

OCCUPATIONAL HEALTH AND SAFETY ASSOCIATE DEGREE PROGRAM

2024-25 COURSE CONTENT

FIRST YEAR - TERM I

OSG 115 MACHINERY AND EQUIPMENT (2+0) 2, ECTS:3

Definition of machine, Classification of machine elements, Fastening elements, Bearings and pulleys, Clutches, shafts and axles, Gear wheels, Welding / soldering / rivet / bolt connections, Pin and pin, Furnaces, Steam boilers and operation, Screening and classification materials, Crushers, Mixers, Drilling machines, Pumps, Compressors, Chimney filters, Introduction of machines and tools for carrying / lifting / pulling / pushing / digging / drilling / cutting / abrasion, Hazards that may occur during work and precautions to be taken.

OSG117 ELECTRICAL HAZARDS AND OCCUPATIONAL SAFETY (1+2) 2, ECTS:4

Definition of electric charge and formation methods, Definition of electric current and formation methods, Types of electric current and related terms, Formation and effects of electric field and magnetic field, Electromagnetic spectrum, Relationship between current, voltage and resistance Ohm's law, Relationship between current, voltage and resistance Ohm's law, Factors affecting resistance and conductivity, Transfer of electrical energy with magnetic field change, Transformers and transformers, Fuse and protective circuits, Fuse and protective circuits, Effects of electricity on the human body, Effects of electricity on the human body

OSG129 OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEMS (2+0) 2, ECTS:3

Conceptual structure of OHS Management System, Relationship between OHS Management Systems and OHS Standards, Principles and standards of OHS Management, Certification process of OHS Management System, Important OHS institutions in the world and in Türkiye, International OSH Agreements that our country is subject to, applications of OSH Management Systems

OSG127 INTRODUCTION TO OCCUPATIONAL HEALTH AND SAFETY (3+0) 3, ECTS:4

Development of Occupational Health and Safety Concepts and Rules, Labor Law, Occupational Health and Safety Management Systems, Physical Risk Factors, Chemical Risk Factors, Biological Risk Factors, Psychosocial Risk Factors, Ergonomics, Emergency Plans, Work Accidents, Health Surveillance and Occupational Diseases, Work Environment Surveillance, Personal Protective Equipment, Risk Assessment.

ILK101 FIRST AID (2+0) 2, ECTS:3

General First Aid Information, Human Body, Patient/Injured and Crime Scene Assessment, Basic Life Support, Respiratory Tract Obstructions, Bleeding and Shock, Injuries, Burns, Frostbites, Heat Stroke, Consciousness Disorders (Loss of Consciousness, Convulsions, Low Blood Sugar, Chest Pain), Poisoning, Animal Bites, Foreign Objects in Eyes-Ears-Nose, Drownings, Fractures, Dislocations, Sprains, Carrying Techniques.

RPSI209 INTRODUCTION TO POSITIVE PSYCHOLOGY AND COMMUNICATION SKILLS (2+0) 2, ECTS:3

Definition and Basic Concepts of Positive Psychology, Theoretical Foundations of Positive Psychology, Brain Infrastructure of Social Behaviors, Positive Psychology Applications, Self-Recognition and Awareness, Recognition of Others and Empathy, Psychosocial Life Skills, Motivation and Planning, Problem-Solving Skills, Anger, Aggression and Violence, Relationship Management, Persistence, Healthy Decision Making, Compromise.

RKUL 101 UNIVERSITY CULTURE -I (1+0) 1, ECTS:1

Each term, seminars, conferences, panels, workshops and talks to be held for 14 weeks within the framework of a program consisting of the suggestions of academic units, student council and student clubs at the university

ATA 101 ATATURK'S PRINCIPLES AND HISTORY OF REVOLUTION-I (2+0) 2, ECTS:2

The Deterioration of the Ottoman Social and State Order and the Reform Movements Carried Out; The Disintegration of the Ottoman State and the Beginning of the National Struggle; Mustafa Kemal Pasha's Organization of the National Struggle in Anatolia; The Opening of the First Turkish Grand National Assembly; Military and Political Developments Between 1920-1922; Revolutions and Counter-Reactions; The Establishment of the Constitutional System; Domestic and Foreign Politics in the Republican Period; The Basic Characteristics of the Turkish Revolution and the Movements of Thought It Influenced; Innovations in Law, Education, Economy and Social Life; Atatürk's Principles and General Characteristics of These Principles; Evaluation of Atatürkism from an Ideological Perspective.

TURK 101 TURKISH LANGUAGE I (2+0) 2, ECTS:2

What is Language? Theories on the birth of language, Language-culture-nation relationship; Language Revolution: Turkish Language Association and its studies; World Languages: Language families, the place of Turkish among world languages; Characteristics of Turkish in Turkey: Sound characteristics, Form characteristics, Sentence characteristics; Spelling Rules; Punctuation Marks; Correspondence: CV, Petition, Letter, Business letter, Telegram.

INGU 101 ENGLISH I (3+0) 3, ECTS:2

Adjudicators; Prepositions: Place, Time, Movement; Singular and Plural Nouns: Countable and Uncountable Nouns; Tenses: Present tense, Present tense, Past tense structures; Modals: Will, Should, Should not, Must, Must not, Can; Comparatives; Pronouns: Personal pronouns, Possessive pronouns; Adjectives; Affirmative sentences, Negative sentences and Interrogative sentences; Conjunctions: And, But, -ken, Because.

FIRST YEAR - TERM II

OSG108 OCCUPATIONAL HEALTH AND SAFETY LEGISLATION (3+0) 3, ECTS:4

Legal sources of occupational health and safety-Introduction to Labor Law, Basic Concepts in Occupational Safety Legislation, Occupational Health and Safety Services in OHS Legislation, Regulation on the Duties, Authorities and Responsibilities and Training of Occupational Safety Experts, Occupational Physicians and Other Health Personnel in OHS Legislation,

Occupational Health and Safety Boards Regulation, Incapacity and Disability in OHS Legislation, Groups Requiring Special Policy in OHS Legislation, Training in OHS Legislation, Personal Protective Equipment in OHS Legislation, Risk Assessment in OHS Legislation

OSG110 OCCUPATIONAL HEALTH AND SAFETY IN CONSTRUCTION WORKS (2+0) 2, ECTS:3

Types of Construction and the Place of Construction in Occupational Safety, General Occupational Health and Safety Rules in Construction Sites, Difference between General OHS and OHS in Construction Works, Occupational Health and Safety Legislation in Construction Works, Occupational Health and Safety Legislation in Construction Works and Sample Applications, Machinery and Equipment Used in Construction Works, Working at Height in Construction Workplaces, Occupational Diseases in Construction Works, Creating and Implementing an Occupational Safety Program in Construction

OSG122 ENVIRONMENTAL HEALTH AND SAFETY (2+0) 2, ECTS:2

A brief history of environmental protection, Factors polluting the environment, Definition and classification of solid and liquid wastes, Industrial wastes, Treatment and recycling facilities, Atmospheric pollution, Environmental pollution and control, Environmental health and effective factors, Workplace environment environmental factors (chemical, physical, biological), Physical environmental factors (water pollution, air pollution, waste, radiation), Social environment.

OSG 124 STATISTICS (2+0) 2, ECTS:2

Statistics, data collection, converting data to series and calculating according to the variability measures of the series, probability, analysis with random variables, sampling, hypothesis testing, chi-square test, regression, correlation and calculating with indexes

RKUL 102 UNIVERSITY CULTURE -II (0+2) 1, ECTS:1

Each semester, seminars, conferences, panels, workshops and talks to be held for 14 weeks within the framework of a program consisting of the suggestions of the academic units, student council and student clubs in the university

ATA102 ATATURK'S PRINCIPLES AND HISTORY OF REVOLUTION II (2+0) 2, ECTS:2

The Deterioration of the Ottoman Social and State Order and the Reform Movements Carried Out; The Disintegration of the Ottoman State and the Beginning of the National Struggle; Mustafa Kemal Pasha's Organization of the National Struggle in Anatolia; Opening of the First Grand National Assembly of Turkey; Military and Political Developments Between 1920-1922; Revolutions and Counter-Reactions; Establishment of the Constitutional System; Domestic and Foreign Policy in the Republican Period; Basic Characteristics of the Turkish Revolution and the Thought Movements It Influenced; Innovations Made in Law, Education, Economy and Social Life; Atatürk's Principles and the General Characteristics of These Principles; Evaluation of Atatürkism from an Ideological Perspective.

TURK102 TURKISH LANGUAGE II (2+0) 2, ECTS:2

In order to provide the skill of using the mother tongue correctly and to develop the skills of students who have come to university by gaining this skill in this field, the course is based on producing thoughts and writing what one thinks, and punctuation and spelling rules, composition rules, types of writing are discussed with examples and writing exercises are carried out on these subjects. In addition, various novels, poetry books and theater plays are read and examined. In the classroom, various diction techniques and applied emphasis and intonation lessons are held by doing reading theater.

INGU102 ENGLISH II (3+0) 3, ECTS:2

Tenses: Present tense, Present tense, Past tense, Future tense structures; Modals: Might, Could, Can, Must, May; Adverbs: Place, Direction, Purpose, Manner adverbs; Adjectives: Order of adjectives, Comparison, Superlative structures; Passive Structure: Passive structure in Present, Present, Past, Future tenses; Conditional Clauses; Adjective Clauses; Transference Clauses; Verb Structures: TO, -ING; Noun Clauses; Adverb Clauses; Comparative Structures.

OSG999 SUMMER INTERNSHIP (0+240) 120, ECTS:9

Practices to be carried out in OHS departments of various businesses or Joint Health and Safety Units, practices related to OHS activities

SECOND YEAR - TERM III

OSG201 WORKER SAFETY IN MAINTENANCE AND REPAIR (2+0) 2, ECTS:4

Concept of Maintenance and Work Safety, Maintenance and Safety Management, Planned Maintenance, Predictive Maintenance, Preventive Maintenance, Total Productive Maintenance, Maintenance Planning Principles, Maintenance Scheduling Principles, Computer Aided Maintenance Management

OSG233 OCCUPATIONAL HEALTH AND SAFETY IN UNDERGROUND STRUCTURES (2+0) 2, ECTS:4

Introduction and history of occupational health and safety in mines. Basic concepts related to the subject. Occupational health and safety from a legal perspective. Effects of the work environment on workers (chemical, physical, biological, psychological and social factors). Problems and solution techniques related to occupational health and safety in mining. Occupational diseases; definition, causes, protection and results. Work accidents; definition, causes, prevention and results. Ergonomics applications in mining. Personal protectors. Evacuation in mines, Expert witness in work accidents and occupational diseases cases.

OSG237 EMERGENCY AND DISASTER MANAGEMENT (2+0) 2, ECTS:4

Definitions of Disaster and Emergency, Types of Disaster, Integrated Disaster Management, Principles of Emergency Management, Field Coordination System in Türkiye, Field Coordination System in Türkiye Field Coordination System in Türkiye, Communication and Evacuation System in Disasters and Emergencies, Disaster and Emergency Planning, Possible Problems in Disasters and Emergencies, Emergency Management in Fire and Earthquake, Drought.

OSG239 WORK ACCIDENTS AND OCCUPATIONAL DISEASES (3+0) 3, ECTS:6

Concepts of accident, work accident and occupational disease, Recognizing and classifying work accidents and occupational diseases, Causes of work accidents and occupational diseases, Analyzing and reporting work accidents and occupational diseases from beginning to end, Analyzing relevant statistics and factors that play a role in the occurrence of work accidents and occupational diseases, Methods for preventing work accidents and occupational diseases, Work accident recording and notifications

OSG241 TRAINING PRACTICES IN OCCUPATIONAL HEALTH AND SAFETY (2+2) 4, ECTS: 8

Basic concepts related to education; Role of Education, Learning Theories; Issues to be Considered in the Design of Effective Training Programs; Matters to be Considered in Increasing the Effectiveness in Education, Applied Education Presentations of Students, Learning Theories, Analysis to Determine Whether Training is Needed, Adult Education, Effective Presentation Techniques

OSG243 HAZARD AND RISK ASSESSMENT METHODS IN OCCUPATIONAL SAFETY (2+2) 3, ECTS: 6

General Overview of Occupational Health and Safety, Examining Occupational Health and Safety Risk Assessment Regulation, Determination of Hazards and Risks, Finding Hazards; Calculation of Risks, Carrying Out Risk Assessment Studies Which Are the First and Basic Steps in Preventing Work Accidents, Risk Assessment Methodologies, Accident Theories, Calculations Related to Work Accidents and Occupational Diseases and Health Surveillance; Calculation of Risks and Hazards.

SECOND YEAR - TERM IV

OSG212 OCCUPATIONAL HEALTH AND SAFETY PRACTICES (2+2) 3, ECTS: 8

Course Description, Purpose, Information about the Process, Explaining the Difference of Applied Course from Summer Internship and Talking about the Contributions of Applied Course to Students, Students are told how to conduct research to get opinions on a subject, how to prepare a survey and interview, students are told how to extract survey and interview results as findings, how to prepare a report, what are the points to be considered when preparing a report, students are told how to interpret the results of a research report, weekly work reports are received from students and their reports are examined and evaluated.

OSG234 ERGONOMICS (2+0) 2, ECTS: 4

Definition and importance of ergonomics, Relationship between ergonomics and work efficiency, Human body, Physical conditions in the work environment, Control and command mechanisms, Loading and strain, Working and rest periods, Work stress, fatigue and boredom, Work energy and energy requirements of jobs, Relationship between ergonomics and work safety, Relationship between ergonomics and occupational diseases, Relationship between ergonomics and work study, Relationship between ergonomics and quality control, Ergonomic design of workplaces, Ergonomic examination in workplaces.

OSG240 FIRE HAZARD AND FIRE SAFETY (2+0) 2, ECTS: 6

Definition and causes of fire, Regulation on the protection of buildings from fire, Duty, authority and responsibility, Usage classes of buildings, Building hazard classification, General fire safety related to buildings, Building load-bearing system stability, partitions, roofs and facades, Fire partitions, Fire walls, Building materials to be used in buildings, Escape routes, escape stairs and special cases, Issues related to building sections and facilities, Boiler rooms, fuel tanks and stoves, Shelters, parking lots, kitchens and roofs, Elevator, Lightning rod, Transformer and generator, Electrical installation, Emergency lighting, Fire detection, Warning systems, Periodic tests, Maintenance and inspection, Smoke control, Air conditioning and ventilation installation, Pressurization system, Fire extinguishing systems, Foam, gas and dry powder fixed extinguishing systems, Storage and use of hazardous materials, Fire safety responsibility, Allowance and directive.

OSG242 RISK FACTORS (2+0) 2, ECTS: 6

Introduction to risk factors, purpose of risk factors, biological risk factors, ergonomic risk factors, physical risk factors, chemical risk factors, psychosocial risk factors, examination of biological, ergonomic, physical, chemical, psychosocial regulations, producing solutions for risk factors

MET 101 OCCUPATIONAL ETHICS (2+0) 2, ECTS: 2

Concepts of ethics and morality, Ethical Systems, Factors Playing a Role in the Formation of Morality, Professional Corruption, Ethical and Unethical Issues in Business Life, Consequences of Behaviors Appropriate to Business Ethics, General and professional ethical principles, defines the virtues, values and ethical codes that Occupational Safety Technicians should have.

MYO015 SOCIAL RESPONSIBILITY PROJECT (ELECTIVE COURSE) (2+0) 2, ECTS:2

Introduction to the course, basic concepts, general overview of the concept of social responsibility and social responsibility campaigns, determination of project topics (children, elderly, women, environmental problems, those with education and learning problems, patients and health problems, etc.) project preparation, presentation. getting to know civil society organizations and their work.

INDUSTRY 4.0 (ELECTIVE COURSE) (2+0) 2, ECTS: 2

Thanks to the integration of the basic building blocks of OHS 4.0, Industry 4.0 and the digital transformation process into the field of occupational health and safety, information is obtained on ensuring safety by maximizing the harmony of human and machine, aiming to proactively protect the health and safety of employees.