





PROSPECTUS

Informatics Program
Undergraduate & Postgraduate

Faculty of Industrial Technology Universitas Ahmad Dahlan

WELCOME TO INFORMATICS



OF FACULTY OF INDUSTRIAL TECHNOLOGY UNIVERSITAS AHMAD DAHLAN



Drs. Abdul Fadlil, M.T., Ph.D.

Head of Informatics Postgraduate Program

Dr. Murinto, S.Si., M.Kom.

Head of Informatics Undergraduate Program

The Faculty of Industrial Technology was established on December 18, 1994 to manage 2 study programs, namely; Informatics Study Program and Industrial Engineering Study Program. However, now the Faculty of Technology already has 5 undergraduate study programs (Chemical Engineering, Electrical Engineering and Food Technology) and has 2 Masters study programs, namely the Masters of Informatics in 2017 and the Masters of Chemical Engineering in 2020. In its current journey, the Informatics Study Program has successfully become one of the leading study programs at FTI because it has advantages including; the only study program that has: an international class program since 2017, has a Joint degree program that has been registered with the 2017 Ministry of Research, Technology and Higher Education and has accreditation with an A predicate in 2018. The student body of Informatics study programs currently numbers 1,727 students with an average number of students new students every year as many as 430 new students.

As a faculty that has a global vision, it's obvious that the Informatics study program also supports the vision and mission of the faculty. Collaborations that have been implemented from both national and international MoUs have been successfully carried out for collaboration in the fields of education, research and community service with partners from various industrial agencies and government agencies. The implementation of cooperation that has been realized includes Karabuk University-Turkey, National University of Malaysia, Guangxi University-China, University of Pahang Malaysia, Universiti Teknologi Malaysia, Hohai University, China and Universiti Petronas Malaysia, Technology Institute of the Philippines and others.

Faculty of Industrial Technology

2- Prospectus Informatics of Universitas Ahmad Dahlan



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INFORMATICS UNDERGRADUATE PROGRAM

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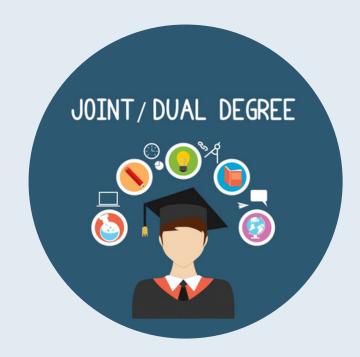


CHOOSE INFORMATICS UNIVERSITAS AHMAD DAHLAN?











Accredited Institution A

Accredited Program A

International Class Informatics

Joint Degree

Students Exchange

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ABOUT INFORMATICS UNDERGRADUATE PROGRAM

VISION

"To become an excellent and innovative study program in software engineering and intelligent systems field imbued with Islamic values"

THE PROFILE OF UNDERGRADUATE PROGRAM OUTCOMES

- 1.UAD Informatics graduates are successful in their careers and become professionals in their fields with intellectual character and integrity
- 2. UAD Informatics graduates are able to compete internationally according to their profession
- 3.UAD Informatics graduates are able to behave according to Islamic values

OBJECTIVES

Undergraduate Informatics Study Program aims to materialize:

- 1. Appreciation and practice of Al Islam and Kemuhammadiyahan values for all academics and teaching staff.
- 2. Mastery of science and technology based on Software Engineering and intelligent systems that benefit society.
- 3. Useful strategic partnerships in education, research, and community service with local, national and international partners.
- 4. Study program that is credible, transparent, accountable, responsible and fair.
- 5. Professionalism as a lecturer through an active role in organizations and society

The Faculty of Industrial Technology has implemented an Outcome Base Education (OBE) based curriculum for all study programs. UADInformatics Undergraduate Program has implemented the OBE Curriculum since 2021. This curriculum fully implements "Merdeka Belajar Kampus Merdeka" policy (Free Campus Independent Learning policy) in accordance with the Regulation of the Minister of Education and Culture (Permendikbud) Number 3 of 2020. Students can take a number of courses outside the study program, both at UAD or even at other universities, domestically and abroad.

The OBE curriculum is implemented by integrating the OBE and IQF curricula that have been established by the Association of Informatics and Computer Colleges.

UAD Informatics Undergraduate Program curriculum is designed to be taken by students in 8 semesters or 4 years. However, students with good academic achievement can complete it in 7 semesters or 3.5 years. This has been proven by more than 16 students being able to complete their studies in less than 4 years by following the recommendations in the curriculum.



SEMESTER I

No	Course Code	Course Name	Credits
1.	211810230	Basic Programming	3 4
2.	211810331	Basic Computer Systems	3
3.	211810431	Informatics Calculus	3
4.	211810531	Informatics Logic	3
5.	211810630	Data Manajement and	3
		Information	
6.	211810811	Basic Programming Practice	
		Total	16

SEMESTER II

No	Course Code	Course Name	Credits
1.	211820230	Programming Algorithm	3
2.	211820320	Matrix Linear Algebra	2 6
3.	211820430	Computer Architecture	31/2
4.	211820520	Indonesia Language	2
5.	211820631	Discrete Mathematics	3
6.	211820731	Web Programming	53/1
-7. .	211820911	Web Programming Practice	1,5
		Total	17

SEMESTER III

No	Course Code	Course Name	Credits
1.	211830341	Data Base	4
2.	211830431	Object Oriented Programmi	ing 3
3.	211830531	Operating System	3
4.	211830631	Informatics Statistics	4
5.	211830731	Data Structure 2	3
		Total	2 17

SEMESTER IV

No	Course Code	Course Name	Credits
1.	211840131	Software Analysis & Design	x-V×3/70
2.	211840231	Computer Graphics	× 3
3.	211840330	Human Computer Interaction	on 3
4.	211840531	Artificial Intelligence	3
5.	211840630	Data Communication &	3, = -
		Computer Network	
6.	211840711	Data Communication &	10
		Computer Network Practice	es FH
7.	211840831	Algorithmic Strategy	23-71
		Total	19

SEMESTER V

No	Course Code	Course Name	Credits
1.	211850131	Security Computer	3 4
2.	211850231	Mobile Programming	3
3.	211850320	Introduction to Project	2
		Management and Principles	5
4.	211850420	Theory of Automated Langu	lage 2
5.		Elective 1	≥ 3
6.		Elective 27	3
7.		Elective 3	3
		Total	19

SEMESTER VI

No	Course Code	Course Name	Credits
1.	211860120	Information Technology	2 9
		Project Management	
2.	211860220	Research Methodology	2
3.	211860330	Software Engineering	3 /2
4.	211860431	Multimedia Technology	3)
5.		Elective 4	3 54
6.		Elective 5	5 3
7.		Elective 6 nq = 65 4	3+-2

Total 19

SEMESTER VII

No	Course Code	Course Name	Cre	edits
1.	211870120	Profesional English		2
2.	211870220	Capita Selecta		2
3.	211870320	Entrepreneurship		2
4.	211870440	Community Service		4
5	211870520	International Communic	cation	2
6.	211870630	Internships		3
7.	211870720	Socio-Informatics		2
			tal	17

SEMESTER VIII

No	Course Cod	e Course Name	Credits
1.	211880160	Undergraduate Thesis	6 _{1/2} = -
		Total	6
	1,2	Total Credits for Undergradu	ate 103

ELEVATIVE COURSE (V)

No	Course Code	Course Name	Semester	Credits
1.	211850531	Optimization Techniques	Intelligent System an	d 3
			Software Engineering	5
2.	211850631	Digital Forensic	Software Engineering	173
3.	211850731	Dynamic Web Programming	Software Engineering	3
4.	211850831	Data Mining	Software Engineering	3
5.	211850931	Software Quality Assurance	Software Engineering	3
6.	211851031	Informatic Robotics	Software Engineering	3
7.	211851131	Applied Graphics	Intelligent System	3
8.	211851231	Machine Learning	Intelligent System	3
9.	211851331	Image Processing	Intelligent System	3
10.	211851431	Decision Support System	Intelligent System	3
11.	211851531	Retrieval Information Systems	Intelligent System	3

ELEVATIVE COURSE (VI)

No	Course Code	Course Name	Semester C	redits
1.	211860531	Geographic Information	Intelligent System and	3
		Systems	Software Engineering	
2.	211860631	Information Security	Software Engineering	3
3.	211860731	Cryptography	Software Engineering	3
4.	211860831	Web Engineering	Software Engineering	30
5.	211860931	Distributed System	Software Engineering	3
6.	211861031	Data Visualization	Software Engineering	320
7.	211861131	Deep Learning	Intelligent System	3
8.	211861231	Natural Language Processing	Intelligent System	3
9.	211861331	Game Application	Intelligent System	3
		Development		
10.	211861431	Pattern Recognition	Intelligent System	3
11.	211861531	Computer Vision	Intelligent System	3

STUDENT ACTIVITES

Informatics Undergraduate Program has a student group named the Informatics Student Association (HMIF) which has many program activities in various fields such as:

- -Informatics Competitions
- -Informatics E-Sport
- -Informatics Goes To School
- -Organizational Basic Training
- -Entrepreneurial Informatics "Peluang Bisnis Digital di Era Milenial"

All student activities are provided with facilities to support activities such as the activity building and its supporting facilities.

Informatics Undergraduate Program has four practicum laboratories, namely: Elementary Computing Laboratory, Multimedia Laboratory, Network Laboratory, Database Laboratory. It also has two research laboratories dedicated to each scientific group in the Informatics Undergraduate Program, namely: the Intelligent Systems Research Laboratory and the Software and Data Engineering Research Laboratory, all of which are located on the 6th Floor of the Integrated Lab Building with a capacity of 42 computers in each room. Laboratories and its facilities are free to use for practicum, lecturer & student research, workshops, and competency tests.

Several other facilities, such as: UAD Islamic Center Mosque, Health Services, Sports Facilities, Information Technology Services (UAD Email, Online Journal, Academic Management Information System, Student Academic Portal), Central Library, Internet Access (Eduroam, Wifi BSI UAD, VPN), E-Learning Portal (Elearning.uad.ac.id).

SHORT COURSE

SUMMER CAMP is a cultural program to provide international students an opportunity to experience Indonesian culture and tradition for 1 month. It is held on odd and even semesters. Students will also participate in a classroom and workshop activity related to their field of discipline. This Summer Camp is a combination of interactive classes, cultural activities, religious activities, and field trips to create an interesting project based on their experiences through this program.

PROGRAM BENEFIT

- Gain learning experience in IT and professional certification in related field
- Opportunity to meet students from different backgrounds
- Experience Indonesian culture and tradition

REQUIREMENTS

- Minimum 2nd semester in home university
- Proficient in English (oral and written)
- Has valid passport
- Letter of endorsement from home university
- International health insurance

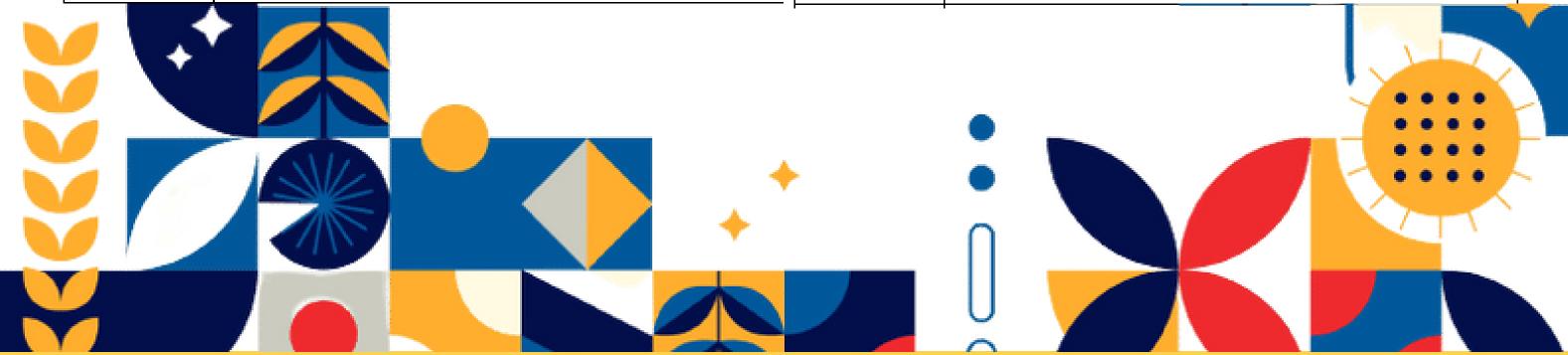
SUMMER CAMP

1. ODD SEMESTER

The odd semester summer camp program provides opportunities for students to learn about data, databases and computer networks. This program is carried out for 1 month. Students will learn about database management, pre-processing and data processing to gain insight. At the end of the program, students will present their final project and take professional certification in databases and data science.



Week	Activity	Week	Activity
	Welcoming ceremony		Database Management
	Introduction to Database		Professional Certification I
I	Database Modeling	II	Introduction to Data Science
	Relational Database Scheme		Data Management
	Cultural Activity		Cultural Activity





Week	Activity	
	Machine Learning Algorithm	
	Model Evaluation	
III	Model Deployment	
	Professional Certification II	
	Cultural Activity	

Week	Activity	
	Final Project Presentation	
IV	Cultural Presentation	
	Closing and Evaluation	

2. EVEN SEMESTER

The even semester summer camp program provides opportunities for students to learn about multimedia and computer network. This program is carried out for 1 month. Students will learn basic multimedia techniques, creating 2D and 3D objects, and implementing objects in Virtual Reality and Augmented Reality. Students also learn about data communication and computer network. At the end of the program, students will present their final project and take professional certification in the multimedia and computer network field.



Week	Activity
	Welcoming ceremony
	Introduction to Multimedia
	Image Representation
I	Audio and Video
	2D and 3D Animation
	Cultural Activity

Week	Activity	
	Modeling and Skinning	
	Audio Visual Dubbing	
	Virtual Reality and Augmented Reality	
	Professional Certification I	
II	Introduction to Data Communication and Computer Network	
	Data Transmission	
	Computer Network	
	Cultural Activity	



Week	Activity
	IP Address and Sub netting
	Server
111	Wireless Network
III	Computer Security
	Professional Certification II
	Cultural Activity

Week	Activity	
	Final Project Presentation	
IV	Cultural Presentation	
	Closing and Evaluation	





ASSESSMENT AND CERTIFICATE

Informatics Undergraduate Program has a Competency Scheme that has been adjusted to Indonesian Government standards managed by the Universitas Ahmad Dahlan Professional Institute (LSP P1 UAD). The Competency Scheme is intended for students starting in semester 5. Students who have attended training can take the Competency Test organized by LSP P1 UAD to obtain a certificate issued by Indonesian Professional Certification Authority (BNSP). Training will be carried out through class activities, group discussions, computer practice according to the competency scheme material guided by tutors. After the training is completed, a competency exam will be carried out according to the competency scheme taken. The 5 competency schemes owned by S1 Informatics are as follows:

No	Name Schema	Credit
1	Database Administrator	4
2	Junior Network Administrator	4
3	Major Multimedia Designers	3
4	Associate Data Scientist	3
5	Multimedia Technical Director	3

INFORMATICS POSTGRADUATE PROGRAM

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prodi@mti.uad.ac.id



Informatics Postgraduate Program is established to meet professional needs in the field of information in various development sectors, such as education, research, practitioners, consultants and leaders in institutions and bureaus.

Informatics Postgraduate Program is granted B (Very Good) accreditation by Indonesian Higher Education Accreditation Board. The teaching staffs includes Associate Professor and Assistance Professor from various informatics studies.



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VISION

UAD Informatics Postgraduate Program vision is to be an excellent and innovative postgraduate program in the fields of mobile technology and digital forensics, serving the interests of the nation and humanity imbued with Islamic values.

The vision is manifested in a series of missions as follows:

- 1. Implementing Al-Islam and Muhammadiyah values in all aspects of activities.
- 2. Advancing science and technology in the fields of mobile technology and digital forensics through education, research, and community service.
- 3. Building and developing cooperation and collaboration in the fields of mobile technology and digital forensics at the local, national, and international levels.



THE PROFILE OF POSTGRADUATE PROGRAM OUTCOMES

UAD Informatics Postgraduate Program vision is to be an excellent and innovative postgraduate program in the fields of mobile technology and digital forensics, serving the interests of the nation and humanity imbued with Islamic values.

The vision is manifested in a series of missions as follows:

- 1. Implementing Al-Islam and Muhammadiyah values in all aspects of activities.
- 2. Advancing science and technology in the fields of mobile technology and digital forensics through education, research, and community service.
- 3. Building and developing cooperation and collaboration in the fields of mobile technology and digital forensics at the local, national, and international levels.

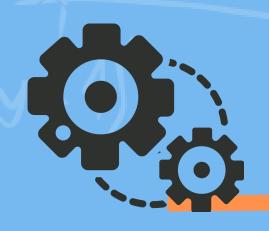


OBJECTIVES

- 1. Realization of appreciation and practice of Al-Islam and Muhammadiyah values for all academicians and educational staff.
- 2. Realization of increased mastery of science and technology in the fields of mobile technology and digital forensics that is beneficial to human life.
- 3. Realization of increased cooperation and strategic collaboration in the fields of mobile technology and digital forensics that are mutually beneficial with local, national, and international partners.



The curriculum consists of compulsory and elective courses. Students are required to take 2 elective courses in either concentration (mobile technology or digital forensics). The curriculum is designed to be taken in 4 semesters or 2 years with a total of 40 credits. In the last four years, 49 students graduated in less than 2 years.



SEMESTER I

No	Course Code	Course Name	Credits
1.	214810131	Algorithm & Programming	3
2.	214810231	Database	3
3.	214810331	Operating System	3
4.	214810431	Information Theory	3
		Total	12



No	Course Code	Course Name	Credits
1.	214820120	Islam & Muhammadiyah	-1×2) + C
		Movement	
2.	214820231	Information Security	3
3.	214820331	Data Communications &	3
		Computer	
4.	214820430	Research Methodology &	3
		Publication	
5.		Elective Course	3
		Y Sing 65 Total	14

ELECTIVE COURSE (II)

No	Course Code	Course Name	Consentration	Credits
1.	214820531	Digital Forensics	Digital Forensics	3
2.	214820631	Modern Cryptography	Digital Forensics	3
3.	214820731	Pattern Recognition &	Mobile Technology	3
		Artificial Intelligence		
4.	214820831	Mobile Technology	Mobile Technology	3



SEMESTER III

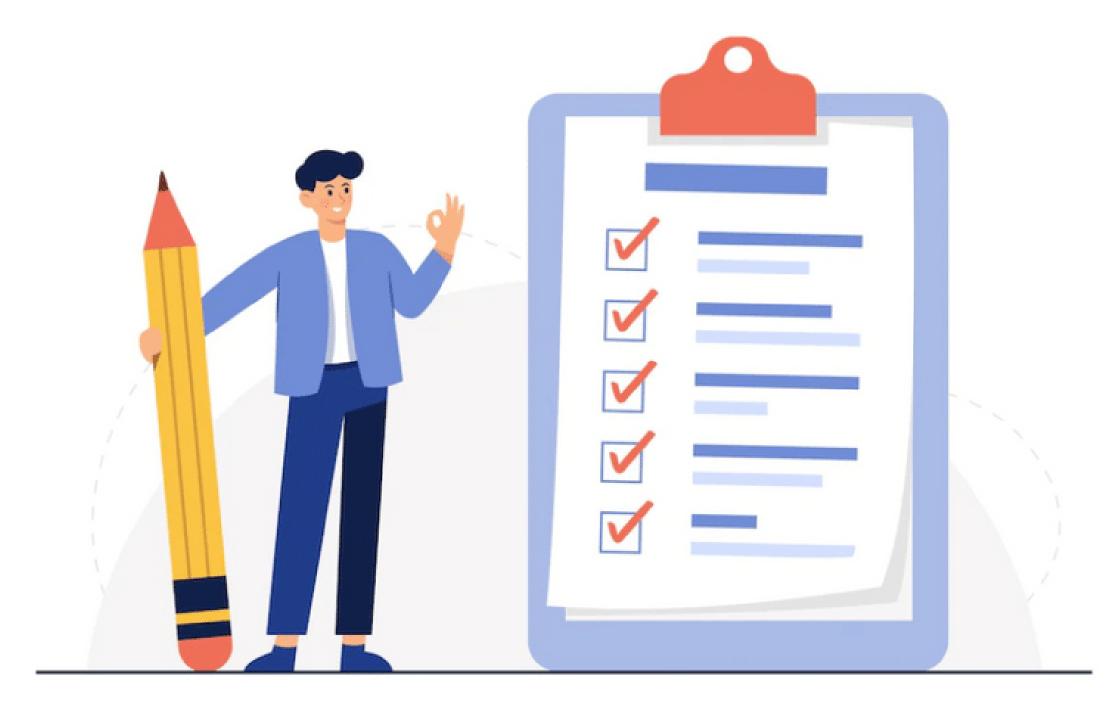
No	Course Code	Course Name	Credits	
1.	214830120	Ethics & Technology	2	
		Management		
2.	214830230	Thesis Proposal	v ×/ ×3	
3.		Elective Course	3 9	
			otal 8	

ELECTIVE COURSE (III)

No	Course Code	Course Name	Consentration	Credits
1.	214820531	Network & Cloud Forensics	Digital Forensics	3
2.	214820631	Grid & Cloud Computing	Digital Forensics	3 /
3.	214820731	Mobile Security	Mobile Technology	3
4.	214820831	Image & Video Processing	Mobile Technology	3

SEMESTER IV

ΙΛΟ	Course Code	Course Name		Credits
1.	214830120	Thesis		6
			Total	6



REGISTRATION

HOW TO APPLY?

please visit: https://pmb.uad.ac.id/ and pmb-online.uad.ac.id

ADMISSION OF NEW STUDENTS:

UAD Kampus IV (Main Building)

Main Building 2nd Floors

Jalan. Jend. Ahmad Yani, Banguntapan, Bantul, Daerah Istimewa Yogyakarta.

Phone. 0274-563 515

(Undergraduate Program): 0853 8500 1960, 0856 267 1960

Email: prodi@tif.uad.ac.id

(Postgraduate Program): 081392725629

Email: prodi@mti.uad.ac.id

CAMPUS SERVICES TIME:

Submission Services

Online by website pmb-online.uad.ac.id

Offline Monday – Saturday (08:00 AM– 16:00 PM)

Computer Based Test (CBT) Services

Monday – Saturday (08:00 AM– 16:00 PM)

LECTURE TIMELINE FOR 16 WEEKS:

- -Odd Semester Start in September-July
- -Even Semester Start in February- August

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