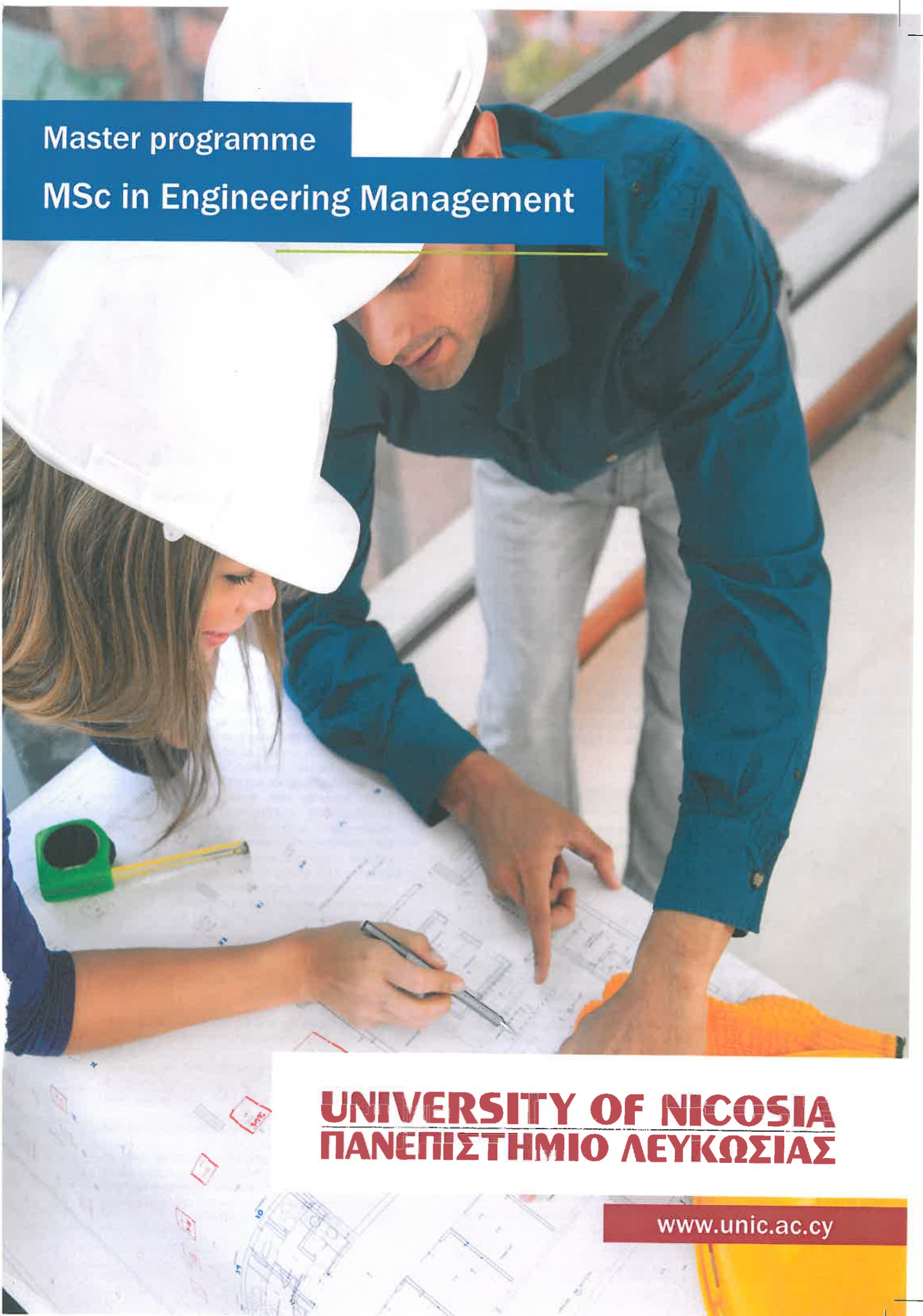


Master programme

MSc in Engineering Management

UNIVERSITY OF NICOSIA
ΠΑΝΕΠΙΣΤΗΜΙΟ ΛΕΥΚΩΣΙΑΣ

www.unic.ac.cy

INTRODUCTION

The University of Nicosia offers an interdisciplinary Master of Science programme in Engineering Management, designed for experienced professionals who have earned a bachelor degree in engineering, science, management or a related scientific area and who seek to develop superior skills in managing diverse complex engineering projects, products and services. Graduates of the programme will learn how to coordinate and lead engineering projects as well as manage teams, engineering functions, and organizations. In addition, they will gain an understanding of the Accounting, Finance and Engineering Economics decision making process and broaden their understanding of the key management and strategic issues involved in developing and implementing engineering projects and solutions. The program is suitable for prospective science and technology entrepreneurs who wish to understand the enterprise formation process.

This program is the result of a joint effort and collaboration of the School of Business (Department of Management & MIS) and the School of Sciences and Engineering (Department of Electrical & Computer Engineering).

AIM AND OBJECTIVES

The aim of the programme is to prepare Engineering Managers to drive technological, economic and social change.

The general objectives of the programme are to:

- Enable graduates to meet existing challenges and create competitive advantage in technology organizations;
- Provide students with critical analytical skills, decision making approaches and targeted management competences to successfully assess risks, complete technology projects, efficiently run engineering teams, and create innovative products and services;
- Develop skills for effective communication with co-workers, managers, and the public on topics related to technical concepts, risks, and recommendations;
- Assist future entrepreneurs in Science and Technology unfold their full potential towards launching successful business initiatives.

The specific objectives of the programme are to:

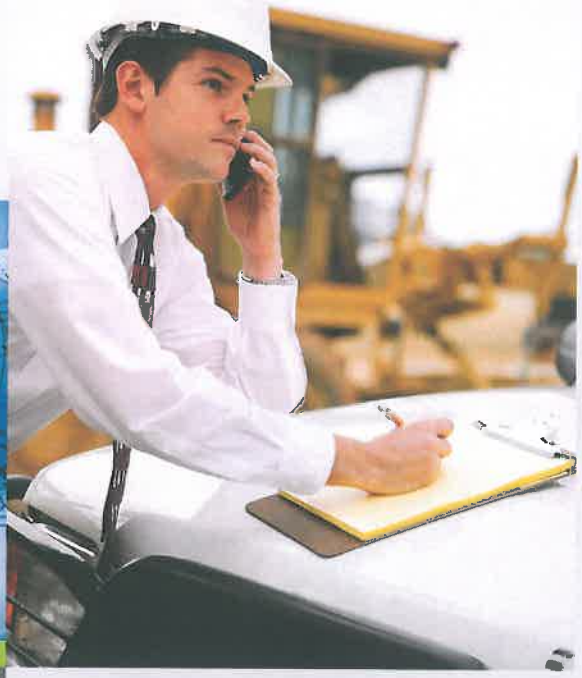
- Enable students to integrate the technological problem-solving savvy of engineering and the organizational, administrative, and planning abilities of management in order to oversee complex enterprises from conception to completion;

- Provide the students with a sound understanding of the techniques and issues in modern engineering management, emphasizing on the skills that are required in first line management roles of aspects of management relevant to the engineering manager;
- Provide the theoretical and management skills necessary for the resolution of challenging management engineering problems in industry;
- Develop an advanced understanding of the key strategic issues involved in developing and implementing engineering projects and solutions;
- Equip students with fundamental knowledge, analytical skills, and engineering tools in order to cope successfully in the technologically challenging field of engineering management;
- Prepare students to work alone or in groups;
- Develop the ability of the graduates to write technical reports and scientific papers as well as to present their work before an audience.

LEARNING OUTCOMES

Upon successful completion of this programme, graduates should be able to:

- Apply the knowledge and principles of management, leadership and negotiation concepts in managing teams of people;
- Understand and apply principles and concepts and strategies to assess the industry dynamics of technological innovation for developing and deploying new products and services;
- Identify, formulate and solve complex engineering management problems;
- Apply an integrative and interdisciplinary way of thinking and a combination of skills and qualifications which include critical/analytical thinking, technical knowledge, and problem-solving skills in engineering management;



- Develop solutions that meet the desired requirements within bounds of economy, engineering, technology and sustainability;
- Function and communicate effectively in multi-disciplinary teams;
- Understand and be able to design operation systems for enhancing the strategic role of operations management in organizations and gain a competitive advantage in the marketplace;
- Develop a clear understanding of the concepts, rules and principles of the major types of intellectual property, contracts, company establishment and economic losses and remedies.

CAREER PROSPECTS

The graduates of the programme will be able to pursue a number of career opportunities including:

- Technical entrepreneurs;
- Managers of engineering and technology organizations;
- Business/Engineering consultants;
- Human resource managers;
- Product development designers;
- Project Managers;
- Business Analysts.

ADMISSION CRITERIA

The criteria for admission are:

- A Bachelor degree in Engineering or Science or Management granted by an institution recognized in the country where it operates;
- A cumulative point average (CPA) of 3.0/4.0 in their undergraduate work (or equivalent according to the academic system followed in the country of study);
- English Proficiency: applicants satisfy the requirements if their first degree was taught in English. Otherwise, they would need to present at least a TOEFL score of 550 paper-based or 213 computer-based, or GCSE "O" Level with "C" or IELTS with a score of 6.5 or score placement at the ENGL-100 level of the University of Nicosia Placement Test.

Each application for admission should include:

- A completed application form;
- Copies of all degrees and transcripts. If applicable, a letter from the Registrar of the student's current university verifying the expected graduation date should be included;
- A Curriculum Vitae indicating the applicant's education, academic and professional experience, any publications, awards, etc.;
- A short statement stating the reason the candidate wishes to join the program, the candidate's professional experience, future goals, etc.;
- At least two letters of recommendation from academic or professional advisors;
- Copies of representative publications, if any;
- Copies of any other supporting material, such as results of exams, honors, awards, etc.
- Evidence of proficiency in English Language in case the official language of instruction during the undergraduate studies was not English.

STRUCTURE OF THE PROGRAMME

The programme consists of 12 required courses (90 ECTS credits) and full-time students will be taking 4 courses (30 ECTS credits) in every semester. Thus, the typical duration for an MSc degree is 3 semesters (18 months), even though it is possible to complete the program in 12 months if the summer term (June-September) is utilized. Part-time studying is also possible and students are allowed 3 years in order to complete the programme.

MAJOR REQUIREMENTS		ECTS
EMGT-500	Project Management	7.5
EMGT-505	Operations and Quality Management	7.5
EMGT-510	Organization and Human Resource Management	7.5
EMGT-515	Strategic Management of Innovation and Technology	7.5
EMGT-520	Leadership and Negotiation Techniques	7.5
EMGT-525	Statistical Methods in Engineering	7.5
EMGT-530	Managing Engineering Teams	7.5
EMGT-535	Accounting, Finance and Economics for Engineers	7.5
EMGT-540	Safety and Risk Management	7.5
EMGT-545	Systems Modeling and Simulation	7.5
EMGT-550	Product Development Process	7.5
EMGT-555	Legal Aspects in Engineering	7.5
EMGT-560	Graduate Seminars	0
TOTAL		**90**

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