

# International Undergraduate Program

Departemen Teknik Informatika  
Fakultas Teknologi Elektronika dan Informatika Cerdas  
Institut Teknologi Sepuluh Nopember  
Surabaya



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# What's inside

## International Undergraduate Program



The Department of Informatics ITS (DIF ITS) was founded in 1985. under the Faculty of Industrial Engineering. In 2006. DIF ITS achieved 'A' accreditation from Badan Akreditasi Nasional Perguruan Tinggi (BAN-PT) from the Directorate of Higher Education Indonesia. The DIF ITS received several grants to strengthen our academic competence. such as PHK A3 from the Directorate of Higher Education Indonesia (year 2007).

JICA Predict from Japan (year 2009). International ASIIN Accreditation grant and PKKM grant for the Freedom of Study from the Ministry of Education and Culture Indonesia (year 2020 and 2021 respectively). The DIF graduates' competences are in-in software programming network

Lecturers (professor, doctoral, and master). advanced laboratories and workshops. smart classrooms. a reading room., prayer room, multipurpose hall cafeteria. and sports facilities.

## Curriculum

# 2023–2028

### 1st year

#### Semester 1

Courses	sks
Calculus 1	3
Fundamental Programming	4
Digital System	3
Linear Algebra	3
Database System	4

### 2nd year

#### Semester 3

Courses	sks
Web Programming	3
Object Oriented Programming	3
Computer Network	4
Graph Theory	3
Discrete Mathematics	3
Artificial Intelligence Concepts	3
Software Development Principles	2

#### Semester 2

Courses	sks
Data Structure	4
Operating System	4
Computer Organization	3
Numerical Computation	3
Calculus 2	3
Introduction to Intelligent Electrical and Informatics Technology	2

#### Semester 4

Courses	sks
Network Programming	3
Probabilistic and Statistic	3
Automata	2
Database Management	3
Design and Analysis Algorithms	3
Machine Learning	3
Software Design	3

**3rd year****Semester 5**

Courses	sks
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Software Design	3
Information Security	3
Modeling and Simulation	3
Computer Graphics	3
Knowledge based Engineering	3
Elective 1	3
Elective 2	3

**Semester 6**

Courses	sks
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English	2
Technopreneurship	2
Religion	2
Citizenship	2
Mobile Programming	3
Human and Machine Interaction	3
Elective 3	3
On Job Training	4

**4th year****Semester 7**

Courses	sks
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Indonesian	2
Pancasila	2
Technology Application and Digital Transformation	3
Professional Ethics	2
Undergraduate Pre-Thesis	2
Elective 4	3
Elective 5	3
Enrichment Course	3

**Semester 8**

Courses	sks
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Undergraduate Thesis	5
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# Specializations and Careers

During their education, students of Informatics can choose one of the eight specializations provided. Specializations is highly related to the elective course and the topic of final project.

Algorithm and programming

Computer Network Architecture

Applied computing and Modelling

Graphics, Interactions, and Game

Net Centric Computing

Intelligent Computing and Vision

Intelligent Information Management

Software Engineering

## Careers options

Software Engineer/Developer

System Developer

Web Engineer/Developer

Database Specialist

IT Consultant

IT Trainer

Game Engineer/Developer

Mobile Apps Developer

Security Specialist

Computer Network Specialist

Data Analyst

Software Project Manager

# International Exposure Activities



## JOINT DEGREE/ DOUBLE DEGREE

*Taking two degrees at ITS and overseas partner universities*



## STUDENT EXCHANGE

*Conduct lectures at overseas partner universities with credit transfers for one/two semesters.*



## FINAL PROJECT

*Working one Final Project at an overseas partner university with a joint supervisor.*



## SHORT PROGRAM

*Student exchange activities to universities in overseas in a short period of time (5 – 21 days).*



## INTERNSHIP

*Working projects in multinational companies or in overseas partner university laboratories.*



## our **DOUBLE DEGREE** partners

### Curtin University



*Model Program Double Degree 2+2*  
Mahasiswa melaksanakan program DD dengan 2 tahun di Institut Teknologi Sepuluh Nopember dan 2 tahun di CURTIN UNIVERSITY.

*Persyaratan Khusus: IPK minimal 3.00*  
IBT TOEFL minimal 80 atau IELTS minimal 6.0

*Rincian Biaya: Tuition Fee (SPP): AUDS 25,040/tahun*  
*Living Cost: AUDS 18,000/tahun*

### The University of Queensland



*Model Program Double Degree: 2.5 + 1.5*  
Mahasiswa melaksanakan program DD dengan 2.5 tahun di Institut Teknologi Sepuluh Nopember dan 1.5 tahun di The University of Queensland

*Persyaratan Khusus: IPK minimal 3.00*  
IBT TOEFL minimal 80 atau IELTS minimal 6.0

*Rincian Biaya: Tuition Fee (SPP): AUDS 25,040/tahun*  
*Living Cost: AUDS 18,000/tahun*

### Univrsity Teknologi Petronas



*Model Program Double Degree: 2 + 2.3*  
Mahasiswa melaksanakan program DD dengan 2.5 tahun di Institut Teknologi Sepuluh Nopember dan 2.3 tahun di UNIVERSITY TEKNOLOGI PETRONAS

*Persyaratan Khusus: Transkrip harus sesuai*

*Rincian Biaya: Tuition Fee (SPP): 158.000.000/tahun (all in)*  
*Living Cost: 3.000.000/bulan*

### Fontys University



*Model Program Double Degree: 3+1*  
Mahasiswa melaksanakan program DD dengan 3 tahun di Institut Teknologi Sepuluh Nopember dan 1 tahun di Fontys University

*Persyaratan Khusus: IPK minimal 3.00*

*Rincian Biaya: Tuition Fee (SPP): €1.850/tahun (all in)*  
*Living cost €10.000/tahun*

## Asia University



## Tomsk State University



**Model Program Double Degree: 2+2**  
Mahasiswa melaksanakan program DD dengan 2 tahun di Institut Teknologi Sepuluh Nopember dan 2 tahun ASIA UNIVERSITY

**Persyaratan Khusus:** Visa student full degree

**Rincian Biaya:** Tuition Fee (SPP): Rp. 28.000.000/tahun  
Living Cost: 5.000.000/bulan

**Model Program Double Degree: 2+2**  
Mahasiswa melaksanakan program DD dengan 2 tahun di Institut Teknologi Sepuluh Nopember dan 2 tahun TOMSK STATE UNIVERSITY

**Persyaratan Khusus:** Minimal 15 mahasiswa yang mengikuti DD/batch

**Rincian Biaya:** Tuition Fee (SPP): Rp. 75.000.000/tahun  
Living Cost: 3.000.000/bulan

## our **SHORT PROGRAM**

*In cooperation ITS and Universiti Sains Malaysia (USM) rank 143 worldwide*



last for one month  
(4 weeks) in July



transferrable to  
6-8 credits at ITS, 6  
credits are the  
core competence



tuition fee is USD 1300 for  
fewer than ten students, or  
less than USD 1300 if more  
students are participating  
including dormitory around  
USM



Registration  
Starts January  
Ends March



## our **Company Internship**

*In cooperation ITS and Universiti Sains Malaysia (USM) rank 143 worldwide*



*last for one semester  
(16 weeks-26 weeks)  
students are given  
real case studies at  
the companies*



*Starts March or  
September for  
4-6 months Program fee  
± 5500 MYR (± 19 million  
rupiahs)*



*transferrable to 20sh  
credit at ITS. under the  
student exchange visa /  
working visa. Students are  
paid 1000RM (in company)  
or 500 RM (in USM)*



*companies are to  
teach students at USM  
mixed with  
face-to-face class  
meetings. Registration:  
Starts January Ends  
March*

## our **Laboratorium Internship**

*In cooperation ITS and Universiti Teknologi Petronas*



*Embark a journey  
minimum of 8 weeks  
or more in UTP  
research centres*



*Experience a global  
researchbased  
internship with leading  
and prominent  
researchers.*



*Supervised and led by  
prominent researchers  
and work in any of the  
cutting-edge research  
areas available at UTP.*



*Have access to  
excellent research  
facilities (i.e.  
laboratories,  
equipment, software,  
etc.)*



# Students Exchange Partners

1. Cardive University, UK
2. Thessaloniki, Greece
3. naka No Mado, Sasayama, Japan
4. Kanagawa Institut of Technology
5. Dankook University
6. Fontys University
7. Kumamoto University
8. Ajoo University
9. Codebrick, South Korea
10. Hiroshima
11. Shibaura Institut of Technology, Tokyo
12. Chulalongkorn University, Thailand
13. NTUST, Taiwan
14. Asia University Taichung College of Information and Electrical Engineering
15. Hanze University
16. Okanagan College
17. Asia University
18. Istanbul Aydin University
19. NTU. NUS Lasalle
20. University Malaya
21. University of Fukui
22. University of Applied Science in Nysa
23. National Chung Cheng University
24. Chung Ang Uni
25. Memorial University of Newfoundland
26. University of Granada
27. University of Pisa
28. Amari Pattaya, Chonburi
30. National Taiwan University of Science and Technology
31. University Teknologi Malaysia

## DIF's Galleries





# Raise Your **Dream** with Us



TEKNIK  
INFORMATIKA

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## Contact Person

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