

**ALANYA ALAADDIN KEYKUBAT UNIVERSITY GRADUATE EDUCATION INSTITUTE
DEPARTMENT OF MANAGEMENT ENGINEERING MASTER'S PROGRAM WITH
THESIS COURSE CONTENTS**

I. Semester

ISG 5001- Basic Law, Labor Law and Occupational Health and Safety in Laws (5 ECTS/3 Credits): The aim of this course is to teach the laws and regulations within the scope of occupational health and safety. Occupational safety legislation, legislation on occupational health and safety, occupational health and safety regulation.

ISG 5903- Counseling (1 ECTS/ 0 Credits): Assisting the Student with Problems Encountered in Scientific Subjects

ISG 6001- Graduation Project (10 ECTS/0 Credits): To do the necessary methodological and subject-related studies in order to write a graduation thesis.

ISG 5003- Occupational Hygiene, Health Surveillance and Occupational Diseases (5 ECTS/3 Credits): This course enables students to determine the causes of work accidents and occupational diseases, to determine safety measures in the workplace by gaining knowledge and skills to prevent work accidents and occupational diseases and occupational safety legislation, aims to be evaluated with practices in the workplace. This course covers the basic concepts and historical development concepts about occupational health and safety; the duties, powers and responsibilities of the occupational physician and occupational safety specialist in the workplace; risk, danger, primary, secondary, tertiary protection concepts; physical, chemical, biological and psychosocial risks; It includes occupational health and safety legislation at workplaces and practices in the workplace.

ISG 5005-Physical, Chemical and Biological Risk Factors (5 ECTS/3 Credits): Teaching the basic theoretical knowledge in the field of occupational health and safety, the basic obligations in the legislation, the duties, authorities and responsibilities of the engineer in the workplace. Giving information about occupational accidents and diseases in the industry, their causes, consequences and prevention.

ISG 5007-Fire Safety, Flammable and Explosive Environments and Protection (5 Akts/3 Credits): To raise awareness of students against fire by obtaining information on fire safety, protection and extinguishing systems. The content of this course consists of defining the fire prevention and training organization structure, explaining the National Professional Competencies System, applying the NFPA standards related to the prevention codes, coding the basic zones and construction areas, learning the protection and extinguishing systems.

ISG 5009-Occupational Psychology and Psychosocial Risk Factors (5 Akts/3 Credits): To inform students about the psychological dimension of working. The field of work psychology includes the concept of work, motivation, burnout, mobbing, work monotony and alienation, conflict, job satisfaction, job analysis and design, ergonomics.

ISG 5011-Occupational Safety in Construction Workplaces (5 Akts/3 Credits): To inform students about the dangers of accidents and occupational safety in construction works.

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ISG 5013-Statistical Research Methods (5 Akts/3 Credits): The aim of the course is to analyze scientific research methods and to examine the rise of modern science and development in scientific research. Purpose and definition of science, Characteristics of scientific knowledge, Scientific knowledge and value system, Birth and development of modern science, Methods in social sciences, Main research methods, Data collection methods, Measurement and testing techniques

ISG 5015- Manpower Planning and Remuneration Systems (5 Akts/3 Credits): Introducing the logic of remuneration and various remuneration systems to students. Analyzing wage justice and problems. To research and discuss wage determination methods and examples in our country.

ISG 5017- Production Systems (5 Akts/3 Credits): The aim of this course;

1. To provide perspective on linking this taught knowledge with current production management issues.
2. Teaching the basic production management knowledge required for the design, solution and interpretation of the problems in the field of Management Engineering is another aim.
3. Teaching the basic production management knowledge required for the design, solution and interpretation of the problems in the field of Management Engineering is another aim.

ISG 5019- Occupational Safety in Electrical Works (5 Akts/3 Credits): It is to inform the student about basic electricity. In addition, it is to give information about basic electrical materials, their work and use. It is to provide information about the operation of basic electrical equipment and to enable students to take safety precautions regarding the situations they may encounter or to evaluate the adequacy of the measures taken.

ISG 5021- Occupational Health and Safety in Mining Works (5 Akts / 3 Credits): To provide knowledge and skills regarding the risks that arise in mining workplaces and the measures to be taken against these risks.

ISG 5023- Work Study (5 Akts/3 Credits): Method Study, Time Study and Ergonomics to provide an interdisciplinary perspective in the field of business analysis and design, and to ensure that students have the basic skills, tools and principles to design productive activity and workspaces. includes topics.

II. Semester

ISG 5002- Risk Assessment and Management (5 Akts/3 Credits): With the enactment of Law No. 6331, the increasing importance of occupational health and safety practices has made risk assessment important with an interdisciplinary approach.

ISG 5904- Counseling (1 Akts/ 0 Credits): Helping the Student with the Problems Encountered in Scientific Subjects

ISG 6002- Graduation Project (10 Akts / 0 Credits): To do the necessary methodological and subject-related studies in order to write a graduation thesis.

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ISG 5004- Occupational Accidents and Investigation Process (5 Akts/3 Credits): To give information about occupational health, accidents and safety, to teach the legal dimensions of occupational safety.

ISG 5006- Total Quality Management and Occupational Health and Safety Management Systems (5 Akts / 3 Credits): Students who are aware of Total Quality, know the principles of Total Quality Management, application steps and can apply it to business processes, and are knowledgeable about the current quality management system standards is to train.

ISG 5008- Ergonomics (5 Akts / 3 Credits): The increasing importance of human-machine faces draws attention to the comfort of the work environment in order to meet occupational health and safety requirements. It will provide a reducing effect on risks and thus occupational accidents by increasing comfort, motivation and performance in the workplace. Definition and Importance of Ergonomics, The Effect of Ergonomics on Individual Performance, Human Body Characteristics / Physical Conditions in the Working Environment / Controls and Mechanisms / Physical Loading and Stress / Working and Listening Periods / Work Stress, Fatigue and Burnout / Relation between Ergonomics and Occupational Safety / Relation between Ergonomics and Occupational Diseases / Ergonomics and Work Study Relationship / Ergonomics and Quality Control Relationship / Ergonomic Design of Workplaces, / Ergonomic Analysis in Workplaces / Anthropometry.

ISG 5010- Emergency Safety (5 Akts/3 Credits): To gain perspective on emergency management; To understand the necessity of the team that will carry out the emergency program in the workplace and provide support; To be able to analyze risks by diagnosing potential hazards in and around the workplace, their realization possibilities and their effects; Ability to develop procedures and adjustments that will allow responding to workplace emergencies and maintaining critical business and service functions; Be able to identify the needs and activities to resume the affected business, reducing damage in the workplace as soon as possible; To examine the legal legislation to be taken into account in emergency planning; To be able to evaluate the issues that should be included in the emergency plan; To prepare the emergency plan individually or as a group for the workplaces to be determined; To maintain the emergency program in the ongoing process to prevent an incident or accident that threatens the environment, operation, production, property, human life, to reduce the damage, to prepare, to intervene and to improve before, during and after the emergency in and around the workplace.

ISG 5012- Work Environment Surveillance and Field Practices in terms of Occupational Health and Safety (5 Akts/3 Credits): Giving information about occupational accidents and diseases, their causes, consequences and prevention. The conceptual framework of occupational health and safety (OHS); national and international standards; causes of work accidents and occupational diseases; basic information about its consequences and prevention; The basic regulations in our legislation in the field of OHS; case studies; Examination of work accidents in the shipbuilding industry and measures to be taken.

ISG 5014- Personal Protective Equipment (5 Akts / 3 Credits): To ensure that OHS graduate students have knowledge and skills about the legal regulations regarding personal protective equipment, the types of PPE and the use of PPE in the workplace.

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ISG 5016- Occupational Health and Safety Training of Employees and Communication Technologies (5 Akts/3 Credits): Giving information about occupational accidents and occupational diseases, their causes, consequences and prevention. The conceptual framework of occupational health and safety (OHS); national and international standards; causes of work accidents and occupational diseases; basic information about its consequences and prevention; The basic regulations in our legislation in the field of OHS; case studies; Examination of work accidents in the shipbuilding industry and measures to be taken.

ISG 5018- Lean Manufacturing (5 Akts/3 Credits): The aim of this course;

1. To provide perspective on linking this taught knowledge with current production management issues.
2. Teaching the basic production management knowledge required for the design, solution and interpretation of the problems in the field of Management Engineering is another aim.
3. Teaching the basic production management knowledge required for the design, solution and interpretation of the problems in the field of Management Engineering is another aim.

ISG 5020- Maintenance and Repair Management Systems and Occupational Health and Safety (5 Akts/3 Credits): This course enables students to determine the causes of work accidents and occupational diseases, to determine safety measures in the workplace by gaining knowledge and skills to prevent work accidents and occupational diseases, It aims to gain information on health and occupational safety legislation and evaluate it with practices in the workplace.

ISG 5022- Safety in Machinery, Welding Works and Design, Manufacturing and Use of Work Equipment (5 Akts/3 Credits): To gain knowledge and skills about the risks that arise in mining workplaces and the measures to be taken against these risks.

ISG 5024- Statistics (5 Akts/3 Credits): Introducing the concept of multivariate in statistics and the central tendency and distribution measures related to them, learning various methods for multivariate data. The concept of multivariate statistics, multivariate measures of central tendency and distribution, principal component analysis, factor analysis, cluster analysis, canonical correlation analysis, corespondense analysis, multidimensional scaling.