

# **FACULTY PROFILE**

www.cs.ui.ac.id







# Ranked #251-300 in Computer Science & Information Systems in the world



(QS World University Rankings by Subject 2023)

### Ranked #49th in Asia



(QS Asian University Rankings 2023)

# Ranked #1 Best University in Indonesia

(Times Higher Education 2023)





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### **History**

The Faculty of Computer Science of Universitas Indonesia (Fasilkom UI) is a place that challenges people with high curiosity with high spirit and imaginative mind to work in the fields of computer sciences and information system.

Fasilkom UI is one of the best educational institutions in the world in the fields of computer sciences and information system. With up to date research, innovative start-ups, high ambition, hands on learning, and smart robots, Fasilkom UI not only imagines the future but also makes it.

The history of the Faculty of Computer 1972 Science of Universitas Indonesia is inextricable from the establishment of the Computer Science Center of Universitas Indonesia (Pusilkom UI) in 1972. Before long, numerous parties were urging UI to establish an educational program in computer science; therefore, in 1986 Pusilkom UI opened an undergraduate computer science study program. Following the development and rising de-1988 mand for the establishment of a higherlevel computer science program, Pusilkom UI officially opened the Master's Degree Study Program of Computer Science in 1988. All the existing study programs were ultimately 1993 placed under Universitas Indonesia Faculty of Computer Science (Fasilkom UI), which was officially established in 1993. The Master's Degree Study Program of 1996 Information Technology (MTI) was officially opened in 1996 and the lectures were held in UI Salemba campus. At the end of the millennium, Fasilkom UI opened the first Doctoral Study Program of Computer Science in Indonesia in 1998. In response to the growing demand for 2002 computer science talents with global perspective, Fasilkom UI opened the international classes study program of computer science in 2002. 2007 As the role of computer science within organizations grows, Fasilkom UI opened a study program of Information System and a D3 extension program of Information System that runs parallel with the Diploma Program in 2007.



### **Vision**

Universitas Indonesia Faculty of Computer Science as the center of excellence in the fields of computer sciences and information technology in Indonesia has been recognized by the international scientific community as a sound organization that provides concrete contribution to the nation's competitiveness.

This vision means that Fasilkom UI is determined to be the "top referral" in the development of computer sciences and information technology in Indonesia. In other words, Fasilkom UI has to be the leading institution in the development of computer sciences and information technology in Indonesia.

This vision was adopted since historically Fasilkom UI, which was born of Pusilkom UI was the first institution in Indonesia that focuses on computer sciences. Moreover, it has ample resources that will enable it to compete at international level.

### **Mission**



#### **Education**

To produce competitive graduates who are able to compete not only in the local market but also in the global market.



#### **Research & Services**

To create, develop, and apply the knowledge and technology to increase the nation's competitiveness.



#### The Outreach Program

To be responsible morally and socially for intellectual development and dignity of the nation.

The Common Organization Culture of the institution is to build prime, smart and quality services with the motto of "Excellence in Teamwork". Therefore, Fasilkom UI designs an academic pursuit that integrates activities in Education, Research and Services and Outreach Program. All resources are dedicated to support these three aspects of academic activities.

### UNDERGRADUATE LEVEL PROGRAM cs.ui.ac.id/sik

# The Study Program of Computer Science

The Study Program of Computer Science under UI Faculty of Computer Science (Fasilkom UI) consists of the Regular and Non Reguler Programs. These programs provide an opportunity for the best senior high school graduates/graduates from equal schools to pursue an education and gain an expertise in the field of computer sciences in the undergraduate level program. The program is designed specifically to fulfill the need for skilled and professional workforce in the field of computer sciences. With more than 30 years' experience, the Undergraduate Study Program of Computer Science has been acknowledged as a capable institution in providing quality education at undergraduate level in the field of computer sciences.

The Undergraduate Study Program Computer Science offers a balanced education of strong science foundation in the field of computer sciences and the professional skills in the same field, which among others include subjects such as discreet mathematics, programming, data structures & algorithm, computer architecture, database, operating systems, computer networks, computing theory, software engineering, and the smart system. For the development of professional skills, the Undergraduate Study Program of Computer Science offers various applied courses that can be grouped into several specializations as follows:

- Artificial Intelligence
- Software Engineering
- Infrastructure & Security

#### **Graduate Profiles**

System Analyst, Software Engineer, Application Developer, DevOps Engineer, IT Security, Product Software Manager, Game Developer, Data Communication Engineer, Network Engineer, UX Researcher, UI/UX Designer, and others.

**DEGREE CONFERRED** Sarjana Ilmu Komputer (S. Kom)

**CAMPUS LOCATION UI Depok Campus** 

**COURSE SCHEDULE Morning/Working Days** 

**DURATION OF STUDY** 8 Semesters (144 credits)

LANGUAGE OF INSTRUCTIONS Indonesian

**ACCREDITATION Accredited by IABEE** 





# The Study Program of Information System

Undergraduate Study Program of The Information System consists of the Regular and Non Reguler Programs. These programs are designed to fulfill the need for skilled and professional workforce in the field of information system/information technology.

The Study Program of Information System teaches the foundation of knowledge and the application of information technology in an organization. In that regard, the curriculum of the Study Program of Information System is unique because it emphasizes the balance between management and business skills as well as information engineering and information technology. The basic courses will equip the students with the capability to design and write a program, especially directed for the development of information system in a big scale. In addition, students will also learn the components of information system/information technology, starting from the operating systems, computer networks, database, and applications. To sharpen their understanding in the fields of business and management, students will learn the concepts of management and the variety of businesses that support the activities of an organization and support that can be provided by information technology. Besides the basic courses, the study Program of Information System also offers specialized courses that are grouped as follows:

Information System/Information Technology

**DEGREE CONFERRED** Sarjana Ilmu Komputer (S. Kom)

**CAMPUS LOCATION UI Depok Campus** 

**COURSE SCHEDULE Morning/Working Days** 

**DURATION OF STUDY** 8 Semesters (144 Credits)

LANGUAGE OF INSTRUCTIONS **Indonesian** 

**ACCREDITATION** 

#### **Graduate Profiles**

Most graduates of Fasilkom UI work in the country or abroad in numerous national and multinational companies in the fields consultancy, insurance, banking, telecommunication, software and service industry and others. The positions that they occupy include among others, as a system analyst, a business analyst, an IT manager, an IT consultant, a researcher, an IT auditor, a data engineer system integrator, a web developer, a technical support, or as a network administrator.

2. E-Business 7



# in Computer Science/Information Technology (Double Degree) cs.ui.ac.id/sik-kki

Since 2002, the Faculty of Computer Science of Universitas Indonesia (Fasilkom UI) in cooperation with several partner universities is offering the International Undergraduate Program in Computer Science/Information Technology. This program prepares its students to become graduates that are capable of dealing with challenges in the globalization era, competing in the regional and international work markets, and pursuing a higher educational degree. The program is run by highly competent lecturers with experience in the fields of computer sciences and information technology from relevant institutions.

# Why choose Computer Science and Information Technology (IT)?

 Computer Science and Information Technology are ever-present in our daily lives; moreover, they are also present in every business sectors and will play an even more important role in the future.

- The demand for professional work force in computer sciences and information technology in the local, regional and international work market is on the rise.
- The fields are growing by leaps and bounds with interesting opportunities that push the limits of science and technology.
- Computer sciences and IT also support the creative and entertainment aspects in life from social networking to game design.

# Why choose this Program? The superiority of this Program:

- High quality education from prominent universities in Indonesia and abroad.
- Students of the international classes will have the opportunity to become part of this interesting Program with a proven track record, a program that will enable them to earn two Bachelor degrees: i.e. Sarjana Ilmu Komputer (S.Kom.) from UI

#### **DEGREE CONFERRED**

Sarjana Ilmu Komputer (S.Kom) and another degree from a partner university

**CAMPUS LOCATION** 

UI Depok Campus (4-5 Semesters) Australia and UK (3-4 Semesters)

COURSE SCHEDULE

Morning/Working Days

LANGUAGE OF INSTRUCTIONS **English** 

**ACCREDITATION** 

A

and Bachelor of Information Technology or Bachelor of Computer Science from a partner university. From ANU, they may earn the Bachelor of Advanced Computing (Honours). While, from the University of Birmingham, students may choose a B.Sc. of Computer Science or B.Sc. of Artificial Intelligence and Computer Science.

- The lower tuition fees compared to attending a similar full-time undergraduate program at the partner university abroad.
- All courses offered at Fasilkom UI and partner universities are delivered in English.
- All lectures are conducted in small size classes.

#### **Length of Study**

Depending on the degree offered by partner universities, the program is arranged as:

- 2.5 + 1.5 scheme, i.e., semester 1 5 at Fasilkom UI and semester 6 – 8 at a partner university (UQ\*, or Deakin & RMIT)
- 2 + 2 scheme, i.e., semester 1 4 at Fasilkom UI and semester 5 – 8 at a partner university (ANU or Univ. Birmingham)
- \*) Some majors may require a 2.5 + 2 scheme.

#### **Interest Areas**

Courses offered in this program cover areas including (but not limited to):

- Artificial Intelligence
- Systems and Architectures
- Theoretical Computer Science
- Cyber Security
- Data Science
- Scientific Computing
- Enterprise Information Systems
- Software Engineering
- User Experience Design
- Game Development
- Virtual and Augmented Reality

#### **Partner Universities**

The School of Information Technology and Electrical Engineering at the University of Queensland (UQ)



The College of Engineering & Computer Science at the Australian National University (ANU)



The School of Information Technology at Deakin University.



The School of Computer Science at University of Birmingham, the United Kingdom.



The School of Computing Technologies, Royal Melbourne Institute of Technology (RMIT) University



#### POSTGRADUATE PROGRAM

# Master of Computer Science cs.ui.ac.id/mik



The Master of Computer Science (Magister Ilmu Komputer or MIK) Study Program was opened in 1988. The program was designed to produce graduates with special skills in conducting computer science research as the continuation of a Bachelor of Computer Science Study Program. MIK puts great emphasis on integrating Master's level education and research projects. Therefore, students are expected to be actively involved in research projects conducted at the Faculty of Computer Science, Universitas Indonesia. The MIK curriculum is designed to offer all students the opportunity to both expand their knowledge about the subject matter and experience in computer science research. Courses are offered and arranged in such a way that students can easily determine their own education plan according to their own research interests.

#### **Placement Test**

After being accepted to MIK, all new students must take the Placement Test which evaluates their current skills and knowledge and to place them into one of two categories of specialization: computer science and information system.

#### Curriculum

The curriculum of our Master of Computer Science Study Program has been designed and prepared to provide great opportunities for students to both acquire more comprehensive knowledge about computer science and join research projects in areas related to information and communication technology (ICT), such as computer science, information system, software engineering, and others.

#### DEGREE CONFERRED

Master of Computer Science (Magister Ilmu Komputer or M.Kom)

CAMPUS LOCATION

UI Depok Campus

COURSE SCHEDULE

Morning-Afternoon/

Morning-Afternoon/Working Days

DURATION OF STUDY

4 Semesters

LANGUAGE OF INSTRUCTION Indonesian

ACCREDITATION

**Excellent** 

by the Independent Accreditation Agency for Informatics and Computer (LAM INFOKOM)

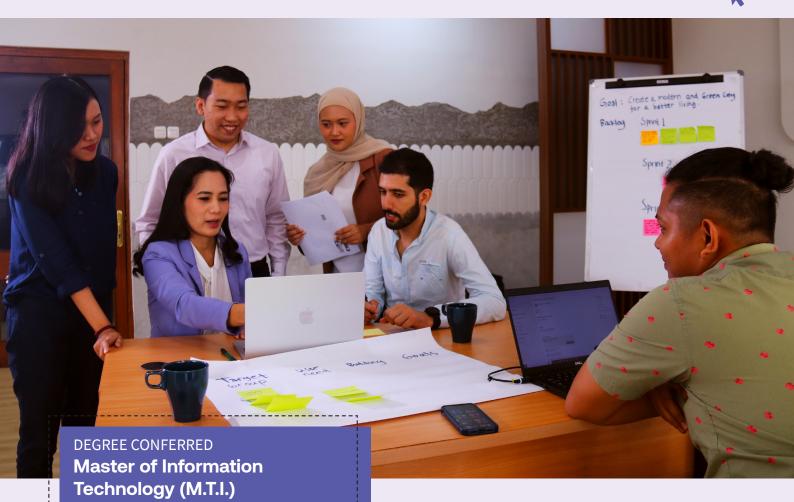
#### **Graduate Profile**

Most Fasilkom UI graduates work either in Indonesia or abroad at various national or multinational companies which run business in various areas such as information technology consultancy, banking, software industry, and other services. Many others enter government institutions or universities, or pursue a higher academic degree both in Indonesia and abroad. Apart from that, there are also graduates who embark on establishing start-up companies upon graduating.



#### POSTGRADUATE PROGRAMS

# Master of Information Technology cs.ui.ac.id/mti



CAMPUS LOCATION

UI Salemba Campus

COURSE SCHEDULE

Evening classes,

Monday to Friday

from 19:00 to 21:30 WIB

Afternoon classes: from 14:00 to 16:30 WIB Please note that afternoon classes will only open when enough students have enrolled.

DURATION OF STUDY

4 Semesters

LANGUAGE OF INSTRUCTION:

Indonesian

**ACCREDITATION:** 

A

The field of information technology (IT) has grown very rapidly over the past few decades. IT has become an essential part in the successful running of modern organizations because it greatly increases the efficiency of business operation and management. Naturally, this creates an ever-increasing need for qualified human resources for designing, managing, and maintaining the IT system. Under the management of the Faculty of Computer Sciences, Universitas Indonesia (Fasilkom UI), the Master of Information Technology Study Program (see SK DIKTI No. 2006/D/T/2005 of 24 June 2005) is designed to answer the demands of the industry and business world for professional human resources with special knowledge and skills in IT.

This study program has several characteristics, such as:

- a strong emphasis on the integration between IT application and sound knowledge about management and organizational strategies
- The development of various IT skills and features which require further research in relation to various business sectors and industry.

The Master of Information Technology (Magister Teknologi Informasi or MTI) Study Program at Fasilkom UI aims to provide its students with these following competencies and capabilities:

- 1. ITCore knowledge and skills.
- 2. Integration of IT with business operations or organizational functions, as well as career support.
- 3. Communication, interpersonal relationships, and teamwork skills within the context of business or organization.

To support its IT-based research projects, MTI is equipped with an e-government and e-business laboratory and an information management laboratory.

#### **Double-Degree Program**

Students who take this program are required to spend their first year studying at MTI Fasilkom UI and their second year at a partner university. The students will receive two academic titles, i.e. from Fasilkom UI and the partner university.

#### **University Partner:**

Melbourne School of Engineering at the University of Melbourne Title: Master of Information Systems



#### Curriculum

Our curriculum is designed to cater for various occupations within the scope of IT management (such as IT/IS planning, IT application, IT management, software development, etc.), as well as relatively new fields of occupations (such as consultancy and system integration, network infrastructure, e-business, IT governance, digital economy, etc.). We support students' career tracks by requiring them to deepen their knowledge and pursue specialized skills through the Final Project. Our study program's curriculum consists of two elements:

- ITCore: This set of courses aims to hone students' IT competency and skills. These competency-oriented courses are offered in semesters 1 and 2.
- 2. System Integration and Career Tracks: This set of courses aims to increase students' ability to synthesize all knowledge they have acquired. Students can choose to take these elective courses according to their personal interests and career plan.

#### **Specialization**

- Enterprise Software Solutions
- Strategic IT Applications
- IS/IT Governance
- Cyber Security
- Business Analytics
- Digital Economy

#### POSTGRADUATE PROGRAM

# Master of e-Government Information Technology cs.ui.ac.id/mti-egov

e-Government Master of Information Technology Study Program is a domestic scholarship program offered by the Ministry of Communication and Informatics (Kemenkominfo) in order to produce high quality government officials who are skilled at developing e-government systems in both central and regional government institutions in accordance with Presidential Instruction No. 3 of 2003 on National Policies and Strategies for e-Government Development. The goal of this program is to increase the number of human resources who can manage e-government in both central and regional government institutions. The Faculty of Computer Sciences, Universitas Indonesia has established cooperation with the Ministry of Communication and Informatics in the implementation of this scholarship program.

**Graduate Profile** 

MTI-Fasilkom UI graduates are expected to have the competency and skills in bridging the realm of IT and business or organizations. MTI graduates have an added capability of solving issues and problems related to information systems and information technology based on case studies carried out in cooperation with scholars and practitioners. Besides that, students will also acquire skills in identifying problems or providing technical solutions in a particular organization or between organizations within the context of the business world.

**DEGREE CONFERRED** 

Master of Information Technology (M.T.I.)

CAMPUS LOCATION

UI Salemba Campus

COURSE SCHEDULE **Evening/Weekdays** 

DURATION OF STUDY

4 Semesters

LANGUAGE OF INSTRUCTION **Indonesian** 

**ACCREDITATION** 

A



#### POSTGRADUATE PROGRAM

# Doctor of Computer Science cs.ui.ac.id/dik

Doctor (Dr.)

CAMPUS LOCATION **UI Depok Campus** 

COURSE SCHEDULE

Morning/Weekdays

DURATION OF STUDY **6-10 Semesters** 

LANGUAGE OF INSTRUCTION **Indonesian** 

**ACCREDITATION** 

#### **Excellent**

by the Independent Accreditation Agency for Informatics and Computer (LAM INFOKOM)

Opened in 1998, the Doctor of Computer Science (Doktor Ilmu Komputer or DIK) Study Program is designed to produce graduates who have the necessary skills to perform research on computer science as a continuation of a Master's degree in computer science. The study program focuses on

integrating postgraduate education and research projects. Students are expected to actively participate in research projects conducted at the faculty. The study program also offers a broad range of courses to students so that they can design their own education plan according to their own research interests.

Graduates of this study program are expected to acquire both knowledge and skills in computer science, which include several core competencies as follows:

- Ability to create original works or make innovations based on the most current or state of the art developments in computer or computational science.
- Ability to write scientific articles and publish them in reputable peer-reviewed international journals.
- Ability to offer recommendations for solving complex problems in computational science using intermulti and trans disciplinary approaches.
- Ability to think critically, show scientific maturity, and keep abreast of the latest developments in computational science.
- Ability to manage, lead, and develop research in computer science.



#### Curriculum

The curriculum of the Doctor of Computer Science (DIK) Study Program at Universitas Indonesia has been designed in such a way that its students may have great opportunity to acquire more comprehensive knowledge and have wide experience of conducting research in various fields related to information communication technology (ICT), such as computer science, information system, software engineering, and so on. The entire curriculum is designed to be completed in minimum 6 (six) semesters and maximum 10 (ten) semesters with a total of 50 credits.

Semeste	Course	Credits
1	Research Methodology and Scientific Research, Scientific Literature Study	4
	Philosophy: Science, Methodology, and Ethics	2
	Independent Study 1/ Advanced Specialization Course	4
2	Independent Study 2 / Advanced Specialization Course	4
	Independent Study 3 / Advanced Specialization Course	4
3	Research Proposal Examination	6
4	Research Result Examination	8
5	Scientific Article and Dissertation Pre-Defense	10
6	Dissertation Final Defense	8

#### **Specialization Courses**

At doctoral level, advanced specialization courses can be taken from courses offered in the Master of Computer Science (MIK) Study Program. Students who wish to specialize in areas which are not covered in any courses offered in the MIK Study Program may opt for Independent Study as a substitute for conventional courses. Below are advanced specialization courses in the 2020 MIK curriculum, which are divided into two areas of specialization:

- computer science
- Sistem Informasi

#### **Graduate Profile**

Graduates of this study program are expected to excel in both scientific and professional worlds with specific characteristics as follows.

- open-minded and able to keep abreast of the latest developments in the discipline and technology in general, especially those related to computer science
- able to identify and observe various problems related to computer science, as well as applying scientific approach and reasoning in order to find the solution therefor.
- able to independently improve their own knowledge and skills in computer science in order to pursue a higher academic degree.

# **Laboratories and (Research Centers**

Research at Fasilkom UI covers two main areas, namely computer science and information system. All research projects related to those two major fields are primarily conducted in seven laboratories and two research centers.



#### **Research Laboratory**

Computer Networks, Architecture & High Performance Computing (CNA-HPC)
Laboratory Head: Dr. Setiadi Yazid
Website: cnahpc.cs.ui.ac.id

This laboratory focuses on three main areas, namely computer network, computer architecture, and high-performance computing. One of the main goals of involving doctoral students in research in this laboratory is to equip them with the analytical capability in the area of computer architecture and performance and the ability to design intelligent computer systems such as robots. Some of the most current research topics covered in the CAN-HPC laboratory are

- Tele-USG and Tele-EKG
- Odor Source Localization with Swarm Robot
- Wireless Sensor Network
- Grid/High Performance Computing to support drug design process.



Machine Learning & Computer Vision (MLCV)

Laboratory Head: Prof. Dr. Aniati Murni

Arymurthy

Website: mlcv.cs.ui.ac.id

The MLCV laboratory focuses on research in the manipulation, analysis, and interpretation of data in the form of images or pictures. The laboratory applies highly varied research methods, from those which can process detailed information saved at pixel level to those which can geometrically divide an image into several regions to generate certain patterns. Some of the most current research topics covered in the MLCV laboratory are

- Feature Extraction and Selection (Color, Texture, Shape, Association Rules)
- Image Segmentation, Clustering, and Classification.
- Object Matching and Recognition.
- Content-Based Image Retrieval System (CBIR):



Digital Library & Distance Learning (DL2)
Laboratory Head: : Dr. Harry B. Santoso

Website: dl2.cs.ui.ac.id

Research activities in the DL2 laboratory mainly focus on the development of information theory and system, especially in the context of e-learning and user

experience. The laboratory also covers the areas of digital business, especially the user experience aspect of digital artifacts in business organizations. Some of the most current research topics covered in the DL2 laboratory are

- Open Education Resources (OER)
- Massive Open Online Learning (MOOC)
- User Experience Design Measurements
- Digital Business User Experience



Reliable Software Engineering (RSE) Laboratory Head: Prof. Eko K. Budiardjo Website: rse.cs.ui.ac.id

Research activities in the RSE laboratory focus on the development of safe and reliable software in terms of requirements engineering, maintainability, testability, and so on. The development of theories resulting from research conducted in this laboratory is mostly based on mathematical logic such as formal methods. Some of the most current research topics covered in the RSE laboratory are

- Software Product Line Engineering (SPLE)
- Theorem Prover
- Program Refinement
- Software Quality Assurance



Information Retrieval (IR)
Acting Laboratory Head: Dr. Indra Budi
Website: ir.cs.ui.ac.id/new

The IR laboratory seeks to explore methods and techniques used in the organization, representation, storage, and retrieval of information, both textual and multimedia (a mixture of utterance, image, and music). The IR laboratory covers numerous subareas, such as cross-language information retrieval (CLIR), geographical information retrieval, music retrieval, and image retrieval. Some of the most current research topics covered in the IR laboratory are:

- Text mining
- Computational linguistics
- Natural language processing
- Information retrieval
- Plagiarism detection



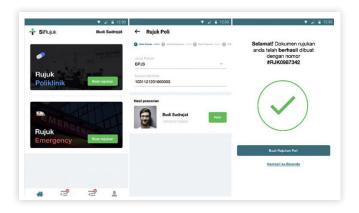
#### E-Government & E-Business (EGB) Laboratory Head:

Prof. Dana Indra Sensuse
Website: egb.cs.ui.ac.id

The EGB laboratory combines various technological skills and knowledge which are related to the development and integration of e-government and e-business. These areas include web services and applications, network architecture and security, data and

information engineering, business process modeling, and human-computer interaction. Some of the most current research topics covered in the EGB laboratory are e-Government and smart city

- Digital business
- Knowledge management
- IS/IT adoption



Information Management (IM)

Laboratory Head: Dr. Bobby A. A. Nazief

Website: im.cs.ui.ac.id

Research activities in the IM laboratory focus on a vast array of fields within information system management, which include IS/IT strategic management (such as business-IT harmonization), IT governance, and IS/IT operation management (such as IT service management). In this laboratory, researchers can also work to investigate more extensive impacts of computer on the behaviors of its main users: human beings. Some of the most current research topics covered in the EGB laboratory are

- IS in healthcare
- Business/IT alignment
- IT governance
- Sustainability and societal impact of IS/IT

## **Research Centers**



#### **Tokopedia-UI AI Center of Excellence**

Directors: Dr. Adila A. Krisnadhi &

Dr. Fariz Darari

Website: tokopedia-ai.cs.ui.ac.id

Tokopedia-UI Artificial Intelligence (AI) Center of Excellence functions not only as a research laboratory, but also as a center where researchers from various research laboratories at Fasilkom UI may establish cooperation among themselves or with external partners in order to solve real life problems using the AI approach. This research center is equipped with collaborative workspaces and NVIDIA DGX-1, the fastest AI and deep-learning computational infrastructure in Indonesia. Some of the most current research topics covered in the AI Center are

- Al in e-commerce
- Al in finance
- Al in education



Cyber Security & Cryptography Center

Chair: Dr. Setiadi Yazid
Website: security.cs.ui.ac.id

CCSC focuses on conducting research and education to solve the problem of cyber security through multidisciplinary and integrated research initiatives. CSCC is committed to developing knowledge about cyber security and supporting new advances in the area of cyber security, both at practical and policy levels. Some of the most current research topics covered in CSCC are

- blockchain-based computation information system (SITUNG)
- Threat modeling
- Secure computing
- Large systems security

### **ADMISSION**

# REQUIREMENTS **E**



#### THE REGULER UNDERGRADUATE STUDY PROGRAM

The Undergraduate Program admits enrollment from senior high school graduates or graduates from equal schools with one condition that only enrollees with diplomas issued not more than three years ago at the time of registration may apply.

#### The Admission Procedure for the Regular Program is as follows:

- Through SNBT, i.e. the Joint Selection Test for State Universities Admissions, held by a national committee through a written exam.
- Through SNBP, i.e. the selection based on evaluation of the student's report card or by an invitation.
- Through Olimpiade Sains, or the Science Olympic, wherein the selection is based on evaluation of the student's report card or invitation and the enrollee is a winner in the Science Olympic in the field of computer.

#### THE NON-REGULER UNDERGRADUATE **STUDY PROGRAM**

This is an undergraduate level program that admits senior high school graduates or graduates from equal schools without any restriction with respect to when the enrollee's diploma was issued.

#### The Admission procedures for the nonreguler program are as follows:

- Through SIMAK UI (UI Admission Test), which is a written admission test. Through SIMAK UI (UI Admission Test), i.e. the written admission test held simultaneously by UI in several major cities in Indonesia. The online registration site at https:// penerimaan.ui.ac.id.
- Through PPKB (Student's Achievement and Equal Opportunity for Learning), the selection is based on evaluation of the student's report card or by an invitation.

#### THE INTERNATIONAL CLASS **UNDERGRADUATE PROGRAM**

This program in cooperation with an overseas partner university provides an international atmosphere through the use of English as the language of instruction. The International Special Classes Program (KKI) offers a Double Degree Program, i.e. a program with a special curriculum that allows a student to pursue his/her study at Fasilkom UI and at an overseas partner university in one duration of study and earn bachelor degrees from UI and the partner university.

#### The admission to KKI Program is as follows:

- Through SIMAK UI KKI Program, i.e. UI written admission test specifically for KKI Program.
- Talent Scouting, i.e. a selection based on evaluation of the student's report card or by inviting a limited number of students from schools that are invited by UI.

#### **Registration Requirements of KKI Program:**

- Completing a senior high school or an equal program in the last five years (senior high school graduates with a focused field of study in sciences and mathematics).
- Meet English language requirement from Institutional TOEFL, certified by ETS (PBT score of 500 or iBT score of 61, or CBT score of 173) or IELTS score of 5.5.
- Passing UI Admission Test for the International Class Undergraduate Program.
- Information on registration and admission at https://admission.ui.ac.id
- Information for international students at https://international.ui.ac.id/

# ADMISSION REQUIREMENTS STUDY PROGRAM MASTER OF COMPUTER SCIENCE (MIK)

#### **Academic Requirements:**

- A Bachelor's degree certificate in computer science, informatics, computer engineering, electrical engineering, mathematics, physics, or any other computational sciences.
- 2. A GPA of not less than 3.00 on a 4.00 scale.
- Passed the university selection test which includes an Academic Potential Test and English proficiency test.

# MASTER OF COMPUTER SCIENCE (MIK) DOUBLE-DEGREE PROGRAM

This program is offered with the following scheme: in the first year, the students are required to study at Universitas Indonesia, while, in the second year, they are required to study at a partner university abroad. The students will earn two academic titles, i.e. from Fasilkom UI and from the partner university.

#### Application Procedures for the Double-Degree Program

Aspiring students may submit their application online through SIMAK UI (Seleksi Masuk UI, i.e. Ul's system of selecting new students) and select the Master's study program offered by Fasilkom UI which they wish to enroll in (i.e. MIK). More detailed guidelines on application and the new student enrolment schedule can be found on Ul's application portal. The selection process consists of several phases including administrative selection based on students' documents, Academic Potential Test, and English proficiency test. After passing the selection process and being accepted, new Master's students may consult the Head of the Study Program about their plans to take a Master's Double-Degree Program at a particular partner university. Upon the Head's approval, the students can then apply to the partner university online according to the guidelines and information provided on the partner university's website. Different partner universities may require a different minimum GPA and English proficiency score.

#### MASTER OF INFORMATION TECH-NOLOGY PROGRAM (MTI)

#### **Academic Requirements:**

- A Bachelor's degree in any one of these areas of study: computer science, informatics, information system, computer engineering, electrical engineering, mathematics, physics, or any other areas of study with sufficient work experience in the area of information technology.
- 2. A GPA of not less than 3.00 on a 4.00 scale
- 3. Aspiring students with non-IT educational background may also apply by showing evidence of a minimum of 2 years of IT-related work experience. Such evidence can be in the form of work experience certificate letters and recommendation letters from a direct superior which must be uploaded along with their academic certificate on the "unggah dokumen" ("upload document") menu at https://penerimaan.ui.ac.id/.
- Passed the SIMAK UI selection test which includes an Academic Potential Test and English proficiency test.

#### MASTER OF INFORMATION TECHNO-LOGY DOUBLE-DEGREE PROGRAM

#### **Academic requirements:**

- 1. Aspiring students may submit their applications online through SIMAK UI (Seleksi Masuk UI, i.e. UI's system of selecting new students) at https:// penerimaan.ui.ac.id and select the Master's study program offered Fasilkom UI which they wish to enroll in (i.e. MTI). More detailed guidelines on application and new student enrolment schedule can be found on Ul's application portal. The selection process consists of several phases including administrative selection, Academic Potential Test, and English proficiency test.
- 2. After passing the selection process and being accepted, new Master's students may consult the Head of the Study Program about their plansto take a Master's Double-Degree Program at a particular partner university. Upon the Head's approval, the students can then apply to the partner university online according to

the guidelines and information provided on the partner university's website. The selection process consists of an administrative selection and selection based on TOEFL/IELTS scores.

#### MASTER OF INFORMATION TECHNO-LOGY STUDY PROGRAM (e-Government)

Faculty of Computer Sciences, Universitas Indonesia in cooperation with with the Ministry of Communication and Informatics (Kemenkominfo) is implementing Domestic Scholarship Program of Kemenkominfo.

#### **Admission Requirements:**

- Civil Servant at a central or regional government institution.
- Civil Servant NOT working in an institution in the education sector.
- Maximum 37 years old when applying.
- Maximum 42 years old for Civil Servants working in "3T" (frontier, outermost, and underdeveloped) regions, when applying. The list of the "3T" regions can be seen in the Letter of the Directorate of Special Zones and Underdeveloped Regions, Ministry of National Development Planning (PPN)/National Development Planning Agency (BAPPENAS) Number 2421/Dt.7.2/04/2015 of 21 April 2015
- Status of active Civil Servant and Indonesian National Army/Police with a minimum of two years work experience after becoming a Civil Servant.;
- Permission or recommendation to pursue education from an authorized official (minimum the head of an Echelon II level institution) at the relevant institution.;
- Not having any Master's titles and currently not taking any Master's program at/from another institution.
- Graduated with a GPA of not less than 3.00.
- Fulfilling other requirements as determined by the chosen university.
- addition to that, this scholarship program is also open to the general public, especially young professionals who wish to pursue a higher education.

# Admission Requirements for the General Public:

- Indonesian citizen.
- Maximum 33 years old when applying
- Work experience in IT-related sectors or is a local start-up founder.
- Not working in an institution belonging to the education sector.
- A minimum of two years of work experience in IT-related sectors.
- Permission from an authorized official to pursue education.
- Recommendation letters from a superior, lecturer, or other credible individual
- Not having any Master's titles and currently not taking any Master's program at another institution.
- Graduated with a GPA of not less than 3.00.
- Fulfilling other requirements as determined by the chosen university.

This scholarship program uses a ost-sharing scheme, with two different parties having their own share of responsibility:

- 1. The Ministry's Agency for Human Resources Research and Development will pay for the tuition fee as determined by each university for the entire standard period of study. The Agency will also grant an operational assistance of IDR 1,500,000 (one million and five hundred thousand rupiah) per month to each scholarship recipient.
- 2. The work unit will pay for other expenses which are allowed in accordance with prevailing regulations during the study period.

#### **Admission Procedures:**

- Aspiring students may submit their applications online through SIMAK UI (Seleksi Masuk UI, i.e. UI's system of selecting new students) at <a href="https://penerimaan.ui.ac.id">https://penerimaan.ui.ac.id</a>. More detailed guidelines on application can be found on UI's application portal.
- After passing the selection process and being accepted, scholarship recipient candidates will undergo a further selection process at Kemenkominfo based on (1) their academic achievements or track records and (2) the validity and completeness of their admission documents.
- Civil Servants can directly submit their applications for Kemenkominfo's internal scholarship program.
- Applicants selected as recipients of the Kemenkominfo scholarship will receive a Decision Letter from the Head of Kemenkominfo's Agency for Human Resources Research and Development after which they must sign an agreement on a stamp duty.
- The application forms and all required documents should be sent to the email address of MTI Secretariat at sekreakademikmti@cs.ui.ac.id.

## DOCTOR OF COMPUTER SCIENCE (DIK) STUDY PROGRAM

# Admission requirements for aspiring DIK students:

- Approved by a dissertation advisor.
- Passed the university's written admission test which includes the Academic Potential Test (TPA) and English proficiency test.
- Passed an "expertise test" or ujian bidang (a written test about the candidate's field of expertise) and an interview at faculty level.
- The proposed research topic should be in line with projects and activities conducted at Fasilkom Ul's research laboratories.
- A sound track record in research and an academic background leaning towards research endeavors.
- Commitment to fulfilling all necessary financial requirements and completing the program within a reasonable timeframe.

# Academic Requirements Below are the requirements that must be fulfilled by aspiring students who wish to apply to the DIK Study Program.

- Holding a Master's degree certificate in the same area of study (computer science or informatics, information system, computer engineering) or related to the proposed research topic, with a minimum GPA of 3.00 on a 4.00 scale. Applicants from a different area of study are required to take a one- to two-year matriculation program determined by the selection committee based on the interview results.
- 2. A candidate student should have a written statement of willingness to become a dissertation advisor from a full-time lecturer at Fasilkom UI with a doctoral degree (template attached). To issue this statement, the said lecturer may require the candidate student to submit an individual assignment in order to examine his/her research potential and confirm the validity

or quality of his/her academic credentials, such as summarizing academic papers or presenting a particular topic. Therefore, a candidate student needs to contact a potential advisor at a reasonable time before the registration deadline. The list of lecturers who can serve as an advisor to a DIK student can be seen on the Teaching Staff page on this site.

#### **Administrative Requirements**

Applicants must follow the procedures of UI's online registration system as can be found at <a href="https://penerimaan.ui.ac.id">https://penerimaan.ui.ac.id</a> and upload the scanned version of all of the following documents at the same website.

- Valid Bachelor's and Master's degree certificates.
- 2. Valid Bachelor's and Master's academic transcript.

Besides that, applicants should also have submitted additional documents before the "expertise test" (ujian bidang) in two forms: (1) the hardcopies are sent to Sekretariat Akademik, Lt. 2, Gedung B, Kampus Depok, Fasilkom UI, while (2) the softcopies are sent online to sekreakademik@cs.ui.ac.id. Below are those hardcopy documents required.

- An authenticated copy of Bachelor's and Master's degree certificates.
- 2. An authenticated copy of Bachelor's and Master's academic transcripts.
- 3. A research statement (2 to 3 pages) which specifies the applicant's research interests and motivation
- 4. Recommendation letters from two (2) former student advisors or superiors which attest to the applicant's academic prowess.
- 5. A permission letter from a superior, if the applicant is currently working at an institution.
- 6. A complete CV which shows the applicant's track record, especially those related to research (template attached).)

- 7. A statement of ability to pay the tuition fee or a scholarship statement if the applicant is receiving a scholarship from an institution.
- 8. A statement of willingness to become an advisor from one of the lecturers at the Faculty of Computer Science with a doctoral degree (template attached).
- 9. A doctoral research proposal.

## **SCHOLARSHIPS**



#### **University Scholarship**

Universitas Indonesia's scholarship is provided under the Fair Tuition Fee (BOP-B) scheme, i.e. in the form of a reduced tuition fee (BOP) and admission fee (UP). Students may apply for BOP-B before the start of the administration registration at the university in accordance with the admission selection. The financial status of a student applying for BOP-B will be assessed based on their parents' income, the number of dependence, assets owned and recommendation from the RT/RW Neighborhood Association/Citizen Association.



"I am very grateful for BOP-B Scholarship because I can choose the amount of the tuition fee that matches with my family's financial condition, so that I do not have to think about my

education cost and can focus on my study on campus."

(Astrid Diany Alwardy, the grantee of the University Scholarship, 2019)

#### **POMDA Scholarship**

In addition to university and external sponsor scholarships, the students also have the opportunities to obtain scholarship from the Association of Parents, Students, Lecturers and Alumni (POMDA), which is an official institution at Fasilkom UI that serves as a forum that unite the parents, students, lecturers and alumni in the mission to support the realization of a healthy, fair and quality teaching and learning process. In brief, POMDA provides assistance to students in need by providing tuition fee, stipend (living cost) and others.

"More often than not, we will have unexpected expenditures. However, through POMDA scholarships, the students will get help to cover their



expenses. Moreover, there is also a foster parents program, so even though the students are far from their hometowns, the foster parents will help the student to feel the presence of a parent."

(Yobelio Ekaharja Putra, the grantee of POMDA Scholarship, 2018)

#### **Sponsored Scholarship**

Regular Undergraduate students also have the opportunities to obtain scholarships from external sources such as the government, banks, or private companies. The nature and duration of these scholarships vary. Some scholarships provide a monthly stipend for a year, while others may provide monthly stipend plus tuition fee until the student graduates. Each year around 250 Fasilkom UI Regular Undergraduate students from all classes obtained scholarships from various sponsors.

"I am quite grateful for receiving Bidikmisi scholarship since it helps alleviating the economic burden of my family, from the tuition fee and the monthly stipend; additionally, each year Bidikmisi organizes educational and training events such as seminars that broaden my skills and knowledge."

(Novia Ramadani, the grantee of Bidikmisi Scholarship, 2018)



#### Pusilkom (Pusat Ilmu Komputer -**Computer Science Center)**

**Website:** https://www.pusilkom.ui.ac.id)

Pusilkom UI Universitas Indonesia's Computer Science Center (Pusilkom UI) was established in 1972. Initially it was intended to develop the competence of Ul's academic community in computer sciences. Since its establishment, the Pusilkom UI has participated in developing computer sciences in the academic world, government, as well as in the business/ industry world.

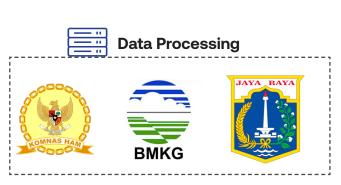


#### Services Offered by Pusilkom UI

Pusilkom UI is an academic business unit that is supported wholly by Fasilkom UI's academic community and as such, its competence in computer sciences is beyond doubt. Pusilkom UI engages and offers services in information technology to clients ranging from businesses, industry and government institution in Indonesia. The services include trainings, consultancy, data processing, IS development and research.















**IS Development** 











**BANK INDONESIA** 













# **ALUMNI** TESTIMONY (#



#### **Education**



Being surrounded by world class academics, many oppurtunities were open for me that I believe elsewhere.

Dr. Hanna Kurniawati, **Associate Professor The Australian National University** (S.Kom '98)

#### Industry



"Fasilkom UI has taught me to have a critical thinking, which is crucial in my work and enabled me to contribute to the industry, specifically in the highly competitive media technology. The course material is always up to date and it pushes me to keep up when pursuing any knowledge."

Amir Karimuddin, Head of **Editorial and Research at** DailySocial.id (S.Kom'03)





"Fasilkom UI is an unforgettable part of my life. It is like a second home and it makes me a better person day by day."

Co-founder & CEO iGrow | co-founder Badr Interactive | 500 Startups B16 (S.Kom'07)



"There are many valuable skills I learned in Fasilkom UI. One of them is problemsolving skills, which has been useful in my career for the last 10 years as an IT consultant and make my dream come true to have a career at international level." Lucia Roly Prihandini, **Senior Functional** 

**Consultant Prometheus** 

Group (S.Kom'06)

"I sincerely believe that going to college was like character building, it built my mental acuity, and Fasilkom UI is a very good place for me, it gave a good character.".

**Natali Ardianto** Co-founder & CEO of Lifepack.id & Jovee.id (S.Kom'99 & M.T.I'04)



"The International Class of Fasilkom UI offers two degrees (double degree) and two cultures that support the learning process and when entering the working world. My experience when studying abroad, I have an excellent learning facilities with 24 hours online library service with ample resources for my research paper."

Adhiatma Nugrahanto, **Partner Enablement** Manager at AWS Indonesia (S.Kom/B. Inf.Tech '07)

#### Government



"Many lessons can be learned from the inspiring lecturers, the hospitality of the staff, the attention from the seniors and alumni not to mention the warm and friendly environment. This is why I consider Fasilkom UI as my second home at that time."

Franova Herdiyanto, the Head of the Information and **Publication of Dikti Database Sub-Division, Pusdatin** Iptek Dikti, Kemenristekdikti (the Ministry of Research, Technology, & Higher Education), S.Kom '04)



## Contact



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