



# Alanya Alaaddin Keykubat Üniversitesi

RAFET KAYIS FACULTY OF ENGINEERING

DEPARTMENT OF FOOD ENGINEERING

GIDA MÜHENDİSLİĞİ (İNG.)

1.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
BIL 101E	INTRODUCTION TO COMPUTER AND INFORMATION SYSTEMS	1+1+0	Compulsory	2
ETK 101E	ENGINEERING ETHICS	1+0+0	Compulsory	2
FDE 101	INTRODUCTION TO FOOD ENGINEERING	2+0+0	Compulsory	3
FIZ 101E	PHYSICS I	3+0+0	Compulsory	4
FIZ 101EL	PHYSICS I LAB	0+0+1	Compulsory	1
KIM 101E	CHEMISTRY	3+0+0	Compulsory	4
KIM 101EL	CHEMISTRY LAB	0+0+2	Compulsory	1
MAT 101E	MATHEMATICS I	4+0+0	Compulsory	5
RES 103E	TECHNICAL DRAWING	1+2+0	Compulsory	5
TDB 101	TURKISH I	2+0+0	Compulsory	2
Total ECTS				29

2.Semester Course Plan				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
BIL 102E	INTRODUCTION TO SCIENTIFIC PROGRAMMING	2+2+0	Compulsory	4
EKO 132E	ECONOMY	3+0+0	Compulsory	5
FIZ 102E	PHYSICS II	3+0+0	Compulsory	4
FIZ 102EL	PHYSICS II LAB	0+0+1	Compulsory	1
KIM 206E	ANALYTICAL CHEMISTRY	3+0+0	Compulsory	5
KIM 206EL	ANALYTICAL CHEMISTRY LAB	0+0+2	Compulsory	1
MAT 102E	MATHEMATICS II	4+0+0	Compulsory	5
TDB 102	TURKISH II	2+0+0	Compulsory	2
ITB 1/Spring (SGS)	ELECTIVE COURSES	2+0+0	Elective	4
Total ECTS				31

Course Groups				
Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
KRP 101	CARRIER PLANNING	2+0+0	Compulsory	2
SEC 101.1	HISTORY OF ART	2+0+0	Elective	2
SEC 101.10	BASKETBALL	2+0+0	Elective	2
SEC 101.11	TENNIS	2+0+0	Elective	2
SEC 101.12	TABLE TENNIS	2+0+0	Elective	2
SEC 101.13	FOLK DANCES	2+0+0	Elective	2
SEC 101.14	MUSIC CULTURE	2+0+0	Elective	2
SEC 101.15	ARTS&PAINTING	2+0+0	Elective	2
SEC 101.16	THEATRE AND CINEMA	2+0+0	Elective	2
SEC 101.17	HEALTHY LIVING	2+0+0	Elective	2
SEC 101.18	NUTRITION	2+0+0	Elective	2
SEC 101.19	MEDIA LITERACY	2+0+0	Elective	2
SEC 101.2	HISTORY AND PHILOSOPHY OF SCIENCE	2+0+0	Elective	2
SEC 101.20	MATHEMATICAL ESTHETICS	2+0+0	Elective	2
SEC 101.21	INDUSTRIAL DESIGN	2+0+0	Elective	2
SEC 101.22	BASIC PHOTOGRAPHY	2+0+0	Elective	2
SEC 101.23	SURFING	2+0+0	Elective	2
SEC 101.24	JAPANESE I	2+0+0	Elective	2
SEC 101.25	JAPANESE II	2+0+0	Elective	2
SEC 101.26	MYTHOLOGY	2+0+0	Elective	2
SEC 101.27	ANCIENT CITIES	2+0+0	Elective	2
SEC 101.28	SOCIOLOGY	2+0+0	Elective	2
SEC 101.29	PHILOSOPHY	2+0+0	Elective	2
SEC 101.3	DISASTER AWARENESS	2+0+0	Elective	2
SEC 101.30	ANCIENT DNA: HISTORY OF THE PAST	2+0+0	Elective	2
SEC 101.31	GENETIC HERITAGE	2+0+0	Elective	2
SEC 101.32	MODERN GENETIC APPLICATIONS: GENE CLONING	2+0+0	Elective	2
SEC 101.33	FOOD AND FOOD CULTURE	2+0+0	Elective	2
SEC 101.34	DIET AND HEALTH	2+0+0	Elective	2
SEC 101.35	TRADITIONAL FOODS	2+0+0	Elective	2
SEC 101.36	ORGANIC AGRICULTURE	2+0+0	Elective	2
SEC 101.4	EFFECTIVE AND WELL SPEAKING	2+0+0	Elective	2
SEC 101.5	BASIC FIRST AID AND EMERGENCY	2+0+0	Elective	2
SEC 101.6	ARCHERY	2+0+0	Elective	2

SEC 101.7	BOXING, KARATE AND TAEKWONDO	2+0+0	Elective	2
SEC 101.8	FOOTBALL	2+0+0	Elective	2
SEC 101.9	VOLLEYBALL	2+0+0	Elective	2

### 3.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
ATA 101	HISTORY OF TURKISH REVOLUTION I	2+0+0	Compulsory	2
FDE 201	FOOD CHEMISTRY I	3+0+0	Compulsory	6
KIM 108E	ORGANIC CHEMISTRY	2+0+0	Compulsory	5
KIM 108EL	ORGANIC CHEMISTRY LAB	0+0+2	Compulsory	1
MAT 202E	DIFFERENTIAL EQUATIONS	4+0+0	Compulsory	5
TER 202E	THERMODYNAMICS	3+0+0	Compulsory	5
FOR2GÜZ	FOR2GÜZ	0+0+0	Elective	0
ITB 2/ FALL (SGS )	ELECTIVE COURSE	2+0+0	Elective	2
TB 2/ FALL	ELECTIVE COURSE	3+0+0	Elective	4

**Total ECTS 30**

### Course Groups

FDE 213	TECHNICAL REPORT WRITING AND PRESENTATION SKILLS	3+0+0	Elective	4
FDE 217	MATERIAL SCIENCE	3+0+0	Elective	4
FOR 201	EDUCATION	3+0+0	Elective	4
FOR 203	TEACHING PRINCIPLES AND METHODS	3+0+0	Elective	4
ISM 208E	MANAGEMENT AND ORGANIZATION	3+0+0	Elective	4
MAT 201E	NUMERICAL METHODS	3+0+0	Elective	4
SEC 201.1	HISTORY OF ART	2+0+0	Elective	2
SEC 201.10	BASKETBALL	2+0+0	Elective	2
SEC 201.11	TENNIS	2+0+0	Elective	2
SEC 201.12	TABLE TENNIS	2+0+0	Elective	2
SEC 201.13	FOLK DANCES	2+0+0	Elective	2
SEC 201.14	MUSIC CULTURE	2+0+0	Elective	2
SEC 201.15	ARTS&PAINTING	2+0+0	Elective	2
SEC 201.16	THEATRE AND CINEMA	2+0+0	Elective	2
SEC 201.17	HEALTHY LIVING	2+0+0	Elective	2
SEC 201.18	NUTRITION	2+0+0	Elective	2
SEC 201.19	MEDIA LITERACY	2+0+0	Elective	2
SEC 201.2	HISTORY AND PHILOSOPHY OF SCIENCE	2+0+0	Elective	2
SEC 201.20	MATHEMATICAL ESTHETICS	2+0+0	Elective	2
SEC 201.21	INDUSTRIAL DESIGN	2+0+0	Elective	2
SEC 201.22	BASIC PHOTOGRAPHY	2+0+0	Elective	2
SEC 201.23	SURFING	2+0+0	Elective	2
SEC 201.24	JAPANESE I	2+0+0	Elective	2
SEC 201.25	JAPANESE II	2+0+0	Elective	2
SEC 201.26	MYTHOLOGY	2+0+0	Elective	2
SEC 201.27	ANCIENT CITY	2+0+0	Elective	2
SEC 201.28	SOCIOLOGY	2+0+0	Elective	2
SEC 201.29	PHILOSOPHY	2+0+0	Elective	2
SEC 201.3	DISASTER CONSCIOUSNESS	2+0+0	Elective	2
SEC 201.30	ANCIENT DNA: HISTORY OF THE PAST	2+0+0	Elective	2
SEC 201.31	GENETIC HERITAGE	2+0+0	Elective	2
SEC 201.32	MODERN GENETIC APPLICATIONS: GENE CLONING	2+0+0	Elective	2
SEC 201.33	FOOD AND FOOD CULTURE	2+0+0	Elective	2
SEC 201.34	DIET AND HEALTH	2+0+0	Elective	2
SEC 201.35	TRADITIONAL FOODS	2+0+0	Elective	2
SEC 201.36	ORGANIC AGRICULTURE	2+0+0	Elective	2
SEC 201.4	EFFECTIVE AND WELL SPEAKING	2+0+0	Elective	2
SEC 201.5	BASIC FIRST AID AND EMERGENCY TRAINING	2+0+0	Elective	2
SEC 201.6	ARCHERY	2+0+0	Elective	2
SEC 201.7	BOXING, KARATE AND TAEKWONDO	2+0+0	Elective	2
SEC 201.8	FOOTBALL	2+0+0	Elective	2
SEC 201.9	VOLLEYBALL	2+0+0	Elective	2

### 4.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
ATA 102	HISTORY OF TURKISH REVOLUTION II	2+0+0	Compulsory	2
FDE 202	FOOD CHEMISTRY II	3+0+0	Compulsory	5
FDE 203	MATERIAL AND ENERGY BALANCES	3+0+0	Compulsory	6
FDE 204	MASS TRANSFER	3+0+0	Compulsory	4
FDE 208	MICROBIOLOGY	2+0+2	Compulsory	5
MAT 203E	PROBABILITY AND STATISTICS	3+0+0	Compulsory	4
ITB 2/Spring (SGS)	ELECTIVE COURSE	3+0+0	Compulsory	4

FOR2BAHAR	FOR2BAHAR	0+0+0	Elective	0
			<b>Total ECTS</b>	<b>30</b>
<b>Course Groups</b>				
FDE 220	TECHNOLOGY AND R&D	3+0+0	Elective	4
FDE 222	WASTE MANAGEMENT AND SUSTAINABILITY	3+0+0	Elective	4
FDE 224	FOOD LAW AND POLICY	3+0+0	Elective	4
FDE 226	CONSUMER RESEARCH	3+0+0	Elective	4
FOR 202	CLASS MANAGEMENT	2+0+0	Elective	3
FOR 204	SPECIAL TEACHING METHODS	3+0+0	Elective	4

<b>5.Semester Course Plan</b>				
<b>Course Code</b>	<b>Course Name</b>	<b>T+A+L</b>	<b>Compulsory/Elective</b>	<b>ECTS</b>
AKM 301E	FLUID MECHANICS	3+0+0	Compulsory	5
FDE 300	INTERNSHIP I	0+0+0	Compulsory	2
FDE 307	FOOD MICROBIOLOGY	2+0+2	Compulsory	5
FDE 309	HEAT TRANSFER	3+0+0	Compulsory	5
FDE 311	FOOD ENGINEERING UNIT OPERATIONS I	3+0+0	Compulsory	4
ISG 401E	OCCUPATIONAL HEALTH AND SAFETY I	2+0+0	Compulsory	2
FOR3GÜZ	FOR3GÜZ	0+0+0	Elective	0
ITB 3/Fall	ELECTIVE COURSE	3+0+0	Elective	4
TM 3/Fall	ELECTIVE COURSE	3+0+0	Elective	5
			<b>Total ECTS</b>	<b>32</b>
<b>Course Groups</b>				

FDE 313	FOOD PACKAGING	3+0+0	Elective	5
FDE 315	HYGIENE CONTROL IN THE FOOD INDUSTRY	3+0+0	Elective	5
FDE 316	RESEARCH METHODS AND SCIENTIFIC ETHICS	3+0+0	Elective	4
FDE 317	FOOD AND NUTRITION	3+0+0	Elective	4
FDE 319	THERMAL PROCESS ENGINEERING	3+0+0	Elective	5
FDE 324	TOTAL QUALITY MANAGEMENT	3+0+0	Elective	4
FOR 301	GUIDANCE AND SPECIAL EDUCATION	3+0+0	Elective	4
FOR 303	ASSESSMENT AND EVALUATION IN EDUCATION	3+0+0	Elective	4

<b>6.Semester Course Plan</b>				
<b>Course Code</b>	<b>Course Name</b>	<b>T+A+L</b>	<b>Compulsory/Elective</b>	<b>ECTS</b>
FDE 304	INSTRUMENTAL ANALYSIS	1+0+2	Compulsory	4
FDE 308	FOOD OPERATION LABORATORY	2+0+2	Compulsory	4
FDE 312	FOOD ENGINEERING UNIT OPERATIONS II	3+0+0	Compulsory	4
GBM 212	BIOCHEMISTRY I	3+0+0	Compulsory	4
ISG 402E	OCCUPATIONAL HEALTH AND SAFETY II	1+0+0	Compulsory	1
FOR3BAHAR	FOR3BAHAR	0+0+0	Elective	0
ITB-1 3/Spring	ELECTIVE COURSE	3+0+0	Elective	4
ITB-2 3/Spring	ELECTIVE COURSE	3+0+0	Elective	4
MT 3/Spring	ELECTIVE COURSE	3+0+0	Elective	5
			<b>Total ECTS</b>	<b>30</b>
<b>Course Groups</b>				

FDE 314	FUNCTIONAL FOODS	3+0+0	Elective	4
FDE 318	FOOD TRACEABILITY	3+0+0	Elective	4
FDE 323	ACADEMIC LITERACY	3+0+0	Elective	4
FDE 423	FOOD PRODUCT DEVELOPMENT	3+0+0	Elective	5
FDE 427	FOOD ADDITIVES	3+0+0	Elective	5
FDE 437	MICROBIOLOGY AND TECHNOLOGY OF FERMENTED FOODS	3+0+0	Elective	5
FOR 302	EDUCATION PSYCHOLOGY	3+0+0	Elective	4
FOR 304	TEACHING TECHNOLOGIES	2+0+0	Elective	3

<b>7.Semester Course Plan</b>				
<b>Course Code</b>	<b>Course Name</b>	<b>T+A+L</b>	<b>Compulsory/Elective</b>	<b>ECTS</b>
FDE 400	INTERNSHIP II	0+0+0	Compulsory	3
FDE 403	FOOD ENGINEERING DESIGN I	3+0+0	Compulsory	6
FDE 405	FOOD TECHNOLOGY	3+0+0	Compulsory	5
FDE 409	FOOD QUALITY CONTROL	2+0+2	Compulsory	5
FDE 413	FOOD FERMENTATION TECHNOLOGY	2+0+0	Compulsory	4
FDE 417	SEMINAR	0+3+0	Elective	5
FOR4GÜZ	FOR4GÜZ	0+0+0	Elective	0
MT 4/Fall	ELECTIVE COURSE	3+0+0	Elective	5
TM 4/Fall	ELECTIVE COURSE	3+0+0	Elective	5
			<b>Total ECTS</b>	<b>38</b>
<b>Course Groups</b>				

FDE 325	NUTRITION IN HEALTH AND DISEASE	3+0+0	Elective	5
FDE 401	FOOD INDUSTRY BY-PRODUCTS VALORIZATION	3+0+0	Elective	5

FDE 411	SHELF LIFE OF FOODS	3+0+0	Elective	5
FDE 416	STABILITY OF COLLOIDAL DISPERSIONS OF FOODS	3+0+0	Elective	5
FDE 421	SENSORY ANALYSIS OF FOODS	3+0+0	Elective	5
FDE 429	BIOCHEMICAL CHANGES DURING FOOD PROCESSING	3+0+0	Elective	5
FDE 431	FRUIT AND VEGETABLE TECHNOLOGY	3+0+0	Elective	5
FDE 435	FOOD TOXICOLOGY	3+0+0	Elective	5
FOR 401G	TEACHING PRACTICE	1+8+0	Elective	10

#### 8.Semester Course Plan

Course Code	Course Name	T+A+L	Compulsory/Elective	ECTS
FDE 402	GRADUATION PROJECT	0+0+6	Compulsory	8
FDE 404	FOOD ENGINEERING DESIGN II	3+0+0	Compulsory	4
FOR4BAHAR	FOR4BAHAR	0+0+0	Elective	0
ITB 4/Spring	ELECTIVE COURSE	3+0+0	Elective	8
MT 4/Spring	ELECTIVE COURSE	3+0+0	Elective	5
TM 4/Spring	ELECTIVE COURSE	3+0+0	Elective	5
			<b>Total ECTS</b>	<b>30</b>
<b>Course Groups</b>				
FDE 326	CEREAL TECHNOLOGY	3+0+0	Elective	5
FDE 328	MEAT TECHNOLOGY	3+0+0	Elective	5
FDE 410	INTRODUCTION TO ENTREPRENEURSHIP & INNOVATION	3+0+0	Elective	4
FDE 412	ENTREPRENEURSHIP	3+0+0	Elective	4
FDE 414	PERSONALISED NUTRITION AND FOOD PRODUCT	3+0+0	Elective	4
FDE 418	FOOD BIOTECHNOLOGY	3+0+0	Elective	5
FDE 419	PHYSICAL PROPERTIES OF FOODS	3+0+0	Elective	5
FDE 420	TRENDS IN FOOD SCIENCE	3+0+0	Elective	4
FDE 422	NUTRITIONAL BIOCHEMISTRY	3+0+0	Elective	5
FDE 424	MINIMALLY PROCESSED FOODS	3+0+0	Elective	4
FDE 433	MILK AND DAIRY TECHNOLOGY	3+0+0	Elective	5
FDE 439	CHOCOLATE- COFFEE TECHNOLOGY	3+0+0	Elective	5
FOR 401B	TEACHING PRACTICE	1+8+0	Elective	10