

## STUDY PROGRAM

# FOOD TECHNOLOGY

## COURSE OUTLINE

Food Technology benefits consumers every day with healthier diets, better tasting food, affordable food, and increased food safety. Food Technology is an exciting new area that uses a blend of basic sciences such as Mathematics, Biology, Chemistry, and Physics, together with Microbiology, Biochemistry, and Engineering to improve the taste, nutrition, safety and value of the world's food supply.

Food Technology students will learn to apply their knowledge in all stages of food production, starting from raw material harvesting, until food reaches the consumers. They will examine the optimisation of food quality, food safety and nutritional value, as well as the means of production, preservation, and distribution, including compliance with government specifications and regulations. Thus, our bachelor's program in food technology will provide students with a seamless entry into a future career in food industries.

## DOUBLE DEGREE AND ELECTIVE INTERNSHIP IN EUROPE

Furthermore, as part of our international program, students will enjoy the experience of conducting cutting edge research in a German university. Added to an elective internship program in Europe, this will become their pathway to acquiring a double degree from Germany. Hence, our graduates will have substantial advantages when they are starting their national or international career, or continuing with higher education in Indonesia or abroad.



Photo: International University Liaison Indonesia

## FIELDS OF ACTIVITIES

Potential areas of employment for graduates of Food Technology are very wide, including:

- Food Industries such as milk/dairy, meat, seafood, bread and bakeries, confectioneries, snack food, beverages manufactures, and brewers
- Specialized food industries dealing with functional food focusing on nutraceutical products such as jamu (Indonesian Herbal Medicine), baby food, and other food for specific diets for health or beauty
- Industries specialising in food packaging, food ingredients, and food processing equipment supply
- Research and development (R&D) into new products, including food-related R&D throughout the entire value chain
- Entrepreneurship in the food sector including food innovation, home industries, coffee shops, and catering
- Quality Control, Quality Assurance, and Quality Management
- Food Safety and Halal Food auditor or tutor
- Government institutions, such as BPOM (Badan Pengawas Obat dan Makanan), the Ministry of Health, and the Ministry of Agriculture
- Food Scientist, researcher or lecturer in universities in Indonesia or abroad

# CURRICULUM 2017-2018

Date/ Rev : 08 AUGUST 2017/ Rev. 08  
 Program : Bachelor  
 Valid : Batch 2017-2018

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SUBJECTS									
University Compulsory Subjects	1	2	3	4	5	6	7	8	Total
English	2	2	2	2	1	1			10
Computer Network & IT Security	2								2
Applied Statistics		2							2
Research Methodology		2							2
Environment Sciences			2						2
Civics				2					2
Ethics and Religious Philosophy					2				2
Innovation & Product Development					2				2
E-Commerce						2			2
Indonesian Language & Culture						2			2
Pancasila						2			2
Oral Final Study Examination (OFSE)						0			0
Research Semester							6		6
Internship / Project								3	3
Thesis / Thesis Defense								6	6
<b>Total</b>	<b>4</b>	<b>6</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>7</b>	<b>6</b>	<b>9</b>	<b>45</b>
Life Sciences Faculty Compulsory Subjects	1	2	3	4	5	6	7	8	Total
Introduction to Life Science	1								1
Physics & Laboratory 1, 2	3	3							6
Mathematics 1, 2	3	3							6
Physics & Laboratory 1, 2	3	3							6
Applied Mathematics			3						3
Numerical Methods				2					2
Chemistry	2								2
Chemistry Laboratory		1							1
Organic Chemistry		3							3
Organic Chemistry Laboratory			1						1
Electrical Engineering & Laboratory 1, 2	3	3							6
Material Science	2								2
Biology	3								3
Biochemistry			3						3
Algorithm Programming 1, 2	3	3							6
Engineering Economy					2				2
Metrology and Quality Control			2						2
<b>Total</b>	<b>20</b>	<b>16</b>	<b>9</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>49</b>
Food Technology Compulsory Subjects	1	2	3	4	5	6	7	8	Total
Food Engineering				3					3
Physical Chemistry			3						3
Analytical Chemistry			2						2
Physics & Analytical Chemistry Laboratory				1					1
Food Processing Technology 1, 2				3	3				6
Food Technology Laboratory 1, 2					1	1			2
Food Chemistry			3						3
Food Chemistry Laboratory				1					1
Microbiology			3						3
Microbiology Laboratory				1					1
Nutrition & Food Science				2					2
Food Material Introduction		2							2
Food Additives						2			2
Food Packaging & Storage				3					3
Unit Process Design					2				2
Standardization & Legalization (Halal)						3			3
Sensor & Instrumentation Technology				3					3
Food Manufacturing, Plant Design						4			4
Elective Subjects					7	5			12
<b>Total</b>	<b>0</b>	<b>2</b>	<b>11</b>	<b>17</b>	<b>13</b>	<b>15</b>	<b>0</b>	<b>0</b>	<b>58</b>
<b>Total 1, 2, 3</b>	<b>24</b>	<b>24</b>	<b>24</b>	<b>23</b>	<b>20</b>	<b>22</b>	<b>6</b>	<b>9</b>	<b>152</b>
Extra Curricular	1	2	3	4	5	6	7	8	Total
German Language	2	2	2	2	2	2			12
<b>Total</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>12</b>

Subject to change

The actual implementation follows the internal arrangements & policy of the Department & Faculty