

## 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 programme 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 programme, 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.

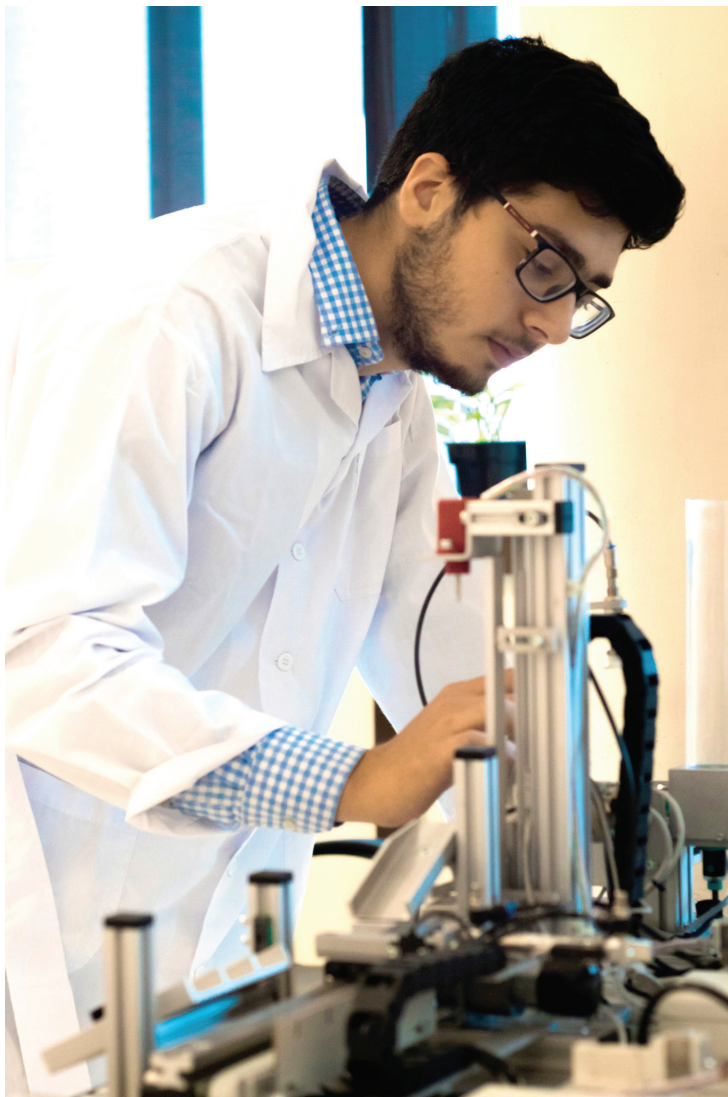


Photo: International University Liaison Indonesia

## 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 : 9 March 2016/ Rev. 3

Program : Bachelor

Valid : Batch 2019

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SUBJECT	1	2	3	4	5	6	7	8	Total
<b>University Compulsory Subjects</b>									
English	2	2	2	2	2	1			11
Fundamentals of Computer Science	2								2
E-Commerce			2						2
Environmental Sciences		2							2
Innovation and Product Development					2				2
Statistics & Probability		2							2
Research Project							6		6
Research Methodology						2			2
Ethics and Religious Philosophy					2				2
Pancasila		2							2
Civics				2					2
Indonesian Language and Culture						2			2
Oral Final Study Examination (OFSE)						0			0
Thesis								6	6
Elective: Internship/Project								3	3
<b>Total</b>	<b>4</b>	<b>8</b>	<b>4</b>	<b>4</b>	<b>6</b>	<b>5</b>	<b>6</b>	<b>9</b>	<b>46</b>
<b>Faculty Compulsory Subjects</b>									
Calculus and Linear Algebra I & II	3	3							6
Material Science	2								2
Biology	3								3
Chemistry	2								2
Chemistry Laboratory		1							1
Physics I & II	3	3							6
Physics Laboratory I & II	1	1							2
Algorithms, Programming, Data Structure		3							3
Organic Chemistry		3							3
Organic Chemistry Laboratory			1						1
Applied Mathematics			3						3
Biochemistry			3						3
Engineering Economy					2				2
Engineering Management								2	2
<b>Total</b>	<b>14</b>	<b>14</b>	<b>7</b>	<b>0</b>	<b>2</b>	<b>-</b>	<b>0</b>	<b>0</b>	<b>37</b>
<b>Department Compulsory Subjects</b>									
Introduction to Life Science	1								1
Industrial Electronics and Laboratory	3								3
Food Engineering Principles				3					3
Physical Chemistry			3						3
Analytical Chemistry			2						2
Physical & Analytical Chemistry Laboratory				1					1
Food Processing Technology I				3					3
Food Processing Technology Laboratory I					1				1
Food Processing Technology II					3				3
Food Processing Technology Laboratory II						1			1
Food Chemistry			3						3
Food Chemistry Laboratory					1				1
Microbiology			2						2
Microbiology Laboratory				1					1
Food Nutrition				2					2
Food Materials Introduction			2						2
Food Microbiology				2					2
Food Additives					3				3
Food Packaging and Storage				3					3
Food Unit Process					3				3
Standardisation and Legislation: Halal, Labelling, SNI						2			2
Sensory Analysis						3			3
Industrial Waste Water Treatment						2			2
Food Manufacturing Capstone Plant Design						4			4
<b>Elective Subjects*</b>									
Introduction to Biotechnology				3					3
Bioprocess Technology					2				2
Safety Management and Quality Assurance					2				2
Lipid Technology						2			2
Advances in Engineering Research I and II				2		2			4
<b>Total</b>	<b>4</b>	<b>0</b>	<b>12</b>	<b>20</b>	<b>15</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>67</b>
<b>Total 1, 2, 3</b>	<b>22</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>23</b>	<b>21</b>	<b>6</b>	<b>9</b>	<b>150</b>
<b>LANGUAGE EXTRACURRICULAR</b>									
German	2	2	2	2	2	2			12

\* courses offered may change between semesters

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