

## BRIEF PROFILE

### 1. Academic staff by rank (November 28, 2019)

Rank	Number	%
Professor	22	16
Associate Professor	27	19
Assistant Professor	40	29
Instructor	4	3
Unranked	47	33
<b>Total</b>	<b>140</b>	<b>100</b>

\*Academic Assistant (23)

### 2. Academic staff by qualification (November 28, 2019)

Qualification	Number	%
Doctor	104	74
Master	36	26
<b>Total</b>	<b>140</b>	<b>100</b>

### 3. Number of students (October 30, 2019)

Study Program	Bachelor	Master	Doctor	Total
Chemical Engineering	382	104	26	512
Engineering Physics	264	37	27	328
Industrial Engineering	462	-	-	462
Industrial Engineering Management	-	167	35	202
Instrumentation and Control	-	32	-	32
Logistic	-	14	-	14
Engineering Management	184	-	-	184
Food Engineering	128	-	-	128
Bioenergy Engineering and Chemurgy	107	-	-	107
First Year	534	-	-	534
Professional Engineer Education	12* (TK-2, TF-4, TI-6)	-	-	12
<b>Total</b>	<b>2.061</b>	<b>354*</b>	<b>88</b>	<b>2.515</b>

## FACILITIES

### Chemical Engineering

Research and teaching laboratories/facilities:

- Polymer and Membrane Technology
- Mineral and Inorganic Materials
- Separation and Purification Processes
- Thermofluid and Utility System
- Process Equipment
- Methodology and Process Control
- Pilot Reactor
- Analytical Instrument
- Product Engineering for Process Engineering
- Chemical and Catalysis Reaction Engineering
- Energetic Process and Electrochemical Safety
- Microbiology and Bioprocess Technology
- Chemical Engineering Education
- Process Simulation
- Vegetable Oil and Fat
- Food and Fermentation
- High Pressure
- Production Unit and Open
- Library

### Engineering Physics

Research and teaching laboratories/facilities:

- Industrial Instrumentation
- Medical Instrumentation
- Laser, Optic and Image Analysis
- Imaging and Ultrasonic Instrumentation
- Intelligent Control and Automation
- Building and Acoustics Physics
- Lighting
- Energy Management
- Material Process
- Computational Material Design
- Thermal and Environment Conditions
- Instrument System, Controls and Decision System
- New Functional Material
- Instrumentation and Metrology
- Engineering Physics A
- Engineering Physics B
- Computer Room
- Cluster Computer
- Workshop
- Multimedia Facilities
- The Gallery of Engineering Physics
- Library

### Industrial Engineering

Research and teaching laboratories/facilities:

- Industrial System Planning and Optimization
- Production Systems
- Information System and Decision
- Work System Engineering and Ergonomics
- Innovation and Corporate System Development
- Logistics
- Industrial Engineering Design
- Engineering Management
- Multimedia
- Library

## COLLABORATIONS

The Faculty of Industrial Technology collaborates with local and international universities and institutions as well as industries:

- Joint research programs
- Academic staff exchange programs
- Student exchange programs
- Joint conferences
- Industrial consultancies
- Student and academic staff internships



# FACULTY OF INDUSTRIAL TECHNOLOGY INSTITUT TEKNOLOGI BANDUNG



## Faculty of Industrial Technology Institut Teknologi Bandung

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Bandung 41032  
INDONESIA  
Phone : +62-22-250 4551  
Fax : +62-22-250 9406  
Website : [www.fti.itb.ac.id](http://www.fti.itb.ac.id)  
Email : [info@fti.itb.ac.id](mailto:info@fti.itb.ac.id)





## FACULTY OF INDUSTRIAL TECHNOLOGY

**F**aculty of Industrial Technology (FTI) was established in 1973. But, almost all degree programs under this faculty have started their academic activities before the faculty was established. After several changes, until December 2005, FTI comprised 7 departments, namely Chemical Engineering Department, Mechanical Engineering Department (offering Mechanical Engineering and Material Engineering Degree Programs), Electrical Engineering Department, Engineering Physics Department (also offerings master program in Instrumentation and Control), Industrial Engineering Department, Informatics Engineering Department, and Aeronautical Engineering Department. However, the establishment of ITB as an autonomous legal enterprise was deemed as an opportunity to establish a more effective and efficient academic management and utilization of resources.

Rector Decree No. 222/SK/K01/OT/2005 about ITB Academic Unit Management brought about the changes in the organization of academic unit. Based on that decree, the management of resources and programs was shifted from departments to Faculty/School. The Dean holds the authority to carry out the entire academic activities. Since January 2006, ITB comprised of 5 Faculties and 5 Schools based on the body of knowledge with the establishment of several new Faculties/Schools, one of which is the School of Electrical Engineering and Informatics that offers Electrical Engineering and Informatics Engineering degree programs.

The remaining programs, i.e. Chemical Engineering, Mechanical Engineering, Engineering Physics, Industrial Engineering, Aeronautics Engineering, Material Engineering, and Master Program for Instrumentation and Control, remained with FTI-ITB. In further reorganization of ITB to enhance agility and ability to swiftly respond to challenges facing the country, starting January 2008, ITB formed a new Faculty of Mechanical and Aerospace Engineering as stated by Rector Decree No. 245/SK/OT/2007. The new Faculty offers undergraduate and graduate programs in Mechanical, Aerospace and Materials Engineering. Hence, at present FTI – ITB runs undergraduate and graduate programs in Chemical Engineering, Engineering Physics, Industrial Engineering, Engineering Management, (start on 2010), as well as Master Program in Instrumentation and Control. Two new undergraduate programs have been introduced in 2015, namely Food Engineering and Bioenergy Engineering and Chemurgy. The reorganization also grouped academic staff in research groups that would serve as the spearheads in ITB's effort toward the realization of its vision and mission.

## ACADEMIC PROGRAMS

Undergraduate Programs : - Chemical Engineering  
- Engineering Physics  
- Industrial Engineering  
- Engineering Management  
- Food Engineering  
- Bioenergy Engineering and Chemurgy



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Master Programs : - Chemical Engineering  
- Engineering Physics  
- Instrumentation and Control  
- Industrial Engineering and Management  
- Logistics



Doctoral Programs : - Chemical Engineering  
- Engineering Physics  
- Industrial Engineering and Management



## VISION AND MISSION

### Vision :

Becoming a leading faculty, dignified, independent, recognized by the world in the field of industrial technology and to lead changes that can improve the welfare of the Indonesia as a nation and the world.

### Mission :

To create, share and apply science and technology in the field of industrial technology and to produce competitive human resources to make a better Indonesia and the world.

## MANAGEMENT OF FACULTY AND PROGRAMS

### Dean

Vice Dean for Academic Affairs  
Vice Dean for Resource Affairs  
Coordinator of Research, and Community Service

**Prof. Brian Yulianto, Ph.D.**

**Prof. Dr. Ir. Yogi Wibisono Budhi, IPM.**

**Prof. Ari Widyanti, Ph.D.**

**Dr. Ardiyan Harimawan**

### Website

: [www.fti.itb.ac.id](http://www.fti.itb.ac.id)

### Phone/Fax

: +62-22-2504551/+62-22-2509406

### Chairman

#### Undergraduate Program:

- |                                       |   |                                   |
|---------------------------------------|---|-----------------------------------|
| 1. Chemical Engineering               | : | Hary Devianto, Ph.D.              |
| 2. Food Engineering                   | : | Prof. Dr. M.T.A. Penia Kresnowati |
| 3. Bioenergy Engineering and Chemurgy | : | Antonius Indarto, Ph.D.           |
| 4. Engineering Physics                | : | Iwan Prasetyo, Ph.D.              |
| 5. Industrial Engineering             | : | Dr. Wisnu Aribowo                 |
| 6. Engineering Management             | : | Dr. Made Andriani                 |

#### Graduate Program:

- |  |   |                              |
|--|---|------------------------------|
| 1. Chemical Engineering                  | : | Elvi Restiawaty, Ph.D.       |
| 2. Engineering Physics                   | : | Mohammad Kemal Agusta, Ph.D. |
| 3. Instrumentation and Control           | : | Mohammad Kemal Agusta, Ph.D. |
| 4. Industrial Engineering and Management | : | Khoirul Muslim, Ph.D.        |
| 5. Logistics                             | : | Khoirul Muslim, Ph.D.        |

#### Doctoral Program:

- |  |   |                              |
|--|---|------------------------------|
| 1. Chemical Engineering                  | : | Elvi Restiawaty, Ph.D.       |
| 2. Engineering Physics                   | : | Mohammad Kemal Agusta, Ph.D. |
| 3. Industrial Engineering and Management | : | Khoirul Muslim, Ph.D.        |

### Website:

Chemical Engineering : [www.che.itb.ac.id](http://www.che.itb.ac.id)  
Phone/Fax : +62-22-2500989/+62-22-2501438

Engineering Physics : [www.tf.itb.ac.id](http://www.tf.itb.ac.id)  
Phone/Fax : +62-22-2504424/+62-22-2506281

Industrial Engineering and Management : [www.ti.itb.ac.id](http://www.ti.itb.ac.id)  
Logistics  
Phone/Fax : +62-22-2504189/+62-22-2509164

## RESEARCH GROUPS

Rector Decree No. 273/SK/I1.A/KP/2018 about Research Groups. Since November 30, 2018, Research Groups in Faculty of Industrial Technology has changed to 14 (fourteen) Research Groups.

### 1. Design and Development of Chemical Engineering Processes

Process Design and Development of Chemical Engineering focuses on the development of chemical engineering science and catalysts, separation and purification processes and computational processes.

### 2. Design and Development of Chemical Engineering Products

The group focuses on designing and developing innovative products based on local resources. Its main activities are devoted to apply scientific and engineering principles for material/substance processing using either catalyst or bio-catalyst in order to produce products e.g. Fermented food, feed, beverage, medicine, microbial enzymes, bioethanol, organic acids, degradable polymers, and other chemicals and services like on the purification water, domestic and industrial waste management.

### 3. Energy and Chemical Engineering Processing System

The group has research interest on energy such as development of bio-fuel (biodiesel, bioethanol, and biomass/coal gasification), energy efficient process, technology for conversion of energy resources, development of materials related to process and energy conversion, combustion processes, corrosion, and electrochemical conversion process.

### 4. Engineering Physics

Fields of Interest: nanoscience & nanotechnology, computational & process material, acoustics (design, measurement, modelling & computation), noise and vibration control engineering, lighting (design, measurement, modeling & computation), thermal science and engineering, industrial automation, energy conservation.

### 5. Instrumentation and Control

Fields of Interest: science and engineering on instrumentation and control, intelligent system and control, industrial instrumentation and control, ultrasonic instrumentation and non destructive evaluation, optical instrumentation, medical physics and instrumentation, and instrumentation on imaging technology.

### 6. Manufacturing Systems

Fields of interest: improving quality, productivity and efficiency of integrated systems consisting of man, machine, material, energy, and information; manufacturing system design, production planning and control, quality and reliability systems, advanced manufacturing systems, production system network and manufacturing strategy.

### 7. Industrial Management

Fields of Interest: design, manage, operate and improve management system as part of integral system of business entity and business group to achieve best performance of products or services utilizing diverse resources efficiently and effectively.

### 8. Industrial System and Techno-Economics

Fields of Interest: large scale modeling, industrial planning and optimization, logistics and supply chain system, socio-technical-economy system, industrial information technology.

### 9. Ergonomics, Engineering Work and Safety

Fields of Interest: work system engineering, methods engineering, physical ergonomics, psychophysical ergonomics, cognitive engineering, safety system and human error, organizational and social cultural ergonomics.

### 10. Chemical Reaction Technology and Catalysts

Field of study in science development chemical reaction engineering and catalyst, system development production, as well as simulation development for repair operations and performance improvements factory.

### 11. Biomassa and Food Processing Technology

Develop the science of process engineering for food and energy based on Indonesian local raw materials to produce food and feed products and components, substitute products for similar products based on petroleum, to industrial scale.

### 12. Building Physics

Fields of Interest: Built Environment; 1. Physical Aspect, 2. Non Physical Aspects: Thermal & Airflow, Lighting, Acoustics & Vibration, Energy.

### 13. Advanced Functional Material

The research topic is divided into two sub-studies : 1. Synthesis and surface engineering of nanoscale materials, 2. Multisystem computing on the surface / interface.

### 14. Information Systems and Decisions

Fields of Interest/Expertise Focus: (1) Use of IT to support integration through the development of information systems, (2) the role of IT as an important part of decision support systems.