



## Project Partners

### EU universities & organizations:

- University of Natural Resources and Life Sciences (BOKU), Vienna, Austria
- Hochschule Geisenheim University (HGU), Germany
- University of Teramo (UNITE), Italy
- ISEKI-Food Association (IFA)
- European Hygienic Engineering & Design Group (EHEDG)
- European Universities Continuing Education Network (EUCEN)

### Thai universities:

- **Kasetsart University (KU)**
  - Dept. of Food Science and Technology, Faculty of Agro-Industry
  - Dept. of Biotechnology, Faculty of Agro-Industry
  - Kasetsart university Food Innovation Research and Services in Thailand (KU-FIRST)
- **Chulalongkorn University (CU)**
  - Dept. of Food Technology, Faculty of Science
  - Center of Excellence in Food Processing, Faculty of Science
- **King Mongkut's Institute of Technology Ladkrabang (KMITL)**
  - Dept. of Food Engineering, Faculty of Engineering
  - Dept. of Instrumentation and Control Engineering, Faculty of Engineering
  - EHEDG Project Thailand

### Industrial Partners:

- Habla-Chemie GmbH (HABLA)
- PATKOL Public Company Limited (PATKOL)
- Non-alcoholic and alcoholic beverage companies in Thailand

## Contact Details:

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For more information, please visit:

[www.SEA-ABT.eu](http://www.SEA-ABT.eu)

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## About the project

Under the Erasmus+ funding scheme "Capacity Building in higher education" the partners of the SEA-ABT project will increase the capacities of Thai Universities for delivering modern high quality curricula in the area of beverage technology. These will be based on new demand driven educational products, using innovative pedagogical approaches and teaching tools for different profiles. The academy will host sustainable collaboration in higher education (HE) and continuing professional development (CPD). The academy will manage training and continuous exchange of best practice between Thai partners and European partners.

## Objectives

- Enhancing the development of beverage industry in Thailand and South East Asia countries
- Improving of the Education Sector in the area of beverage technology (and beyond) in Thailand and SEA
- Increasing the capacities of Thai Universities for delivering modern high quality curricula and Life Long Learning (LLL) in the area of beverage technology
- Promoting the convergence with EU standards in higher education

## Tentative Curriculum of Graduate Diploma in Beverage Technology\*

**Degree :** Graduate Diploma in Beverage Technology & Management from Kasetsart University

### Curriculum structure

Seminar	2 credits
Required course	23 credits
Total Not less than	25 credits

**Language** Thai and English

### Admission

Applicant must have minimum degree in (a) or (b)

(a) Bachelor of Science in food science, product development, biotechnology, chemistry, microbiology, or related fields

(b) Bachelor of Engineer in food engineering, chemical engineering, environmental engineering or related fields

**Admission procedure:** Evaluation of CV and Interview

### Program overview

#### 1<sup>st</sup> Semester Modules

	Credit**
Non Alcoholic Beverage Technology	2 (2-0-4)
Target marketing & strategic pricing for beverage industry	2 (2-0-4)
Supply chain management for beverage industry	2 (2-0-4)
Beverage chemistry and microbiology	2 (2-0-4)
Food law and regulation	1 (1-0-2)
Practical LAB in beverage industry	1 (0-1-2)
Seminar	1 (1-0-0)
<b>Total</b>	<b>11</b>

#### 2<sup>nd</sup> Semester Modules

	Credit**
Alcoholic Beverage Technology	2 (2-0-4)
Planning and project management for beverage industry	2 (2-0-4)
Product and Process Development	2 (2-0-4)
Hygienic Engineering and Design	2 (2-0-4)
QC and QA	2 (3-0-4)
Special problem	3 (0-1-6)
Seminar	1 (1-0-0)
<b>Total</b>	<b>14</b>

\*In process for approval by Thailand Higher Education system

\*\*Credit (Lecture hr-Laboratory hr-Self Study hr)

### Co-operative institutes

Kasetsart University, Thailand  
 Chulalongkorn University, Thailand  
 King Mongkut's Institute of Technology Ladkrabang, Thailand  
 University of Natural Resources and Life Sciences Vienna, Austria  
 Hochschule Geisenheim, Germany  
 University, University of Teramo, Italy  
 ISEKI-Food Association, Austria  
 Habla-Chemie GmbH, Germany  
 Patkol Public Company Limited, Thailand

## Tentative Training Modules for Continuing Professional Development

### Examples of Continuing Professional Development (CPD) Modules

- Shelf-life of beverages
- Sugars in foods
- Hygienic design
- Lean business plan development
- Selected topics of food safety for less educated professionals
- Food Law & Regulations for beverage
- New Product Development (NPD)
- Innovative Technology
- Project Management
- Fruits & Vegetables Drink
- Food Safety Management for SMEs

Certificate will be given to participant who meets requirements (depending on module) of each module.



### Teaching and training facilities

- Juice Processing Facilities (extraction, separation, filtration, membrane processing, clarification, thermal processing, filling)
- Dairy processing Facilities (homogenizer, thermal processing)
- Fermenter & Distiller
- Plate Heat Exchanger: Pasteurization unit
- Vacuum evaporator
- Spray dryer / Freeze-dryer
- Beverage Quality and Flavor Analysis Laboratory
- UHT Laboratory Scale
- UHT Pilot Scale
- Canning Line & Retort Facilities
- Cleaning Test Rig
- Temperature and Pressure Process Calibration

### Partnerships : Contributions & Benefits

- Help identify the needs of the Industry
- Get involved in the development of HE and CPD training:
  - Help specify topics and learning outcomes (HE and CPD)
  - Identify topics for independent study (HE)
  - Host practical training (HE)
  - Guest lecture in specialized topics
  - (CPD and HE)
  - Provide facilities (tours/laboratory practice/demonstration)
- Improving staff's skills through the training provided by the "Joint EU-SEA Beverage Academy" in Thailand
- Networking among stakeholders in the beverage sector including both academics and industries