ÜSKÜDAR UNIVERSITY
INSTITUTE OF HEALTH SCIENCES

ISG601 Reliability Engineering (3-0-3 ECTS:10)

Basic concepts and definitions of Security Engineering; Safety and maintenance activities; Basic security calculations; Fundamentals of security; Security testing and planning; Provides failure mode and effects analysis information.

ISG603 ATEX (Explosive Atmospheres) and Precautions (3-0-3 ECTS:10)

Determination and evaluation of explosion risk, identification and classification of hazardous areas where explosive atmosphere may occur, and production of zone maps are carried out in accordance with TS EN 60079-10-1 and TS EN 60079-10-2 standards. Calculations must be made with the formulas in the TS EN 60079-10-1 standard while performing these operations for flammable gases and liquids. With this course, knowledge about preparing a roadmap and sample document format for the preparation of Explosion Protection Document is gained.

ISG658 Artificial Intelligence Applications in Occupational Safety (3-0-3 ECTS:10)

Definition of artificial intelligence, basic concepts and techniques, Expert Systems and engineering applications, Fuzzy logic and engineering applications, Decision support systems and applications, Genetic algorithms and application examples, Artificial neural networks: Structure and basic elements of artificial neural networks, first artificial neural networks, artificial neural network models, feedback networks. Gain knowledge about the contribution of artificial neural networks to engineering applications and occupational safety applications.

ISG602 Risk Management and Evaluation (3-0-3 ECTS:10)

Basic concepts, terms and definitions; OHSAS 45001/ISO 9001:2000 Quality Management / Total Quality Management relationship; Legal terms and other requirements; Goals and management programs; Application; Structure and responsibilities; Education; awareness and competence; Operation control; Emergency Preparedness; control and corrective actions; Performance measurement and monitoring; accidents; incidents and nonconformities; Evaluation of results in computer environment and creation of statistical results; OHS evaluation of workplaces depending on business lines.

SAY666 Health Policies and Analysis (3-0-3 ECTS:10)

Policy making processes and factors affecting it / Health and social determinants of health / The effects of general policies on health / Stakeholders and stakeholder analysis in health policies / International health and health care relations / Analysis methods of countries' health status and policies / Health policies of Turkey and other countries comparatively **.**

ISG605 Occupational Safety Law Based on Labor Law (3-0-3 ECTS:10)

History of laws, regulations, regulations and other legal procedures in force in our country in the field of Occupational Health and Safety; Occupational Health and Safety in the Constitution / Occupational Health and Safety in Laws; Labor Law, Code of Obligations, Public Health Law; Occupational Health and Safety Law; Bylaws and regulations on OHS legislation; Occupational Health and Safety Committees; Responsibilities of employers and employers' representatives in the field of OHS; Regulations regarding the occupational safety measures to be taken for the building and its annexes, raw materials and materials to be used and machinery and equipment in the workplace; Regulations on the organization of occupational safety; Regulations on working order; Duties, powers and responsibilities of the occupational safety specialist; Principal employer sub-employer relationship; Examination of sample Supreme Court decisions.

ISG651 OHS for the Prevention of Major Industrial Accidents (3-0-3 ECTS:10)

In order to prevent major industrial accidents in establishments containing dangerous substances and to minimize the damage of possible accidents to people and the environment, the necessary measures to be taken to ensure a high level, effective and continuous protection, and the determination of major industrial accident hazards by the operator of lower and higher level establishments and the determination of the dangers of major industrial accidents arising from these hazards. Gains information on the preparation of major accident scenario document in order to evaluate the risks.

SAY633 Statistics Applications in Health Management (3-0-3 ECTS:10)

Concepts of variables and constants / Data and properties of data / Summarizing data / Data acquisition techniques and methods / Data analysis / Presentation of analysis results / Statistical approach in Health Management / Frequently used tables and graphs in health management / Computerized analysis applications.

ISG657 Electromagnetic Radiation Exposure and OHS (3-0-3 ECTS:10)

To gain knowledge and attitude about the definition of radiation, its history, sources, units, types, effects on health, sources that cause radiation in the working environment, methods of protection within the scope of occupational health and safety.

ISG604 Fire Prevention Systems and Technologies (3-0-3 ECTS:10)

The dangers of fire and Atex explosions in workplaces; What to do in case of fire; Precautions to be taken against fire; Explosive atmosphere hazards, disposal and minimization methods; Determination of dangerous areas and determination of safe equipment to be used in these areas; Basic concepts of combustion and fire chemistry; Classes and behavior of fires; Provisions of regulations on the protection of buildings from fire and measures against fire; Fire detection and alarm systems and their features; What to do in case of fire; Extinguishing principles and methods; Fire extinguishers and using techniques; fire extinguishing systems; Safety and personal protective equipment during fire; Fire response teams and techniques; Evacuation plan and organization in case of fire emergency.

EM 509 Advanced System Simulation (3-0-3 ECTS:8)

Queuing models and Basic Performance measures; Random Number, Variable and Generating Methods; Monte Carlo Simulation; Discrete event simulation: Modeling and Programming; Statistical Analysis of Input and Output (simulated) Data; Validation and Verification, Variance Reduction Techniques; Comparison of Alternative Systems

SAY677 Project Management in Health Services (3-0-3 ECTS:10)

Introduction to Project Management / Health Projects / Project and Operations / Subproject, Program, Portfolio concepts / Project Management Processes / Initial Processes / Planning Processes / Execution Processes / Monitoring and Control Processes / Closing Processes / Project Management Knowledge Areas / Integration Management / Scope Management / Time and Cost Management / Risk Management / Procurement Management / Project Phases / Project Life Cycle.

ISG606 Seminar (0-1-0 ECTS:10)

The candidate who has started the thesis process, the subject, field research, scanning of the resources related to the subject, the construction of the method, the determination of the qualitative and quantitative approaches, the presentation of the original preliminary preparation by the student, the completion of the preliminary preparation to the thesis process by placing the academic approach

ISG600.01 Thesis Study I (0-0-0 ECTS:30)

The aim of this course is to integrate qualitative methods with knowledge and skills related to the research field to test a hypothesis that addresses a current issue of importance for Occupational Health and Safety. It contains literature review and research work. The student receives literature study support on the research topic from his/her academic advisor.

ISG600.02 Thesis Study II (0-0-0 ECTS:30)

The aim of this course is to integrate qualitative methods with knowledge and skills related to the research field to test a hypothesis that addresses a current issue of importance for Occupational Health and Safety. It contains literature review and research work. The student receives the support of a literature study on the research topic from his/her academic advisor.

ISG600.03 Thesis Study III (0-0-0 ECTS:30)

The aim of this course is to integrate qualitative methods with knowledge and skills related to the research field to test a hypothesis that addresses a current issue of importance for Occupational Health and Safety. It contains literature review and research work. The student receives the support of a literature study on the research topic from his/her academic advisor.

ISG600.04 Thesis Study IV (0-0-0 ECTS:30)

The aim of this course is to integrate qualitative methods with knowledge and skills related to the research field to test a hypothesis that addresses a current issue of importance for Occupational Health and Safety. It contains literature review and research work. The student receives the support of a literature study on the research topic from his/her academic advisor.