PRODUCTION AND OPERATIONS MANAGEMENT

- **Course code**

  8134

- **Type of course (compulsory, optional)**

  On the specializations *Operations Research & Management Science and Operations & Supply Chain Management*

- **Level of course**

  First Cycle

- **Year of study**

  2013-2014

- **Semester**

  6th Semester

- **Number of credits allocated**

  6 ECTS Credits

- **Name of lecturer**

  Ioannou George, Professor

- **Learning outcomes**

  The goal of the course is to introduce the student to the design, analysis, reengineering, optimization and functional control of modern companies and addresses the key elements that forge the effective management of an organization's limited resources. The same principles hold whether the organization manufactures a product or provides a service, operates in the public or private sector, or is profit or non-profit oriented. Through the course, the student will understand the organizational structure and the various components, sub-systems and functions of a Production or Service Provisioning System, and will gain significant knowledge on the problems arising during their design and operation, as well as on the problem-solving methods through analytical and computational techniques. The topics of the course cover most complex and interrelated business processes inherent in the systems operation, e.g., product and process design, operations planning and scheduling, facility location and layout, etc.

- **Mode of delivery (face-to-face, distance learning)**

  Face-to-face

- **Prerequisites and co-requisites**

- **Recommended optional programme components**

- **Course contents**

The course aims at providing a comprehensive view of most managerial techniques that are used by today's complex enterprises in solving their difficult and intrinsic operational problems. The course covers the following thematic areas:

1. Introduction – POM as a system
2. Forecasting
3. Assembly lines and cellular systems
4. Facility Location – The Transportation problem
5. Facility Layout
6. Inventory Management basic models)
7. ROP models with demand variability
8. Production Scheduling
9. Lean systems

- **Recommended or required reading**

📖 ΔΙΟΙΚΗΣΗ ΠΑΡΑΓΩΓΗΣ ΚΑΙ ΥΠΗΡΕΣΙΩΝ, Γ. ΙΩΑΝΝΟΥ, ΕΚΔΟΣΕΙΣ ΣΤΑΜΟΥΛΗ ΑΕ, 2005, ΑΘΗΝΑ

📖 OPERATIONS MANAGEMENT: CONTEMPORARY CONCEPTS AND CASES, SCHROEDER, ΕΚΔΟΣΕΙΣ ΕΠΙΚΕΝΤΡΟ, 2010, ΑΘΗΝΑ

- **Planned learning activities and teaching methods**
- **Assessment methods assessment methods and criteria**
- **Language of instruction**

  Greek
- **Work placement(s)**

  Not applicable