

## **Study Program:** Food Processing Technology – “From Farm to the Dining Tables”

**Description:** Food Technology is an exciting field for those who have passion and interest in food processing and food manufacturing technology. In the program, students will be guided and equipped with the knowledge and skills, starting with the basic knowledge of sciences and engineering, up to their applications, that will bring them to understand the concept of food manufacturing chains, starting from farm, to factories, to retail chains, and finally, to the dining tables of the consumers.

Through the curriculum, students will also learn topics such as food safety, food microbiology, food sensory analysis, food storage/packaging technology, food nutrition, food fermentation, food product legislation/regulations, engineering economics, as well as innovative new food products design and development.

For further enrichment, students will also gain knowledge in biotechnology, nanotechnology, Indonesian herbal medicine, nutraceuticals and cosmetics particularly using natural products, and bioprocess technology, as well as safety protocols in manufacturing including the HACCP and cGMP. These will provide our graduates with stronger competitiveness to prepare them for future work, or as a new entrepreneur in food and related industries.

**IULI 3+1 International Program in Germany:** Students at Food Technology Program also have the opportunity to gain experience of studying, doing research, and working in an internship program in Germany in our **3+1 International program**.

In the program, students will study for 3 years in Indonesia at IULI, and will spend the last 1 year in Germany. Our partner, **TU Ilmenau (Technische Universität Ilmenau)**, offer a unique and challenging experience that will open up the perspectives of our students to start their international career after graduation, or to continue with Masters and Doctorate degrees.

In this program, students will be given the chance to experience classroom study in Germany, while also doing fundamental cutting edge research supervised by experienced research team in our partner university. Finally, the internship program will give students new and exciting experience of working in Germany. This can be working in a company/industry, or in a university research laboratory. The multicultural setting faced by the students will give our graduates confidence to work in international companies.

**International Exchange Program and Double Degree (B.Sc.) Program in Germany :** During this **3+1 International Program**, our students are given the options to take the status of exchange students, or to take the Double Degree (DD) Program. In the DD program, students are required to take in total of 60 ECTS<sup>1</sup> (European Credit Transfer System) during the 1 year stay, which will allow the student to get a Bachelor Double Degree from the TU Ilmenau. The

<sup>1</sup> 1 SKS (Indonesia) = 1.4 ECTS (European)

required ECTS credits are fulfilled by completing courses, research work for thesis, and by the internship program.

**Field of Studies:** Food Processing and Manufacturing Technology • Food Chemistry • Food Microbiology • Food Nutrition • Food Storage and Packaging Technology • Food Safety • Food Sensory Analysis • Food Processing Technology laboratories • Food Regulations, Certification and Standardization • HACCP and cGMP Protocols • Food Fermentation and Bioprocess Technology • Biotechnology and Nanotechnology • Food Innovations and Products development • Herbal Medicine, Nutraceuticals and Cosmetics • Engineering Economics • Innovation and Product Development • Food Manufacturing Plant Design

## General Information:

Legal Base / Accreditation:	SK DIKTI No. 425/E/O/2014
Duration of Study:	4 years (8 semester)
Academic Year:	2 semesters (even + odd) Even Semester: February - July Odd Semester: August - January
Academic weeks/semester:	16 (14 academics + 2 exams)
SKS <sup>2</sup> per semester:	Max. 24
SKS per study:	144-160
Duration of a lecture:	50 minutes
Number of students per subject:	16-32
Language of Instruction:	English
Academic Degree:	Indonesia: Sarjana Teknik – S.T. (S1) International: Bachelor of Science (B.Sc)
Tuition Fee/semester:	Rp. 29.900.000
Online Application:	<a href="https://pmb.iuli.ac.id">https://pmb.iuli.ac.id</a>

<sup>2</sup> SKS: 1 SKS (preparation, lecture, exercises)

# Study Program Description



Academic Year 2022/2023 – Bachelor Degree Programs

## Structure of a study:

1	2	3	4	5	6	7	8
	Semester 1-6: Academic Education (see curriculum), OFSE (Oral Final Study Examination)						
	Semester 7: Research Semester (abroad for Double Degree)						
	Semester 8: Thesis Defense, Graduation						

## Score System:

Grade Letter	Grade Wording	IULI	Indonesian Grade	Germany Grade	Grade Descriptions	Student Representation
A	Excellent	86-100	4	1	Outstanding Performance	10%
B	Good	71-85	3.0-3.9	2	Performance is considerably higher than the average requirements	25%
C	Satisfactory	56-70	2.0-2.9	3	Performance meets the average requirements	30%
D	Poor	46-55	1.0-1.9	4	Performance is poor and likely to lead to failure	25%
F	Fail	<45	0	5	Performance does not meet the minimum criteria. Considerable further work is required	10%

## Contacts:



**Tina Nurkhoeriyati S.TP, M.Sc**

Head of Food Technology Study Program  
[tina.nurkhoeriyati@iuli.ac.id](mailto:tina.nurkhoeriyati@iuli.ac.id)

Version: 2021\_9 | Editor: Tina Nurkhoeriyati

DAAD



Federal Ministry of Education and Research

Coordinator

TECHNISCHE UNIVERSITÄT  
ILMENAU

PO Box 150, BSD CPA 15330  
Tel. +62 21 50588000  
+62 852 12318000  
[info@iuli.ac.id](mailto:info@iuli.ac.id); [www.iuli.ac.id](http://www.iuli.ac.id)

IULI – Eco Campus, The Breeze  
Jl. BSD Grand Boulevard  
BSD City 15345  
Island of Java

# Study Program Description



Academic Year 2022/2023 – Bachelor Degree Programs

## Curriculum: in SKS

University Compulsory Subjects			Semester								Total
			1	2	3	4	5	6	7	8	
1	English	ENGL	2	2	2	2	1	1			10
2	Computer Network & IT Security	CNIS	2								2
3	Applied Statistics	MATH		2							2
4	Research Methodology	RESM		2							2
5	Environmental Sciences	ENVI			2						2
6	Civics	CIVI				2					2
7	Ethics and Religious Philosophy	ETRP					2				2
8	Innovation & Product Development	PROD					2				2
9	E-Commerce	ECOM						2			2
10	Indonesian Language & Culture	IDLC						2			2
11	Pancasila	PANC						2			2
12	Oral Final Study Examination (OFSE)	OFSE						0			0
13	Research Semester	RESS							6		6
14	Elective : Internship / Project	INSP								3	3
15	Thesis / Thesis Defence	THES								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 Science Faculty Compulsory			Semester								Σ
			1	2	3	4	5	6	7	8	
1	Introduction to Life Sciences	INLS	1								1
2	Physics & Laboratory 1	PHY1	3								3
3	Physics & Laboratory 2	PHY2		3							3
4	Engineering Mathematics 1	MAT1	3								3
5	Engineering Mathematics 2	MAT2		3							3
6	Applied Mathematics	MAT3			3						3
7	Numerical Methods	NUME				2					2
8	Chemistry	CHEM	2								2
9	Chemistry Laboratory	CHEL		1							1
10	Organic Chemistry	ORCH		3							3
11	Organic Chemistry Laboratory	ORCL			1						1
12	Electrical Engineering & Laboratory 1	EEL1	3								3
13	Electrical Engineering & Laboratory 2	EEL2		3							3
14	Material Science	MATS	2								2
15	Biology	BIOL	3								3
16	Biochemistry	BICH			3						3

Version: 2021\_9 | Editor: Tina Nurkhoeriyati



Federal Ministry  
of Education  
and Research

Coordinator



PO Box 150, BSD CPA 15330  
Tel. +62 21 50588000  
+62 852 12318000  
info@iuli.ac.id; www.iuli.ac.id

IULI – Eco Campus, The Breeze  
Jl. BSD Grand Boulevard  
BSD City 15345  
Island of Java

# Study Program Description



Academic Year 2022/2023 – Bachelor Degree Programs

17	Algorithm, Programming 1	PRO1	3								3
18	Algorithm, Programming 2	PRO2		3							3
19	Engineering Economy	EECO					2				2
20	Metrology and Quality Control	MEQC			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>

FTE - Department Compulsory			Semester								Σ
			1	2	3	4	5	6	7	8	
1	Food Engineering	FOEN				3					3
2	Physical Chemistry	PHCH			3						3
3	Analytical Chemistry	ANCH			2						2
4	Physical and Analytical Chemistry Lab	PACL				1					1
5	Food Processing Technology 1	FPT1				3					3
6	Food Processing Technology Laboratory 1	FTL1					1				1
7	Food Processing Technology 2	FPT2					3				3
8	Food Processing Technology Laboratory 2	FTL2						1			1
9	Food Chemistry	FOCH			3						3
10	Food Chemistry Laboratory	FOCL				1					1
11	Microbiology	MIBI			3						3
12	Microbiology Laboratory	MIBL				1					1
13	Nutrition and Food Science	NFSC				2					2
14	Food Materials Introduction	FOMI		2							2
16	Food Additives	FOAD						2			2
17	Food Packaging and Storage	FOPS				3					3
18	Unit Process Design	UNPD					2				2
19	Standardization and Legislation: Halal, Labeling and SNI	SLHA					3				3
20	Sensory Analysis	SENS						3			3
21	Food Manufacturing Plant Design	FMCD						4			4
22	Electives	ELEC				3	4	3			10
<b>Department</b>			<b>0</b>	<b>2</b>	<b>11</b>	<b>17</b>	<b>13</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>56</b>
<b>Faculty</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>
<b>University</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>
<b>Total</b>			<b>24</b>	<b>24</b>	<b>24</b>	<b>23</b>	<b>20</b>	<b>20</b>	<b>6</b>	<b>9</b>	<b>150</b>

Elective Courses (*)		
	Subjects	SKS
1	Introduction to Biotechnology	3
2	Introduction to nanotechnology	2
3	Chemistry of Complex Compounds	2
4	Industrial Waste Water Treatment	2
5	Advances in Engineering Research	2
6	Quality Assurance and Management	2
7	Anatomy and Physiology	3
8	Antibiotics	2
9	Bioprocess Technology	2
10	Instrumental Analysis	2
11	Cellular Biology	2
12	Indonesian Herbal Medicine	2
13	Nutraceuticals and Cosmetics	2

\*) Elective Subjects offered may varied each academic year

Other Extracurricular Courses	
	German Language (B1/B2 level by semester 6)