

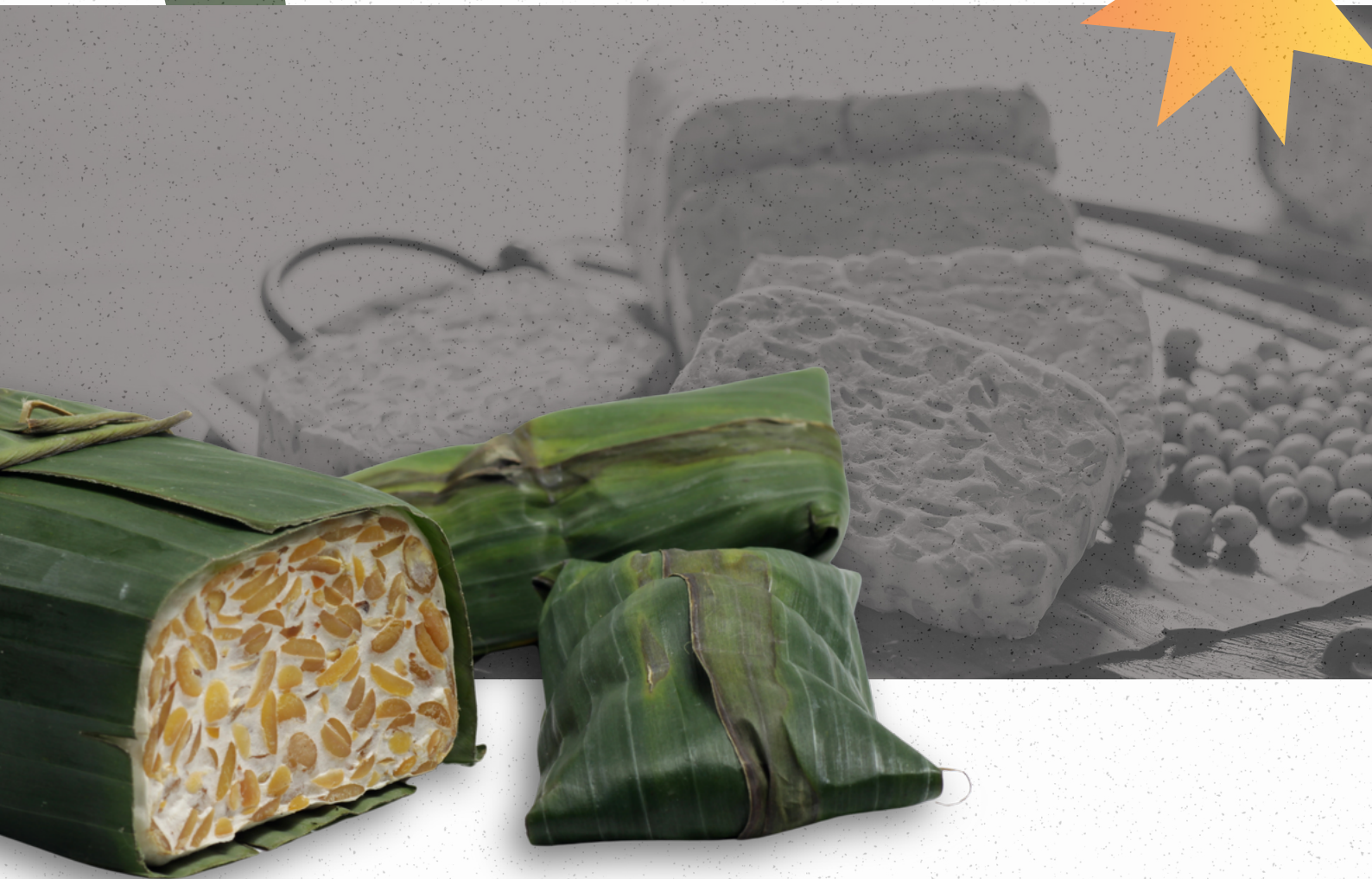
Program Guidelines

The 8th Summer Course

Tempe:

Indonesian Cultural Heritage for The World

JUNE 30 - JULY 5, 2025



DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY
IPB UNIVERSITY
2025

INTRODUCTION

Tempe is an Indonesian indigenous food made of fermented soy bound together by mycelium of *Rhizopus* mold into a compact cake. Since 2017, tempe has been acknowledged as national cultural heritage. Tempe has been part of Indonesian cuisine, reportedly originated centuries ago on the island of Java, long before the country of Indonesia is established. Tempe is a cheap source of protein, containing around 19.5% protein, compared with 17.9% for hamburgers and 21% for chicken, on average. Nowadays, with the growing interest in sustainability and vegan/vegetarian lifestyle, tempe offers a sustainable alternative to meat. Beyond its high protein, tempe is also rich in various bioactive compounds, making it a potential superfood.

Department of Food Science and Technology, IPB University actively support the promotion of tempe as world's cultural heritage through research and scientific publication as well as advocacy on international platform. This summer course program part of these efforts, aiming to promote tempe and share the know-how and knowledge about tempe with international audience.

Held annually, the summer course consistently attracts participants from diverse backgrounds and countries, including Indonesia, Thailand, Malaysia, China, Austria, and The Netherlands. This year's summer course on "Tempe: Indonesian Cultural Heritage for the World" marks the 8th edition of the program. The Summer Course will be conducted at at IPB University, Dramaga Campus, Bogor, Indonesia. While some sessions will be held in a hybrid format, all participants are required to attend in person for the practical sessions at our Laboratory at the Department of Food Science & Technology.

CREDIT EARNING

This summer course activity is equivalent to 2 credits (consisting of a combination of lectures, practical work, discussion, and presentation).

TARGET PARTICIPANTS

Expected participants in this summer course program are undergraduate and graduate students, researchers, academia, and professionals from both universities and various institutions in Indonesia, Thailand, Malaysia, Austria, as well as professionals and individuals with a general interest in the topic.



TENTATIVE PROGRAM SCHEDULE

Day	Time (GMT+7)	Activity	Place
Sunday, June 29	08.00 - 14.00	Arrival in Bogor	
Monday, June 30	08.00 - 09.00	Opening Ceremony	ITP Meeting Room (Ruang Sidang ITP)
	09.00 - 09.30	Introduction of Department of Food Science and Technology, Bogor Agricultural University	ITP Meeting Room (Ruang Sidang ITP)
	09.30 - 10.00	Introduction of program and schedule	ITP Meeting Room (Ruang Sidang ITP)
	10.00 - 11.40	Lecture 1: Tempe as Indonesian Cultural Heritage for The World (Prof. Made Astawan, IPB University)	ITP Meeting Room (Ruang Sidang ITP)
	13.00 - 14.40	Laboratory work: Explanation & Group discussion	Laboratory L2
	14.40 - 16.00	Laboratory work: Cleaning, Boiling, Dehulling, & Soaking	Laboratory L2
Tuesday, July 1	08.00 - 09.40	Lecture 2: Basic fermentation technology: Theory and applications (Prof. Dr. Lilis Nuraida, IPB University)	ITP Meeting Room (Ruang Sidang ITP)
	10.00 - 12.00	Lecture 3: Fermentation technology of tempe: Chemical and microbiological changes during tempe fermentation (Prof. Dr. Lilis Nuraida, IPB University)	ITP Meeting Room (Ruang Sidang ITP)
	12.00 - 13.00	Laboratory work: observation of soaked soybeans	Laboratory L2
	14.00 - 15.00	Industrial Speaker: Fermentation Technology & MSG Production (Wahyu Wibowo, STP Fermentation Manager PT. Sasa Inti Probolinggo)	ITP Meeting Room Hybrid
	15.00 - 17.00	Cooking session of tempe-based dishes with Chef PT. Sasa Inti	Node PAU

TENTATIVE PROGRAM SCHEDULE

Day	Time (GMT+7)	Activity	Place
Wednesday, July 2	08.00 - 09.40	Lecture 4: Tempe-based product development (Prof. Dr. Made Astawan, IPB University)	ITP Meeting Room (Ruang Sidang ITP)
	10.00 - 12.00	Laboratory work: Steaming, Inoculation, Incubation	Laboratory L2
	13.00 - 14.40		
	14.40 - 16.00	Lecture 5: Novel fermented food from non-animal sources (Prof. Dr. EJ Eddy Smid, Wageningen University & Research)	ITP Meeting Room (hybrid)
Thursday, July 3	07.00 - 10.00	Field trip to Rumah Tempe Indonesia	Rumah Tempe Indonesia
	10.00 - 16.00	Excursion: Experience Bogor	Museum Zoologi, Kebun Raya Bogor
Friday, July 4	08.00-10.00	Laboratory work: Harvesting tempe and discussion	Laboratory L2
	10.00 - 12.00	Excursion and Cultural Activity IPB	IPB Dramaga Campus
	13.00 - 14.40	Lecture 6: Developing tempe-based business abroad (Assoc. Prof. Bethania Muflih, International Islamic University Malaysia)	ITP Meeting Room (hybrid)
	14.40 - 16.00	Lecture 7: The science of cheese (Assoc. Prof. Dr. Clemens K. Peterbauer, BOKU University Austria)	ITP Meeting Room (hybrid)
Saturday, July 5	08.00 - 09.40	Lecture 8: Thai fermented food and their health benefit (Dr. Putthapong Phumsombat, King Mongkut's Institute of Technology Ladkrabang)	ITP Meeting Room (hybrid)
	10.00 - 12.00	Lecture 9: Plant based meat alternatives: sensory properties and consumers' expectation (Dr. Philipp Fuhrmann)	ITP Meeting Room (Ruang Sidang ITP)
	13.00 - 15.00	Group presentation	ITP Meeting Room (Ruang Sidang ITP)
	15.00 - finish	Closing ceremony	ITP Meeting Room (Ruang Sidang ITP)

Note:

1. All timings are in Western Indonesian Time (GMT+7).
2. The schedule may be subject to change, especially the independent practical works, depending on the circumstances.

Tempe:

Indonesian Cultural Heritage for The World

*Let's Unravel the Horizons of Tempe and
Fermented Foods Around the World*

JUNE 30 – JULY 5, 2025

📍 IPB University, Indonesia

Speakers



Prof. Made Astawan
IPB University



Prof. Lilis Nuraida
IPB University



Prof. Eko H. Purnomo
IPB University



Prof. Dr. EJ (Eddy) Smid
Wageningen University



Wahyu Wibowo, STP
PT. Sasa Inti Probolinggo



Dr. Phillipp Fuhrmann
BOKU University



Assoc. Prof. Betania Muflih
International Islamic
University Malaysia



Dr. Putthapong Phumsombat
King Mongkut's Institute of
Technology Ladkrabang



**Assoc. Prof. Dr. Clemens
K. Peterbauer**
BOKU University

Topics

- Tempe as Indonesian cultural heritage for the world
- Fermentation technology: theory & application
- Fermentation technology of tempe: chemical and microbiological changes during fermentation
- Tempe-based food products: development strategies
- Fermentation technology & MSG Production (Industrial Lecture)
- Novel fermented food from non-animal sources
- Challenges of developing tempe business abroad
- The science of cheese
- Thai fermented foods and their health benefit
- Plant-based meat alternatives: sensory properties and consumers' expectation

Benefits

Transferable course credit (2 credits),
certificate, experienced lecturers

Activities

- Lecture
- Practical work on tempe production
- Industrial visit to Rumah Tempe Indonesia
- Bogor excursion (Botanical Garden & Zoologi Museum)
- **Cooking session of Tempe based dishes with Chef from PT. Sasa Inti**

How to Apply

- Pay the registration fee (USD 150 **international participants**, IDR 500,000 for **Indonesian students**, IDR 1,000,000 for **Indonesian professionals**)
- Prepare the required documents
- Fill in the application form through the link/scan the QR code below:

<https://ipb.link/scp2025-tempe>



Contact Person