

Introduction



History of education in pharmacy ITB began in 1947, 12 years prior to the name of ITB was coined in 1959. At that time, the Department of Pharmacy was part of the *Faculteit Wiskunde en Naturwetenschap van Universiteit van Indonesia*. In 2006, the Department of Pharmacy was transformed into School of Pharmacy (a Faculty-level entity) and the School has since been running two undergraduate study programs, namely: **Pharmaceutical Sciences and Technology** and **Clinical and Community Pharmacy**.

Structure of the 2013 Curriculum Pharmaceutical Sciences and Technology Study Program



Semester 1 [18 cr], Mathematics IB, Elementary Physics IB, Basic Chemistry IA, Introduction to Design and Engineering I, Introduction to Information Technology A, Scientific Writing in Indonesian, Introduction to Pharmacy & Health. Semester 2 [18 cr], Mathematics IIB, Elementary Physics IIB, Basic Chemistry IIA, Introduction to Design and Engineering II, Sports, English, Cell Biology and Its Application. Semester 3 [19] Basics of Pharmaceutical Analysis, Pharmaceutical Physical Chemistry, Pharmaceutical Microbiology, Principles of Drug Synthesis, Pharmaceutical Botany, Basic Pharmaceutics, Human Anatomy and Physiology I, Pancasila and Civic Education. Semester 4 [18 cr], Drug Synthesis, Environmental Pharmacy, Practicum of Organic and Physical Pharmaceutical Chemistry, Pharmacognosy, Pharmaceutical Statistics, Physical Pharmacy, Human Anatomy and Physiology II, Religion and Ethics. Semester 5 [15 cr], Pharmaceutical Biochemistry, Instrumental Pharmaceutical Analysis, Practicum of Instrumental Pharmaceutical Chemistry and Biochemistry, Pharmaceutical Technology of Liquid-Semisolid Dosage Forms, Practicum of Pharmaceutical Technology of Liquid-Semisolid, Pharmacology and Toxicology I, Immunology. Semester 6 [15 cr], Management and Entrepreneurship, Practicum of Analytical Pharmaceutical Chemistry, Pharmaceutical Biotechnology, Pharmacokinetics, Pharmacology and Toxicology II, Analytical Pharmacognosy. Semester 7 [18 cr], Final Project I, Medicinal Chemistry, Analysis of Active Compounds, Phytochemistry, Pharmaceutical Technology of Solid Dosage Forms, Pharmacology and Toxicology III, Practicum of Integrated Pharmacology, Basic Pharmacotherapy. Semester 8 [13 cr], Seminar, Final Project II, Final Comprehensive Examination, Natural Product Technology, Basic Industrial Pharmacy, Biopharmacy, Electives Courses [12 cr]: Subjects offered within* or outside the study program.

* Drug Stability, Chromatography and Electrophoresis, Radiopharmacy, Food Safety Analysis, Marine Pharmacognosy, Pharmaceutical Polymer, Plant Tissue and Cell Culture, Analytical Toxicology, Analytical Microbiology, Cosmetics Technology, Ethnopharmacology, Biomedical Products, Capita Selecta, Crystallography, Veterinary Pharmacy, Development & Validation of Analytical Methods, Biosynthesis of Drug Compounds, Pharmacogenetics

Clinical and Community Pharmacy Study Program



Semester 1 [18 cr], Mathematics IB, Elementary Physics IB, Basic Chemistry IA, Introduction to Design and Engineering I, Introduction to Information Technology A, Scientific Writing in Indonesian, Introduction to Pharmacy & Health. Semester 2 [18 cr], Mathematics IIB, Elementary Physics IIB, Basic Chemistry IIA, Introduction to Design and Engineering II, Sports, English, Cell Biology and Its Application. Semester 3 [17 cr], Pharmaceutical Analytical Chemistry, Medical Microbiology, Basic Pharmaceutics, Basic Physical Pharmacy, Human Anatomy and Physiology I, Pharmaceutical Botany, Religion and Ethics. Semester 4 [18 cr], Environmental Pharmacy, Biostatistics, Organic Chemistry of Drug, Basics of Pharmaceutical Dosage Form Technology, Epidemiology and Public Health, Pathophysiology, Human Anatomy and Physiology II, Pancasila and Civic Education. Semester 5 [13 cr], Practicum of Drug Analysis, General Pharmacognosy, Basics of Hospital Pharmacy, Pharmacology and Toxicology I, Immunology, Instrumental Pharmaceutical Analysis. Semester 6 [15 cr], Medical Biochemistry, Phytotherapy, Practicum of Medical Biochemistry and Clinical Chemistry, Clinical Chemistry, Medical Biotechnology, Management and Entrepreneurship, Pharmacology and Toxicology II. Semester 7 [17 cr], Biopharmacy - Clinical Pharmacokinetics, Analytical Toxicology and Bioanalysis, Basic Pharmacotherapy, Basic Clinical Pharmacy, Final Project I, Pharmacology and Toxicology III, Practicum of Integrated Pharmacology. Semester 8 [16 cr], Final Project II, Seminar, Final Comprehensive Examination, Pharmacotherapy, Counseling and Drug Information, Medicinal Chemistry, Psychology and Communication Electives Courses [12 cr]: Subjects offered within* or outside the study program.

* Sport Physiology, Medical Nutrition Therapy, Pharmacological and Toxicological Methods, Parasitology and Virology, Hematology, Immunotherapy, Clinical Toxicology, Pharmacoeconomics, Evaluation of Drug Efficacy and Safety

Global Recognition



Both undergraduate programs at School of Pharmacy have been recognized by the Board of Pharmacy of Malaysia since 2014 (<http://www.pharmacy.gov.my>). In 2015, the two undergraduate programs were granted accreditation from a European accreditation agency, ASIIN (Akkreditierungsagentur für Studiengänge der Ingenieurwissenschaften, der Informatik, der Naturwissenschaften und der Mathematik), which is based in Germany. All information related to ASIIN accreditation can be visited at <http://www.asiin-ev.de/pages/en/asiin-e-v/programme-accreditation.php?lang=EN>.

Academic Staff Qualification



Teaching staffs at School of Pharmacy are graduates of well-known universities from various countries in the world, such United States, England, Germany, the Netherlands, Japan and Australia. Currently the School has 11 Professors with other faculties are mostly PhD holders.

Facilities



Some laboratories at School of Pharmacy have been equipped with state-of-the-art equipments to support not only teaching and learning activities but also services. Analytical equipments commonly used in quality assessment, such as spectrophotometers and HPLC, have been installed in a number of laboratories. To model activities in pharmaceutical industries, essential equipments, including sterile production facilities and tableting machine, have also been made available. A clinical pharmacy laboratory has been an important part of teaching and learning activity in the Clinical and Community program that simulates real-life pharmacy practice in clinical setting. In the near future the School of Pharmacy is to establish a drug information center with students of final grade as the core personnel assisted by teaching staffs as well practitioners working pharmacy practice in community setting. Access to internet is freely available at all corners of School of Pharmacy, providing students and teaching staffs the ease of access to online sources and references.



Graduates Career Opportunities



As the orientation of pharmacists has expanded to patient care besides production and quality control of drugs, pharmacists are in demand in a variety of fields. Pharmacists may engage in community or ambulatory settings, such as in clinics and at hospitals. In addition, they may also have their career paths in research and product development, management, marketing, quality control, and education in universities as well as hospitals. For graduates who have more interest in pharmaceutical sciences, they may pursue advanced degrees, such as PhD, or join pharmaceutical company as research scientists.

Overseas Student Admission



Candidates are required to submit online application to the Executive Directorate of Student Admission Management (Direktorat Eksekutif Pengelolaan Penerimaan Mahasiswa).

Important Dates



The registration for new student admission is open from January to June each year. The announcement of successful candidates will be issued during the period soon after the final verdict for each candidate is made.

Prospective Candidate and Document Requirement



Candidate who is eligible to enter from first year should follow the procedure as stated on the ITB website for student admission (usm.itb.ac.id). They must have a High School certificate or equivalent, issued within the past three years.

Candidate to be accepted as transfer student must have diploma certificate with GPA of at least 3.5. The evaluation will be carried by a team at School Pharmacy.

In general, documents to be prepared by candidates are as follow:

- Copy of High School certificate or equivalent, issued within the past three years, endorsed and authorized by the authorized official of the applicant's country of origin.
- Copy of Academic Transcript of High School or equivalent, validated by the authorized official of the applicant's country of origin.
- TOEFL (international) IELTS certificate, issued within the past six months.
- Applicants must not be color blind (verified by ophthalmologist).
- Copy of birth certificate validated by the authority of the applicant's country of origin.
- Copy of valid applicant's Identity Card.
- Two, 4 X 6 cm, recent photographs.
- Copy of submission fee transfer receipt.
- An active and reachable telephone number and active e-mail address.

Further information and inquiries:



1. Queries about admission to School of Pharmacy:
School of Pharmacy, Institut Teknologi Bandung (ITB), Jl. Ganesa 10 Bandung 40132, Indonesia. Phone/Fax: +62-22-2504852, email: farmasi@fa.itb.ac.id, <http://www.fa.itb.ac.id>; contact person: Dr. Diky Mudhakhir
2. Queries about student admission in general:
Executive Directorate of Student Admission Management/Direktorat Eksekutif Pengelolaan Penerimaan Mahasiswa: Gd. CCAR ITB Lt.4, Jl. Tamansari 64 Bandung, Indonesia, Phone/Fax : +62 22 2508519; +62 22 4254016 : +62 22 2508519, www.usm.itb.ac.id



UNDERGRADUATE STUDY PROGRAMS SCHOOL OF PHARMACY *International Class*



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