification Assessment and Max grades. Rows include: 1. Evaluation of academic qualification (Master of Science degree grade: 10/100), 2. Relevance of the thesis to the topics of the Summer School (10/100), 3. Curriculum vitae: assessment of Postgraduate Degree qualifications (40/100), 4. Motivational Interview in English language (40/100). Total Max grade for qualifications assessment: 60/100.

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Candidates who, on the basis of the evaluation of their qualifications, will be selected for the oral interview will receive a communication via email; the ranking will also be published on the official website of the Summer School, together with the details of the interview.

The interviews will take place starting from **13<sup>th</sup> June 2022 from 9:30 (CET)** electronically using the **Zoom platform**, or another one previously indicated by the organizational didactic coordinator, whose access link will be sent in advance. In the event of a high number of applications, the interviews will extend until **June 16, 2022**.

At the end of the interviews, suitable candidates will be admitted to the Summer School according to the ranking, compiled on the basis of the overall score (qualifications and interview), up to the **60 available places**. In case of a tie, the candidate with the highest score in the evaluation of qualifications precedes. In case of further equality, the younger candidate will precede.

To take the oral exam it will be necessary to show a valid identification document, which will be the same as sent in the application documentation. Failure to show the identification document will result in exclusion from the selection.

This announcement has the value of notification in all respects: therefore, if the exclusion from the selection is not communicated, the candidates are required to present themselves without notice. The absence of the candidate / candidate will be considered as a waiver of the selection.

#### Art. 18 - DOCUMENTS TO BE SUBMITTED FOR SELECTION REGISTRATION

Candidates must apply for the selection **by 23:00 CET of 03<sup>rd</sup> June 2022** by submitting **via email** to [afterdamages@unife.it](mailto:afterdamages@unife.it) or **on the online form** on the After the Damages **website** the following documentation (Max. 15Mb):

1. the **application form** [.pdf] filled in - (**dated and signed**);
2. a copy of the identity card or other **identification document**;
3. Scientific and/or Professional **Curriculum Vitae** [.pdf] - (**dated and signed**);
4. **Cover letter** explaining:
  - motivations for participating in the course consistently with personal specialization areas, possible applicability and skills development;

- short and medium-long term objectives that contribute to the choice of the Summer School as a tool to achieve these goals;
- scientific-professional strengths, describing experiences, knowledge and skills highlighting particular attention to the strategic activities of the course. **Total size limit for ALL documents to be delivered is 15Mb**

*Please note that the person concerned is personally responsible for the declaration accuracy; if the Public Authority has a well-founded doubt on the truthfulness of what has been declared, then it shall perform suitable checks and adopt any measures where applicable.*

*No application procedure other than online as described above. Candidates who do not apply in accordance with the procedures and deadlines indicated above will not be admitted to the selection.*

*Any communication to candidates will be sent to the e-mail address entered in the Application Form.*

#### Art. 19 - RANKING AND ENROLMENT

By **07<sup>th</sup> June 2022**, at the end of the selection procedure, selected candidates will be notified by email and it will be possible to check their ranking position by logging in to the official web site [www.afterthedamages.com](http://www.afterthedamages.com).

#### Art. 20 - RENOUNCE AND REPLACEMENT

Any vacant position due to the formal withdrawal by selected candidates before the start of the course will be made available according to the ranking list.

It will be possible to check positions availability by logging in to the Summer school web site [www.afterthedamages.com](http://www.afterthedamages.com).

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