BSc in FOOD SCIENCE AND TECHNOLOGY CURRICULUM, Dept. of Food Science and Technology, IHU (2019-20)

COURSE CODE	COURSE	TYPE[1]	CONTACT HOURS				ECTS
			Lectures	Lab	Tutorial	TOTAL	TOTAL
1st Semester							
276-190101	MATHEMATICS I	Compul.	3		1	4	6
276-190102	PHYSICS	Compul.	3		1	4	6
276-190103	GENERAL AND INORGANIC CHEMISTRY	Compul.	3	3		6	7
276-190104	ORGANIC CHEMISTRY	Compul.	3			3	4,5
276-190105	BIOLOGY-GENETICS	Compul.	2			2	3
276-190106	NUTRITION AND NUTRITIONAL VALUE OF FOODS	Compul.	2			2	2,5
276-190107	INTRODUCTION TO FOOD SCIENCE AND TECHNOLOGY	Compul.	1			1	1
	SEMESTER TOTALS		**17**	**3**	**2**	**22**	**30**

2nd Semester							
276-190201	MATHEMATICS II	Compul.	3		2	5	7,5
276-190202	ANALYTICAL CHEMISTRY	Compul.	2	2		4	5
276-190203	GENERAL MICROBIOLOGY	Compul.	2	2		4	5
276-190204	FOOD BIOCHEMISTRY	Compul.	2			2	3
276-190205	PHYSICAL CHEMISTRY OF FOODS	Compul.	3			3	4,5
276-190206	INFORMATICS	Compul.	1	3		4	5
276-190207	SPECIAL TOPICS IN PHYSICS	Option.	2			2	2
	SEMESTER TOTALS		**13**	**7**	**2**	**22**	**30**

[1] Compul.: compulsory course, Elect.: compulsory elective course, Option.: optional course

COURSE CODE	COURSE	TYPE[1]	CONTACT HOURS				ECTS
			Lectures	Lab	Tutorial	TOTAL	TOTAL
3rd Semester							
276-190301	FOOD ENGINEERING I - MASS AND ENERGY BALANCES	Compul.	3	1	2	6	7,5
276-190302	FOOD MICROBIOLOGY	Compul.	2	4		6	6
276-190303	QUALITY ASSURANCE AND CONTROL	Compul.	1	3	1	5	6
276-190304	STATISTICS FOR FOOD TECHNOLOGISTS – COMPUTATIONAL STATISTICS AND DATA ANALYSIS	Compul.	2	2		4	5
276-190305	FOOD CHEMISTRY	Compul.	3	2		5	5,5
	SEMESTER TOTALS		**11**	**12**	**3**	**26**	**30**

4th Semester							
276-190401	FOOD ENGINEERING II	Compul.	2	2	1	5	6,5
276-190402	FOOD PLANT SANITATION AND SAFETY	Compul.	2			2	3
276-190403	FOOD MARKETING	Compul.	2			2	3
276-190404	FOOD PROCESSING I	Compul.	2	1	1	4	5
276-190405	SCIENTIFIC REPORT WRITING (SEMINAR)	Compul.		2		2	3
276-190406	ORGANIZATION AND MANAGEMENT OF FOOD INDUSTRIES	Compul.	2			2	3
276-190407	FOOD ANALYSIS	Compul.	2	2	1	5	6,5
	SEMESTER TOTALS		**12**	**7**	**3**	**22**	**30**

COURSE CODE	COURSE	TYPE[1]	CONTACT HOURS				ECTS
			Lectures	Lab	Tutorial	TOTAL	TOTAL
5th Semester							
276-190501	TECHNOLOGY AND QUALITY CONTROL OF OLIVE OIL & LIPIDS	**Compul. Elect. Group A** 2 from 4 courses	3	3		6	7,5
276-190502	TECHNOLOGY AND QUALITY CONTROL OF MILK & DAIRY PRODUCTS		3	3		6	7,5
276-190503	TECHNOLOGY AND QUALITY CONTROL OF FISH PRODUCTS						
276-190504	STATISTICAL PROCESS CONTROL						
276-190505	FOOD PROCESSING II	Compul.	2	2	2	6	8
276-190506	FOOD LEGISLATION	Compul.	2			2	3
276-190507	FOOD TOXICOLOGY	Compul.	2		1	3	4
	SEMESTER TOTALS		**12**	**8**	**3**	**23**	**30**
6th Semester							
276-190601	TECHNOLOGY AND QUALITY CONTROL OF CEREALS	**Compul. Elect. Group B** 2 from 4 courses.	3	3		6	7,5
276-190602	TECHNOLOGY AND QUALITY CONTROL OF FRUITS & VEG.						
276-190603	TECHNOLOGY AND QUALITY CONTROL OF MEAT & MEAT PRODUCTS		3	3		6	7,5
276-190604	WATER QUALITY AND TREATMENT TECHNOLOGIES						
276-190605	FOOD INDUSTRY WASTEWATER MANAGEMENT AND TREATMENT	Compul.	2			2	3
276-190606	NANOTECHNOLOGY-BIOMATERIALS	Compul.	2			2	3
276-190607	QUALITY MANAGEMENT	Compul.	1		1	2	3
276-190608	COMPUTER APPLICATIONS IN FOOD TECHNOLOGY	**Compul. Elect. Group C** 2 from 7 courses	2			2	3
276-190609	STATISTICAL TECHNIQUES OF PRODUCT OPTIMIZATION						
276-190610	TECHNICAL ENGLISH						
276-190611	ACCOUNTING IN THE FOOD INDUSTRIES		2			2	3
276-190612	STATISTICAL ANALYSIS OF MULTIVARIATE TECHNIQUES: CASE STUDIES						
276-190613	PROJECT MANAGEMENT						

COURSE CODE	COURSE	TYPE[1]	CONTACT HOURS				ECTS
			Lectures	Lab	Tutorial	TOTAL	TOTAL
276-190614	*COLLECTIVE ACTIONS AND SOCIAL ENTERPRENEURSHIP*[2]						
	SEMESTER TOTALS		**15**	**6**	**1**	**22**	**30**
7th Semester							
276-190701	INSTRUMENTAL ANALYSIS OF FOODS	Compul.	3	3		6	7,5
276-190702	FOOD PACKAGING	Compul.	2	2		4	5
276-190804	PHYSICAL PROPERTIES OF FOODS	Compul.	2		1	3	4,5
276-190704	MOLECULAR ANALYSIS TECHNIQUES	Compul.	2	2		4	5
276-190705	SUSTAINABILITY AND FOOD	Compul.	2			2	4
276-190706	FOOD CONTAMINANTS	Compul.	2			2	4
276-190707	*POSTHARVEST PHYSIOLOGY AND TREATMENT OF AGRICULTURAL PRODUCTS*	Option.				4	4
276-190708	*INDUSTRIAL AND ENERGY PLANTS*	Option.				4	5
	SEMESTER TOTALS		**14**	**7**		**21**	**30**

8th Semester							
276-190801	FOOD BIOTECHNOLOGY AND INDUSTRIAL FERMENTATION	Compul.	2	3		5	6
276-190802	NEW FOOD PRODUCT DEVELOPMENT	Compul.	3		3	6	9
276-190803	MEASUREMENTS AND PROCESS CONTROL IN THE FOOD INDUSTRY	Compul.	2		1	3	4,5
276-190703	FOOD STRUCTURE AND FUNCTIONALITY	Compul.	3			3	4,5
276-190805	EXAMINATION OF FOOD AUTHENTICITY	Compul.	2			2	3
276-190806	EPIDEMIOLOGY, MICROBIOLOGICAL FOOD SAFETY, PUBLIC HEALTH	Compul.	2			2	3

[2] Courses shown in Italics are offered by the Department of Agriculture, IHU

COURSE CODE	COURSE	TYPE[1]	CONTACT HOURS				ECTS
			Lectures	Lab	Tutorial	TOTAL	TOTAL
276-190807	*FEED TECHNOLOGY*	Option.				4	4
276-190808	*AROMATIC AND PHARMACEUTICAL PLANTS*	Option.				4	6
	SEMESTER TOTALS		**13**	**3**	**5**	**21**	**30**
9th Semester							
276-190901	FOOD PROCESS DESIGN	Compul.	5		2	7	12
276-190902	*FOOD SUPPLY CHAINS*	Option.				4	4
276-190903	*CONSUMER BEHAVIOR-MARKET RESEARCH*	Option.				4	6
	SEMESTER TOTALS		**5**		**2**	**7**	**12**
10th Semester							
	RESEARCH PROJECT	Compul.					30
	SEMESTER TOTALS						**30**

CURRICULUM TOTALS

	CONTACT HOURS				ECTS
	Lectures	Lab	Tutorial	TOTAL	TOTAL
ALL SEMESTERS	112	53	21	186	282
INDUSTRIAL TRAINING (Internship)					18
CURRICULUM TOTALS	**112**	**53**	**21**	**186**	**300**

Notes:

- The semester totals shown in the tables above on contact hours, ECTS units and work load have been computed by taking into account the Compulsory courses and the minimum number of required courses from the Compulsory Elective Course Groups. Optional courses are excluded.
- At minimum, two (2) courses must be selected from each of the Compulsory Elective Course Groups A, B and C
- Industrial training lasts for 4 months with an optional extension to 6 months (in which case it corresponds to 25 ECTS units instead of 18 units)
- Industrial training can be substituted by at least 3 curriculum courses (which are either characterized as optional or belong to the three elective groups (including those offered by the Department of Agriculture); in the latter case, these courses will be selected as extra courses beyond the minimal requirements of the corresponding elective group. The sum of ECTS units for the course elected as substitutes of Industrial training should be at least 18 units.
- Only compulsory and compulsory elective courses are taken into account when computing the total number of ECTS units and the student's GPA. Optional courses and extra courses selected from the elective groups (beyond the minimum requirements) are shown in the Diploma Supplement (along with the ECTS units and the student grade) but are not included in the calculation of the total ECTS units or the GPA.
- **Minimum requirements for degree: 50 courses + Research Project + Industrial Training**
- **Minimum number of ECTS units for degree: 300**

TABLE OF COURSE PREREQUISITES

Course...	**...is prerequisite for...**
PHYSICS	FOOD ENGINEERING I - MASS AND ENERGY BALANCES
GENERAL MICROBIOLOGY	FOOD MICROBIOLOGY
STATISTICS FOR FOOD TECHNOLOGISTS	STATISTICAL PROCESS CONTROL
FOOD PROCESSING II	FOOD PROCESS DESIGN
BIOLOGY-GENETICS	MOLECULAR ANALYSIS TECHNIQUES

TABLE OF PREREQUISITES FOR RESEARCH PROJECT/INDUSTRIAL TRAINING

RESEARCH PROJECT	• After the completion of the 8th Semester • Successful completion of 35 out of 50 courses • Successful completion of the Technical Writing course before oral presentation of Project

INDUSTRIAL TRAINING (Internship)	• After the completion of the 8th Semester • Successful completion of 30 out of 50 courses • Successful completion of the minimal requirements from the Compulsory Elective Course Groups A and B