



الجامعة الألمانية الأردنية
German Jordanian University

School of Architecture and Built Environment

**Department of
Architectural Conservation**

Courses Description

**Masters of Science Program in
Architectural Conservation**

2012

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AC 429 History of the Built Environment in Jordan and the Fertile Crescent, 3 Crs.

This course aims to understand the evolution of socio-economic, spatial, architectural, and urban and rural environments within Jordan and the region concentrating on the recent past (last 250 years), with reference to the history of the earlier periods. The course also attempts to illustrate the significant contribution of the social sciences and archaeological research to a better understanding of the built environment. In its attempt to study the history of the built environment, the course philosophy rejects the concept of history as totalizing, and attempting to analyze moments of rarity and transformation in society, thus qualifying and granting voice to subjugated knowledge and realities, while uncovering mechanisms of hegemonic power and systemized control.

AC 701 Special Topics in Architectural Conservation, 3 Crs.

This course allows specialized or in-depth study of a supplementary subject in architectural conservation. Students' interests and instructor's expertise help determine the topic.

AC 710 Conservation in the Field / Internship, 3 Crs.

This training/ internship will be conducted at research institutions, international organizations offering internship or training, our German partners and may also include architectural firms specialized in conservation. Students will work on real heritage conservation projects which may include documentation, rehabilitation, and adaptive re-use of buildings and different levels of conservation in addition to being part of research teams investigating various issues of interest to conservationists. Furthermore, students could participate in planning projects and surveys that are related to heritage conservation/management.

AC 721 Conservation Theory, Philosophy and Practice, 3 Crs.

This course provides analysis of the historical background including the development of the theoretical scope of architectural conservation. It aims to discuss concepts and terms that determine the field of contemporary conservation. The course also provides a survey of history, philosophy, and approaches of conservation and rehabilitation of cultural heritage at the scale of buildings and monuments and at an integrated scale of conservation areas as well. The course also presents the diversity of actors and agents, including institutions that are involved in heritage conservation internationally, regionally and locally.

SABE 721 Research and Presentation Skills, 2 Crs.

This course provides students with theoretical and practical knowledge needed to write and present technical research papers. The course covers research norms, data collection tools and techniques, methods of evaluating information, data analysis techniques and data interpretation, quantitative (experimental, quasi-experimental, and survey) and qualitative studies (case studies, comparative analysis, field reconnaissance surveys, participant observation, and archival). The review includes all methods of observation and data collection with focus on measurements, reliability, validity, data analysis, interpretation, inferences, reporting, and research ethics.

SABE 722 Technical Writing Skills, 1 Crs.

This course provides students with theoretical and practical knowledge needed to write thesis proposals and final Master's Thesis. The course covers preparation for thesis writing, thesis management, proposal rewriting, conducting oral and visual presentations, and teaching and training didactics.

AC 741 Conservation of Urban and Cultural Landscapes, 3 Crs.

The course commences with a review of the progression of integrated conservation approaches worldwide, beginning single monument conservation and ending with conservation of whole areas and city cores. The course introduces different approaches and methodologies to urban conservation; including understanding the urban environment, conducting surveys and proposing different levels of intervention that are physical and non-physical in nature. The course also introduces the diversity of stakeholders involved in urban and cultural landscape conservation including local communities, guilds, commercial associations, owners, residents and local authorities (e.g. municipalities).

AC 742 Adaptive Re-Use of Buildings, 3 Crs.

The course concentrates on the processes of adaptive reuse of buildings into contemporary uses and functions. It introduces theories of adaptive reuse of heritage and contemporary buildings as a key factor in conservation. It further addresses design and planning with consideration of the entire life cycle of the building and its components in regard to ethics, economics, environmental impact, and performance. It also deals with methods of analysis of heritage buildings and settings in relation to cultural aspects, socio-economic impacts as well as market oriented trends.

AC 751 Heritage Documentation and Surveys, 3 Crs.

This course aims to convey a comprehensive meaning of cultural heritage documentation beyond the production of measured drawings for buildings and sites to include photography, historic and archival research; and conducting thematic surveys. The understanding of documentation Sites or historic buildings and Monuments needs to be based on the different categories/types and components of documentation

taking into account the internationally agreed standards for the documentation of the cultural heritage. Photographic, graphic documentation and digital documentation shall also be introduced. From hand survey, photogrammetry, to total station and up to photo modeler in addition to 3 d laser scanning applications shall be explored. Specific objectives include conveying thinking and analytical skills regarding documentation, such as identifying reasons and levels of surveys. The course also attempts to convey practical and technological skills including how to prepare for fieldwork and how to measure historic buildings, using conventional and advanced technologies. The course will depend on field projects to materialize such approaches.

AC 752 Building Pathology and Diagnosis, 3 Crs.

This course aims to provide information on the causes and agents of deterioration of historic buildings and building materials, documentation and classification of agents of deterioration based on international experience. The course addresses the subject of natural and anthropogenic causes of building deterioration reflected in disturbances and threats. Emphasis on building pathology, relevant documentation techniques leading to scientific diagnosis for the different reasons and technical aspects of deterioration will be made. Visual glossaries as part of the diagnostic features shall be explored based on work in the field. Lectures cover subsurface conditions, structural systems and related problems, wall and roof systems, and interior finishes, targeting performance, deterioration, and stabilization or intervention techniques.

AC 753 Preventive and Remedial Conservation, 3 Crs.

This course will explore techniques and approaches to preventive conservation, including investigation and testing on site and researching various approaches to characterize, identify weakness and possibilities of interventions that will maintain the structural stability and cultural and historic authenticity of the building. The course introduces the characteristics of the variety of materials such as masonry - stone, brick, mortars, metal, glass and possible compatible materials used in conservation and restoration projects, and includes hands-on laboratory and field work in addition to field experiments.

AC 754 Conservation and Information Technology and Management, 3 Crs.

The course investigates the implications of various information technologies on the practice of architectural and urban conservation. This course is concerned with the different methods for image-based 3D mapping and digital recording, visualization and heritage management, and Geographic Information System (GIS) applications in architectural and urban conservation and management. It introduces students to the various software packages in simulation to produce animated and digital reconstructions of buildings and sites.

AC 781 Management of Conservation Projects, 3 Crs.

In this course students will acquire knowledge and skills to develop, manage, and evaluate projects in the field of conservation and rehabilitation of cultural heritage. It also provides information for skill development in the process in relation to business

and management, including strategic planning, business plan development, managing client relationships, financial and legal issues, quality control, and professional ethics. This course also covers principles and methods of conservation and rehabilitation project management at the planning and implementation phases including execution of an interdisciplinary work program and budget, and establishment of a comprehensive organization covering all phases starting with the general assessment phase and ending with an effective guidelines for carrying out the implementation phase.

AC 782 Introduction to Cultural Site Management, 3 Crs.

This course is concerned with basic methods, theories and principles of cultural site management. The course illustrates the process of cultural site management starting from cultural heritage identification, assessment and interpretation, and response and monitoring. The course focuses on management, planning, and decision-making for all types of heritage sites ranging from individual buildings, to historic sites and to whole cultural landscapes. Course material will draw on model approaches to management as well as on a series of local and international case studies, with the goal of understanding the practicalities of site management. Particular topics to be examined in greater detail might include conservation policy and interpretation, tourism, and economic development strategies.

AC 783 Conservation Legislations and Regulations, 3 Crs.

This course lends information about various regulations, conventions, charters, and laws of conservation in order to develop an understanding of legal and administrative aspects in conservation; especially to the development of conservation thought and practices. By the end of the course, students will be familiar with the roles of the public and private organizations involved in conservation, and begin to analyze conservation policies. The course will also include review of legal and administrative aspects in conservation, examination of international regulations, charters, declarations and conventions, and a look at governmental and non-governmental organizations in Jordan and in the world.

SP 783 Tourism Planning, 3 Crs.

This course provides students with the appropriate understanding of the relationship between the built environment and the complexity of tourism activities, and its impact on society and resources allocation. It covers various processes in tourism planning and development including government involvement, local communities, NGOs, and public-private initiatives. It also presents various planning approaches including resource-based and community-based tourism. Field trips and field research will be utilized.

AC 799 Master Thesis / Architectural Conservation, 9 Crs.

This course involves extensive research in architectural conservation. The Master's Thesis is based on field research and demonstrates student's background knowledge. A defense will be set to evaluate student's capabilities of carrying out research, with a focus on the analysis and interpretation of skills gained.