

DEPARTMENT OF FOOD ENGINEERING					
DOCTOR OF PHILOSOPHY DEGREE PROGRAM IN FOOD ENGINEERING					
LIST OF COURSES					
1st SEMESTER					
Course Code	Course Name	Core/ Elective	Prerequisite	Credit	ECTS Credits
FE511	Advanced Food Chemistry	Core		3	7
FE532	Food Engineering Principles	Core		3	9
ELT1	Elective Course	Elective		3	7
ELT2	Elective Course	Elective		3	7
Total ECTS (min)					30
2nd SEMESTER					
Course Code	Course Name	Core/ Elective	Prerequisite	Credit	ECTS Credits
FE503	Advanced Food Microbiology	Core		3	7
FE536	Design of Experiments	Core		3	9
ELT3	Elective Course	Elective		3	7
ELT4	Elective Course	Elective		3	7
Total ECTS (min)					30
3rd SEMESTER					
Course Code	Course Name	Core/ Elective	Prerequisite	Credit	ECTS Credits
FE590	Research Methods and Technical Report Writing	Core		0	3
FE600	PhD. Thesis	Core		0	26
FE8XX	Special Studies	Core		0	4
Total ECTS (min)					33
4th SEMESTER					
Course Code	Course Name	Core/ Elective	Prerequisite	Credit	ECTS Credits
FE600	PhD. Thesis	Core		0	26
FE8XX	Special Studies	Core		0	4
Total ECTS (min)					30
5th SEMESTER					

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Course Code	Course Name	Core/ Elective	Prerequisite	Credit	ECTS Credits
FE600	PhD. Thesis	Core		0	26
FE8XX	Special Studies	Core		0	4
Total ECTS(min)					30

6thSEMESTER

Course Code	Course Name	Core/ Elective	Prerequisite	Credit	ECTS Credits
FE600	PhD. Thesis	Core		0	26
FE698	Seminar II	Core		0	5
FE8XX	Special Studies	Core		0	4
Total ECTS (min)					35

7thSEMESTER

Course Code	Course Name	Core/ Elective	Prerequisite	Credit	ECTS Credits
FE600	PhD. Thesis	Core		0	26
FE8XX	Special Studies	Core		0	4
Total ECTS (min)					30

Course Code	Course Name	Core/ Elective	Prerequisite	Credit	ECTS Credits
FE600	PhD. Thesis	Core		0	26
FE600	PhD. Thesis	Core		0	26
FE8XX	Special Studies	Core		0	4
Total ECTS (min)					30

Core-Elective Courses

At least 4 of the following courses must be taken.

Course Code	Course Name	Prerequisite	Credit	ECTS Credits

Elective Courses

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Course Code	Course Name	Prerequisite	Credit	ECTS Credits
FE501	Food and Process Engineering Design		3	7
FE502	Advanced Food Quality Control		3	7
FE504	Advanced Food Plant Sanitation		3	7
FE505	Advanced Food Technology		3	7
FE506	Optimization Methods in Food Science		3	7
FE507	Advanced Instrumental Methods in Food Analysis		3	7
FE509	Meat and Poultry Processing		3	7
FE512	Membrane Processes		3	7
FE513	Food Lipids		3	7
FE514	Food Biotechnology		3	7
FE515	Food Additives, Contaminants and Toxicology		3	7
FE516	Sensory Evaluation of Foods		3	7
FE517	Introduction to Food Process Principles		3	7
FE518	Food and Industrial Microbiology		3	7
FE519	Food Packaging		3	7
FE520	Protein Purification		3	7
FE521	Aseptic Processing Technology		3	7
FE522	Downstream Processing in Biotechnology		3	7
FE524	Principles of Different Fermentation Methods		3	7
FE526	Physical Properties of Food and Biological Materials		3	7
FE525	Advanced Food Biochemistry		3	7
FE527	Enzyme Engineering		3	7
FE528	Functional Foods		3	7
FE530	Heat Treatment and Thermal Processing of Food		3	7
FE531	Biological Systems Simulation and Modeling		3	7
FE533	Enzyme Characterization and Kinetics		3	7
FE534	Multivariate Statistical Analysis for Engineers		3	7
FE535	Statistical Process Monitoring and Quality Control		3	7
FE538	Bioprocess Engineering Principles		3	7
FE539	Molecular Methods for Food Safety Applications		3	7
FE540	Foodborne Bacterial Pathogens		3	7
FE541	Food and Environmental Virology		3	7
FE542	Mycology: Food and Indoor Fungi		3	7
FE543	Food Applications of Nanotechnology		3	7

FE544	Analytical Methods in Food Engineering		3	7
FE545	Advanced Human Nutrition		3	7
FE546	Molecular Nutrition in Food Science and Dietetics		3	7
FE580	Special Topics in Food Engineering		3	7

Instructions: