

FOOD TECHNOLOGY PROGRAMME

1st SEMESTER

GDT101-INTRODUCTION TO FOOD TECHNOLOGY

Duties and responsibilities of the food technician, occupational ethics, the structure and properties of foodstuffs, the technological characteristics of foodstuffs, food processing and storage methods, basic food terms and technologies

BLT101-COMPUTER TECHNOLOGIES-I

Computer technology 1 lesson is included examination of methods techniques of accessing information and acquisition of use skill them. Computer Technology 1 is composed of basic concepts of information technology, such as; Computer information, technological development, professional concepts and applications, current software applications (Windows, Word, Excel, Power Point)

GDT103-GENERAL CHEMISTRY

Basic concepts and properties of matter, atomic structure and properties, periodic table and its properties, classification of chemical reactions, equilibration of reaction equations, mole and molecular concepts, mol calculations, stoichiometric calculations, chemical reactions in aqueous solutions, gases, chemical bonds, laboratory applications.

GDT105-PRINCIPLES OF NUTRITION

Definitions of nutrition and nutrition, historical development, daily energy requirement calculations, nutrition pyramid, food component; carbohydrates, lipids, proteins, water and minerals, vitamins, energy metabolism, digestion, absorption and transport, food groups, preparation, storage and processing of foods, nutrition in special situations

GDT107-GENERAL MICROBIOLOGY

Basic principles of microbiology, history and scope of microbiology, classification and definition of microorganisms, the structure of prokaryotic and eukaryotic cells and their differences, microbial development physiology and developmental stages, control of microbial growth, the relationship between microorganisms, beneficial and harmful effects of microorganisms, use of microscope, media and isolation methods

GDT111-STATISTIC

Basic concepts of statistics, variable and variation concepts, variable types, frequency distributions, sample and population, descriptive sample statistics, standard deviation, variation, probability theories, frequency concepts, probability distributions, sampling, sampling methods, statistical interpretation, tests, variance analysis, regression and correlation analyzes.

İSG113-OCCUPATIONAL HEALTH AND SAFETY

Basic concepts of occupational health and safety, risk factors and varieties, surveillance of environment, occupational and occupational diseases causes, preventive measures and occupational safety culture.

TURK101-TURKISH LANGUAGE-I

Definition of language, the place and prominence in the life of the nation, language and culture relation, the place of Turkish Language among the world languages, development of Turkish Language, sounds and classification, audio features, phonetic rules, syllable, bookmarking rules and application, punctuation marks and its application, construction supplements and functions, forms of word usage, practices in literary texts

TCT101-HISTORY OF TURKISH REPUBLIC-I

The reasons leading to the collapse of the Ottoman Empire, the efforts to stop the collapse and the quest for reform, the reasons leading to World War I, the participation in the war and its consequences, the Mondros Armistice, the Societies, the beginning of the National Struggle.

İNG 101-FOREIGN LANGUAGE – I

Students will be able to understand English, use it effectively, and compare basic grammar rules of English. Through this course, students can interpret simple dialogue in English and use the new structure and words they have learned in their daily lives.

2nd SEMESTER

GDT102-FOOD MICROBIOLOGY

Microorganisms and antimicrobial agents important in the production of food, food poisoning, microbiological deterioration in meat and meat products, milk and milk products, eggs and products, fruits and vegetables and products, microbiological deterioration in canned and fermented foods.

Determination of the microorganism burden in the soil, microorganism, mold, yeast counts; conformity to microbiological analyzes and standards in canned foods, in animal and vegetable-derived foods.

BLT102-COMPUTER TECHNOLOGIES-II

Computer Technology-1I Lesson is Included Examination of Methods Techniques of Accesing Information and Acquisition of Use Skill Them. Computer Technology is Compose That Basic Concepts of Information Technology, Such As; Computer Information, Technological Development, Professional Concepts And Applications, Current Software Applications (Windows, Word, Excel, Power Point)

ING102-FOREIGN LANGUAGE – II

Students will be able to understand English, use it effectively, and compare basic grammar rules of English. Through this course, students can interpret simple dialogue in English and use the new structure and words they have learned in their daily lives.

GDT104-HYGIENE AND SANITATION

Cleaning and disinfection in food premises

GDT106-CEREAL TECHNOLOGY

The importance of cereal technology, the structure of grains, the storage conditions of grains, the quality standards of wheat, the processing steps of wheat and the elements to be considered at this stage, other cereal grains, bread, pasta and biscuit technology.

GDT108-INTERNSHIP-I

Students complete internship training in public or private sector organizations working in the field of food.

GDT110-READY TO SERVE FOOD TECHNOLOGY

Definition and classification of ready to serve food industry. Balanced nutrition, menu planning in making ready to serve meals, kitchen design and equipment, kitchen organization, storage, transportation and service techniques, hygiene and sanitation in mass feeding systems, quality assurance applications

GDT112-FOOD MARKETING TECHNIQUES

Marketing management, marketing types and consumer behavior, economic, social, psychological and personal factors affect the consumer behavior, the company estimates market demand, market

environment and industry-level competitive examination, market segmentation, target market selection and positioning of products, marketing strategy, marketing performance evaluation of and control, marketing research topics.

MYO104-DISASTER CULTURE

Kinds of disasters, Disaster and practices for surviving, things to do before, during and after a disaster, search and rescue activities, field coordination system, the disaster planning.

TCT102-HISTORY OF TURKISH REPUBLIC-II

Information on the Concept of Revolution, Preparation, Action, Reformation Stages of the Turkish Revolution as well as Basic Principles and Characteristics of the Turkish Revolution, Domestic and foreign policy of Turkey after the period of Ataturk.

TURK102-TURKISH LANGUAGE-II

Definition of language, the place and prominence in the life of the nation, language and culture relation, the place of Turkish Language among the world languages, development of Turkish Language, sounds and classification, audio features, phonetic rules, syllable, bookmarking rules and application, punctuation marks and its application, construction supplements and functions, forms of word usage, practices in literary texts

3rd SEMESTER

GDT201-OIL TECHNOLOGY

General compositions and structures of vegetable, animal fats and oils, oil raw materials, crude oil from olive and oil seeds, animal fat, fish oil technology, oil refining, oil hardening and margarine production, increased resistance to oil degradation and deterioration.

İNG201-VOCATIONAL ENGLISH – I

Translation Rules from Turkish to English, Technical Vocabulary, Translation Examples, Professional Practices.

GDT203-MILK TECHNOLOGY

Milk and milk products production and trade in Turkey and in the world; definition of milk, milk composition and factors affecting composition; physicochemistry of milk components and technological prominence, milk coagulation mechanisms; milk microbiology, sanitation in dairy

establishments and starter cultures used in dairy products; collection of raw milk; pre-treatment, pasteurization, sterilization. A brief description of yogurt, cheese, butter and ice cream production techniques.

GDT205-INSTRUMENTAL FOOD ANALYSIS

Definition of instrumental analysis, Refractometry, Spectroscopic methods, Chromatographic methods, Thermal analysis methods, Electrochemical methods

GDT207-MEAT TECHNOLOGY

Composition of meat, structure of meat and tissues, glycolysis, post mortem mechanism, conversion of muscle to meat and factors that affecting meat quality during this conversion, meat quality, cooling and freezing of meat, storage conditions, techniques of meat products processing, cured and dried meat products, fermented and emulsified meat products, additives, materials and equipments that used in meat technology, problems and solutions about meat products, adapting theoretical knowledge about meat technology to the practical usage by using meat pilot plant, learning analyses about determination of meat and meat products quality.

GDT209-FOOD PACKAGING TECHNOLOGY

Defines the relationship between food packaging materials, packaging and packaging materials, food deterioration and protection functions. Food packaging materials (glass, paper, cardboard, corrugated board, wood, aluminum, tin, plastic and plastic based packages, multilayer combinations) and aseptic packaging. Modified atmosphere packaging. Barcode. Smart packaging. Recommendations for food packaging.

GDT211-RESEARCH METHODS

Making observations, experimental design and interpretation, library search, visual library search, uses of tables and figures, types of research, research papers, scientific misconduct, error and fraud, ethics in science.

GDT213-FOOD INDUSTRY MACHINES

Cooling/freezing storage of foodstuffs, weighing, conveying and conveying equipment, food pre-processing, classification, food processing and heat treatment equipment, microwave applications, drying processes and drying equipment, evaporation processes, cooling/freezing systems. Separation, washing, filtration, centrifugation, conveying systems, mills, presses, evaporators, dehydrators, etc.

MYO203-EMOTIONAL INTELLIGENCE

The concept of Emotional Intelligence will be defined and the relationship with other concepts will be examined. The concept of Emotional Intelligence will be evaluated by emphasizing the importance of work and social life.

4th SEMESTER

İNG202-VOCATIONAL ENGLISH – II

Preparing Transactions in English Preparing Official Transcripts, Preparing CVs, Writing Mail, Preparing Training Presentations, Preparing Academic Publications and Seminars, Creating Reports, Record Keeping Professional Requirements

GDT202-FRUIT AND VEGETABLE TECHNOLOGY

Fruit and vegetable biochemistry, pre-processing, fruit juice production technology, canned food production process, paste production process, jam production process, frozen fruits and vegetables, dried fruit and vegetable production.

GDT204-FERMENTATION TECHNOLOGY

Definition of fermentation, microorganisms performed in fermentation, production of wine, beer, high alcoholic beverages, pickles, vinegar, olives, boza, turnip.

GDT206-FOOD LEGISLATION AND OCCUPATIONAL ETHIC

Definition and historical development of quality, quality system documents (TS ISO EN 9001-2000, TS ISO 22000, TS ISO EN 14001, TS 18001), certification, quality-efficiency relationship, Law 5179 on the Production Consumption and Inspection of Foods and related regulations, Examining the results of the Turkish Food Codex and its annexes (product notifications), expertise and other professional laws, ethical theories, examination of professional ethics, professional corruption and unethical behavior in professional life

GDT208-FOOD ADDITIVES

Definition of food additives. Examination of additives used in food industry

GDT210-INTERNSHIP-II

Students complete internship training in public or private sector organizations working in the field of food.

GDT212-GRADUATION PROJECT

Students will prepare a project proposal in the field of food, conduct a scientific research on the selected subject, and deliver the results in a report.

İSG212-PREPARE FOR A VERTICAL TRANSFER EXAMINATION

Strengthening the relationship between concepts, developing problem-solving ability, gaining verbal and numerical skills.

İSG214-ENTREPRENEURSHIPS

Entrepreneurship and Importance of Entrepreneurship, Entrepreneur and Characteristics of Successful Entrepreneur, Creativity and Innovation in Entrepreneurship, Conversion of a Business Idea to the Project and Investment, Entrepreneurship in the World, Developments in the Entrepreneurship and Suggestions to the Young Entrepreneurs, Environmental Factors and Industry Analysis in Business Plan Preparation, Marketing Plan, Production Plan, Management Plan, Finance Plan and Risk Analysis.

MYO204-KNOWLEDGE RENEAWAL

Knowledge Concept, Knowledge Exchange, Knowledge Economy, Industry 4.0, Application of Knowledge, Legal, Social and Academic Developments in the Field.