



DIPONEGORO UNIVERSITY
FACULTY OF SCIENCES AND MATHEMATICS
CHEMISTRY DEPARTMENT

INTERNATIONAL CLASS PROGRAM
International Undergraduate Program (IUP)
CHEMISTRY

Address:
CHEMISTRY DEPARTMENT
Faculty of Sciences and Mathematics, Diponegoro University
Jl. Prof. H. Soedarto, S.H., Tebalang Semarang 50275
Phone (024) 7474754 Fax. (024) 764808690
Website: <http://kimia.fsm.undip.ac.id/>

INTRODUCTION

The Undergraduate Chemistry Program of the Faculty of Sciences and Mathematics of Diponegoro University was established in 1993 and holds **Accreditation A** [376] based on **Decree of Board of National Accreditation for Higher Education (BAN-PT) No. 3436/SK/BAN-PT/Akred/S/XII/2018 on December 20, 2018 and is valid until December 20, 2023.** The Undergraduate Program has a vision in 2027 to become a Center for Chemistry Research and Education and its Application. One strategy to realize this vision is to design programs that can be internationally recognized. Therefore, starting from 2018/2019 academic year, **INTERNATIONAL UNDERGRADUATE PROGRAM (IUP) OF CHEMISTRY** has been opened which accepts new students from high school/equivalent.

VISION AND MISSION

Vision:

In 2027, The Chemistry Undergraduate Program of Faculty of Sciences and Mathematics Diponegoro University become the Center for Chemistry Research and Education and its Applications focused on developing (i) Natural Materials and Biomolecules (ii) Materials and Processes, and (iii) Energy Systems and Environment, and produce graduates who have a competitive advantage in increasing human dignity.

Mission:

1. Education to produce graduates with expertise in chemistry and having entrepreneurial spirit.
2. Research on the development of chemistry and applied chemistry with interest groups: (i) Natural Materials and Biomolecules, (ii) Materials and Processes, and (iii) Energy System and Environmental.
3. Implementing the results of education and research to address the challenges of community needs focused on: (i) Empowerment and Strengthening of Chemistry-Based Home Industries, (ii) Strengthening chemistry competencies among students, and (iii) Environmental empowerment and recovery by applying Green Chemistry

CURRICULUM

The curriculum and syllabus are designed to equip Bachelor of Chemistry with a study load of at least 144 credits that can be taken in 4 years with accumulative competencies to explore and determine the chemical structure of natural materials and to design and produce new substances with high economic value or useful for health, food, industry, and environmental sustainability. During the study, the IUP Chemistry students are designed to take lectures through a one-semester sit-in program at Foreign University.

LABORATORY AND SUPPORTERS

Learning processes is carried out in English. Research is supported by the availability of adequate supporting facilities and laboratories - Basic Chemistry laboratory, Inorganic Chemistry Laboratory, Organic Chemistry Laboratory, Analytical Chemistry Laboratory, Physical Chemistry Laboratory, Biochemistry Laboratory, Instrumentation Laboratory and Integrated Laboratory of Diponegoro University.

LIBRARY

Complete lecture supporting books and primary literature sources are available in various libraries:

1. University Library,
2. Faculty Library,
3. Internet through network and hotspot facilities

Some library resources are available online, including:

- Online Journals: proquest (<http://www.proquest.com>)
- Springerlink (<http://www.springerlink.com>)
- Science direct (<http://sciencedirect.com>)
- Kubuku e-Resources (<http://kubuku.co.id/>)

STUDENT ACTIVITIES

Students can be involved in several student activity bureaus, such as VALENSI (Student Research), KSIKAMU (Religious Studies), POLYMER (Student Press), TRANSPALA

(Mountaineering Club), Chemistry Olympiad, Student Creativity Program (PKM), Delegates to Academic and Non Academic Activities at National or International levels.

ENROLEMENT

Registration : 1 July 2019 until 24 July 2019

Test : 25 July 2019

Announcement : 28 July 2019

The capacity of the IUP Chemistry of 2019/2020 Academic Year is 25 students

ALUMNI/JOB PROSPECT

As bachelor of chemistry, alumni have expertise in the concepts and principles of chemistry, have the ability to apply them to produce substances that are beneficial to life and natural sustainability, and also have entrepreneurial abilities based on expertise in chemistry. These specifications put undergraduate chemistry in fields of:

1. Research and development of Industrial products (synthesis),
2. Chemical Analysis,
3. Assurance quality of industrial products and materials,
4. Environmental conservation, etc.

Alumni currently contribute in various agencies or departments, such as the Ministry of Home Affairs, the Ministry of Research, Technology and Higher Education, the Ministry of Health, the Ministry of Industry, the Ministry of Mining and Energy, Ministry of Defense, Banking and Industry or state-owned enterprises (SOEs/BUMN) related to chemicals such as pharmaceutical industry, materials, construction, and petroleum.

For preparation and career development, students can also take advantage of Undip Career Center (<https://career.undip.ac.id>). This institution offers a variety of programs, such as internships, work training and the job market, making it easier for graduates to pursue the desired field.

ACADEMIC ATMOSPHERE



- **Sit in program: SHARE program in collaboration with the European Union (EU) and the Association of Southeast Asian Nations (ASEAN)**
- **Sit in program: University of Sabah Malaysia**
- **The Permata program in collaboration with Belmawa Dikti.**

COURSE

Total credits	: 144 credits (at least)
Number of credits for Mandatory courses	: 118 credits (82,6%)
Number of credits for elective courses	: 26 credits (17,3%)
Number of Mandatory courses	: 48 courses
Number of University Mandatory courses	: 8 courses
Number of elective courses	: ± 11 courses
Number of elective courses offered	= 39 courses (3 times the courses to be taken)

Some excellent courses to support the achievement of graduate competencies, i.e.:

- **Synthesis of Organic Chemistry**
- **Synthesis of Inorganic Chemistry**
- **Traditional Medicinal Chemistry**
- **Molecular Biotechnology**
- **Environmental Chemistry**
- **Industrial Material Analysis**
- **Elucidation of Chemical Structure**
- **Polymer chemistry**
- **Chemistry Catalyst**
- **Energy Exploration**
 - **Medical Biochemistry**
- **Food Analysis**

INFORMATION

CHEMISTRY DEPARTMENT

Faculty of Sciences and Mathematics, Diponegoro University

Jl. Prof. H. Soedarto, S.H., Tembalang Semarang 50275

Phone. (024) 7474754 Fax. (024) 764808690

Website: <http://kimia.fsm.undip.ac.id/>

Email: chemistry@live.undip.ac.id

Dwi Hudiyantri +62 852-2506-4261,

Ismiyarto +62 822-2593-0606