Department of Landscape Design and Ecosystem Management (LDEM)

Chairperson:	Zurayk, Rami
Professors:	Talhouk, Salma; Zurayk, Rami
Associate Professors:	Makhzoumi, Jala
Assistant Professors:	Farajalla, Nadim; Husain, Sayyed-Ali; and Weltzien, Julie
Instructors:	[P]Jarroush Abdouni, Najah; [P]Shibli, Rabih; [P]Isa, Maha
Lecturer:	Battikha, George

Graduate Programs

The graduate study program leading to the MS degree with thesis or non-thesis options is offered with a specialization of Ecosystem Management.

The program educates students in ecosystem science and management by integrating instruction in biophysical and human systems. It provides students with sufficient research experience, and it equips graduates with the necessary tools for professional practice and/or the pursuit of higher education.

It crosses traditional boundaries by applying a interdisciplinary approach and multiple resource knowledge to ecosystem studies. It emphasizes human-nature interactions.

Natural resources management involves not only the understanding of ecosystem structure and function when used for a variety of purposes, but also the incorporation of social, economic and political considerations into decision-making. Consequently the discipline involves the collection, analysis, interpretation and integration of information from not only the more traditional areas of science but also from the areas of management.

P Part time

Ecosystem Management Courses

ECMG 330/ ENSC 630LDEM 630 **Natural Resource Management** **3 cr.**

Ecosystem approach to NRM. Data sources and interpretation for NRM. Physical, socio-economic, cultural, political, and geographic specificity of NRM. Principles and processes of NRM. Case studies and practical examples in contrasting situations.

ECMG 314/ ENSC 631 LDEM 631 **Agricultural Pollution and Control** **3 cr.**

Fate of agrochemicals in the environment. Effect on terrestrial and aquatic systems. Contamination, monitoring residues, methodologies, and risk assessment models and research. *Annually.*

ECMG 333/ ENSC 633 LDEM 633 **Ecological Landscape Design and Planning** **3 cr.**

Introduction to the theory and methodology of ecological landscape design and planning, aims to introduce the holistic approach of landscape ecology and its application in sustainable management of natural and cultural landscape sterosystems.

ECMG 354/ ENSC 654 **Physical and Biological Resources in Terrestrial Ecosystems** **3 cr.**

Physical and Biological Resources in Ecosystems, soils in the ecosystem, soil conservation, water in the ecosystem, water conservation, principles of soil and water chemistry and microbiology, plant and animal biodiversity, collection and conservation of wild plants, preservation of endangered species, plant response to environmental stress.

Faculty of Arts and Sciences