Industrial Management –Operation Research
Department of Operation Management and Information Technology, Faculty of
Management, Kharazmi University

Program Title (major)	Industrial Management – Operations Research
Level of studies	Master of Science
Medium of Instruction of Program	Farsi - English
Duration of program	4 Semester
Intake / Academic Session	Fall (September)
Number of Credits	32 credits during 4 Semester
Coursework / Research (Mode of studies)	This program is delivered by coursework/research mixed mode. Students must confirm their research supervisor and research topic after first semester or before end of third academic semester. Students will register and submit their research proposal in the fourth semester and their viva will be conducted after 6 months of their submission.
Main / General Courses	Advanced Operations Research, Advanced Production and Operations Management, Statistical Analysis, Advanced Strategic Management, Advanced Information Systems Management, Application of Decision Theory in Management, Business Process Reengineering, Advanced Human Resource Management
Specialized Courses	Principles of queuing and simulation, systems dynamics, soft operation research, artificial intelligence and meta-innovative methods
Program description / objective	This two-year MSc program involves completing 14 course modules (core and optional) and writing a 35000-45000 words thesis. Through studying the practice and theory of Operations Research, the students will learn the key analytical skills and knowledge to provide effective solutions to industrial problems. On the theoretical side, the students learn Operations Research techniques such as mathematical programming, simulation, Bayesian network and Multiple-criteria decision-making (MCDM), and how they can be applied to model real-world, decision-making problems. On the practical side, they apply these Operations Research techniques to model a range of real-world problems in areas such as logistics and supply chain management, healthcare operations management, risk management and financial engineering through coursework projects and their MSc thesis. Then, they solve the models using suitable software and provide managerial insights to decision makers.

	Throughout the program, a special focus is given to teaching Operations Research software and applying the software to solve the quantitative decision models.

There are different employment opportunities in manufacturing and service industries for the graduates, including operations research analyst, data analyst and business analyst. |

General plan of credits distribution in semesters

- General Courses from all Programs (10 Credits)
- Main Courses (10 Credits)
- Specialized Courses (8 Credits)
- Thesis (4 Credits)

TBA