

## PROGRAM FOR ENGINEER DEGREE IN FOOD ENGINEERING

No	CODE	SUBJECTS	CREDITS
1.	MI1110	Analytics I	4(3-2-0-8)
2.	MI1120	Analytics II	3(2-2-0-6)
3.	MI1130	Analytics III	3(2-2-0-6)
4.	MI1140	Algebra	4(3-2-0-8)
5.	PH1110	Physics I	3(2-1-1-6)
6.	PH1120	Physics II	3(2-1-1-6)
7.	EM1010	General management	2(2-0-0-4)
8.	IT1110	General informatics	4(3-1-1-8)
9.	CH3223	Organic chemistry	3(2-1-1-6)
10.	CH3080	Physical chemistry	3(2-1-2-6)
11.	CH3306	Analytical chemistry	3(2-1-1-6)
12.	EE2012	Electrotechniques	2(2-1-0-4)
13.	ME2015	Descriptive geometry	3(3-1-0-6)
14.	BF3010	Biochemistry	4(4-0-0-8)
15.	BF3091	Experiments in biochemistry	2(0-0-4-4)
16.	BF3012	Microbiology	3(3-0-0-6)
17.	BF3013	Experiments in microbiology	2(0-0-4-4)
18.	BF3014	Mechanical process and equipments	3(2-1-1-6)
19.	BF3015	Mass transfer process and equipments	3(2-1-1-6)
20.	BF3016	Heat transfer process and equipments	2(2-0-1-4)

21.	BF3017	Project 1- Process and equipments	1(0-0-0-2)
22.	BF3018	Quality management in food industry	2(2-0-0-4)
23.	BF3019	Techniques for mesuaring and Control of technological processes	3(3-0-1-6)
24.	BF3032	Nutrition and food safety	3(2-2-0-4)
25.	BF3033	Food quality control and analysis	4(3-0-2-8)
26.	BF3023	Introduction to food engineering	2(2-0-1-4)
27.	BF4580	Technical practice	2 CRE
28.	<i>BF5011</i>	<i>Process Optimization and production organization</i>	2(2-1-0-4)
29.	<i>BF5020</i>	<i>Building Project for enterprise</i>	4(3-2-0- 8)
30.	<i>EM2104</i>	<i>Business Administration</i>	2(2-1-0-4)
31.	<i>BF5930</i>	<i>Graduation practicum and Graduation thesis</i>	12 credits
		<b>1. Specialization in Food Technology</b>	
32.	BF4219	Food engineering	3(3-0-0-6)
33.	BF4211	Materials in food technology	2(2-0-0-4)
34.	BF4212	Enzyme in food technology	2(2-0-0-4)
35.	BF4213	Preservation for Food and agricultural products	2(2-0-0-4)
36.	BF4214	Practical work in food technology	3(0-0-6-6)
37.	BF4217	Refrigeration technology for food production	2(1-2-0-4)
38.	BF4317	Food packing	2(2-0-0-4)
39.	BF4340	Food quality management system	2(1,5-1-0-4)
40.	BF3022	Waste treatment in food technology	2(1-2-0-4)

41.	BF4215	Project in food technology	2(0-0-4-4)
42.	BF5210	Air conditioning and ventilating	2(2-0-0-4)
43.		<i>Selective subjects from program offered in HUST</i>	10 CRE
44.		<b>Subjects by orientation</b>	18 Credits
45.		<b>Orientation 1</b>	
46.	BF5220	Malt and Beer Technology	3(3-0-1-6)
47.	BF5230	Ethanol and high-alcohol concentration product technology	3(3-0-1-6)
48.	BF5240	Wine technology	3(3-0-1-6)
49.	BF5450	Tobacco Technology	3(3-0-1-6)
50.	BF5410	Coffee and Cocoa technology	3(3-0-1-6)
51.	BF5440	Flavor technology	3(3-0-1-6)
52.		<b>Orientation 2</b>	
53.	BF5280	Seafood Technology	3(3-0-1-6)
54.	BF5250	Dairy Technology	3(3-0-1-6)
55.	BF5260	Meat Technology	3(3-0-1-6)
56.	BF5460	Fruit and vegetable Processing	3(3-0-1-6)
57.	BF5430	Vegetable oil technology	3(3-0-1-6)
58.	BF5230	Ethanol and high-alcohol content product technology	3(3-0-1-6)
59.		<b>Orientation 3</b>	
60.	BF5270	Cereals technology	3(3-0-1-6)
61.	BF5470	Sugar technology	3(3-0-1-6)
62.	BF5480	Bakery and Confectionery Technology	3(3-0-1-6)

63.	BF5290	Tea technology	3(3-0-1-6)
64.	BF5460	Fruit and vegetable Processing	3(3-0-1-6)
65.	BF5220	Malt and beer technology	3(3-0-1-6)
		<b>2. Specialization in Food Quality management</b>	
66.	BF4310	General food technology	3(3-0-0-6)
67.	BF4311	Control for microorganisms in food	2(1-0-2-4)
68.	BF4312	Food sensory evaluation	2(1-0-2-4)
69.	BF4313	Physico-chemical analysis in food	2(1-0-2-4)
70.	BF4314	Documentation for quality management system	3(2-2-0-6)
71.	BF4315	Statistical analysis	2(2-1-0-4)
72.	BF4316	Food Marketing	2(2-0-0-4)
73.	BF4317	Food packaging	2(2-0-0-4)
74.	BF4318	Food standard and regulation	2(2-0-0-4)
75.	BF4319	Food additives	2(2-0-0-4)
76.	BF4321	Project in quality management	2(0-4-0-4)
77.		<i>Selective subjects from program offered in HUST</i>	8 CRE
78.	BF5310	Rapid analyzing methods for food quality control	3(3-0-1-6)
79.	BF5320	Food authenticity and traceability	2(2-0-1-4)
80.	BF5330	Food chain total quality management	3(2-2-0-4)
81.	BF5340	Organic food	2( 2-0-0-4)
82.	BF5350	Hygienic design in food industry	2(1-2-0-4)
83.	BF5360	Applied Informatics in Quality Management	2(2-1-0-4)

84.		<i>Selective subjects from 3 orientation of specialization in food technology</i>	<i>6 credits</i>
		<b>3. Specialization in processing and equipments of food technology</b>	
85.	ME2040	Technical mechanics	3(3-1-0-6)
86.	BF4310	General food technology	3(3-0-0-6)
87.	BF4411	Machines and equipments in food production	3(3-0-0-6)
88.	BF4412	Automatic control for food processing	2(2-0-0-4)
89.	ME3090	Machines details	3(3-0-1-6)
90.	ME3190	Strength of materials	2(2-0-0-4)
91.	BF4415	Practical work in processing and equipments	2(0-0-4-4)
92.	BF4416	Automatic machines in food production	2(2-0-0-4)
93.	BF4419	Applied informatics in design and computing	2(2-1-0-4)
94.	BF4420	Project in processing and equipments	2(0-4-0-4)
95.		<i>Selective subjects from program offered in HUST</i>	<i>8 Credits</i>
96.	BF5530	Design for heat-transfer and mass-transfer equipments in food production	4(3-1-1-8)
97.	BF5540	Integrated automatic processes control systems	3( 2-1-1-6)
98.	BF5550	Electric devices for food processing machines	2( 2-0-0-4)
99.	BF5560	Hydraulic and Pneumatic Automatic Actuators	2( 2-1-0-4)

100.	BF5570	Transportation, Quantification and Packaging machines	2( 2-1-0-4)
101.	BF5580	Design for Pump, Fan, and Compressor	2( 2-1-0-4)
102.	BF5590	Design systems of chilling and air conditioning	2( 2-1-0-4)
103.	BF5511	Design for drying system of food products	2( 2-1-0-4)
104.		TOTAL	160