SUSTAINABILITY REPORT

UNIVERSITAS SULTAN AGENG TIRTAYASA

2021

INTRODUCTION

University of Sultan Ageng Tirtayasa, popularly known as Untirta, is a State University (PTN) located at Banten Province, Indonesia. The main campus is in Sindangsari – Serang, Faculty of Engineering is in Cilegon and Faculty of Teacher Training and Education is in Ciwaru – Serang.

As an Institution of Higher Education, students and lecturers conduct research and community services in various fields for the advancement of Indonesia in the future.

Vision and Mission UNTIRTA 2019-2023

Vision

The actualization of Untirta as excellent, characterized, and competitive Integrated Smart and Green (It'S Green) University.

Mission

Upgrading the quality, relevance, and education competitiveness along with excellent and competitive graduates with good personality in ASEAN.

Increasing the quality and quantity of innovative research and community service based on the needs according to current development.

Enhancing the carrying capacity of good university governance as the implementation of Integrated Smart and Green (It'S Green) University.

Value JAWARA (Jujur Adil Wibawa Amanah Religius Akuntabel) "UNTIRTA is a house that not only acts as a place, but also as a source of knowledge, example, and virtue. Therefore, all academicians are obliged to uphold these basic values in carrying out their duties and responsibilities. " (Sulaiman. 2019)

UNIVERSITAS INDONESIA
Veritas, Probitas, Iustitia

UI GreenMetric
World University Rankings

Certificate

This certificate is awarded to

Universitas Sultan Ageng Tirtayasa

as The 224th World's Most Sustainable University
in 2021 UI GreenMetric World University Rankings

Jakarta, 14 December 2021

Prof. Ari Kuncoro, S.E., M.A., Ph.D
Rector of Universitas Indonesia

Prof. Riri Fitri Sari, M.M., M.Sc
Chairperson of UI GreenMetric
World University Rankings

Template for Evidence(s)
UI GreenMetric Questionnaire

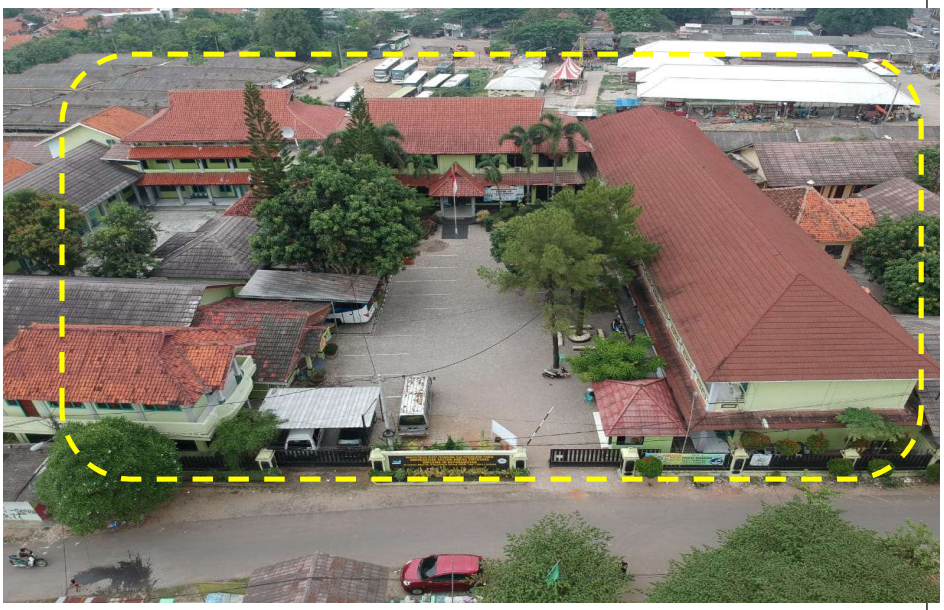
University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

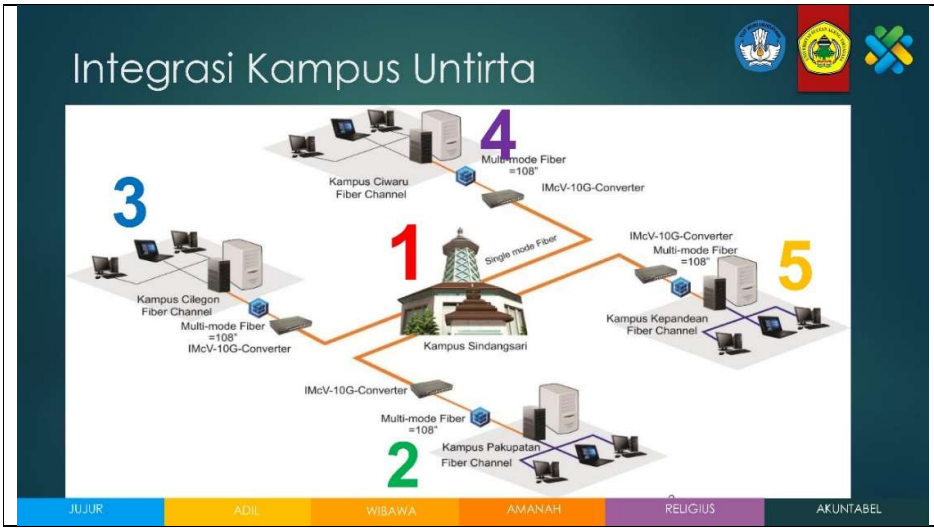
[1] Setting and Infrastructure (SI)

Universitas Sultan Ageng Tirtayasa, commonly abbreviated as Untirta, is a state university located in the province of Banten, Indonesia. Untirta campus has several campus locations spread across Serang and Cilegon, where these areas have the same climate as Indonesian cities in general, namely a tropical climate with two seasonal patterns that are influenced by the movement of monsoon winds, namely the rainy season and the dry season.

[1.3] Number of Campus Sites

	**Campus A (Pakupatan)** Universitas Sultan Ageng Tiratayasa
	**Campus B (Cilegon)** Universitas Sultan Ageng Tiratayasa

	**Campus C (Ciwaru)** Universitas Sultan Ageng Tiratayasa
	**Campus D (Kepandean)** Universitas Sultan Ageng Tiratayasa
	**Campus E (Sindangsari)** Universitas Sultan Ageng Tiratayasa



Currently, it serves as the main campus, with Campus E Sindangsari serving as the administrative hub for the other campuses (Campus A, Campus B, Campus C, and Campus D), as well as being the primary Untirta-owned campus.

Description:

Universitas Sultan Ageng Tirtayasa (Untirta) as a State University continues to make changes and improvements in all fields, both institutional, academic, as well as student affairs and cooperation. Changes and improvements in the academic field, especially the establishment of new Faculties and Departments or Study Programs, construction of educational facilities and infrastructure and other fields to meet the needs of the community in the field of education.

Universitas Sultan Ageng Tirtayasa currently organizes academic education programs and vocational education programs, for the Academic Education program consists of 7 Faculties (S1) Education Programs and 1 Masters (Postgraduate) Education Program, namely (1) Faculty of Law, (2) Faculty of Teacher Training and Education, (3) Faculty of Engineering, (4) Faculty of Agriculture, (5) Faculty of Economics, (6) Faculty of Social and Political Sciences, (7) Postgraduate and (8) Faculty of Medicine.

In 2021 Universitas Sultan Ageng Tirtayasa has 5 campuses spread across two cities, namely:

1. Campus A (Pakupatan)
   Campus A (Pakupatan) is currently planned for postgraduate academic activities.

2. Campus B (Cilegon)
   Campus B (Cilegon) currently consists of 2 faculties, namely Faculty of Engineering and Faculty of Medicine.
   a. The Faculty of Engineering consists of 7 departments, namely Electrical Engineering Department, Industrial Engineering Department, Chemical Engineering Department, Mechanical Engineering Department, Metallurgical Engineering Department, Civil Engineering Department and Department of Informatics.
   b. Untirta Faculty of Medicine is the first medical faculty in Banten, ratified based on the Decree of the Minister of Research, Technology and Higher Education of the Republic of Indonesia Number 283/KPT/I/2019. Untirta's medical study program is currently under the supervision of the Faculty of Medicine, University of Indonesia. The Faculty of Medicine consists of 2 study programs, namely the Nutrition Science Study Program and the Sports Science Study Program.

3. Campus C (Ciwaru)
   Campus C (Ciwaru) is currently the campus of the Faculty of Teacher Training and Education which consists of 18 study programs, namely Non-Formal Education, Indonesian B Education, English B Education, Biology Education, Mathematics Education, Primary Teacher Education, Teacher Education for Early Childhood Education, Counseling Guidance, Physics Education, Natural Science Education, Chemistry Education, Special Education, Pancasila & Citizenship Education, History Education, Performing Arts Education, Sociology Education, Mechanical Engineering Vocational Education, Electrical Engineering Vocational Education.

4. Campus D (Kepandean)
   Campus D (Kepandean) is a campus for Diploma III Nursing which is anlocated on Jl. Letnan Jidun No. 2 Kepandean, Serang.

5. Campus E (Sindangsari)
   Campus E (Sindangsari) is Untirta's fifth site. It serves as the administrative center for the other campuses (Campus A, Campus B, Campus C, and Campus D), as well as being the primary campus owned by Untirta. Additionally, Campus E Sindangsari has developed a water management system, an automation system, and has its own substation equipped with German technology. Campus E Sindangsari is comprised of many structures, including the following:
   (1) Rectorat, (2) Faculty of Social and Politic, (3) Integrated Sustainable Agriculture LAB, (4) Faculty of Agriculture, (5) Library, (6) Integrated Classroom, (7) Faculty Economy and Bussines. (8) Auditorium, (9) Faculty of Law, (10) Female Dormitory, (11) Male Dormitory and (12) Student Learning Center.

Additional evidence link:

1. Maps of Campus A (Pakupatan) : https://goo.gl/maps/hf8fc22kcdM6FhbN6
2. Maps of Campus B (Cilegon) : https://goo.gl/maps/2x8GmRCvFofeRAFUA
3. Maps of Campus C (Ciwaru) : https://goo.gl/maps/SCmTSeb6hwkSe7UQA
4. Maps of Campus D (Kepandean) : https://goo.gl/maps/QJRW27GQUtJ3jQsi7
5. Maps of Campus E (Sindangsari) : https://goo.gl/maps/PKyYr9GGpQ4xCXsX6

Template for Evidence(s)
UI GreenMetric Questionnaire

University : University Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[1] Setting and Infrastructure (SI)

[1.4] Campus Setting

A. Campus A (Pakupatan)

Location of Campus A Pakupatan (Universitas Sultan Ageng Tirtayasa, Indonesia)

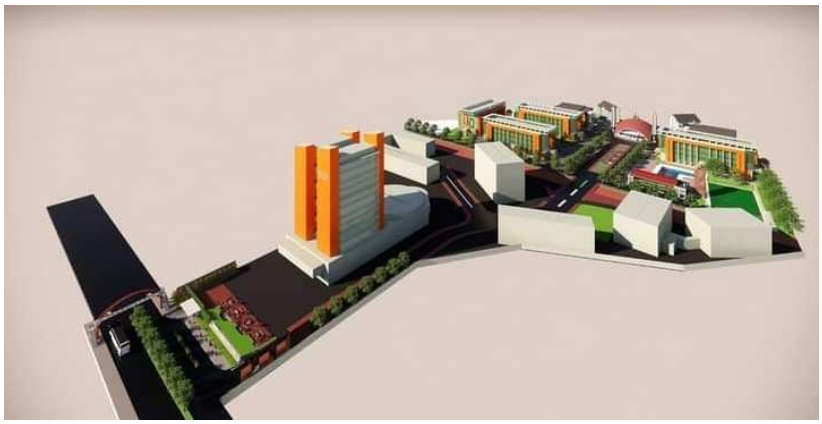
Description:
Campus A (Pakupatan) is located in Serang City, Serang City has a position as the administrative center of Banten Province as well as an alternative and buffer area for the Capital, because from the Special Capital Region of Jakarta it is only about ± 70 km. The location of campus A Pakupatan is adjacent to residential areas and adjacent to the Pakupatan Bus Station. Currently Campus A Pakupatan stands on an area of 2.84 hectares consisting of the Postgraduate administration building.

Serang City which covers an area of 266.74 km² with a population of Serang City in 2020 of 692,101 people, the population density level in the Serang City area is 2,595 people/km² where most of the population lives in urban areas.

Additional evidence link:
1. https://untirta.ac.id/tentang/
2. https://serangkota.bps.go.id/publication/2021/02/26/92d07f0edc333af1889f4a49/kota-serang-dalam-angka-2021.html

B. Campus B Cilegon

Location of Campus B Cilegon (Universitas Sultan Ageng Tirtayasa, Indonesia)



Master plan Area of Campus B Cilegon (Universitas Sultan Ageng Tirtayasa, Indonesia)

Description:

Campus B (Cilegon) or the Faculty of Engineering and the Faculty of Medicine are faculties within Universitas Sultan Ageng Tirtayasa (Untirta). Untirta's Faculty of Engineering campus is located in Cilegon Industrial Estate, where in this area there are various kinds of heavy metal, chemical, manufacture, engineering and power generation industries, including PT. Krakatau Steel & Group, PT. Krakatau Posco, PT. Candra Asri, PT. Asahimas, PT. Tri Polita, PT. PLN (Persero) PLTGU Cilegon, PT. Indonesia Power UBP Suralaya and so on. Geographically, the Faculty of Engineering of Untirta is located at the gates and trade routes of Java-Sumatra as well as international trade routes, namely the ASDP crossing port in Merak and several international ports including Cigading, Bojonegara and Krakatau Bandar Samudra. Administratively, the Faculty of Engineering is located in Cilegon City and Banten Province which continues to grow.

Until now, the Faculty of Engineering consists of 7 undergraduate majors, namely Mechanical Engineering, Electrical Engineering, Metallurgical Engineering, Industrial Engineering, Chemical Engineering, Civil Engineering and Informatics Engineering. All majors have obtained accreditation from the National Accreditation Board for Higher Education (BAN-PT). At this time the Faculty of Engineering stands on an area of 6.17 Ha, consisting of 3.43 Ha which has been used for academic activities and the remaining 2.74 Ha in the form of land overgrown with forest/big trees. In addition, currently the Faculty of Engineering has physical facilities, namely the Dean Building, Hall Building, COE Petrochemical Building, Lecture Building with three floors, Secretariat Room, Lecturer Room, Laboratory, Library, Cooperative Room, Al-Muta'alimin Mosque, Computer Room, Workshop Room, Undergraduate Meeting Room, Clinic, Student Canteen, Department Student Association Room, Sports Facilities and Parking Facilities. The Faculty of Engineering continues to make changes and improvements, both in the institutional, academic, as well as in the field of student affairs and cooperation. Changes and improvements in the academic field, especially the establishment of new departments, construction of educational facilities and infrastructure according to the master plan design. One of the efforts to improve services in 2020 the Faculty of Engineering has started the construction of the Canteen Building in accordance with the draft master plan of the Faculty of Engineering. In addition to the Faculty of Engineering in Campus B Cilegon, there is also a Faculty of Medicine which is still in the same area within the campus.

Cilegon City which covers an area of 175.5 km^2, The total population of Cilegon City in 2020 is 434,896 people, The population density level in the Cilegon City area is 2,477 people/km^2.

Additional evidence link:

1. http://ft.untirta.ac.id/
2. https://kedokteran.untirta.ac.id/
3. https://cilegonkota.bps.go.id/publication/2021/02/26/62579c317955d0838eef1313/kota-cilegon-dalam-angka-2021.html

C. Kampus C Ciwaru

Location of Campus C Ciwaru (Universitas Sultan Ageng Tirtayasa, Indonesia)

Description:

Campus C (Ciwaru) or the Faculty of Teacher Training and Education is located in Serang City, where Serang City has a position as the administrative center of Banten Province as well as an alternative and buffer area for the State Capital, because from the Special Capital Region of Jakarta it is only about 70 km. The capital of Serang City is in Serang District. Campus C Ciwaru stands on an area of 2.9 Ha. The location of campus C Ciwaru is adjacent to a residential area. Currently, the Faculty of Teacher Training and Education has 18 (eighteen) departments, namely: (1) Non-Formal Education, (2) Bahasa Education, (3) English Education, (4) Biology Education, (5) Mathematics Education, (6) Primary Teacher Education, (7) Early Childhood Teacher Education, (8) Counseling Guidance, (9) Physics Education, (10) Natural Science Education, (11) Chemistry Education, (12) Special Education, (13) Education of Pancasila & Citizenship, (14) History Education, (15) Performing Arts Education, (16) Sociology Education, (17) Mechanical Engineering Vocational Education, (18) Electrical Engineering Vocational Education. And in 2018 received the mandate to organize the Teacher Professional Education Program through the Decree of the Minister of Research, Technology, and Higher Education of the Republic of Indonesia.

Number : 990/KPT/I/2018, November 9, 2018, namely the fields of study: Physics, Chemical, Bahasa, English, Biology, Mathematics and Primary School Teachers.

Serang City has an area of 266.74 km² with a population of Serang City in 2020 of 692,101 people. The population density level in the Serang City area is 2,595 people/km² where most of the population lives in urban areas.

Additional evidence link:

1. http://fkip.untirta.ac.id/
2. https://serangkota.bps.go.id/publication/2021/02/26/92d07f0edc333af1889f4a49/kota-serang-dalam-angka-2021.html

D. Campus D Kepandean

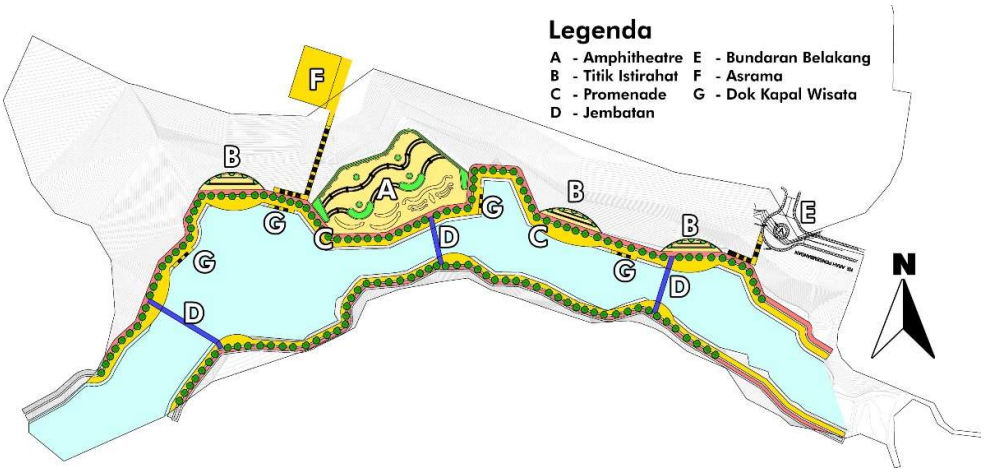
Location of Campus D Kepandean (Universitas Sultan Ageng Tirtayasa, Indonesia)

Description:
Campus D (Kepandean) or Campus Diploma III Nursing is located in Serang City like campuses A and C. Campus D Kepandean stands on an area of 0.593 ha. The location of campus D Kepandean is bordered by residential areas and the Bus Station.

Additional evidence link:
1. https://kedokteran.untirta.ac.id/

E. Campus E Sindangsari

Location of Campus E Sindangsari (Universitas Sultan Ageng Tirtayasa, Indonesia)



Master plan of South Embung Landscape at Campus E Sindangsari (Universitas Sultan Ageng Tirtayasa, Indonesia)

Description:

Campus E (Sindangsari) is located in Serang Regency, the location of Campus E Sindangsari is close to the administrative center of Banten Province with a distance of about ±4 km. Campus E is built on an area of 28.5 Ha consisting of 12.9 Ha which has been built with 12 buildings, and 0.7 Ha was built as an Embung (water treatment), and the remaining 14.9 Ha is a land overgrown with trees. The location of campus E Sindangsari is bordered by plantation and forest areas. Campus E Sindangsari consists of 12 buildings including: (1) Rectorat, (2) Faculty of Social and Politic, (3) Integrated Sustainable Agriculture LAB, (4) Faculty of Agriculture, (5) Library, (6) Integrated Classroom, (7) Faculty Economy and Bussines. (8) Auditorium, (9) Faculty of Law, (10) Female Dormitory, (11) Male Dormitory and (12) Student Learning Center. The construction of Campus E Sindangsari was built with the concept of Smart and Green Building. In addition, Campus E will also be equipped with Embung or a Retention Pool as a water catchment area with an area of 13,892 m^2.

Additional evidence link:

1. https://untirta.ac.id/tentang/
2. https://untirta.ac.id/2021/02/09/wujudkan-smart-green-campus-untirta-tuai-dukungan-pemerintah-kabupaten-serang/
3. https://www.youtube.com/watch?v=azOBpa4g5lw
4. https://bidikutama.com/berita-mahasiswa/jokowi-perintahkan-menteri-pupr-bangun-embung-di-kampus-sindangsari/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
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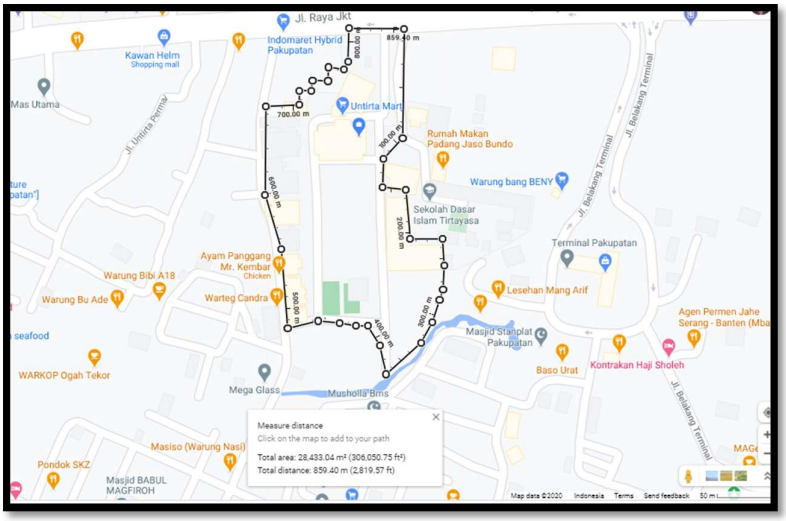
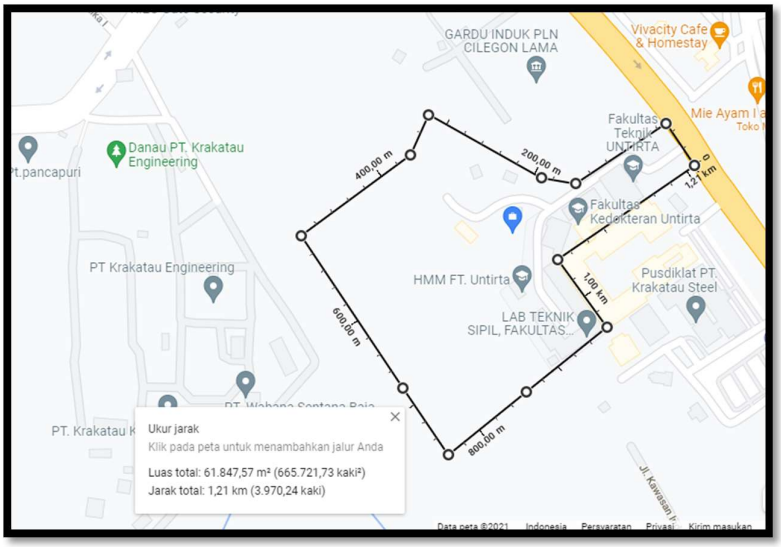
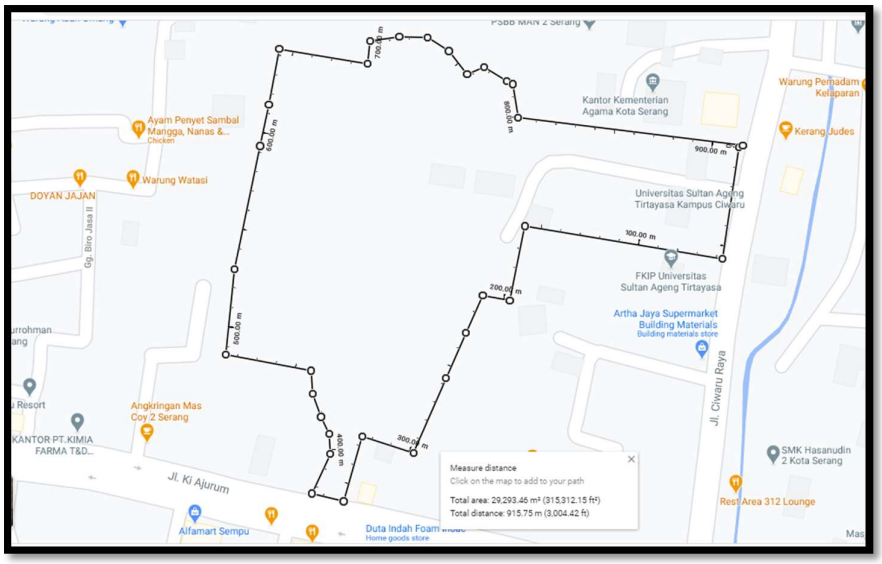
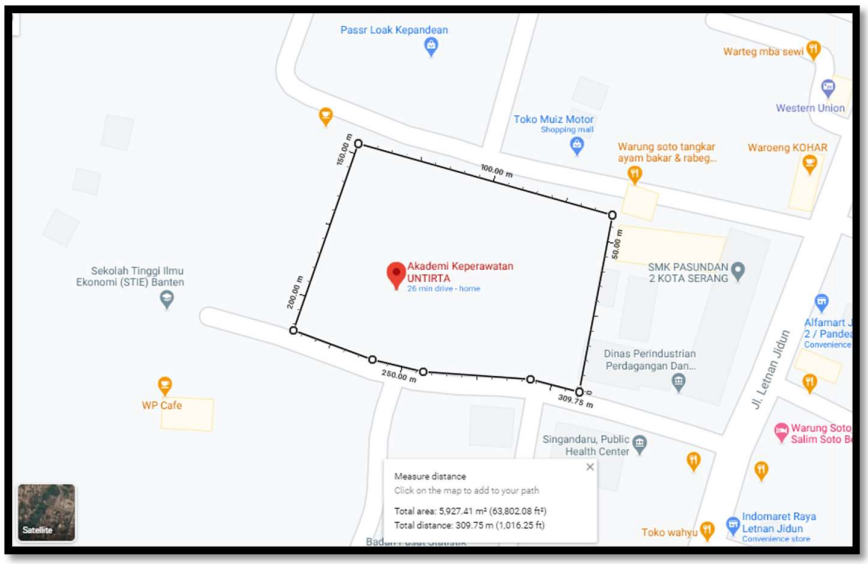
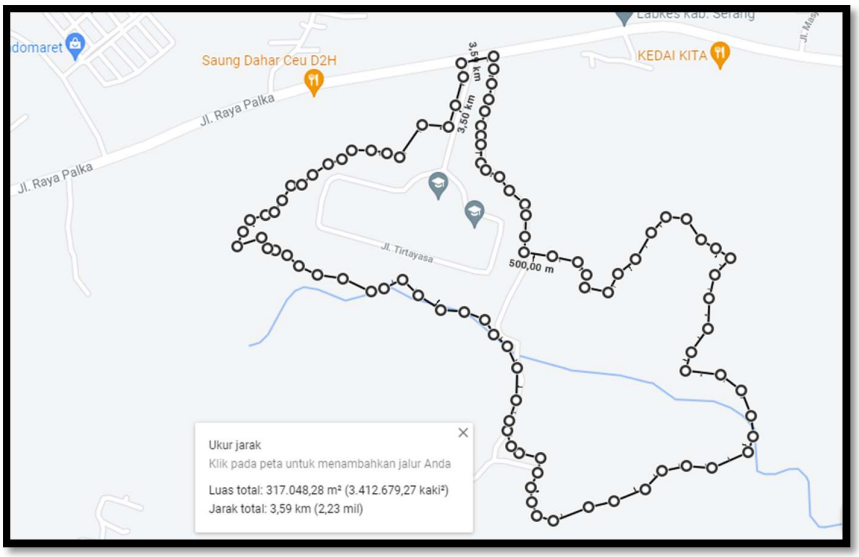
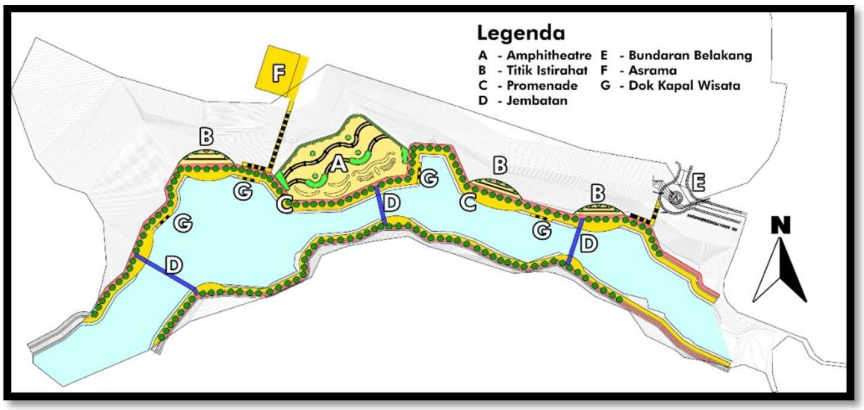
[1] Setting and Infrastructure (SI)

[1.5] Total Campus Area (m^2)

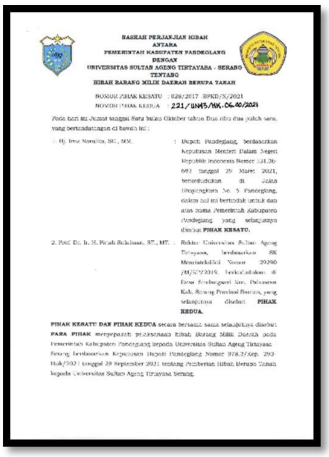
	Total Area of **Campus A Pakupatan** (Universitas Sultan Ageng Tirtayasa, Indonesia)
	Total Area of **Campus B Cilegon** (Universitas Sultan Ageng Tirtayasa, Indonesia)

	Total Area of **Campus C Ciwaru** (Universitas Sultan Ageng Tirtayasa, Indonesia)
	Total Area of **Campus D Kepandean** (Universitas Sultan Ageng Tirtayasa, Indonesia)





Total Area of **Campus E Sindangsari, Master plan of Embung Campus E and Development Land Use of Campus E** (Universitas Sultan Ageng Tirtayasa, Indonesia)

	Agricultural land **(Karangkitri)** As Land for Practicum of the Faculty of Agriculture
    	Agricultural land **(Cadasari, Pandeglang)** As Ecofarm Riset

Description:
Universitas Sultan Ageng Tirtayasa has 5 campuses located in two cities, and 2 Agricultural Lands with each of the following areas:

No.	Campus	Area (m^2)	Distance (m')
1.	Campus A Pakupatan	28.384	859
2.	Campus B Cilegon	61.847	1210
3.	Campus C Ciwaru	29.216	915
4.	Campus D Kepandean	5.933	309
5.	Campus E Sindangsari	127.054	3590
6.	Embung at Campus E Sindangsari	13.892	
7.	Development Land Campus E	176.102	
7.	Agricultural land (Karangkitri)	21.483	673
8.	Agricultural land (Cadasari)	74.250	1448
		538.161	

Additional evidence link :

1. https://www.google.com/maps/place/Universitas+Sultan+Ageng+Tirtayasa+(Untirta)/@-6.120726,106.194561,13z/data=!4m5!3m4!1s0x0:0xd7fbb1e65b42cbd2!8m2!3d-6.1207259!4d106.1945611?hl=id-ID
2. https://untirta.ac.id/
3. https://www.google.com/maps/place/Fakultas+Teknik+UNTIRTA/@-5.996273,106.032095,13z/data=!4m5!3m4!1s0x0:0x249411dd80bfd66e!8m2!3d-5.9962731!4d106.032095?hl=id-ID
4. https://ft.untirta.ac.id/
5. https://www.google.com/maps?ll=-6.130764,106.16566&z=13&t=m&hl=id-ID&gl=US&mapclient=embed&cid=12412607988068042645
6. http://fkip.untirta.ac.id/
7. https://www.google.com/maps/place/Kampus+D3+Keperawatan+Universitas+Sultan+Ageng+Tirtayasa/@-6.1118034,106.1424769,17.57z/data=!4m5!3m4!1s0x2e418b26b0bae6a1:0x7daee5584bf42617!8m2!3d-6.1119801!4d106.141035
8. https://www.google.com/maps/place/Universtas+Sultan+Ageng+Tirtayasa+Banten/@-6.1909125,106.1242294,17.33z/data=!4m8!1m2!3m1!1s0x0:0xd0e3e2065d06d35c!3m4!1s0x2e4221ef196497b9:0xf60ef7a24ea5646c!8m2!3d-6.1903756!4d106.1245219?hl=id-ID
9. https://www.youtube.com/watch?v=azOBpa4g5lw
10. https://bidikutama.com/berita-mahasiswa/jokowi-perintahkan-menteri-pupr-bangun-embung-di-kampus-sindangsari/

Template for Evidence(s)
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[1] Setting and Infrastructure (SI)

[1.7] Total Campus Building Area (m^2)

A. Campus A Pakupatan

	
Rectorate Building	**A Building**

	
Postgraduate Building	**B Building**

Gedung Doktor Pascasarjana

Description:

The following is a list of the basic and overall building areas at Campus A Pakupatan:

No.	Building	Ground Floor Area (m^2)	Number of Floors	Area (m^2)
1.	Central Security Post	12	1	12
2.	Left Security Post	24	1	24
3.	ATM Gallery	31	1	31
4.	Rectorate Building	1.055	2	2.110
5.	Lab. FKIP & Clinic	251	2	502
6.	UTBK	603	1	603
7.	UPT Building	116,5	2	233
8.	Law Faculty	455	2	910
9.	Faculty of Economics and Business	605,5	2	1.211
10.	Lab. & Library of FEB	93,5	2	187
11.	Library	405,5	2	811
12.	Gedung Program Doktor Pascasarjana	626,5	2	1.253
13.	Data and Information Centre Building	293,5	2	587
14.	Lecturer room of Faculty of Agriculture	50	2	100
15.	Faculty of Agriculture	553	1	553
16.	Lab. Green House of Agriculture	279	3	838
17.	Lab. Faculty of Agriculture	80	3	240
18.	C Building	679,33	3	2.038
19.	PKM B	590	1	590
20.	PKM A	559	1	559
21.	Saung of students	30	1	30
22.	Back Side Canteen	176	1	176
23.	Canteen of B Building	60	1	60
24.	B Building	784,75	4	3.139
25.	A Building	789,25	4	3.157
26.	Integrated Laboratory	1.450	3	4.350
27.	Saung Untirta Serang	36	1	36
28.	Generator Room	28	1	28
29.	Mosque	750	1	750
Total (m^2)		**11.467,33**		**25.118**

B. Campus B Cilegon

	
Dean Building Faculty Of Engineering	**Faculty Of Engineering Hall**
	
Lecture Building	**Medical Faculty Building**
	
COE Building	**Lecture Building**

Description:

The following is a list of the basic and overall building areas on Campus B Cilegon:

No.	Building	Ground Floor Area (m^2)	Total of Floor	Area (m^2)
1.	Security Post 1	9	1	9
2.	Security Post 2	25	1	25
3.	Clinic	78	1	78
4.	Dean's Canteen	162	1	162
5.	Engineering Faculty Hall	796	1	796
6.	New Dean's Building	700	5	3500
7.	Old Secretariat	500	1	500
8.	Old Dean's building	426	1	426
9.	Mosque	675	1	675

10.	BR Building	300	3	900
11.	PKM	288	1	288
12.	U Lecture Building	1.551	3	4.652
13.	COE Building	807	4	3.228
14.	Medical building	517	3	1.551
15.	New Canteen	800	2	684
Total (m^2)		**7634**	**-**	**17.474**

C. Campus C Ciwaru

Lecturer Room and Library

Lecturer Room

Mosque

PKM

Art Practice Building

Lecture Building A and B

Dormitory Building

Description:

The following is a list of the basic and overall building areas at Campus C Ciwaru:

No.	Building	Ground Floor Area (m^2)	Number of Floors	Area (m^2)
1.	Security Post	9	1	9
2.	Head of Department Building	209	1	209
3.	Lecturer Building	282	1	282
4.	ATM Gallery	31	1	31
5.	Engineering Laboratory	60	1	60
6.	Mosque	237	1	237
7.	PKM	193	1	193
8.	Art Practice Building	286	1	286
9.	Lecture Building A	595	1	595
10.	Lecture Building B	598	3	1.795
11.	Lecture Building C	544	3	1.632
12.	Old Lecture Building	150	1	150
13.	Canteen	134	1	134
14.	Dormitory	565,5	4	2.262
15.	Lecture Building of FKIP	1.672	4	6.688
Total (m^2)		**5.565,5**	**-**	**14.563**

D. Campus D Kepandean

Dormitory

Lecture Building

Description:

The following is a list of the basic and overall building areas on Campus D Kepandean:

No.	Building	Ground Floor Area (m^2)	Number of Floors	Area (m^2)
1.	Security Post	5	1	5
2.	Office	389,5	2	779
3.	Lab. Demon	147	1	147
4.	Lab. KMB	166	1	166
5.	Nursing Laboratory	83	2	166
6.	Female's Mosque	82	1	82
7.	Male's Mosque	51	1	51
8.	Classes	555,5	2	1.111
9.	Male Dormitory 1	364	1	364
10.	Male Dormitory 2	50	1	50
11.	Male Dormitory 3 dan Kitchen	157	1	157
12.	Male Dormitory 4	87	1	87
13.	Female Dormitory 1	325	1	325
14.	Female Dormitory 2 dan Clinic	306	1	306
15.	Female Dormitory 3	90	1	90
16.	Guest House	1.184	1	1.184
Total (m^2)		**4.042**	**-**	**5.070**

E. Campus E Sindangsari

Rectorat

Faculty of Social and Politic

Integrated Sustainable Agriculture LAB

Faculty of Agriculture

	
Library	**Integrated Classroom**
	
Faculty Economy and Bussines	**Auditorium**
	
Faculty of Law	**Female Dormitory**
	
Male Dormitory	**Student Learning Center**

Description:

The following is a list of the basic and overall building areas at Campus E Sindangsari:

No.	Building	Ground Floor Area (m^2)	Number of Floors	Area (m^2)
1.	Rectorat	1.585,60	4	6.469
2.	Faculty of Social and Politic	1.239,19	4	4.230
3.	Integrated Sustainable Agriculture LAB	3.757,15	1	3.755
4.	Faculty of Agriculture	1.630,90	4	5.140
5.	Library	812,50	4	3.250
6.	Integrated Classroom	1.112,75	4	4.451
7.	Faculty Economy and Bussines	2.114,11	4	7.800
8.	Auditorium	3.880,40	4	4.746
9.	Faculty of Law	1.430,71	4	4.866
10.	Male Dormitory	792,66	4	2.460
11.	Female Dormitory	792,66	4	2.460
12.	Student Learning Center	4.111,54	4	10.651,91
13.	Gardu PLN	24	1	24
14.	Power House & Trafo	312	1	312
15.	Tangki Air Bersih	34	1	800
16.	Gate/Security Post	34	1	34
Total (m^2)		**23.664,17**	**-**	**61.448,91**

Recapitulation of Total Campus Building Area:

No.	Untirta Campuses	Building Area (m^2)
1.	Campus A (Pakupatan)	25.118
2.	Campus B (Cilegon)	17.474
3.	Campus C (Ciwaru)	14.563
4.	Campus D (Kepandean)	5.070
5.	Campus E (Sindangsari)	61.448,91
	TOTAL	**123.673,91**

Additional evidence link :

https://green.untirta.ac.id/penataan-dan-infrastruktur/

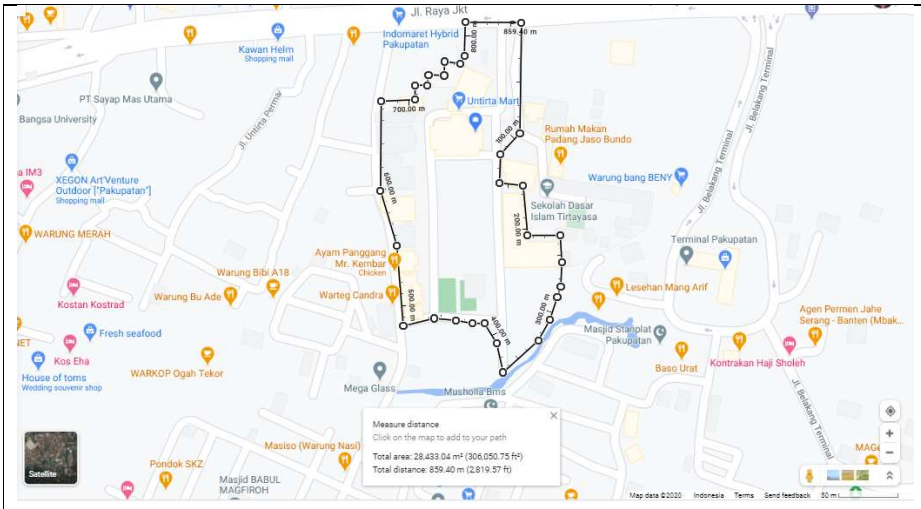
Template for Evidence(s)
UI GreenMetric Questionnaire

University : University of Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[1] Setting and Infrastructure (SI)

[1.8] The Ratio Of Open Space To Total Area

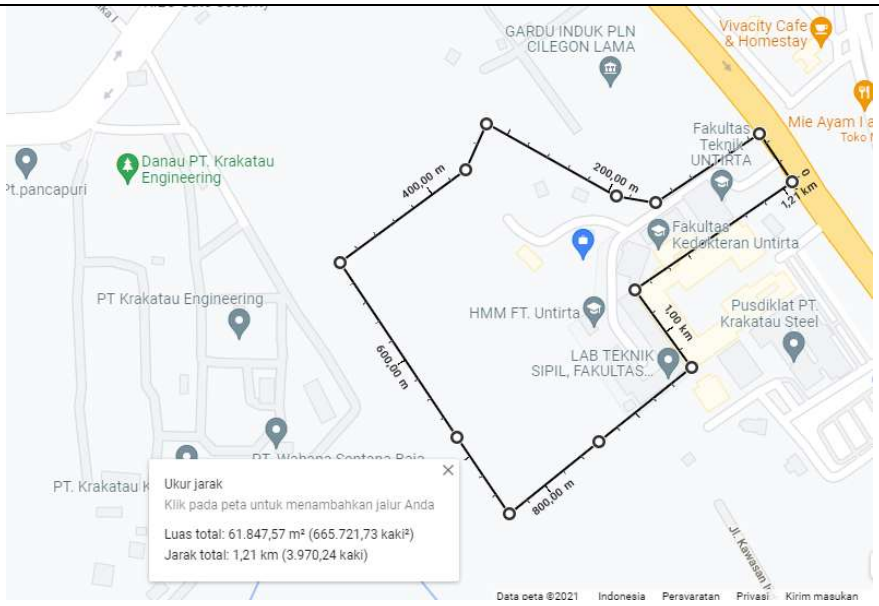
A. Campus A Pakupatan



Total Area of **Campus A Pakupatan** (Universitas Sultan Ageng Tirtayasa, Indonesia)

Description:
The total area of campus A Pakupatan is 28,384 m^2
The total base area of the Pakupatan Campus A building is 11,467.33 m^2
The total open space area is 28,384 m2 – 11,467.33 m^2 = 16,916.67 m^2

B. Campus B Cilegon



Total Area of **Campus B Cilegon** (Universitas Sultan Ageng Tirtayasa, Indonesia)

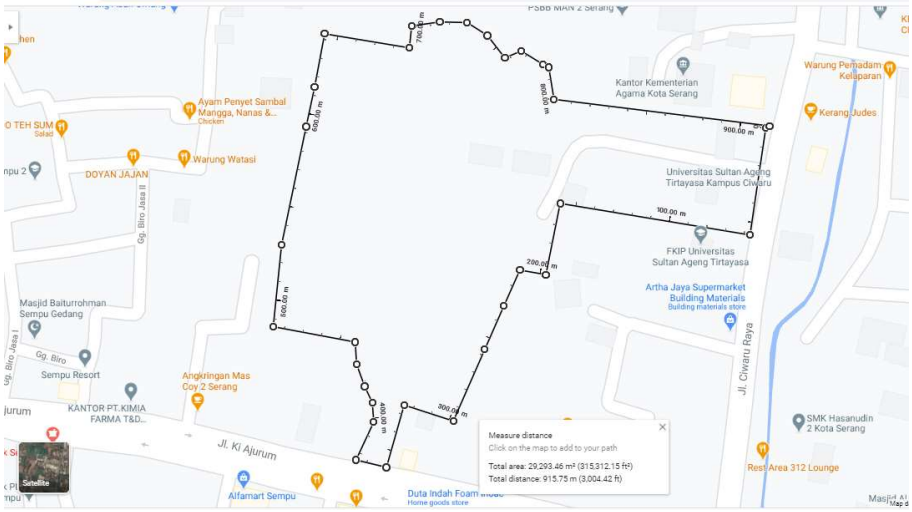
Description:

The total area of campus B Cilegon is 61,847 m^2

The total building base area of the Campus B Cilegon is 7,634 m^2

The total open space area is 61,847 m2 – 7,634 m^2 = 54,213 m^2

C. Campus C Ciwaru



Total Area of **Campus C Ciwaru** (Universitas Sultan Ageng Tirtayasa, Indonesia)

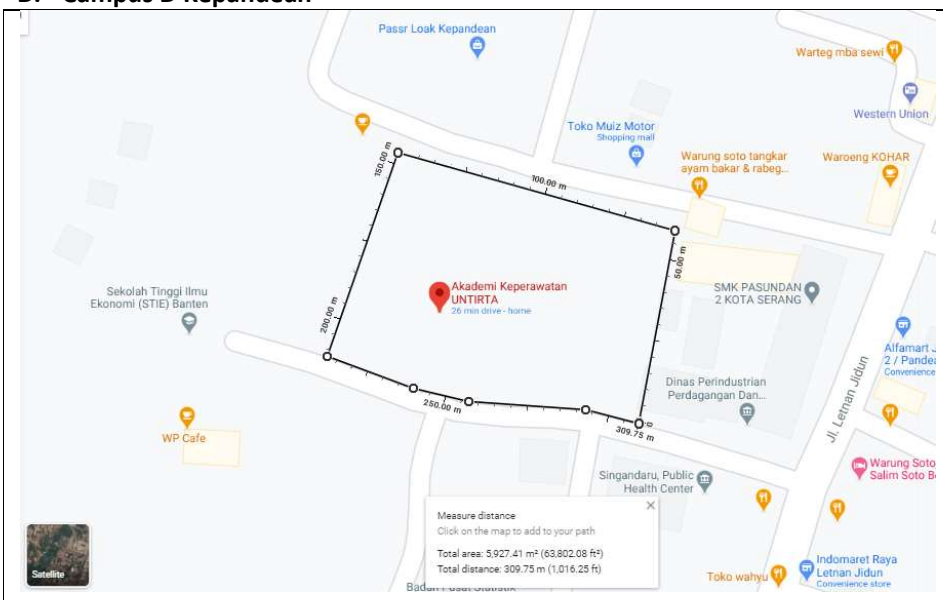
Description:

The total area of the C Ciwaru campus is 29,216 m^2

The total base area of the Campus C Ciwaru building is 5,565.5 m^2

Total open space area is 29,216 m2 – 5,565.5 m^2 = 23,650.5 m^2

D. Campus D Kepandean



Total Area of **Campus D Kepandean** (Universitas Sultan Ageng Tirtayasa, Indonesia)

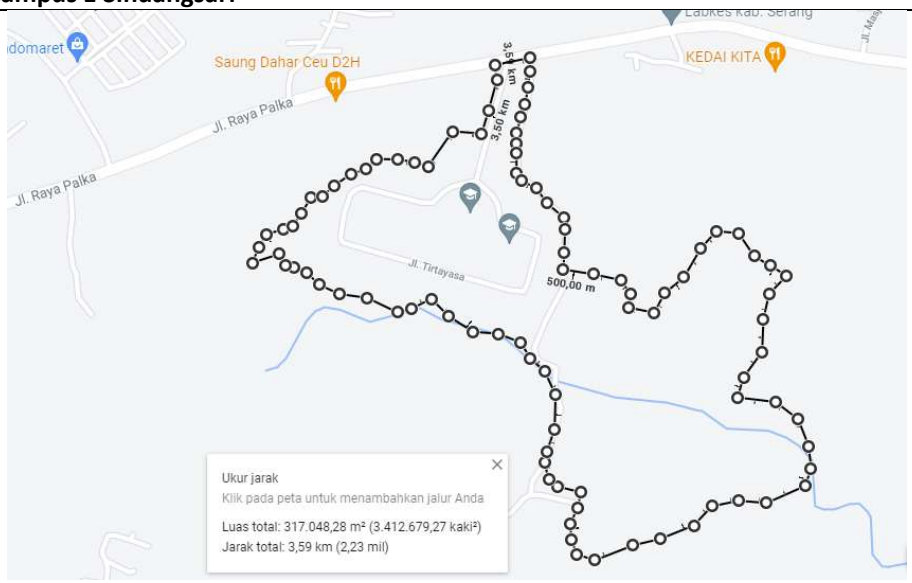
Description:

The total area of campus D Kepandean is 5,933 m^2

The total base area of Campus D Kepandean building is 4,042 m^2

The total open space area is 5,933 m2 – 4,042 m2 = 1,891 m^2

E. Campus E Sindangsari



Total Area **of Campus E Sindangsari** (Universitas Sultan Ageng Tirtayasa, Indonesia)

Description:
The total area of campus E Sindangsari is 317,048 m^2
The total area of Campus E Sindangsari building is 23,664.17 m^2
Total open space area is 317,048 m2 – 23,664.17 m2 = 293,383.83m^2

Open Space to Total Area Data Recapitulation :

No.	UNTIRTA's Campuses	Campus Area (m^2)	Ground Floor Area (m^2)	Open Space (m^2)
		(1.5)	(1.6)	(1.5-1.6)
1.	Campus A (Pakupatan)	28.384	11.467,33	16.916,67
2.	Campus B (Cilegon)	61.847	7.634	54.213
3.	Campus C (Ciwaru)	29.216	5.565,5	23.650,5
4.	Campus D (Kepandean)	5.933	4.042	1.891
5.	Campus E Sindangsari	127.054	23.664,17	103.389,83
6.	Embung of Campus E Sindangsari	13.892	0	13.892
7.	Campus E Development Land	176.102	0	176.102
8.	Agricultural land (Karangkitri)	21.483	0	21.483
9.	Agricultural land (Pandeglang)	74.250	0	74.250
	TOTAL	**538.161**	**52.373**	**485.788**

Based on a total of 5 campuses and with the addition of land used as a practical laboratory from the faculty of agriculture, the ratio of open space to the total area of UNTIRTA is:

The Ratio Of Open Space To Total Area = $\frac{(1.5-1.6)}{1.5} x\ 100\%$ = $\frac{485.788}{538.161} x\ 100\%$ **= 90,26 %**

Where the value of **90.26%** is included in the category **[4], namely > 90% - 95%**

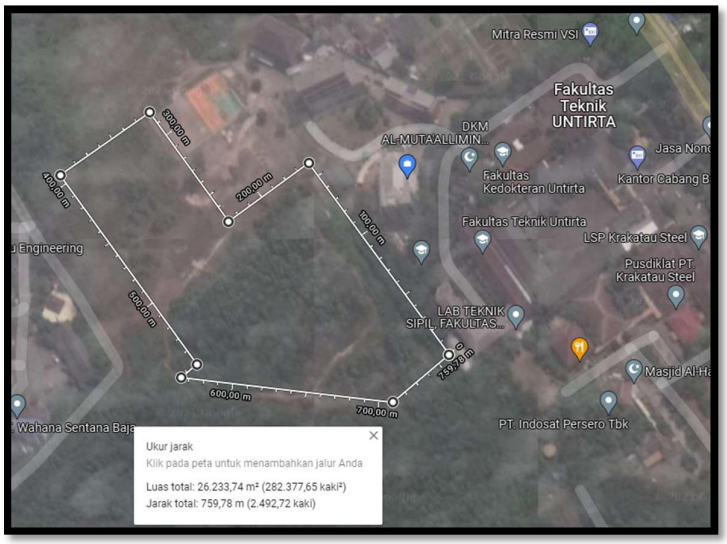
Additional evidence link:
https://green.untirta.ac.id/penataan-dan-infrastruktur/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[1] Setting and Infrastructure (SI)

[1.9] Total Area On Campus Covered In Forest Vegetation (m^2)

	Forest Vegetation located on campus B Cilegon with an area of 26,233 m^2
	Forest Vegetation located on campus E Sindangsari with an area of 176,102 m^2

	
 	Forest vegetation in Karangkitri with an area of 21,483 m^2
    	Forest Vegetation in Cadasari, Pandeglang with an area of 74,250 m^2

Description:
The total area of Campus B (Cilegon), Campus E (Sindangsari), Karangkitri Agricultural Experimental Garden, and Pandeglang Experimental Garden are covered with forest vegetation.

Open Space to Total Area Data Recapitulation :

No.	Untirta's Campuses	Open Space (m^2)
1.	Campus B Forest Vegetation	26.233
2.	E Campus Development Area	176.102
3.	Agricultural Area (Karangkitri)	21.483
4.	Agricultural Area (Pandeglang)	74.250
	TOTAL	**298.068**

Total campus area = 538.161 m2
So that the ratio of the total area on the campus covered by forest vegetation is obtained:
% ratio = $\frac{298.068}{538.161} \mathbf{x}\ 100\%$ **= 55,39 %**

Additional evidence link:
https://green.untirta.ac.id/penataan-dan-infrastruktur/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[1] Setting and Infrastructure (SI)

[1.10] Total Area On Campus Covered In Planted Vegetation

A. Campus A Pakupatan

Green Area	
	

Description:
Area of Campus A Pakupatan : 28,384 m^2
Green area (garden): 839.50 m^2

B. Campus B Cilegon

Green Area	
	


Description:
Cilegon Campus B area : 35,614 m^2
Greean Area (garden): 1,350 m^2

C. Campus C Ciwaru

Green Area	
	

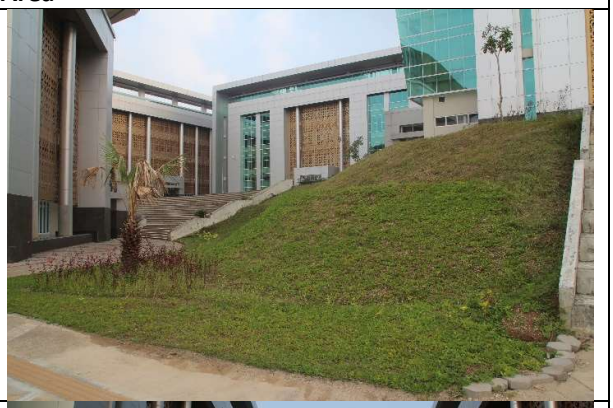
Description:
The area of Campus C Ciwaru : 29,216 m^2
Green area (garden): 25 m^2

D. Campus D Kepandean

Green Area	
	

Description:
Area of Campus D Kepandean : 5,933 m^2
Green area (garden): 70.65 m^2

E. Campus E Sindangsari

Green Area	
	
	
	
	 

Description:
Area of Campus E Sindangsari : 127,054 m^2
Green area (garden): 45,218 m^2

Data Recapitulation Total area on campus covered in planted vegetation :

No.	Untirta's Campuses	Campus Area (m^2)	Garden (m^2)
1.	Campus A (Pakupatan)	28.384	839,5
2.	Campus B (Cilegon)	35.614	1.350
3.	Campus C (Ciwaru)	29.216	25
4.	Campus D (Kepandean)	5.933	70,65
5.	Campus E Sindangsari	127.054	45.218
	TOTAL	**226.201**	**47.503,15**

Based on the total area of garden on 5 campuses, total area on campus covered in planted vegetation of UNTIRTA is:

Total area on campus covered in planted vegetation = $\frac{47.503,15}{226.201} \mathbf{x}\ 100\%$ **= 21,00 %**

Where the value of 21.00% is included in the category [3], namely > 20% - 30%

Additional evidence link:
https://green.untirta.ac.id/penataan-dan-infrastruktur/

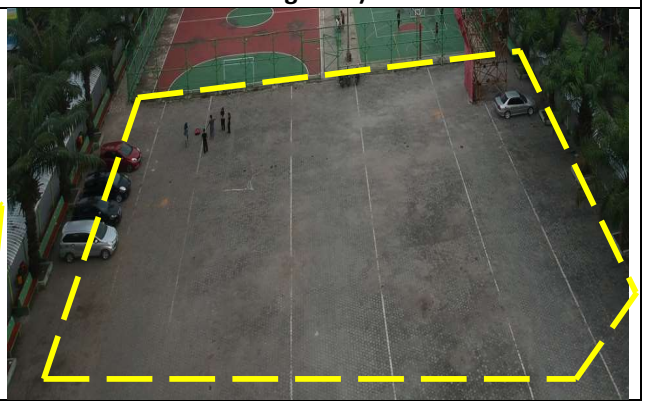
Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[1] Setting and Infrastructure (SI)

[1.11] Total Area On Campus For Water Absorption Beside Forest And Planted Vegetation

A. Campus A Pakupatan

Water Infiltration Area (Con-Block Installation In Parking Land)	
	

Description:
Area of Campus A Pakupatan : 28,384 m^2
Absorption area : 2,628.97 m^2

B. Campus B Cilegon

Water Infiltration Area (Grass And Con-Block Installation)	
	

Description:
Cilegon Campus B area : 35,614 m^2
Absorption area : 5,600 m^2

C. Campus C Ciwaru

Water Infiltration Area (Con-Block Installation In Parking Area)	
	

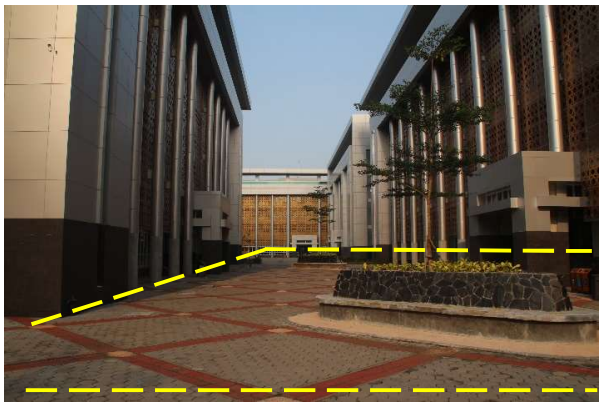
Description:
The area of Campus C Ciwaru : 29,216 m^2
Absorption area: 3,183 m^2

D. Campus D Kepandean

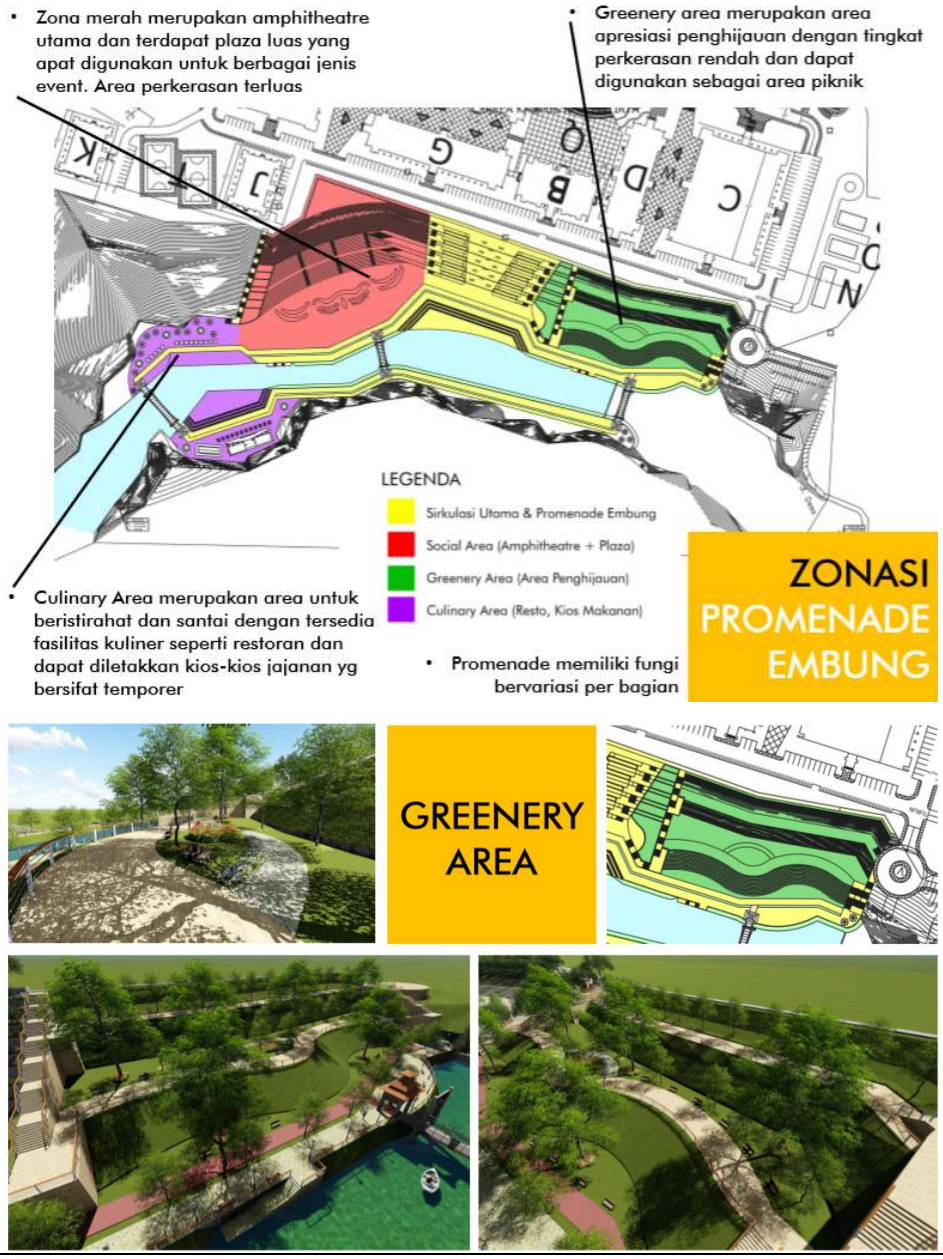
Water Infiltration Area (Con-Block Installation In Parking Area)	
	

Description:
Area of Campus D Kepandean : 5,933 m^2
Absorption area : 449 m^2

E. Campus E Sindangsari

Water Infiltration Area (Grass And Con-Block Installation)	
	
	
East Side + West Side Retention Pool Construction	
	
	

Master Plan For The Back 'Embung' Of Campus E Sindangsari



Description:

Area of Campus E Sindangsari : 127,054 m^2

Absorption area : 33,480 m^2

Data Recapitulation Total area on campus for water absorption beside forest and planted vegetation :

No.	Untirta's Campuses	Campus Area (m^2)	Absorption (m^2)
1.	Campus A (Pakupatan)	28.384	2.628,97
2.	Campus B (Cilegon)	35.614	5.600
3.	Campus C (Ciwaru)	29.216	3.183
4.	Campus D (Kepandean)	5.933	449
5.	Campus E Sindangsari	127.054	33.496
	TOTAL	**226.201**	**45.356,97**

Based on the total area of garden on 5 campuses, the total area on campus covered in planted vegetation of UNTIRTA is:

Total area on campus covered in planted vegetation = $\frac{45.356,97}{226.201} \mathbf{x}\ 100\%$ **= 20,05 %**

Where the value of **20.05 %** is included in the category **[3], namely > 20% - 30%**

Additional evidence link:

1. https://www.youtube.com/watch?v=azOBpa4g5lw
2. https://bidikutama.com/berita-mahasiswa/jokowi-perintahkan-menteri-pupr-bangun-embung-di-kampus-sindangsari/

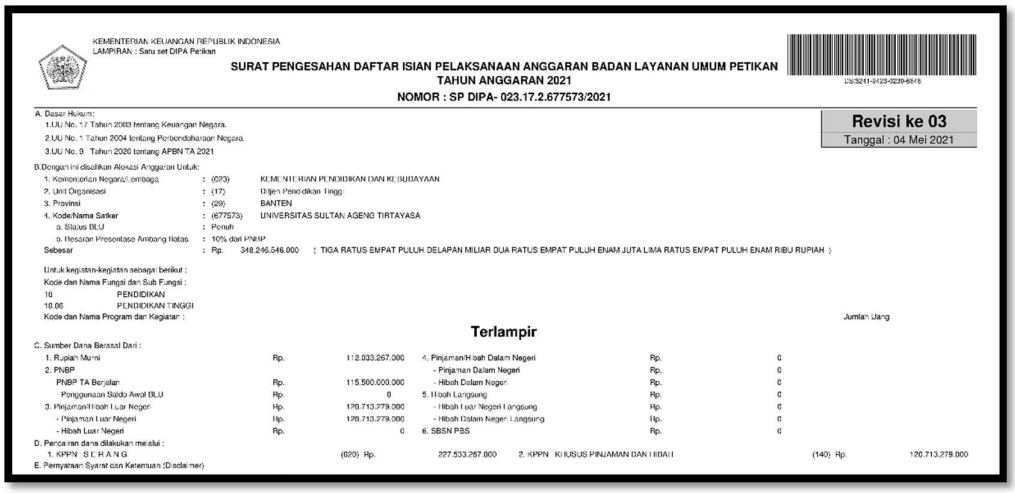
Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[1] Setting and Infrastructure (SI)

[1.18] University's Budget for Sustainableity Effort

DIPA 2019	 KEMENTERIAN KEUANGAN REPUBLIK INDONESIA LAMPIRAN : Satu set DIPA Petikan SURAT PENGESAHAN DAFTAR ISIAN PELAKSANAAN ANGGARAN BADAN LAYANAN UMUM PETIKAN TAHUN ANGGARAN 2019 NOMOR : SP DIPA- 042.01.2.401017/2019 Revisi ke 11 Tanggal : 20 Januari 2020 Terlampir
DIPA 2020	 KEMENTERIAN KEUANGAN REPUBLIK INDONESIA LAMPIRAN : Satu set DIPA Petikan SURAT PENGESAHAN DAFTAR ISIAN PELAKSANAAN ANGGARAN BADAN LAYANAN UMUM PETIKAN TAHUN ANGGARAN 2020 NOMOR : SP DIPA- 023.17.2.677573/2020 Revisi ke 05 Tanggal : 15 September 2020 Terlampir

DIPA 2021	

KEMENTERIAN KEUANGAN REPUBLIK INDONESIA
LAMPIRAN : Satu set DIPA Petikan

SURAT PENGESAHAN DAFTAR ISIAN PELAKSANAAN ANGGARAN BADAN LAYANAN UMUM PETIKAN
TAHUN ANGGARAN 2021
NOMOR : SP DIPA- 023.17.2.677573/2021

Revisi ke 03
Tanggal : 04 Mei 2021

A. Dasar Hukum:
1.UU No. 17 Tahun 2003 tentang Keuangan Negara.
2.UU No. 1 Tahun 2004 tentang Perbendaharaan Negara.
3.UU No. 9 Tahun 2020 tentang APBN TA 2021

B.Dengan ini disahkan Alokasi Anggaran Untuk:
1. Kementerian Negara/Lembaga : (023) KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
2. Unit Organisasi : (17) Ditjen Pendidikan Tinggi
3. Provinsi : (29) BANTEN
4. Kode/Nama Satker : (677573) UNIVERSITAS SULTAN AGENG TIRTAYASA
a. Status BLU : Penuh
b. Besaran Presentase Ambang Batas : 10% dari PNBP
Sebesar : Rp. 348.246.546.000 (TIGA RATUS EMPAT PULUH DELAPAN MILIAR DUA RATUS EMPAT PULUH ENAM JUTA LIMA RATUS EMPAT PULUH ENAM RIBU RUPIAH)

Untuk kegiatan-kegiatan sebagai berikut :
Kode dan Nama Fungsi dan Sub Fungsi :
10 PENDIDIKAN
10.06 PENDIDIKAN TINGGI
Kode dan Nama Program dan Kegiatan : Jumlah Uang

Terlampir

C. Sumber Dana Berasal Dari :

1. Rupiah Murni	Rp.	112.033.267.000	4. Pinjaman/Hibah Dalam Negeri	Rp.	0
2. PNBP			- Pinjaman Dalam Negeri	Rp.	0
PNBP TA Berjalan	Rp.	115.500.000.000	- Hibah Dalam Negeri	Rp.	0
- Penggunaan Saldo Awal BLU	Rp.	0	5. Hibah Langsung	Rp.	0
3. Pinjaman/Hibah Luar Negeri	Rp.	120.713.279.000	- Hibah Luar Negeri Langsung	Rp.	0
- Pinjaman Luar Negeri	Rp.	120.713.279.000	- Hibah Dalam Negeri Langsung	Rp.	0
- Hibah Luar Negeri	Rp.	0	6. SBSN PBS	Rp.	0

D. Pencairan dana dilakukan melalui :
1. KPPN SERANG (020) Rp. 227.533.267.000 2. KPPN KHUSUS PINJAMAN DAN HIBAH (140) Rp. 120.713.279.000
E. Pernyataan Syarat dan Ketentuan (Disclaimer)

University Budget Recapitulation In The Last 3 Years (Us Dollar)

No	Descriptions	Year			Average
		2019	2020	2021	
1	Total campus budget	21.218.929,50 USD	30.090.959,12 USD	24.760.765,33 USD	25.356.884,65 USD
2	Total campus budget for sustainability				1.268.000 USD
3	Percentage of campus budget for sustainability efforts				5 %

Description:
The budget for sustainability campus funds is taken from DIPA for capital and building expenditure activities with a total annual average of 1.268.800 USD or about 5 % of the total university budget.

Additional evidence link:
https://untirta.ac.id/2021/01/02/dipa-rka-kl-untirta-2021/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[1] Setting and Infrastructure (SI)

[1.20] Percentage Of Operation And Maintenance Activities During Covid-19 Pandemic

(Maintain Cleanliness of Rooms and Yard Periodically)


KOHLER


2021/7/30 14:11


www.untirta.ac.id
2021/9/21 11:00


2021/9/21 11:58

(Periodic Checking of Supporting Machines and Lights)

Description:

Universitas Sultan Ageng Tirtayasa, commonly abbreviated as Untirta, is a state university located in the province of Banten, Indonesia. Universitas Sultan Ageng Tirtayasa as a State University continues to make changes and improvements in all fields by making improvement or maintenance of the facilities and infrastructure owned to support activities on campus and always doing cleaning to maintain cleanliness and health during Covid-19 pandemic. Almost all buildings are always checked for conditions and cleaning, especially in buildings that carry out many activities such as rectorate buildings and faculty buildings, but classroom buildings are only carried out periodically because during the Covid-19 pandemic, teaching and learning activities are still online. The following is a presentation of buildings that carry out routine maintenance:

1. Total campus building area = 123.673,91 m^2
2. Total operated building = 93.944,91 m^2

   Percentage building that operated and maintenanced = 76 %

Additional evidence link:

https://green.untirta.ac.id/penataan-dan-infrastruktur/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[1] Setting and Infrastructure (SI)

[1.20] Percentage Of Operation And Maintenance Activities During Covid-19 Pandemic

(Maintain Cleanliness of Rooms and Yard Periodically)


KOHLER


2021/7/30 14:11


www.untirta.ac.id
2021/9/21 11:00


2021/9/21 11:58

(Periodic Checking of Supporting Machines and Lights)

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1. Total campus building area = 123.673,91 m^2
2. Total operated building = 93.944,91 m^2

   Percentage building that operated and maintenanced = 76 %

Additional evidence link:

https://green.untirta.ac.id/penataan-dan-infrastruktur/

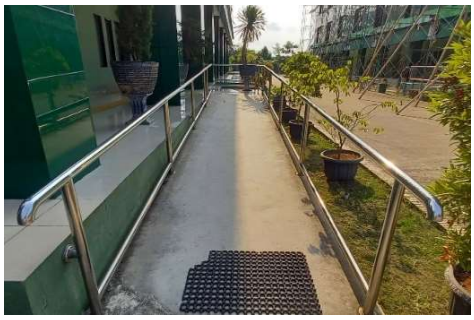
Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[1] Setting and Infrastructure (SI)

[1.21] Campus Facilities For Disabled, Special Needs And Or Maternity Care

Pedestrian Facilities For Disabled (Blind)



Wheelchair Track Facilities For Disabled And Disabled Toilets

Lactation Room Facilities for Maternity Care

Description:

Universitas Sultan Ageng Tirtayasa, commonly abbreviated as Untirta, is a state university located in the province of Banten, Indonesia. Universitas Sultan Ageng Tirtayasa as a State University continues to make changes and improvements in all fields, one of those is by preparing facilities friendly to persons with disabilities, such as disability lanes available along the road, then special parking locations for disabilities and complete with signs as access to the building, besides that there is also special toilet for people with disabilities or people with special needs in each building, this is done with the intention that people with disabilities can still be active on campus. At several locations, lactation rooms are available to support maternity care.

Not only support in terms of facilities, Untirta also cares for students with special needs by giving appreciation to students who have achievements in both academic and non-academic fields.

Additional evidence link:

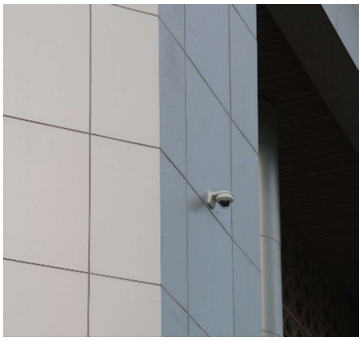
https://untirta.ac.id/2020/10/19/berkah-dies-natalis-ke-39-untirta-vivi-mahasiswi-berkebutuhan-khusus-banjir-hadiah/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[1] Setting and Infrastructure (SI)

[1.22] Security and safety facilities



Description:

Universitas Sultan Ageng Tirtayasa, commonly abbreviated as Untirta, is a state university located in the province of Banten, Indonesia. Universitas Sultan Ageng Tirtayasa as a State University has good security in each of its campuses, this is evidenced by the presence of guard by the security team, guard posts at several points of the campus and the availability of CCTV and APAR on each campus. This is provided to support security in the Untirta campus environment from all things that are not desirable so that every academic community will still feel comfortable in carrying out activities in campus environment. Additionally, Untirta conducted many disaster response simulations on the Sindangsari campus to ensure that the Sindangsari campus has standardized security measures in place to deliver the best service possible to the Academic Civitas, Stakeholders, and Community.

Additional evidence link:

https://www.instagram.com/reel/CSBHreiJQ-N/?utm_medium=copy_link

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[1] Setting and Infrastructure (SI)

[1.23] Health Infrastructure Facilities For Students, Academics And Administrative Staffs' Wellbeing

Description:

Technical Implementing Service Unit - Clinic Untirta has an obligation to provide health services to all Untirta employees, all academics, both preventively and curatively. Therefore, Technical Implementing Service Unit - Clinic Untirta implements an integrated service program, which is a service activity aims to provide health services, provide integrated health information and socialization. Through the annual program, Technical Implementing Service Unit - Clinic Untirta also conducts medical tests for new students, these types of tests consist of general medical tests, tests for the use of illegal drugs or types of narcotics or drugs and color blind tests for certain faculties or educational programs require these requirements.

To facilitate the form of health services at Technical Implementing Service Unit - Clinic Untirta, technical instructions are given for those who will seek treatment by being given a special card for treatment functions to control changes or developments in patients in treatment.

Technical Implementing Service Unit - Clinic Untirta service is at the stage of improvement in terms of the facilities provided to support the health of Untirta employees. Sultan Ageng Tirtayasa University (Untirta) currently has a Technical Implementing Service Unit - Clinic, was established based on the 2003 Untirta Rector's Decree on Organization and Work Procedures (OTK) of Untirta, which was named Technical Implementing Service Unit - Clinic. The existence of the Technical Implementing Service Unit - Clinic Untirta is expected to be able to become a health service center (Central of Health) for Untirta. Various collaborations in health services are also carried out, community service through social services (Baksos) is the main target in providing health services for the community, especially Untirta employees and generally the people of Banten. Technical Implementing Service Unit - Clinic Untirta is trying to strengthen its role in maximizing the form of Untirta health services through various work plans in the next five years such as seminars or health workshops by inviting various health experts or collaborating with other health service units in providing health services to carry out community service activities on society. The explanation above shows that Untirta's hope to improve the quality of health services is profound. Untirta's Clinic as a health service center is certainly highly expected. Therefore, support for the development and socialization of Untirta 's Clinic needs support.

Universitas Sultan Ageng Tirtayasa already has several clinics spread across several campuses, namely:

1. Campus A (Pakupatan)
   Campus A (Pakupatan) as the central clinic.
2. Campus B (Cilegon)
   Campus B (Cilegon) currently has a clinic located at the front of the Cilegon campus site map which is intended for students and Untirta employees.
3. Campus C (Ciwaru)
   Campus A (Ciwaru) currently has a clinic located at the front of the Ciwaru campus site map.

Additional evidence link:

1. http://ubis.untirta.ac.id/umc
2. https://www.youtube.com/watch?v=q_uNd9YN3tw&t=3s
3. https://www.youtube.com/watch?v=6BwocozDAXc
4. https://www.youtube.com/watch?v=dQk5is6Gptk
5. https://www.youtube.com/watch?v=1HJ5dHFZdWg

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
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[1] Setting and Infrastructure (SI)

[1.24] Conservation : Plant, Animal, And Wildlife Genetic Resources For Food And Argicultural Secured In Either Medium Or Ling-Term Conservation Facilities

Palawija Plantations and Research Conservation Areas


Chili Plants in the Yard of the Faculty of Agriculture Building



Fish Conservation On The Ground Floor Of The Student Center Building

Fish Ponds At Several Points On Campus

The Using Of Unproductive Land In Engineering Faculty As Open Space Renewable Energy Garden With Local Wisdom Of Banten Province (Saung Sanggah)

Description:

Universitas Sultan Ageng Tirtayasa, commonly abbreviated as Untirta, is a state university located in the province of Banten, Indonesia. Sultan Ageng Tirtayasa University as a State University continues to strive to make changes and improvements in all fields, one of those is by utilizing vacant land to be used to support every activity while still supporting the green campus program. The vacant land used is located behind Campus E (Sindangsari) as a secondary crop plantation, in addition, the Faculty of Agriculture Untirta has 2 lands that are used for plant conservation practices which are located in Karangkitri and in Cadasari, Pandeglang as a innovation local food. There are also chili plants around the Faculty of Agriculture building that can be used.

Untirta also has a conservation pond at the ground floor of the Student Center building, the pond has been planted with fish by UNTIRTA's Rector. In addition, at several points around the campus there are beautiful facilities specially aquariums. Of the total conservation, about 27% have been implemented.

Additional evidence link:

1. https://untirta.ac.id/2021/09/03/untirta-mendapat-4000-benih-ikan-dari-balai-benih-ikan-tawar/
2. https://www.instagram.com/p/CUU8LRWpayl/?utm_medium=copy_link

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
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[2] Energy and Climate Change (EC)

[2.1] Energy Efficient Appliances Usage

Example of LED light usage, Air Conditioning Inverter system (Campus B Universitas Sultan Ageng Tirtayasa)

Example of LED light usage, (Campus E Universitas Sultan Ageng Tirtayasa)

Example of Air Conditioning Inverter and VRV system (Campus E Universitas Sultan Ageng Tirtayasa)

Description:
Universitas Sultan Ageng Tirtayasa has several campus locations namely Campus A located in Pakupatan - Serang, Campus B located in Cilegon, Campus C located in Ciwaru - Serang, Campus D located in Kepandean – Serang and Campus E located in Sindang Sari – Banten.

Currently the Main Campus has moved to camus E in Sindangsari, there are Rectorate Building, Audiotorium, Library, Laboratory, 4 faculty buildings, Integrated Class Building, Student Center Building and 2 Dormitory Buildings.
The use of LED lights and energy-saving air conditioners has reached 100% at campus E Sindangsari. With a total of 5520 lamps spread over 12 buildings, all of air conditioner have been using centralized VRV technology.
The use of lights and air conditioners can be monitored and controlled by the BAS (Building Automation System)

REKAPITULASI JUMLAH LAMPU			
NO	**KAMPUS**	**JUMLAH PENGGUNAAN LAMPU**	**LAMPU LED**
1	**A Pakupatan**	2856	571
2	**B Cilegon**	1187	594
3	**C Ciwaru**	1240	342
4	**D Kepandean**	433	51
5	**E Sindangsari**	5415	5415
TOTAL		11131	6973
PERSENTASI		63%	

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/energi-dan-perubahan-iklim/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
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[2] Energy and Climate Change (EC)

[2.3] Smart Building Implementation

***Min. at least five requirements for each building**

No.	Name	Place	automation		safety				energy		water		Indoor environment				lighting				Building Area (m^2)
			B1	B2	S1	S2	S3	S4	E1	E2	A1	A2	I1	I2	I3	I4	L1	L2	L3	L4	
	Universitas Sultan Ageng Tirtayasa; Campus A	Serang, Indonesia				x	x										x	x		x	20612
	Universitas Sultan Ageng Tirtayasa; Campus B	Cilegon, Indonesia				x	x		x							x	x	x		x	8987
	Universitas Sultan Ageng Tirtayasa; Campus C	Serang, Indonesia				x	x										x	x		x	4989
	Universitas Sultan Ageng Tirtayasa; Campus D	Serang, Indonesia				x	x										x			x	1258
	Universitas Sultan Ageng Tirtayasa; Campus E	Serang, Indonesia	x	x		x	x		x							x	x	x		x	60275
	Total																				**96121**

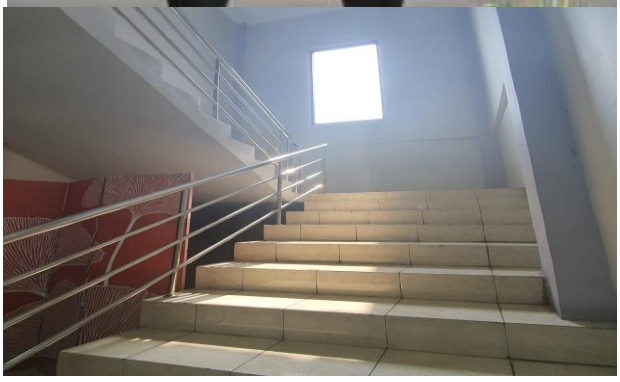
Please compile one row for each building (or homogeneous part of it) by ticking with a "X" for each requirement

Smart building implementation

$$\frac{\textit{total smart building area}}{\textit{total building area}} \times 100\%$$

Example:
***Total Building Area: 112338 m^2**

$$\frac{9121\ m^2}{123,6655\ m^2} \times 100\% = 78\%$$



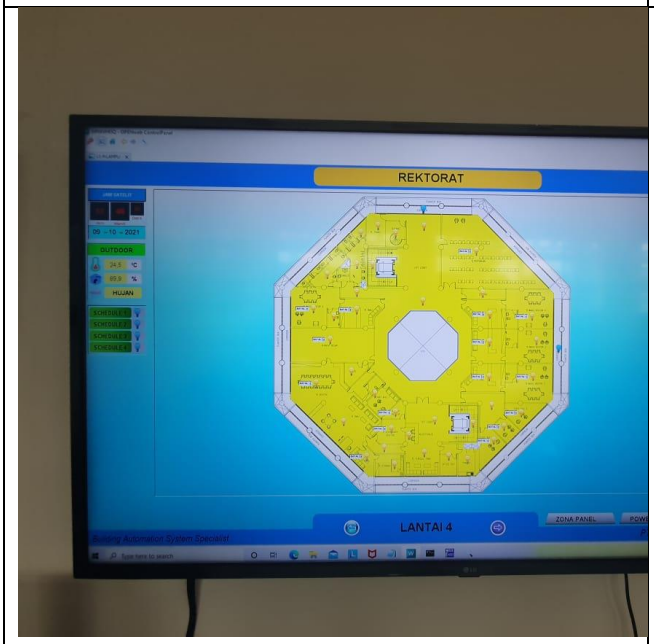
Building A

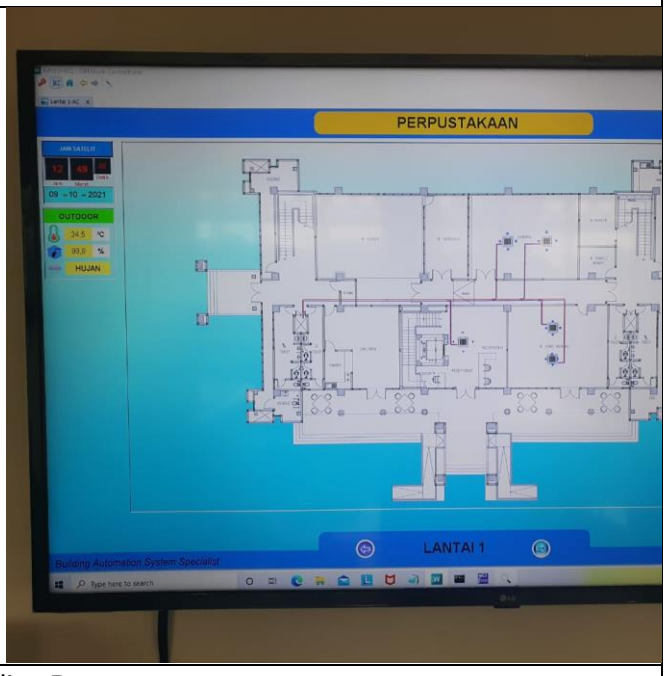

Building B




Building C


Building D





Buliding E

In the calculation of a smart building implementation, two campuses meet the minimum requirements of 5 features; campus B and Campus E. However, Campus A, campus C and campus D meet three features, namely S2, S3 (fire fighting system and CCTV system) and L1 (use LED).
. Campus E is a new campus which is built based on smart and green building.

Percentage of the building area that has used the smart building concept reached 78%, which the largest area is in E campus Sindangsari, with all of buildings already installed with smart systems. Of the 11 buildings in Sindangsari, each building is equipped with an electronic system i.e. CCTV security, Fire Alarm, Building Sound system, temperature sensor, heat sensor, smoke detector-It's all integrated with the Building Automation System (BAS). All systems in E campus Sindangsari can be monitored and controlled centrally, as well as with the use of electricity, both lighting and AC systems.

The integrated control system is located in Library, and can also be monitored from Rector's room. Not only that, all of information is also supported by the existence of an IPTV system spread in each building

Additional evidence link: https://green.untirta.ac.id/energi-dan-perubahan-iklim/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[2] Energy and Climate Change (EC)

[2.5] Renewable Energy Sources in Campus

Biodiesel 1250 KVA

Biodiesel 460 KVA

Biodiesel 460 KVA

Description:

1. There are five Biodiesel generators available which are distributed in Campus A two generators (capacity 1250 kVA), one in Campus B (capacity 1250 kVA), one in Campus D (capacity 460 kVA), and another one in Campus E (capacity 1250 kVA).
2. In Campus B, solar cell 3300 Wp was installed and utilized for lighting. The lighting load is 1410 Watt. There is also a small capacity of wind power plants that is specifically used for lecturers' and students' research.
3. There are some studies of solar cell implementation have been conducted in Campus B. Some studies which utilized the software PVSyst recommended the installation of 24 solar cells (12 series and two parallels) with the capacity of 300Wp on each of them. As a result, the Solar cell power plant enables to generate total energy of 11.211 energy/year. The installation of the solar cell power plant is in the right place to generate a lot of energy. To fulfill the lightning load of 11.624,5 kWh/year, some loads of solar cell power plant ON-GRID is also supplied by the National Electrical Company (known as PLN). The amount of energy of the solar cell power plant used is 6.253 kWh/year and energy supplied by PLN is 5.371,5 kWh/year. Other studies stimulated the use of solar cells as a power plant on BR building (3-floor building) with a lightning load of 5.280 kWh/year and it was required for, at least, 36 solar cells (300Wp/each). The distribution on each floor will be 12 solar cells that are connected to 6 series and 2 parallels.
4. In early 2020, a study was conducted to measure the total amount of energy in Universitas Sultan Ageng Tirtayasa. This planning was stimulated using the PVsyst application and the load on the simulation used energy consumption on a yearly calendar. Modul PV used was Jinko Solar JKM 300M-60-V *monocrystalline* and its specification is as in the following table 1.

Table 1 Spesification of Modul Jinko Solar JKM 300M-60-V *monocrystalline*

No	Spesification	Notes
1	Peak Power (Pmax)	301,5 Watt
2	Efficiency Module / Area	18,42 %
3	Max. power volt (Vmp)	32,6 V
4	Max. power current (Imp)	9,22 A
5	Open circuit volt (Voc)	39,1 V
6	Short circuit current (Isc)	10,02 A
7	Dimension	1650 x 992 x40 mm
8	Weight	19 kg

The inverter used was customized with the number of module PV that will be installed. Inverter Solaredge SE2500H-AUS was used for building A-D and its specification is as in the following table 2.

Table 2 Specification of Inverter Solaredge SE2500H-AUS

No	Specification	Notes
1	Fixed Input DC Voltage	380 V
2	Input Current	8 A
3	Efficiency	99.1 %
4	Maximum Input Power	3,9 kW
5	Output Voltage	230 V
6	Output Current	11,5 A
7	Output AC Power	2,5 kW

Meanwhile, for the energy use in the entire building utilized 2 inverter Solaredge SE16K-EU-APAC/AUS and its specification is as in the following table 3.

Tabel 3 Spesification Inverter SE16K-EU-APAC/AUS

No	Spesification	Notes
1	Fixed Input DC Voltage	750 V
2	Input Current	23 A
3	Efficiency	97.97 %
4	Maximum Input Power	17,6 kW
5	Output Voltage	400 V
6	Output Current	25,5 A
7	Output AC Power	17 kW

Solar cell power plant (PLTS) on building A-D will use 10 modules which are compiled series. On the module, seitan will be installed *optimizer* SolarEdge 505 that functions to maximize the output of the module and to match the input of required inverter voltage.

In addition, the design for the whole load will use 128 modules that are compiled 32 series that are parallel on four parts.

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/energi-dan-perubahan-iklim/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
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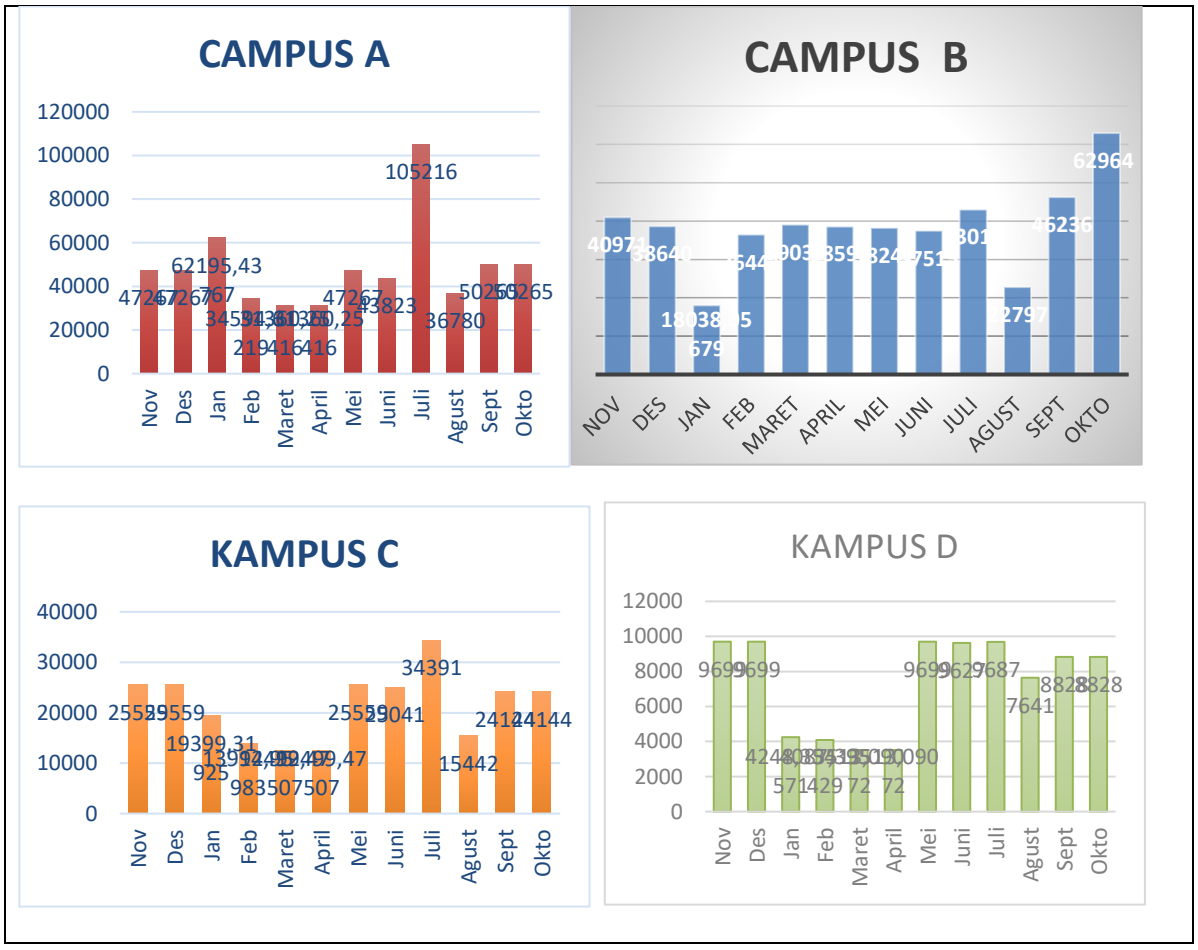
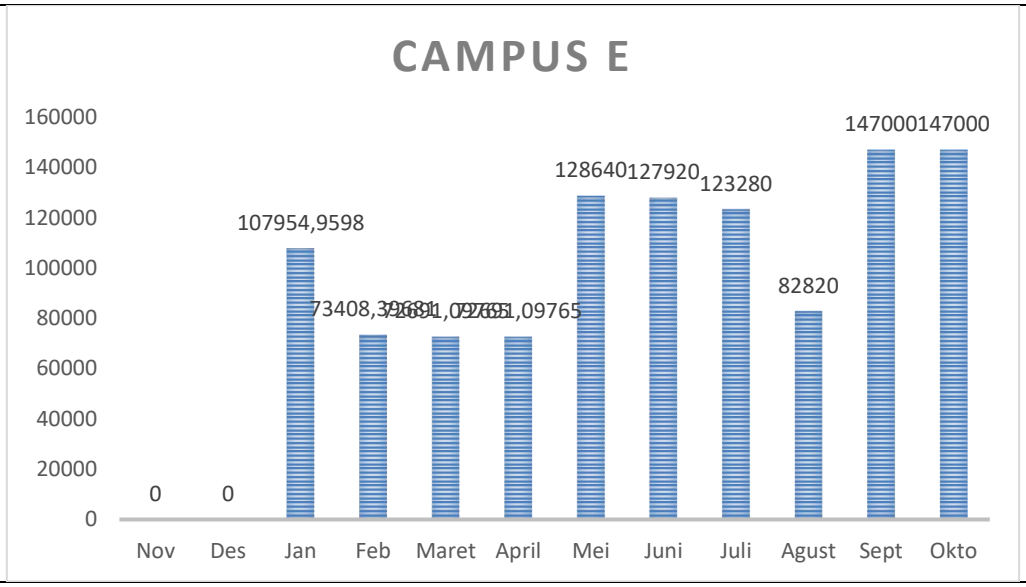
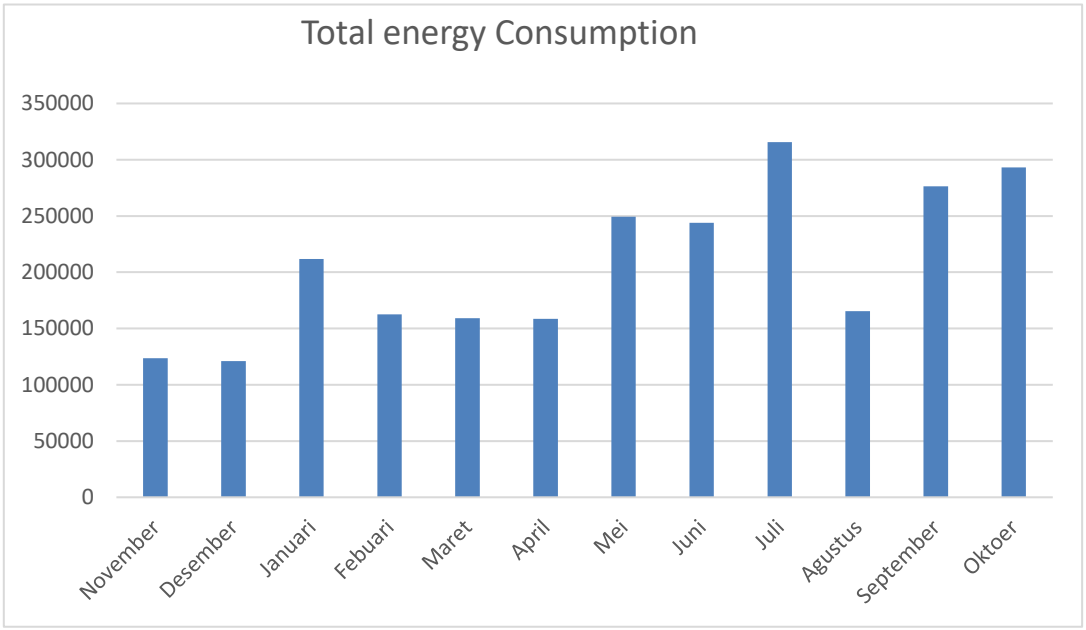
[2] Energy and Climate Change (EC)

[2.6] Electricity Usage per Year (in Kilowatt hour)





Annual energy consumption on each campus



Total energy consumption on kWh (Universitas Sultan Ageng Tirtayasa)

Description:

Campus A, monthly energy consumption can be seen on the graphic. The total of energy use in 1 year are 587.667 kwh, last year was 592.609 kWh.

Campus B, load demands are supplied by two sources namely PT Krakatau Daya Listrik (KDL) and PT Persero PLN. The total energy use from both sources are 462.494 kwh and last year load demands were 750.662 kWh.

Campus C, the total of energy consumption in one year are 258.232 kwh, and last year 425.877 kWh, and for Campus D, the total energy consumption are 89,069 kwh, and for last year was 126.928 kWh.

Currently Campus E in Sindangsari has begun to be used gradually starting from January, the total of energy consumption in one year are 1,083,405 kwh.
The total energy consumption of Universitas Sultan Ageng Tirtayasa is 2,480,862 kwh, and last year at 2,896,076 kWh.
Overall, seen from the total electrical energy used by Untirta there is a decrease in usage, although there is an additional campus area in Sindangsari which consists of 11 buildings. This shows that the Sindangsari campus has realized the use of energy-efficient electrical equipment.

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/energi-dan-perubahan-iklim/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
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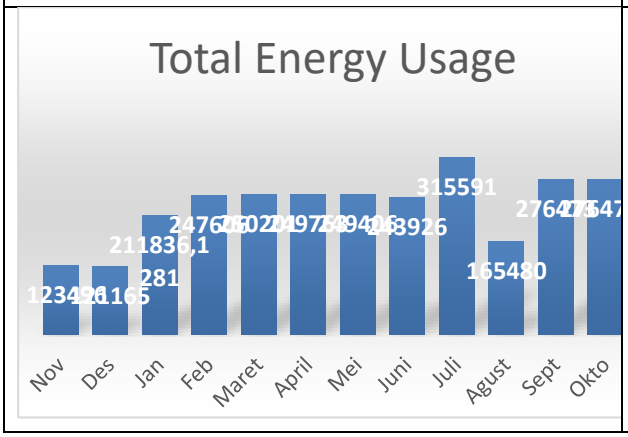
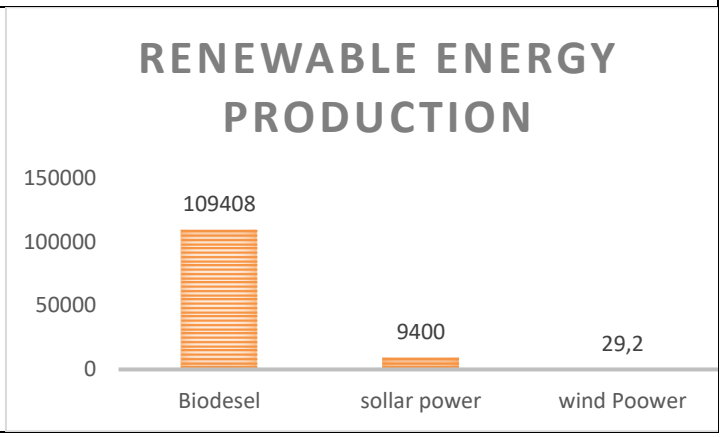
[2] Energy and Climate Change (EC)
[2.8] The ratio of renewable energy production divided by total energy usage per year

Picture A	Picture B
	

Description:
The calculation of renewable energy resulted in one-year calendar is as follow:
Biodisel: There are 3 biodiesels available with the capacity of 460 kVA and 1 biodiesel capacity of 1250 kVA. The total amount of capacity is 2630 kVA. Assumed that cos phi is 0,85 and its operation for 1 hour/a week, biodiesel generate total energy of 109408 kWh.

Solar power: Using 20 solar cell, energy that can be generated is in 9400 kWh/year.
Wind power: It is still in small scale of wind power design and the power generates between 35 – 50 watt. Two hours per day, those equipment yield 29,2 kWh/year.

In total, the renewable energy is **118837,2 kWh**

The ratio of renewable energy production divided by total energy usage per year:

$$\frac{renewable\ energy\ production}{total\ energy\ useage\ per\ year} = \frac{118837.2}{2{,}480{,}862} \times 100\% = 4{,}8\%$$

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/energi-dan-perubahan-iklim/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
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[2] Energy and Climate Change (EC)

[2.9] Elements of Green Building Implementation as Reflected in All Construction and Renovation Policies

KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
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Jalan Raya Jakarta KM. 4 Pakupatan-Serang Kode Pos.42121
Telepon 0254-280330 *Faxsimile* (0254)-281254
Website : www.untirta.ac.id, *Email* : info@untirta.ac.id

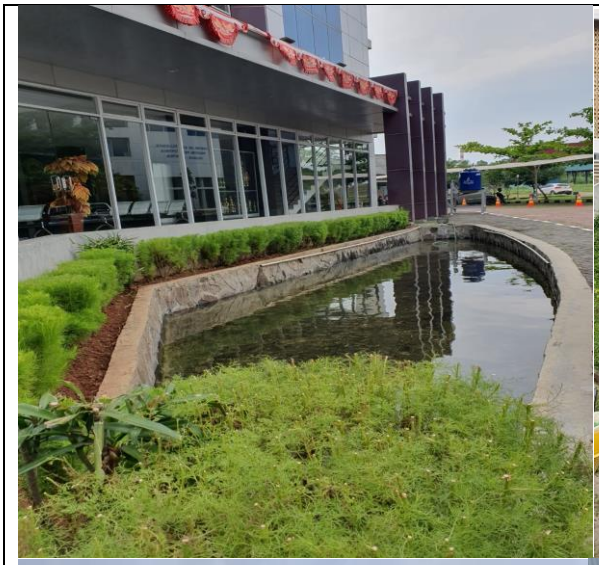
KEPUTUSAN REKTOR
UNIVERSITAS SULTAN AGENG TIRTAYASA
Nomor : 655 /UN43/KPT.PR.00.00/2020
Tentang
KEBIJAKAN PROGRAM PENELITIAN BERKELANJUTAN YANG MENDUKUNG KAMPUS UNIVERSITAS SULTAN AGENG TIRTAYASA TAHUN 2020

REKTOR UNIVERSITAS SULTAN AGENG TIRTAYASA,

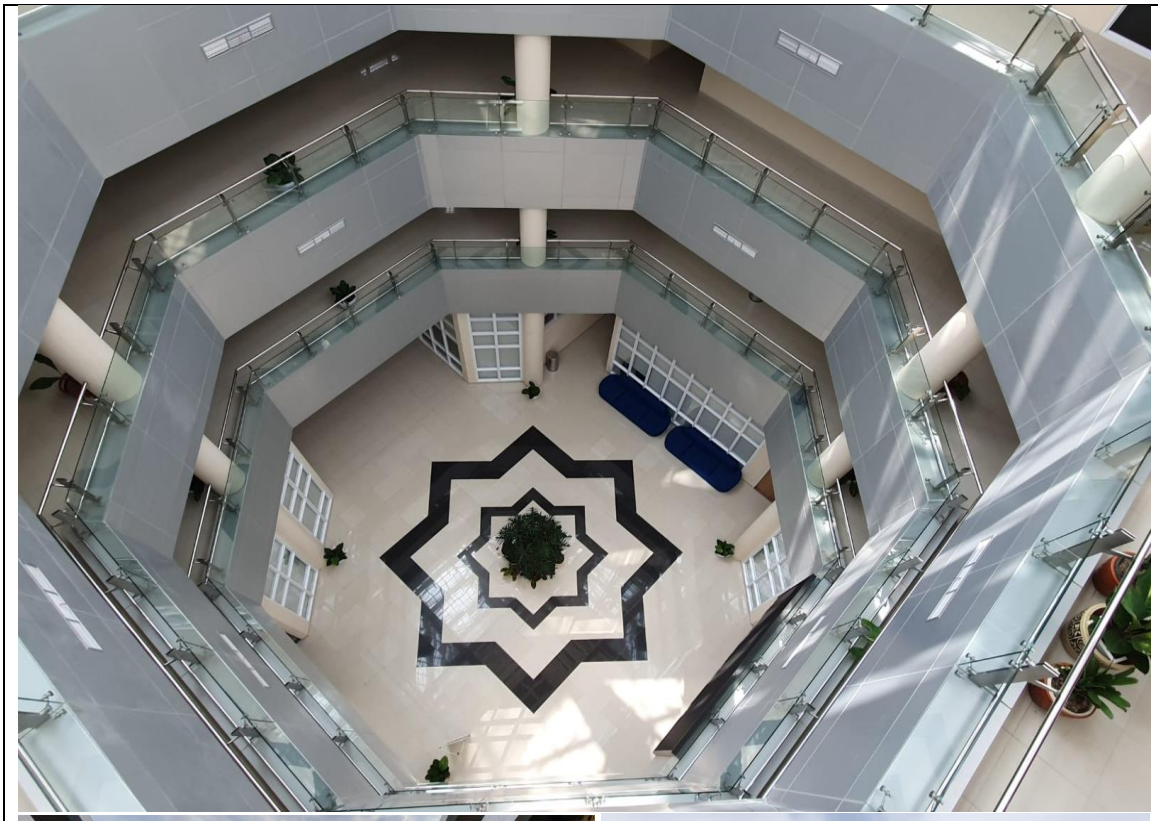
Menimbang :
a. bahwa untuk terwujudnya UNTIRTA sebagai *Integrated Smart and Green (It'S Green) University* yang Unggul, Berkarakter, dan Berdaya Saing, di Kawasan ASEAN tahun 2030;
b. bahwa untuk penguatan bidang ilmu, inovasi dan penemuan baru, dan teknologi baru yang mampu mendorong meningkatkan reputasi kampus Universitas Sultan Ageng Tirtyasa;
c. bahwa sehubungan dengan huruf a dan b tersebut di atas, perlu dibuat Kebijakan Program Penelitian yang mendukung kampus berkelanjutan di kampus Universitas Sultan Ageng Tirtayasa dengan Keputusan Rektor.

Mengingat :
1. Undang-Undang Republik Indonesia Nomor 32 Tahun 2009 Tentang Perlindungan dan Pengelolaan Lingkungan Hidup
2. Peraturan Pemerintah Nomor 4 Tahun 2014 tentang Penyelenggaraan Pendidikan Tinggi dan Pengelolaan Pendidikan Tinggi (Lembaran Negara Republik Indonesia Tahun 2014 Nomor 16, Tambahan Lembaran Negara Republik Indonesia Nomor 5500);
3. Peraturan Pemerintah Republik Indonesia Nomor 66 Tahun 2014 Tentang Kesehatan Lingkungan;
4. Keputusan Presiden RI Nomor : 32 Tahun 2001 tentang Pendirian Universitas Sultan Ageng Tirtayasa;
5. Peraturan Menteri Negara Lingkungan Hidup Republik Indonesia Nomor 16 Tahun 2012 Tentang Pedoman Penyusunan Dokumen Lingkungan Hidup;
6. Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor: 29 Tahun 2012 tentang Organisasi dan Tata Kerja Universitas Sultan Ageng Tirtayasa;
7. Peraturan Menteri Riset, Teknologi dan Pendidikan Tinggi Nomor : 17 Tahun 2015 tentang Statuta Universitas Sultan Ageng Tirtayasa;
8. Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor : 3 tahun 2020 tentang Standar Nasional Pendidikan Tinggi;
9. Keputusan Menteri Keuangan RI Nomor 1/PMK.05/2012 tanggal 3 Januari 2012 tentang Penetapan Universitas Sultan Ageng Tirtayasa sebagai Instansi Pemerintah yang menerapkan PK-BLU secara penuh;
10. Keputusan Menteri Riset, Teknologi, dan Pendidikan Tinggi Republik Indonesia Nomor 29290 / M / KP /2019 tentang pengangkatan Dr. H. Fatah Sulaiman, ST., MT. sebagai Rektor Universitas Sultan Ageng Tirtayasa periode 2019 - 2023;
11. Peraturan Rektor Universitas Sultan Ageng Tirtayasa Nomor : 13 Tahun 2019 Tentang Rencana Strategis (Renstra) Universitas Sultan Ageng Tirtayasa.

The figure above is the sample of rector's decree on the use of renewable energy



The pictures above are the sample of green Area Garden in Universitas Sultan Ageng Tirtayasa



The pictures above are the sample of Green Building architecture implementation in Universitas Sultan Ageng Tirtayasa

Description:

The implementation of renewable energy has been successfully implemented at Universitas Sultan Ageng Tirtayasa, as can be seen in Campus B. Several studies regarding the use of solar and wind energy have been conducted. Almost all the buildings at Universitas Sultan Ageng Tirtayasa have implemented a natural lightening system and ventilation system as referred to concept of green building. Land expeditious is also applied, for instance, the application of green house roof top for hydroponic system using circulation water pump system by using solar cell. The use of fishpond for hydroponic DFT system operated by the solar cell sources.

A green shelter making has also been successfully implemented, this is a bicycle shelter facility can be used to charge electric bicycles with solar power, equipped with a vertical garden. Everything is stated in the policy of research direction refers to a green campus.

During the development, the policy of parks making and green areas continues to be carried out.

The green building design concept has been implemented in all Sindangsari campus buildings with elements of air conditioning and natural lighting applied

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/energi-dan-perubahan-iklim/

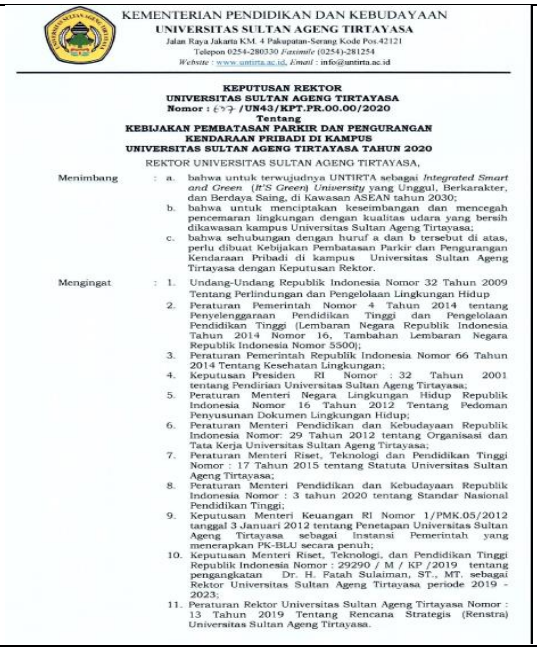
P

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[2] Energy and Climate Change (EC)

[2.10] Greenhouse gas emission reduction program



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Website : www.untirta.ac.id, Email : info@untirta.ac.id

KEPUTUSAN REKTOR
UNIVERSITAS SULTAN AGENG TIRTAYASA
Nomor : [illegible] /UN43/KPT.PR.00.00/2020
Tentang
KEBIJAKAN PEMBATASAN PARKIR DAN PENGURANGAN KENDARAAN PRIBADI DI KAMPUS UNIVERSITAS SULTAN AGENG TIRTAYASA TAHUN 2020

REKTOR UNIVERSITAS SULTAN AGENG TIRTAYASA,

Menimbang :
a. bahwa untuk terwujudnya UNTIRTA sebagai *Integrated Smart and Green (It'S Green) University* yang Unggul, Berkarakter, dan Berdaya Saing, di Kawasan ASEAN tahun 2030;
b. bahwa untuk menciptakan keseimbangan dan mencegah pencemaran lingkungan dengan kualitas udara yang bersih dikawasan kampus Universitas Sultan Ageng Tirtayasa;
c. bahwa sehubungan dengan huruf a dan b tersebut di atas, perlu dibuat Kebijakan Pembatasan Parkir dan Pengurangan Kendaraan Pribadi di kampus Universitas Sultan Ageng Tirtayasa dengan Keputusan Rektor.

Mengingat :
1. Undang-Undang Republik Indonesia Nomor 32 Tahun 2009 Tentang Perlindungan dan Pengelolaan Lingkungan Hidup
2. Peraturan Pemerintah Nomor 4 Tahun 2014 tentang Penyelenggaraan Pendidikan Tinggi dan Pengelolaan Pendidikan Tinggi (Lembaran Negara Republik Indonesia Tahun 2014 Nomor 16, Tambahan Lembaran Negara Republik Indonesia Nomor 5500);
3. Peraturan Pemerintah Republik Indonesia Nomor 66 Tahun 2014 Tentang Kesehatan Lingkungan;
4. Keputusan Presiden RI Nomor : 32 Tahun 2001 tentang Pendirian Universitas Sultan Ageng Tirtayasa;
5. Peraturan Menteri Negara Lingkungan Hidup Republik Indonesia Nomor 16 Tahun 2012 Tentang Pedoman Penyusunan Dokumen Lingkungan Hidup;
6. Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor: 29 Tahun 2012 tentang Organisasi dan Tata Kerja Universitas Sultan Ageng Tirtayasa;
7. Peraturan Menteri Riset, Teknologi dan Pendidikan Tinggi Nomor : 17 Tahun 2015 tentang Statuta Universitas Sultan Ageng Tirtayasa;
8. Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor : 3 tahun 2020 tentang Standar Nasional Pendidikan Tinggi;
9. Keputusan Menteri Keuangan RI Nomor 1/PMK.05/2012 tanggal 3 Januari 2012 tentang Penetapan Universitas Sultan Ageng Tirtayasa sebagai Instansi Pemerintah yang menerapkan PK-BLU secara penuh;
10. Keputusan Menteri Riset, Teknologi, dan Pendidikan Tinggi Republik Indonesia Nomor : 29290 / M / KP /2019 tentang pengangkatan Dr. H. Fatah Sulaiman, ST., MT. sebagai Rektor Universitas Sultan Ageng Tirtayasa periode 2019 - 2023;
11. Peraturan Rektor Universitas Sultan Ageng Tirtayasa Nomor : 13 Tahun 2019 Tentang Rencana Strategis (Renstra) Universitas Sultan Ageng Tirtayasa.

1. Private Vehicle Reduction Policy on campus

2. Design of rooftop solar panels for E campus

3. Providing Electric Cars in the E Campus Area

P

Description:

.
Untirta continues to make efforts to reduce carbon emissions, starting with the issuance of a policy in the form of the Rector's Decree regarding the policy of reducing private vehicles entering the campus area. The master plan to build a rooftop solar panel with a capacity of 1,1 MW step by step is currently in the DED document stage. The provision of an environmentally friendly shuttle in the form of an electric car has now been implemented which operates in the campus area.

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/energi-dan-perubahan-iklim/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[2] Energy and Climate Change (EC)

[2.11] Please Provide The Total Carbon Footprint (CO_2 emission in the last 12 months, in metric tons)

Option 2: Recommended by UI GreenMetric

CO_2 (electricity)

$$= \frac{electricity\ usage\ per\ year\ (kWh)}{1000} \times 0{,}84$$
$$= \frac{2748144\ kWh}{1000} \times 0{,}84$$
$$= 2{,}308 \text{ metric tons}$$

CO_2 (bus)

$$= \frac{number\ of\ shuttle\ bus\ in\ your\ university \times total\ trips\ for\ shuttle\ bus\ service\ each\ day \times approximate\ travel\ distance\ of\ vehicle\ each\ day\ inside\ campus\ only\ (KM) \times 240}{100} \times 0{,}01$$
$$= \frac{2 \times 6 \times 1{,}9 \times 240}{100} \times 0{,}01$$
$$= 0{,}55 \text{ metric tons}$$

CO_2 (cars)

$$= \frac{\text{number of cars entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0{,}02$$
$$= \frac{408 \times 2 \times 1{,}9 \times 240}{100} \times 0{,}02$$
$$= 74.42 \text{ metric tons}$$

CO_2 (motorcycle)

$$= \frac{\text{number of motorcycle entering your university} \times 2 \times \text{approximate travel distance of vehicle each day inside campus only (KM)} \times 240}{100} \times 0{,}01$$
$$= \frac{2021 \times 2 \times 1{,}9 \times 240}{100} \times 0{,}01$$
$$= 184.31 \text{ metric tons}$$

CO_2 (total)

$$= 2{,}308 + 0{,}55 + 74.42 + 184.31$$
$$= 2{,}567.72 \text{ metric tons}$$

Carbon footprint in 2021 = 2,567.72 metric tons

Description:

The carbon in 1 year is 2,567.72 metric tons. The total population in campus during covid-19 pandemic is 50% of the total campus population in general including student and staff who came to campus in one-year period.

In this case, normally total population campus is 21907, during pandemic the total population is 10954. The total carbon is divided by the total campus population = 2,567.72 / 10954 = 0.234 metric tons

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/energi-dan-perubahan-iklim/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
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https://green.untirta.ac.id

[2] Energy and Climate Change (EC)

[2.13] Number of innovative program(s) during Covid-19 pandemic

Examples of innovative program (Untirta, Indonesia)

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/energi-dan-perubahan-iklim/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
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[2] Energy and Climate Change (EC)

[2.14] Impactful university program(s) on climate change

Untirta and Indonesian Rector Forum are serious to find solution for management and utilization of sustainable plastic waste


Focus Group Discussion with local government

Universitas Sultan Ageng Tirtayasa (Untirta) and Indonesia Rector Forum (FRI) held a national webinar of management and utilization of sustainable plastic waste. The event was attended by Rector of Untirta – Prof. Dr. Ir. H. Fatah Sulaiman, ST., MT., Chairman of FRI - Prof. Ir. Panut Mulyono, M.Eng., D.Eng., IPU ASEAN Eng, prominent speakers, industrial representatives, representative form Ministry of Environment, local government, and several scholars from Faculty of Engineering Untirta.

Focus grup discussion with local government has also been conducted. The discussion mainly focused on the planning construction of pond at Untirta. This collaboration also received positive feedback from both party leaders, Regent of Serang and Rector of Untirta. Moreover, local government expressed their enthusiasm to get involved into an educational program, not only in the part of construction.

Furthermore, the existence of water treatment plant for ablution water that can be re-used. All pipelines in the Student Centre building have been separated from raw water and recycle water. And, the output of the water treatment is used to water plants and flush in the toilet.

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/energi-dan-perubahan-iklim/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
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[3] [Waste]

[3.1] Recyling program for University waste

Waste sorting program, namely organic waste, inorganic waste and B3 waste.

Waste management scheme at Universitas Sultan Ageng Tirtayasa

Organic waste treatment at Universitas Sultan Ageng Tirtayasa

Processing rainwater and river water for ablution

Processing of plastic waste into fuel

Description:
The recycling program for university waste has been implemented at Universitas Sultan Ageng Tirtayasa. This program is strengthened by the Rector's Decree Number 636/UN43/KPT.PR.00.00/2020. Some of the recycling programs for university waste that have been carried out at Universitas Sultan Ageng Tirtayasa include:
1. Waste sorting program, namely organic waste, inorganic waste and B3 waste.
2. Composting to recycle organic waste which is centered on Sindang Sari Campus
2. Processing rainwater and river water for ablution
3. Using the water for ablution that has been reprocessed so that it can be used for watering plants
4. Processing of plastic waste into fuel

Additional evidence link:

Processing rainwater and river water for ablution
https://link.untirta.ac.id/konservasiair

Processing of plastic waste into fuel
https://green.untirta.ac.id/2021/10/18/pengembangan-industri-pengolahan-sampah-plastik-terpadu-berbasis-circular-economy-di-kota-cilegon-banten/

Additional evidence link:

Template for Evidence(s)
UI GreenMetric Questionnaire

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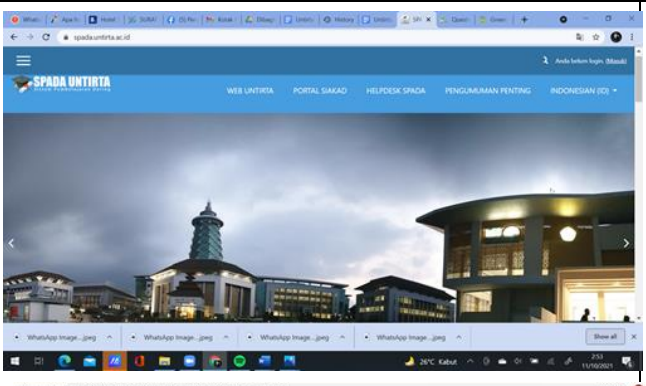
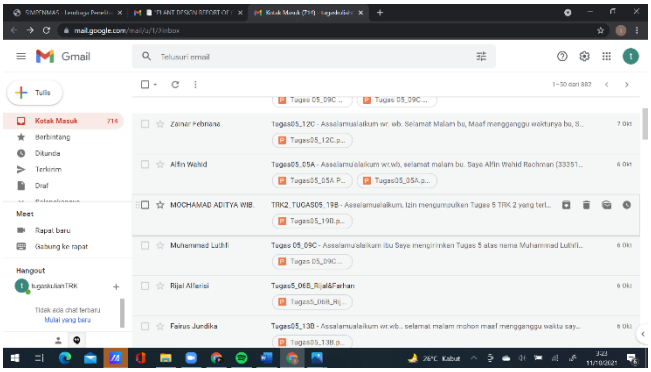
https://green.untirta.ac.id

[3] [WASTE]

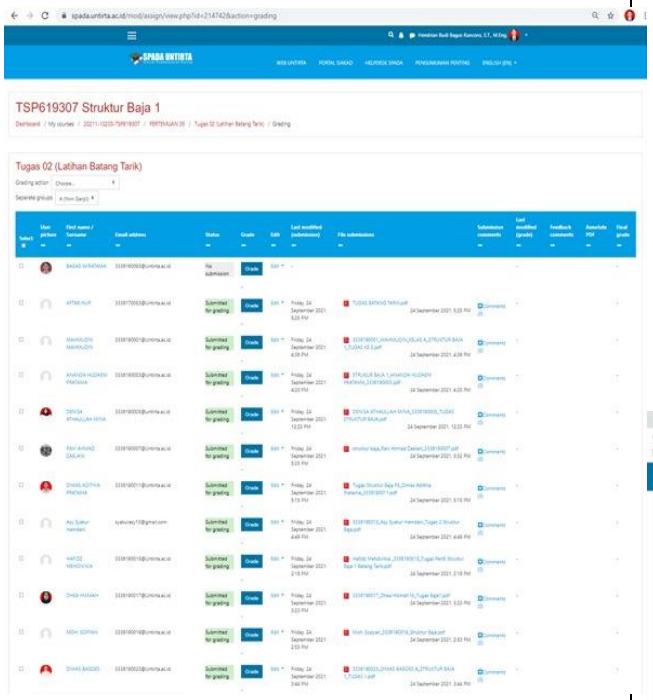
[3.2] Program to reduce the use of paper and plastic in campus

Reducing the use of plastic containers (either beverage or food) during activities on campus, such as meetings and other activities

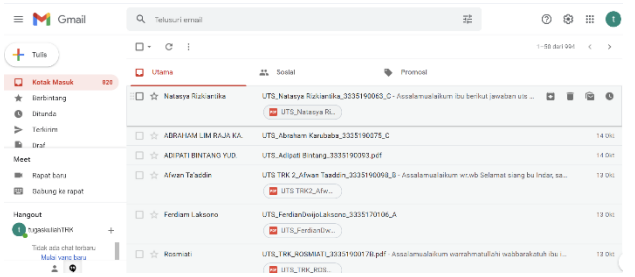




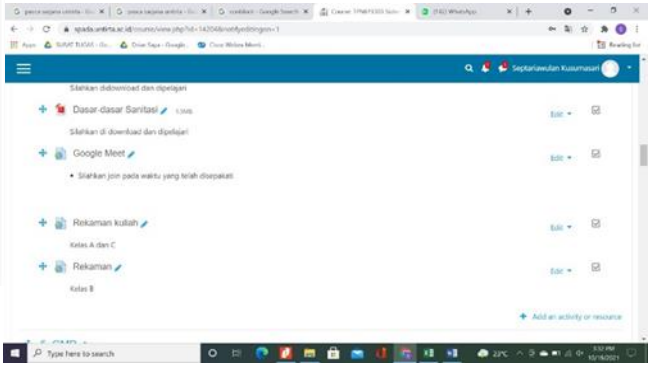
Submission of assignment done through email



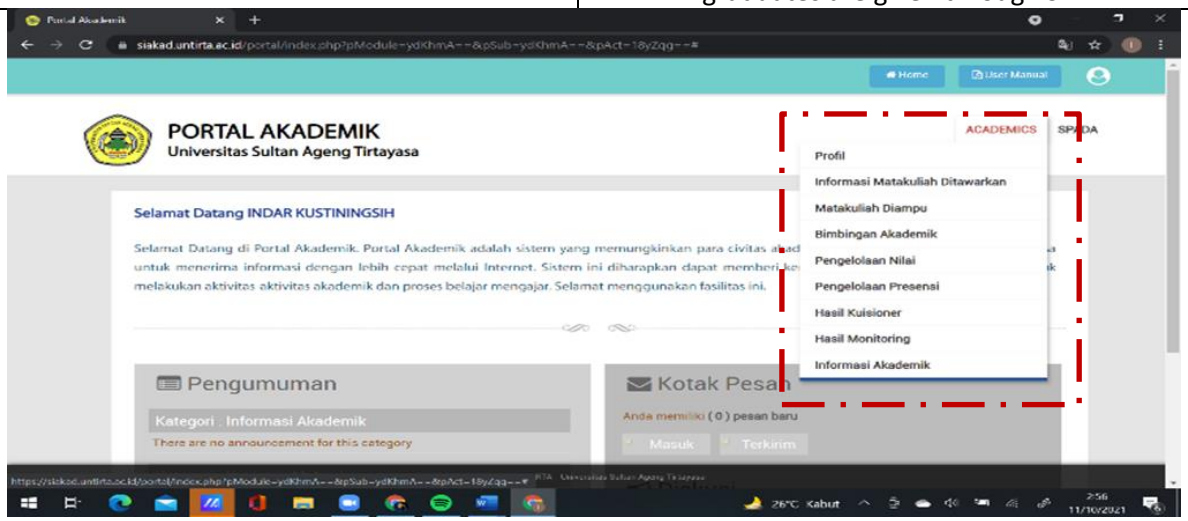
Submissions of assignment through SPADA



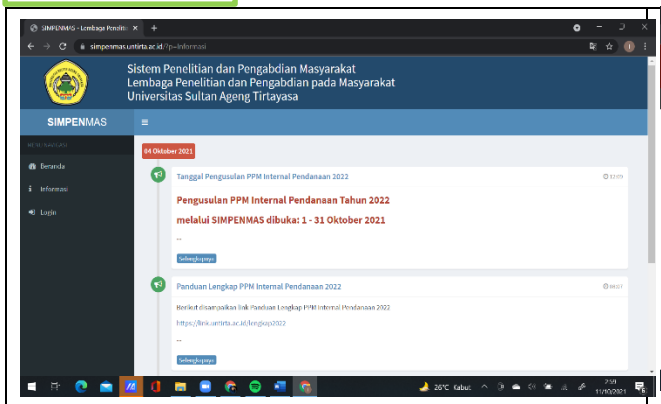
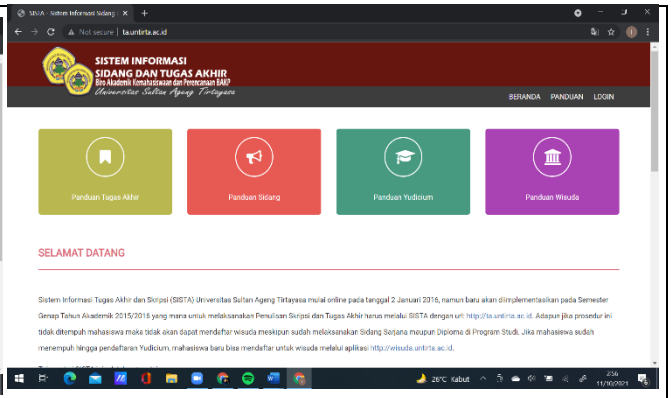
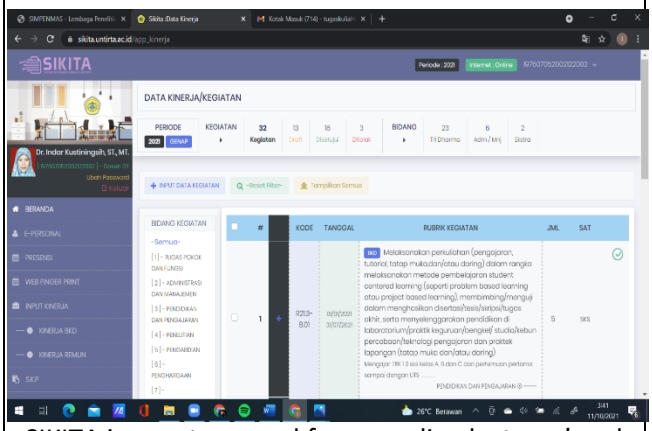
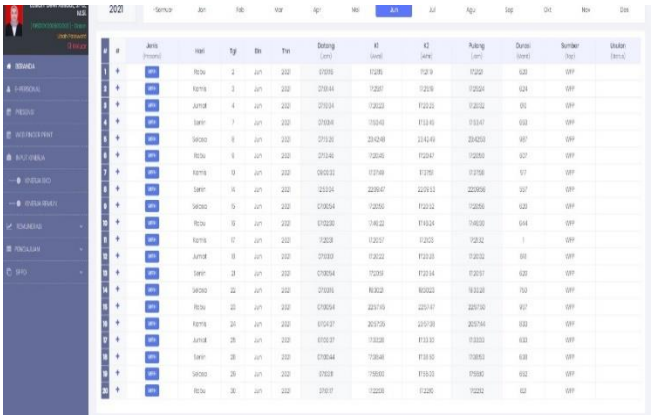
Submission of answer sheet of test done through email



Learning materials for undergraduate and post-graduates are given through SPADA



SIAKAD is used for storing students' final marks, attendance, questionnaire of lectures' performance, and academic supervision

	
SIMPENMAS is a program used for internal research and public service grand	SISTA is an information system used for registration of thesis writing and final exam
	
SIKITA is a system used for recording lectures' and staffs' working performance	SIKITA is used to record lectures' and staff attendance

Description:

Universitas Sultan Ageng Tirtayasa has played an active role in reducing the use of paper and plastic according to the Rector's Decree Number 639/UN43/KPT.PR.00.00/2020. Some of the programs already conducted include:

1. Reducing the use of plastic containers (either beverage or food) during activities on campus, such as meetings and other activities;

2. Maximizing the use of the SIKD system and SIM KEU in the correspondence practice among staff members in Untirta in both administrative and financial sectors;

3. Teaching using online system (SPADA) and submitting assignments in softcopy files by students via SPADA or email

4. Management of student attendance, information on courses taught, management of student grades, academic guidance, questionnaires for lecturers and students are all through SIAKAD

5. Using online system for Untirta's internal grant competition, both research grants and community service grants.

6. Registration of the final project (thesis/dissertation), graduation through Sista Untirta and the final project is submitted to the Department in soft copy file.

7. Using SIKITA in the collection of data of remuneration for lecturers and education staff and list of attendees of lecturers

Additional evidence link:

Teaching using online system (SPADA) and submitting assignments in softcopy files by students via SPADA
https://spada.untirta.ac.id/

Additional evidence link:

Management of student attendance, information on courses taught, management of student grades, academic guidance, questionnaires for lecturers and students are all through SIAKAD
https://siakad.untirta.ac.id/portal/

Additional evidence link:

Using online system for Untirta's internal grant competition, both research grants and community service grants.
https://simpenmas.untirta.ac.id/?p=Informasi

Additional evidence link:

Registration of the final project (thesis/dissertation), graduation through Sista Untirta and the final project is submitted to the Department in soft copy file
http://ta.untirta.ac.id/

Additional evidence link:

Using SIKITA in the collection of data of remuneration for lecturers and education staff and list of attendees of lecturers
https://sikita.untirta.ac.id/app_presensi/list_tap

Template for Evidence(s)
UI GreenMetric Questionnaire

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Country : Indonesia
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https://green.untirta.ac.id

[3] [WASTE]

[3.3.] Organic Waste Treatment


Organic composting center for processing organic waste into orgaanic fertilizer

Description:
Universitas Sultan Ageng Tirtayasa has organic composting center that is used for processing organic waste into organic fertilizer.

Description:

Additional evidence link: https://green.untirta.ac.id/limbah/

Template for Evidence(s)
UI GreenMetric Questionnaire

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https://green.untirta.ac.id

[3] [WASTE]

[3.4] Inorganic waste treatment

Lab-scale pyrolysis at the Faculty of Engineering

Chopped plastic waste

Plastic waste processing in collaboration with PT Chandra Asri tbk

	
The results of processing plastic waste	

Description :
Universitas Sultan Ageng Tirtayasa has already separated inorganic waste from organic waste by providing different trash bins both inside the campus building and outside the campus building. In addition, Untirta has reduced inorganic waste by requiring the use of tumblers for drinking water for employees and lecturers and also prohibiting the use of bottled water during meetings and other activities.
Inorganic waste processing is partly in collaboration with outside parties and partly plastic waste is processed into fuel using the pyrolysis method. This plastic waste processing is in collaboration with PT Chandra Asri tbk.

Additional evidence link:

https://drive.google.com/file/d/1y2IUkUUmpS3G5UEXkVhNc4pqOlzAy0p4/view?usp=sharing

Additional evidence link:

https://green.untirta.ac.id/2021/10/18/pengembangan-industri-pengolahan-sampah-plastik-terpadu-berbasis-circular-economy-di-kota-cilegon-banten/

Template for Evidence(s)
UI GreenMetric Questionnaire

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https://green.untirta.ac.id

[3] [WASTE]

[3.5] Toxic waste handled

Description :
Universitas Sultan Ageng Tirtayasa has given considerable attention to B3 waste management since 2020 in accordance with Rector's Decree Number 636/UN.43/KPT.PR.00.00/2020. B3 waste treatment at Universitas Sultan Ageng Tirtayasa was previously managed by a third party. In 2021, B3 waste management has been managed independently, centralized by the Integrated Lab and the Faculty of Agriculture at Sindang Sari Integrated Campus.

Additional evidence link: https://green.untirta.ac.id/2021/10/15/alat-netralizer-limbah-di-kampus-

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
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https://green.untirta.ac.id

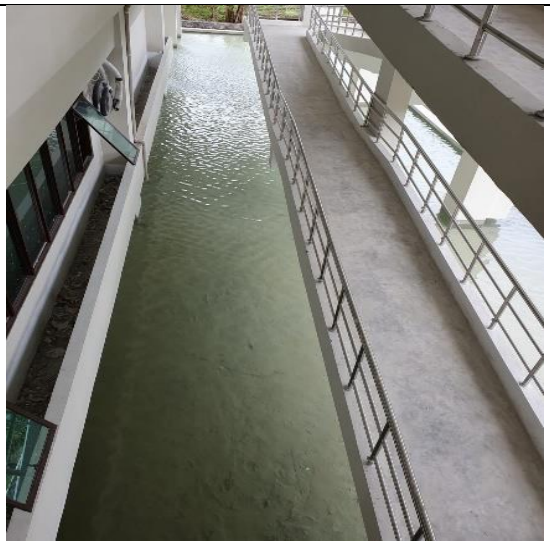
[3] [WASTE]

[3.6] Sewage diposal

Sewer water in Sindang Sari

WTP Electro System Processing Scheme

Wastewater and rainwater treatment equipment using Electro System



Results of water treatment used for ablution

Description:
Wastewater processing at Universitas Sultan Ageng Tirtayasa has been carried out in the Untirta campus area such as the reuse of water used for ablution and for watering plants. Waste water treatment at Universitas Sultan Ageng Tirtayasa has been built on the Sindang Sari Campus using the WTP electro system. The results of treatment of rainwater and waste water can be reused for watering plants and green areas at Universitas Sultan Ageng Tirtayasa and for ablution.

Additional evidence link: https://link.untirta.ac.id/konservasiair

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
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https://green.untirta.ac.id

[4] [WATER]

[4.1] Water conservation program and implementation

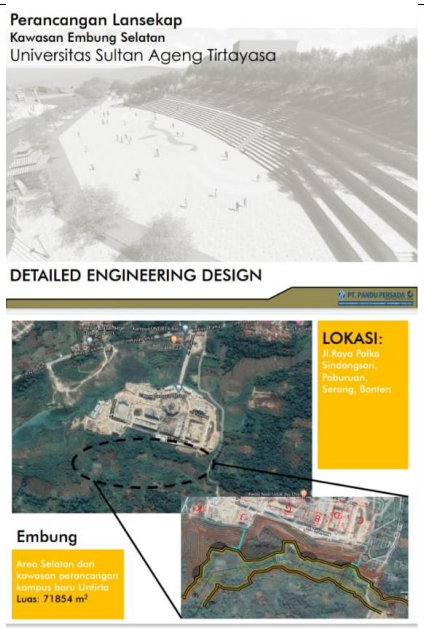

Figure 4.1 Planning for developing 'embung' reservoir in Untirta Sindangsari campus

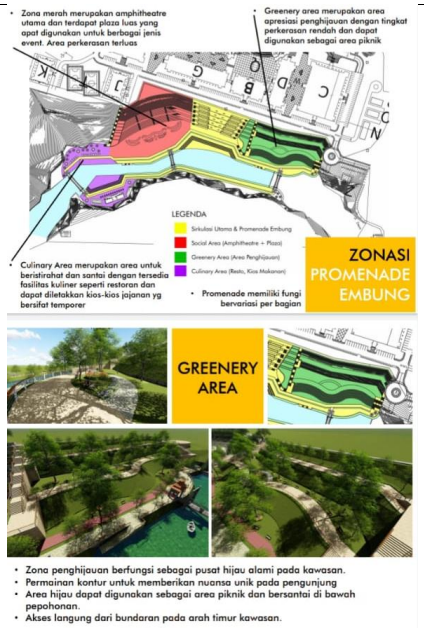

Figure 4.2 Green open space zone (RTH) in Untirta Sindangsari campus

Commented [A1]: cek, tambah foto asli ruang terbuka hijau

Figure 4.3 The Details reservoir of UNTIRTA Sindangsari campus

Figure 4.4 The Installation of bio pores and infiltration wells in the Engineering Faculty campus

Untirta Rector Decree Number 634 / UN43 / KPT.PR.00.00 / 2020 concerning THE IMPLEMENTATION POLICY FOR WATER CONSERVATION IN Untirta CAMPUS, it regulates the following:

1. Implementation of zoning and water conservation measures in Campus B / Untirta - Cilegon and Campus E / Untirta - Sindangsari.

2. The Program for implementing local and ecological protection functions; as conservation zones to restore balance and anticipate disaster-prone areas, which include botanical forests and the area's lungs, river boundaries, and disaster evacuation zones.
3. The implementation program for green open space includes green open space for slope conservation, water catchment areas, retention and detention facilities on campus A / Untirta - Pakupatan, campus B / Untirta - Cilegon, campus C / Untirta - Ciwaru, campus D / Untirta - Kepandean, and campus E / Untirta - Sindangsari.
4. The establishment of biopore hole drilling programs and infiltration wells throughout UNTIRTA's campus regions.
5. The Implementation Program for Greenery Areas; a green open space zone with a low level of pavement that serves as a recreation place for campus A / Untirta - Pakupatan, campus B / Untirta - Cilegon, campus C / Untirta - Ciwaru, campus D / Untirta - Kepandean, and campus E / Untirta - Sindang

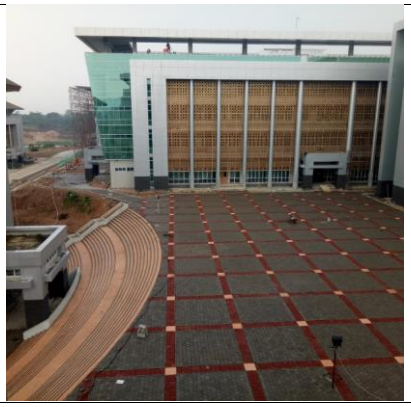

Figure 4.5 Anti-flood drainage system (zero run-offs) equipped with bio pure pipes in the main plaza / main hall at Untirta Sindangsari campus

Figure 4.6 Retention Pool as flood control and water management at Untirta Sindangsari campus

Description:

(The Rector's Decree 634 / UN43 / KPT.PR.00.00 / 2020 contains various initiatives and policies connected to water conservation: 1) In the UNTIRTA Sindangsari region, there is a plan to construct an embung (reservoir) with the purpose of increasing infiltration capacity and reducing flow to the nearby river. 2) By planning a greenery area, which is a zone of green open space, a campus recreation area can be created. 3) The installation of biopore holes and infiltration wells in the campus areas A / Untirta - Pakupatan, B / Untirta - Cilegon, C / Untirta - Ciwaru, and D / Untirta - Kepandean, as well as the installation of anti-flood drainage systems (zero run-offs) fitted with biopore pipes in the main plaza near Sindangsari - Untirta). At Untirta Sindang Sari (Main Campus), there is a retention pool for flood management. Additionally, retention pools provide as lovely landscape and can help boost groundwater reserves. On Main Campus, there were two retention pools. These retention ponds have a combined capacity of approximately 20.000 m3. Embung/Lake/Reservoir was developed with a total size of 13.000 m2 and is scheduled to open in June 2022. The Ministry of Public Works and Public Housing of the Republic of Indonesia will oversee this project. Embung will construct a building at the Sindang Sari Campus's back area. UNTIRTA Sindangsari's main plaza/main hall has an anti-flood drainage system (zero run-offs) fitted with bio pure pipes (main campus). This system may contribute to Untirta's water saving efforts. The biopore area on the main campus is approximately 10.500 m3. Around 30.500 m3 of water was preserved in total (retention pools, con block area in main campus and bio pores). Untirta's entire campus utilized approximately 100.000m3 of pure water, which means that 30% of water was already preserved.

Additional evidence link:
https://green.Untirta.ac.id/air
https://youtu.be/tlJO0c6wPo4

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
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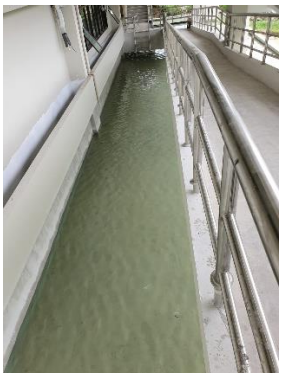
https://green.untirta.ac.id

[4] Water (WR)

[4.2] Water Recycling Program Implementation

Untirta Rector's Decree Number 633 / UN43 / KPT.PR.00.00 / 2020 concerning THE IMPLEMENTATION POLICY FOR WATER MANAGEMENT OR WATER HARVESTING, Untirta CAMPUS, it regulates the following:

1. Rainwater management/water harvesting activities in the campus areas A / Untirta - Pakupatan, B / Untirta - Cilegon, C / Untirta - Ciwaru, D / Untirta - Kepandean, and E / Untirta - Sindangsari.
2. The implementation of rainwater harvesting programs as a means of meeting water requirements in campus facilities, such as watering plants and flushing toilets.
3. The establishment of a river water recycling program in the E / Untirta - Sindangsari campus region as a regulator of the hydrological system (runoff) and river conservation (increasing the river's water quality/purification process) to allow water to flow back into the river.
4. Implementation of the WTP development program for the reservoir (embung) as a source of clean water for one or more buildings on the E / Untirta - Sindangsari campus.



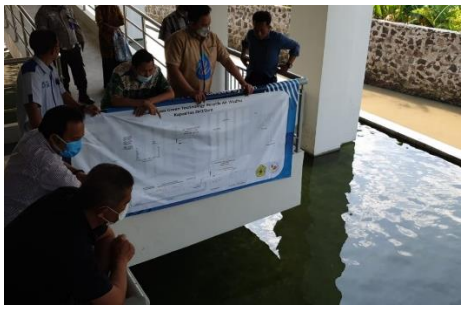



Figure 4.7 Green Technology Recycle Wudhu's Water in Student Center Untirta Sindang Sari

Description:

(The Rector's Decree 633 / UN43 / KPT.PR.00.00 / 2020 has many policies regarding the usage of recycled water: 1) Water harvesting programs in all areas of the Untirta campus, 2) Rainwater harvesting to meet raw water needs in buildings and outside buildings for watering plants and toilets, 3) River water recycling plan in the E / Untirta - Sindangsari campus area, 3) Development of WTP artificial lake/ reservoir (embung) as a source of clean water for the E / Untirta - Sindangsari campus area.

Eco-Friendly Technology Recycle Wudhu's Water in the Untirta Sindang Sari Student Center has been installed. This method is environmentally benign and can provide clean wudhu's water; also, the water can be used as a source of clean drinking water. Water from the pool, rainwater, and the river were collected and processed using the electrochemistry filtering method. This system was developed by Untirta graduates. Additionally, Untirta Sindang Sari has a clean water storage space near the power building. The clean water storage tank had a capacity of around 800 cubic feet per day. This system is already in place and is capable of providing clean water to the Sindang Sari campus. Around 29% of water has already been recycled.

Figure 4.8 Water Treatment in Power House Area Untirta Sindang Sari

Figure 4.9 Schema Water Treatment Process

Additional evidence link: https://www.youtube.com/watch?v=tlJO0c6wPo4

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[4] Water (WR)

[4.3] Water Efficient Appliances Usage (e.g. hand washing taps, toilet flush, etc.)

Figure 4.10 The Use of water-saving equipment

Untirta Rector's Decree Number 640 / UN43 / KPT.PR.00.00 / 2020 concerning to Untirta CAMPUS WATER SAVING IMPLEMENTATION POLICY, it regulates the following:

1. A program for deploying water-saving devices throughout the campus building through the use of automatic sensors.
2. A program for the use of tools (automated and censored faucets, water-efficient out-flush toilets) on all campuses in the Untirta area, particularly in new buildings or buildings that are being replaced due to damage.
3. A program to gradually phase out the use of water-saving equipment across the Untirta system.

Description:

(The Rector's Decree Number 640 / UN43 / KPT.PR.00.00 / 2020 contains several programs and policies relating to water conservation on campus: 1) the use of water-efficient equipment such as automatic water taps for household purposes, bathing, washbasins, and flush toilets; 2) the policy on the use of water-saving devices in the form of automatic sensors both inside and outside campus buildings; and 3) the policy on the use of tools (automatic and censored)

Appliance	Total Number	Total number water Efficient appliances	Percentage
Toilet	469	422	89.9%
Orinoir	197	157	79.7%
Shower	175	122	69.7%
		Average Percentage	**79.7%**

Additional evidence link: https://green.untirta.ac.id/air/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[4] Water (WR)

[4.4] Treated Water Consumed

Figure 4.11 Drinking water consumption of Untirta-Ku

Untirta Rector's Decree Number 639 / UN43 / KPT.PR.00.00 / 2020 concerning POLICY ON IMPLEMENTATION OF THE USE OF DRINKING WATER IN PACKAGING AT Untirta CAMPUS, it regulates the following:

1. It is prohibited to utilize a plastic container, such as a tumbler, in any academic community activity held on campus.
2. A program to adopt the use of "Untirta-Ku," purified drinking water, as the primary source of drinking water for the entire academic community in Untirta.
3. Use used water to make wudhu (holly water) with a capacity of 2 m^3 per hour, located on Campus E of Sultan Ageng Tirtayasa University.

Figure 4.12 Tap Water facilities for ready to drink water

Description:

(The Rector's Decree Number 639/UN43/KPT.PR.00.00/2020 contains several programs and policies relating to the drinking water policy: 1) the use of plastic containers is prohibited in all academic activities on campus; 2) Source Untirta-Ku bottled drinking water (AMDK) was developed by the Business and Entrepreneurship Development Unit (UPBK) of Sultan Ageng Tirtayasa (Untirta) University in collaboration with PT UntirtaKu is a brand of bottled water that supplies all water gallon dispensers on the Untirta campus.

In the region surrounding the power house, there are tap water facilities for ready-to-drink water. Untirta Sindang Sari is capable of producing 10-15 gallons of drinkable water each day. All students and visitors are welcome to use these facilities for free. The reverse osmosis system converts clean water to drinkable water. This drinking water has been analyzed in a laboratory approved by Banten Province's Public Health Office. Air Jawara is the brand name for this bottled water. Clean water derived from green technology on the main campus of the Student Center was drank as wudhu's water. Around 27% of water has already been consumed.

Additional evidence link:
https://untirta.ac.id/2020/06/16/rektor-luncurkan-air-minum-dalam-kemasan-merk-Untirta-ku/
https://youtu.be/crVDhO7_Aro
https://green.untirta.ac.id/air

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[4] Water (WR)

[4.5] Percentage of additional handwashing and sanitation facilities during Covid-19 pandemic

<table>
<tr><td>  </td><td> 
</td></tr>
<tr><td>Handwashing Facilities in ULP and mosque</td><td>the entrance of the Integrated Laboratory Building</td></tr>
<tr><td>  </td><td>  </td></tr>
<tr><td>Handwashing Facilities in Rector Office Sindang Sari</td><td>Common Class Room Building C Ciwaru</td></tr>
<tr><td colspan="2">Figure 4.13 Handwashing and sanitation facilities during Covid-19 pandemic</td></tr>
</table>

Description:

All Untirta campuses have additional hand washing facilities. Meanwhile, the graphic depicts handwashing stations located at each building's entrance. Hand sanitizer dispensers are placed in all corners of buildings when handwashing facilities cannot be installed.

Figure 4.14. Hand sanitizer in entrance building and meeting room

Facilities	Number of Facilities
Handwashing Facilities	70
Number of Building	91
Percentage Facilities	**76.9%**

Concerns over COVID handling and sanitation have been expressed by Untirta. Each building in Untirta is equipped with a hand sanitizer, additional hand washing facilities, and a body temperature monitoring system at the main entrance. Each room already has a hand sanitizer (meeting rooms, class rooms, and offices).

Additional evidence link:
https://covid19.untirta.ac.id/en/
https://youtu.be/nWj_pO1SO78
https://youtu.be/hphTiOQBFRg

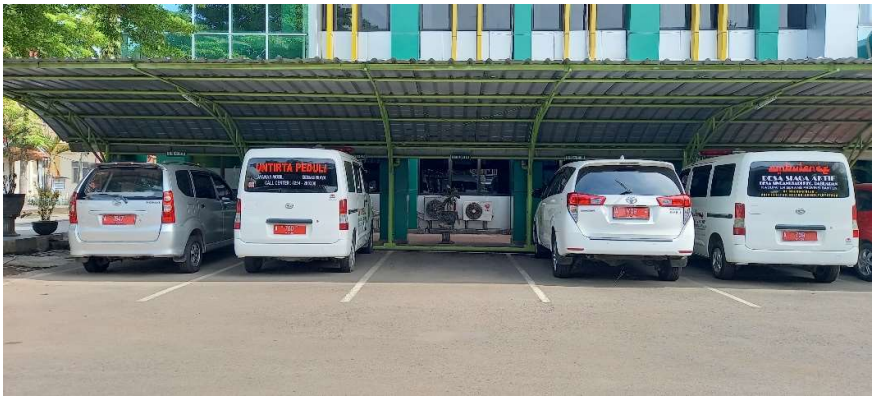
Template for Evidence(s)
UI GreenMetric Questionnaire

University : University of Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[5] Transportation (TR)

[5.4] The Total Number Of Vehicles (Cars And Motorcycles) Divided By Total Campus Population

Several Operational Vehicle For The Untirta Campus




Description:
(Based on data from BMN, the number of cars managed by Untirta is 60 vehicles)

No.	Indicator	Total
5.1	Number of cars actively used and managed by the university	60
5.2	Number of Cars entering the university daily	408
5.3	Number of Motorcycles entering the university daily	2021
	Total Number of Vehicles	**2489**
1.12	Total number of regular students	20603
1.14	Total number of academic and administrative staff	1304
	Total Campus Population	21907
	The Total Number Of Vehicles (Cars And Motorcycles With Combustion Engine) Divided By Total Campus Population	**0,1136**

Additional evidence link :
https://green.untirta.ac.id/transportasi/
https://ppid.untirta.ac.id/?p=1463

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Serang Banten
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[5] [TRANSPORTATION]

[5.5] Shuttle Services

Untirta's Shuttle Bus

Shuttle Bus Schedule

Description:
Untirta campus provides campus bus services for free to support the accessibility of the academic community, the. Untirta Campus Bus operates during weekdays Monday - Friday. It is divided into two routes, namely the B.01 and B.02 lines with The bus stop is centralized on the Untirta Main Campus in SIndangsari. Route B.01 will go through the New Untirta Sindangsari Campus - D Nursing Campus - Campus B, Faculty of Engineering Cilegon, while Route B.02 will serve the New Untirta Sindangsari Campus route - Campus C FKIP Ciwaru - Campus A Untirta in Pakupatan.

For future development, the Untirta campus will operate a shuttle bus service on campus regularly to serve the entire academic community in the new campus in Sindangsari; Untirta campus policy to reduce the use of private vehicles on campus.

Additional evidence link :

https://untirta.ac.id/2021/01/25/untirta-sediakan-shuttle-bus-ke-kampus-sindangsari/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Serang Banten
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[5] [Transportasi]

[5.9] Zero Emission Vehicles (ZEV) Policy On Campus

Bicycle Parking at Campus A Pakupatan	
 	 

Bicycle Parking at Campus B Cilegon	
	

Bicycle Parking at Campus C Ciwaru

Bicycle Parking at Campus E Sindangsari

Mobil Listrik Parking at Campus E Sindangsari


Description:
To create a pollution-free campus environment, currently, Untirta has provided bicycle services for free; used in the campus. In addition, it can encourage the use of bicycles as a daily means of transportation for the Untirta academic community on campus.

Untirta campus is so wide; the distances between building to building especially in the New Untirta Sindangsari campus. very far Therefore, bicycle service as an alternative in facilitating the movement of the Untirta academic community to move from one building to another one to avoid vehicle emissions on campus. Also, the availability of campus bicycle services can improve the quality of the environment and the safety of road users on the Untirta campus by starting to reduce the use of motorized vehicles in the campus environment.

Untirta already has an electric automobile with an open model, such as a golf car or what is generally referred to as a buggy car. This vehicle is used to transport students and staff throughout the E Sindangsari campus. This electric buggy car seats up to eight passengers.

With the presence of these zero-emission vehicles, both bicycles and electric cars, it is intended that the amount of emission gas within the campus can be minimized, resulting in cleaner and healthier air. Additionally, there is no charge or fee for using a bicycle or buggy car.

Additional evidence link :
1. https://untirta.ac.id/2018/10/05/untirta-bersepeda-membangun-kebersamaan/
2. https://untirta.ac.id/2019/09/25/sivitas-untirta-rayakan-diesnatalis-ke-38-dengan-gowes-sepeda-santai/
3. https://untirta.ac.id/2020/09/24/tirtayasa-virtual-bike/
4. https://untirta.ac.id/2020/10/21/bni-sumbang-10-unit-sepeda-listrik-untuk-untirta/
5. https://www.youtube.com/watch?v=7i0uRzBlEZE
6. https://www.youtube.com/watch?v=YSUVAiTXaJM

Template for Evidence(s)
UI GreenMetric Questionnaire

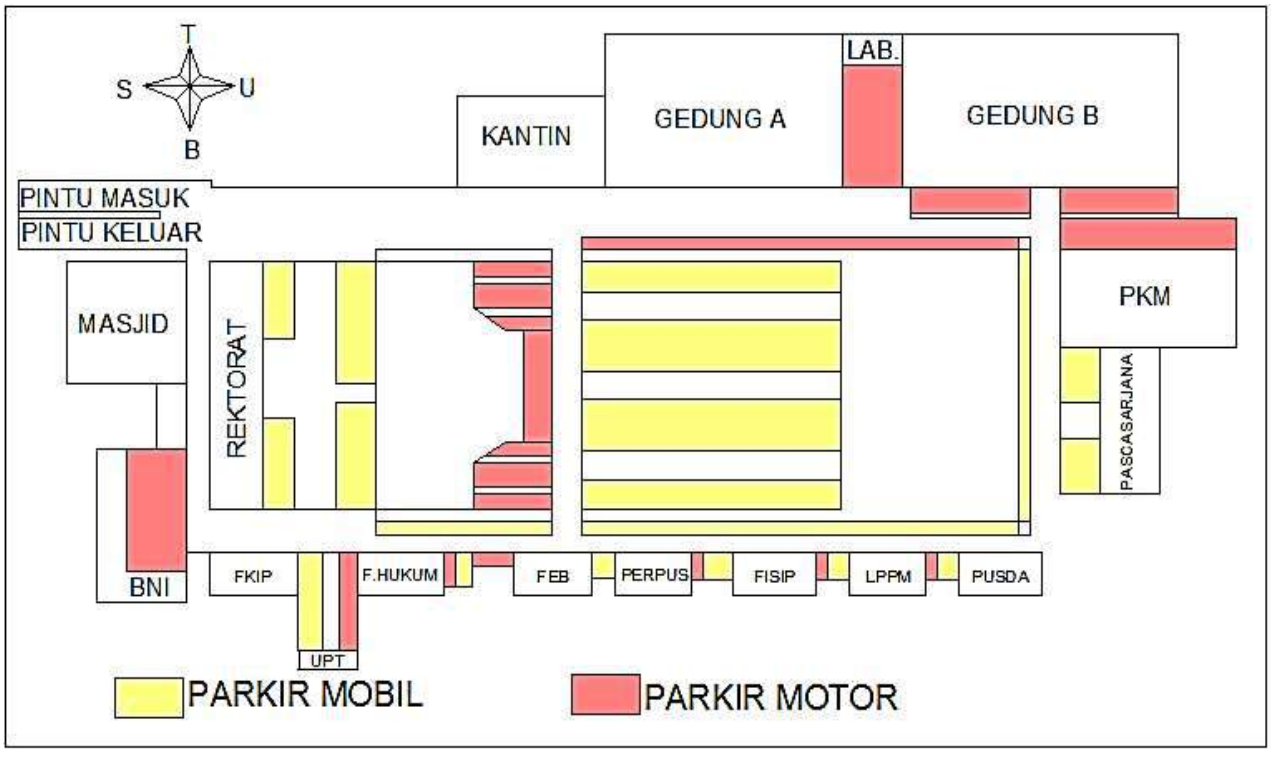
University : Universitas Sultan Ageng Tirtayasa
Country : Serang Banten
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[5] [TRANSPORTATION]

[5.13] Ratio of Parking Area to Total Campus Area

Campus A Pakupatan

Parking Zone at Campus A Pakupatan



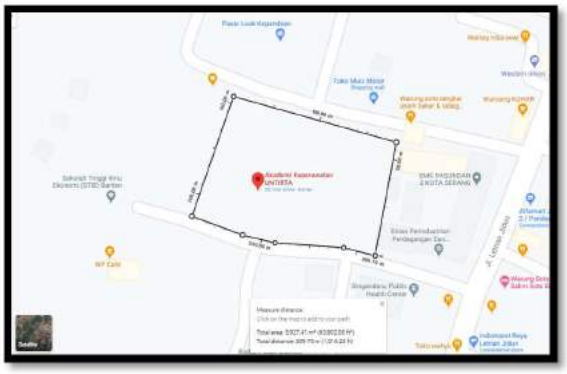
Campus B Cilegon

Parking Zone on Campus B Cilegon

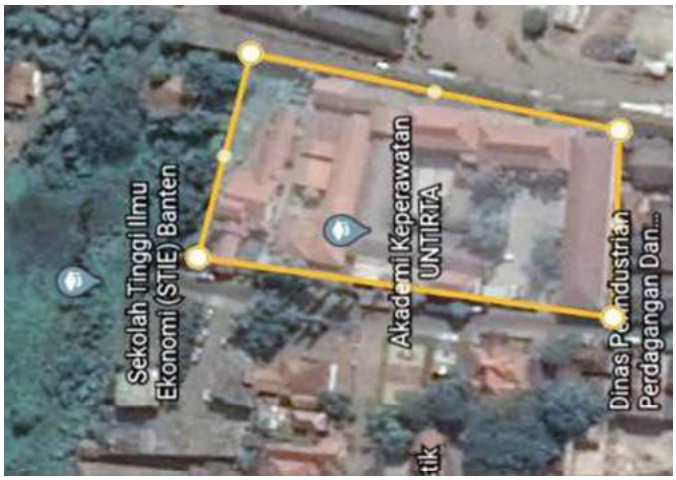
Campus C Ciwaru

Parking Zone on Campus C Ciwaru

Campus D Kepandean



Parking Zone on Campus D Kepandean



Campus E Sindangsari

Parking Zone on Campus E Sindangsari

Description:

No	Campus	Area (m^2)
1.	Kampus A Pakupatan	28.384
2.	Kampus B Cilegon	61.847
3.	Kampus C Ciwaru	29.216
4.	Kampus D Kepandean	5.933
5.	Kampus E Sindangsari	317.048
	Total Area	**442.428**

No.	Campus	Parking Area (m^2)
1.	Kampus A Pakupatan	3.015,80
2.	Kampus B Cilegon	3.226,23
3.	Kampus C Ciwaru	1.546,85
4.	Kampus D Kepandean	574,60
5.	Kampus E Sindangsari	132,00
	Total Parking Area	**8.495,48**

Total Campus Area	442.428
Total Parking Area	8.495,48
Ratio of ground parking area to total campus area	0,02 % Tergolong ke dalam kategori < 1 %

Additional evidence link :

1. https://www.google.com/maps/place/Universitas+Sultan+Ageng+Tirtayasa+(Untirta)/@-6.120726,106.194561,13z/data=!4m5!3m4!1s0x0:0xd7fbb1e65b42cbd2!8m2!3d-6.1207259!4d106.1945611?hl=id-ID
2. https://untirta.ac.id/
3. https://www.google.com/maps?ll=-6.189931,106.124637&z=13&t=m&hl=id-ID&gl=US&mapclient=embed&cid=15052122896560739164
4. https://www.google.com/maps/place/Fakultas+Teknik+UNTIRTA/@-5.996273,106.032095,13z/data=!4m5!3m4!1s0x0:0x249411dd80bfd66e!8m2!3d-5.9962731!4d106.032095?hl=id-ID
5. https://ft.untirta.ac.id/
6. https://www.google.com/maps?ll=-6.130764,106.16566&z=13&t=m&hl=id-ID&gl=US&mapclient=embed&cid=12412607988068042645
7. http://fkip.untirta.ac.id/
8. https://www.google.com/maps/place/Akademi+Keperawatan+UNTIRTA/@-6.1121953,106.1407066,19z/data=!4m5!3m4!1s0x2e418b26b0bae6a1:0x7daee5584bf42617!8m2!3d-6.1119801!4d106.141035?hl=en

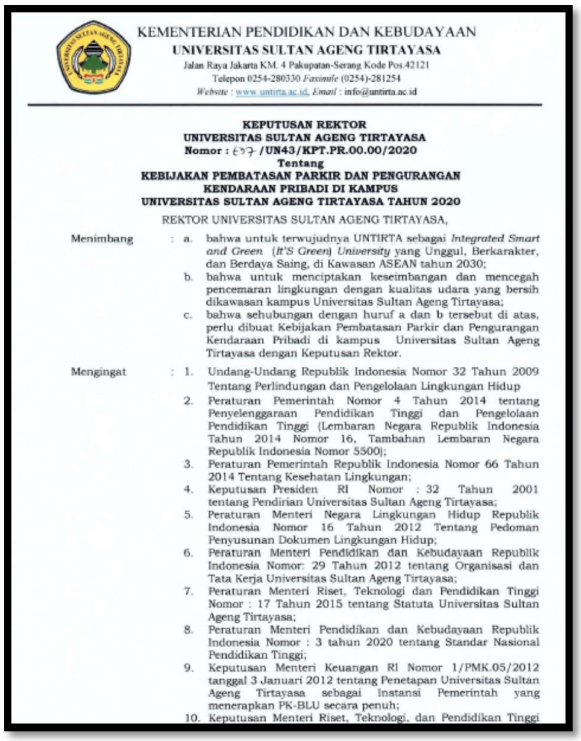
Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Serang Banten
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[5] [TRANSPORTATION]

[5.14] Program To Limit Or Decrease The Parking Area On Campus For The Last 3 Years (From 2018 To 2020)

The Parking Restriction Policy and Reduction of Private Vehicles on the Untirta Campus



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS SULTAN AGENG TIRTAYASA
Jalan Raya Jakarta KM. 4 Pakupatan-Serang Kode Pos.42121
Telepon 0254-280330 *Facsimile* (0254)-281254
Website : www.untirta.ac.id, *Email* : info@untirta.ac.id

KEPUTUSAN REKTOR
UNIVERSITAS SULTAN AGENG TIRTAYASA
Nomor : ٤٦٦ /UN43/KPT.PR.00.00/2020
Tentang
KEBIJAKAN PEMBATASAN PARKIR DAN PENGURANGAN KENDARAAN PRIBADI DI KAMPUS UNIVERSITAS SULTAN AGENG TIRTAYASA TAHUN 2020

REKTOR UNIVERSITAS SULTAN AGENG TIRTAYASA,

Menimbang :
a. bahwa untuk terwujudnya UNTIRTA sebagai *Integrated Smart and Green (It'S Green) University* yang Unggul, Berkarakter, dan Berdaya Saing, di Kawasan ASEAN tahun 2030;
b. bahwa untuk menciptakan keseimbangan dan mencegah pencemaran lingkungan dengan kualitas udara yang bersih dikawasan kampus Universitas Sultan Ageng Tirtayasa;
c. bahwa sehubungan dengan huruf a dan b tersebut di atas, perlu dibuat Kebijakan Pembatasan Parkir dan Pengurangan Kendaraan Pribadi di kampus Universitas Sultan Ageng Tirtayasa dengan Keputusan Rektor.

Mengingat :
1. Undang-Undang Republik Indonesia Nomor 32 Tahun 2009 Tentang Perlindungan dan Pengelolaan Lingkungan Hidup
2. Peraturan Pemerintah Nomor 4 Tahun 2014 tentang Penyelenggaraan Pendidikan Tinggi dan Pengelolaan Pendidikan Tinggi (Lembaran Negara Republik Indonesia Tahun 2014 Nomor 16, Tambahan Lembaran Negara Republik Indonesia Nomor 5500);
3. Peraturan Pemerintah Republik Indonesia Nomor 66 Tahun 2014 Tentang Kesehatan Lingkungan;
4. Keputusan Presiden RI Nomor : 32 Tahun 2001 tentang Pendirian Universitas Sultan Ageng Tirtayasa;
5. Peraturan Menteri Negara Lingkungan Hidup Republik Indonesia Nomor 16 Tahun 2012 Tentang Pedoman Penyusunan Dokumen Lingkungan Hidup;
6. Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor: 29 Tahun 2012 tentang Organisasi dan Tata Kerja Universitas Sultan Ageng Tirtayasa;
7. Peraturan Menteri Riset, Teknologi dan Pendidikan Tinggi Nomor : 17 Tahun 2015 tentang Statuta Universitas Sultan Ageng Tirtayasa;
8. Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor : 3 tahun 2020 tentang Standar Nasional Pendidikan Tinggi;
9. Keputusan Menteri Keuangan RI Nomor 1/PMK.05/2012 tanggal 3 Januari 2012 tentang Penetapan Universitas Sultan Ageng Tirtayasa sebagai Instansi Pemerintah yang menerapkan PK-BLU secara penuh;
10. Keputusan Menteri Riset, Teknologi, dan Pendidikan Tinggi

M E M U T U S K A N

Menetapkan : KEPUTUSAN REKTOR UNIVERSITAS SULTAN AGENG TIRTAYASA TENTANG PEMBATASAN PARKIR DAN PENGURANGAN KENDARAAN PRIBADI DI KAMPUS UNIVERSITAS SILTAN AGENG TIRTAYASA TAHUN 2020.

KESATU : Menetapkan bahwa kebijakan pembatasan parkir dan pengurangan kendaraan pribadi di kampus Universitas Sultan Ageng Tirtayasa meliputi :
1. Pemberlakuan biaya parkir kendaraan di lingkungan kampusUniversitas Sultan Ageng Tirtayasa.
2. Pemberlakuan parkir ganjil-genap bagi seluruh kendaraan yang memasuki area Universitas Sultan Ageng Tirtayasa, kecuali kendaraan dinas.
3. Pemberlakuan pengoperasian bus yang melayani rute antar kampus mulai pukul 07.00-18.00 WIB.
4. Pemberlakuan *car free day* di lingkungan kampus Universitas Sultan Ageng Tirtayasa sebagai implementasi pengurangan area parkir, minimal 1 hari per minggu pada hari kerja.
5. Pelarangan membawa kendaraan bermotor bagi mahasiswa semester pertama selama 1 tahun.

KEDUA : Petunjuk Teknis (Juknis) dan Petunjuk Pelaksanaan (Juklak) Kebijakan pada diktum kesatu akan diatur dalam Peraturan Rektor

KETIGA : Keputusan ini berlaku sejak tanggal ditetapkan.

Ditetapkan : di Serang
Pada tanggal : 1 September 2020
Rektor,

H. FATAH SULAIMAN
NIP. 196810062001121002

Special Parking Sticker Which Is Only Given To Particular Lecturers And Teachers

"Green Friday" Activities, Held on the Second Sunday of Each Month on Fridays


Description:

In order to preserve the environment on campus, it will regulate restrictions on entering and parking at campus A Pakupatan Untirta considering that for other campuses there are still enough parking spaces available so that there is no congestion in parking spaces; the area of campus A Untirta is not affordable to accommodate the number of parking vehicles.

This policy is conducted to limit the carbon emissions/pollution in order to provide comfortable campus environment and order in the Untirta campus environment, especially at Campus A Pakupatan. This policy only allows parking for vehicles belonging to the University (Dinas), Senior Lecturers (Sepuh), Education Personnel and is valid only from Monday - Friday. To mark vehicles that can be parked, the University issues a special parking sticker which is only given to particular lecturers and teachers.

As a solution for those who do not get a parking space on campus, Untirta has provided a parking lot as an alternative place in collaboration with third parties in managing parking lots. Previously charged parking rates in the parking lot, but the University has waived fees as a consequence of the parking restriction policy.

Furthermore, the University has prepared several additional policies to limit the volume of parking in the campus environment, especially at the New Sindangsari Campus, based on the Rector's Decree No. 637 / UN43 / KPT.PR.00.00 / 2020 has listed several policies, including:

a. The application of vehicle parking fees in the Universitas Sultan Ageng Tiratayasa campus.
b. Enforcement of vehicle plate odd-even system for all vehicles entering the campus, except for official vehicles.
c. Enactment of the operation of buses serving inter-campus routes that operate from 07.00 - 18.00.
d. Enforcement of Car Free Day (CFD) on the campus of Universitas Sultan Ageng Tirtayasa as an implementation of reducing the parking area, at least one day per week during weekdays.
e. Prohibition of bringing vehicles into the campus for one year for first semester students.

Untirta also offers a regular "Green Friday" program, which involves working on a bicycle from Campus A Pakupatan to Campus E Sindangsari at 7:00 a.m. and continuing with the "Clear Campus" activity in order to keep the Sindangsari Campus clean of rubbish.

Additional evidence link :

1. https://bidikutama.com/berita-mahasiswa/catat-ini-kebijakan-untirta-soal-lahan-parkir-kampus-a/
2. https://bidikutama.com/berita-mahasiswa/babak-baru-lahan-parkir-untirta/
3. https://www.youtube.com/watch?v=7i0uRzBlEZE
4. https://www.youtube.com/watch?v=YSUVAiTXaJM
5. https://untirta.ac.id/2021/02/18/untirta-green-friday-19-februari-2021/

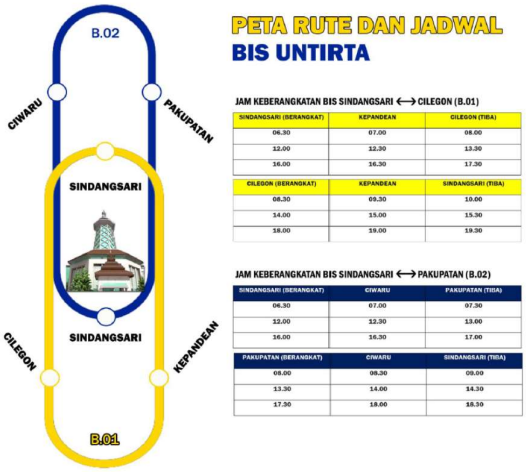
Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Serang Banten
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[5] [TRANSPORTATION]

[5.15] Number of Transportation Initiatives to Decrease Private Vehicles on Campus

The Availability of UNTIRTA Campus Bus services



Car Free Day (CFD) Policy

KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS SULTAN AGENG TIRTAYASA
Jalan Raya Jakarta Km. 4 Pakupatan Serang-Banten Telp. : (0254) 280300 Fax. 281254
Website : www.untirta.ac.id, email : info@untirta.ac.id

Nomor : 0631 /UN.43/TU/2014 3 Juni 2014
Perihal : Himbauan Kegiatan Car Free Day

Kepada :
Civitas Akademika Untirta
di -
Tempat

Dalam rangka memperingati hari Lingkungan Hidup yang dilaksanakan oleh BEM, KBM, UNTIRTA, salah satu kegiatannya adalah Car Free Day. Sehubungan dengan hal tersebut diatas, kepada seluruh Civitas Akademika Untirta dimohon untuk tidak membawa kendaraan memasuki Lingkungan Kampus. Adapun waktu pelaksanaannya adalah :

Hari / Tanggal : Jum'at, 06 Juni 2014
Waktu : 05.00 – 18.00 Wib

Demikian kami sampaikan atas perhatian dan kerjasamanya kami ucapkan terima kasih.

Rektor

Prof. Dr. H. Sholeh Hidayat., M.Pd
NIP. 1958 05091984031004

KEMENTERIAN RISET, TEKNOLOGI, DAN PENDIDIKAN TINGGI
UNIVERSITAS SULTAN AGENG TIRTAYASA
FAKULTAS KEGURUAN DAN ILMU PENDIDIKAN
Alamat: Kampus I Jalan Raya Jakarta Km. 04 Pakupatan Kota Serang
Kampus II Jalan Ciwaru Raya No. 25 Kota Serang
Kampus III D3 Keperawatan Jl. Letnan Jidan No. 2 Kepandean Kota Serang
Tlp. (0254) 280330, Ext. 111, (0254) 203205, 7910005/7910008 Fax. (0254) 281254
Website: www.fkip.untirta.ac.id email: surat.fkip@untirta.ac.id, akperkabserang@gmail.com

SURAT PEMBERITAHUAN
Nomor: B/127/UN43.2/KM.05.01/2019

Disampaikan dengan hormat kepada seluruh civitas akademika Fakultas Keguruan dan Ilmu Pendidikan (FKIP) Universitas Sultan Ageng Tirtayasa. Sehubungan dengan akan dilaksanakannya kegiatan Seputar Pengenalan Organisasi Kemahasiswaan (SPOK) sebagai rangkaian Kegiatan Pengenalan Kampus (KPK) UNTIRTA untuk mahasiswa baru FKIP, dengan ini kami memberitahukan bahwa akan dilaksanakan **CAR FREE DAY** di **kampus C Untirta Ciwaru, dari hari Senin – Sabtu/12 - 17 Agustus 2019.**

Demikian pemberitahuan ini disampaikan atas perhatian dan kerjasamanya diucapkan terimakasih.

Serang, 8 Agustus 2019
Dekan,

Dr. H. Ageng Hasani, M.Pd
NIP. 196708201998021003

KEMENTERIAN RISET, TEKNOLOGI, DAN PENDIDIKAN TINGGI
UNIVERSITAS SULTAN AGENG TIRTAYASA
Jl. Raya Jakarta KM. 4 Pakupatan-Serang Kode Pos. 42121
Tlp. 0254-280330 Fax. 0254-281254
Website : www.untirta.ac.id, e-mail : info@untirta.ac.id

SURAT EDARAN
Nomor : 1066 /UN.43/PL/2018

Yth.

1. **Para Wakil Rektor**
2. **Para Ketua Lembaga**
3. **Para Dekan dan Wakil Dekan**
4. **Direktur dan Wakil Direktur Pascasarjana**
5. **Para Kepala Biro**
6. **Para Kepala UPT**
7. **Kabag & Kasubag**
8. **Dosen, Karyawan & Mahasiswa**

di

Lingkungan Untirta

Sehubungan dengan kegiatan Dies Natalis Untirta ke – 37 dan persiapan Groundbreaking Kampus Terpadu Universitas Sultan Ageng Tirtayasa Sindangsari seiring dengan kehadiran Menteri Riset, Teknologi dan Pendidikan Tinggi **(Menristekdikti RI)** ke Kampus Untirta Pakupatan, untuk menciptakan suasana kampus yang aman dan nyaman dengan ini dihimbau kepada seluruh Sivitas Akademika Universitas Sultan Ageng Tirtayasa Kampus Pakupatan untuk tidak membawa kendaraan ke area Kampus Pakupatan ***(Car Free Day)*** pada **Hari Rabu, 26 September 2018**.

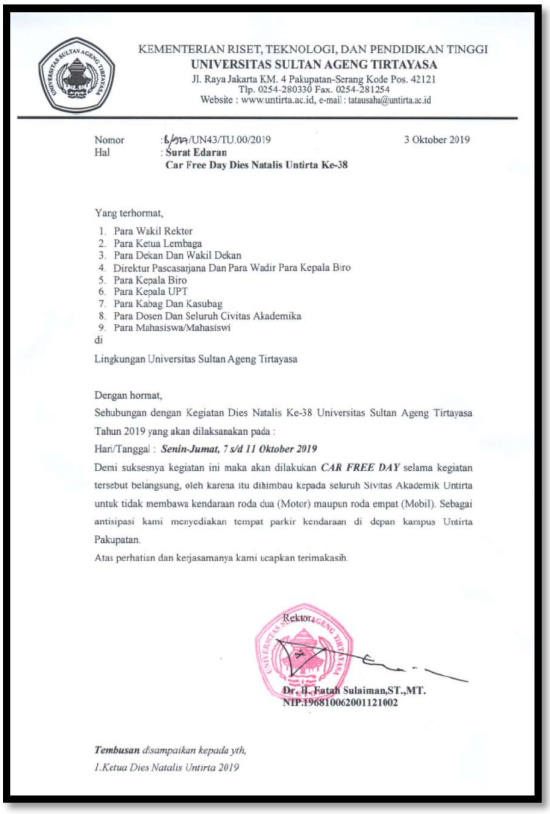
Adapun kendaraan yang boleh masuk hanya kendaraan Rektor, Menteri dan rombongan serta tamu/undangan Groundbreaking Kampus Terpadu Sindangsari.

Atas perhatian dan kerjasamanya, kami ucapkan terima kasih.

Rektor

Prof. Dr. H. Sholeh Hidayat, M.Pd.
NIP. 195805091984031003

Tembusan :
1. Ketua Panitia Dies Natalies Untirta



KEMENTERIAN RISET, TEKNOLOGI, DAN PENDIDIKAN TINGGI
UNIVERSITAS SULTAN AGENG TIRTAYASA
Jl. Raya Jakarta KM. 4 Pakupatan-Serang Kode Pos. 42121
Tlp. 0254-280330 Fax. 0254-281254
Website : www.untirta.ac.id, e-mail : tatausaha@untirta.ac.id

Nomor : 1/UN43/TU.00/2019 3 Oktober 2019
Hal : **Surat Edaran**
Car Free Day Dies Natalis Untirta Ke-38

Yang terhormat,

1. Para Wakil Rektor
2. Para Ketua Lembaga
3. Para Dekan Dan Wakil Dekan
4. Direktur Pascasarjana Dan Para Wadir Para Kepala Biro
5. Para Kepala Biro
6. Para Kepala UPT
7. Para Kabag Dan Kasubag
8. Para Dosen Dan Seluruh Civitas Akademika
9. Para Mahasiswa/Mahasiswi

di

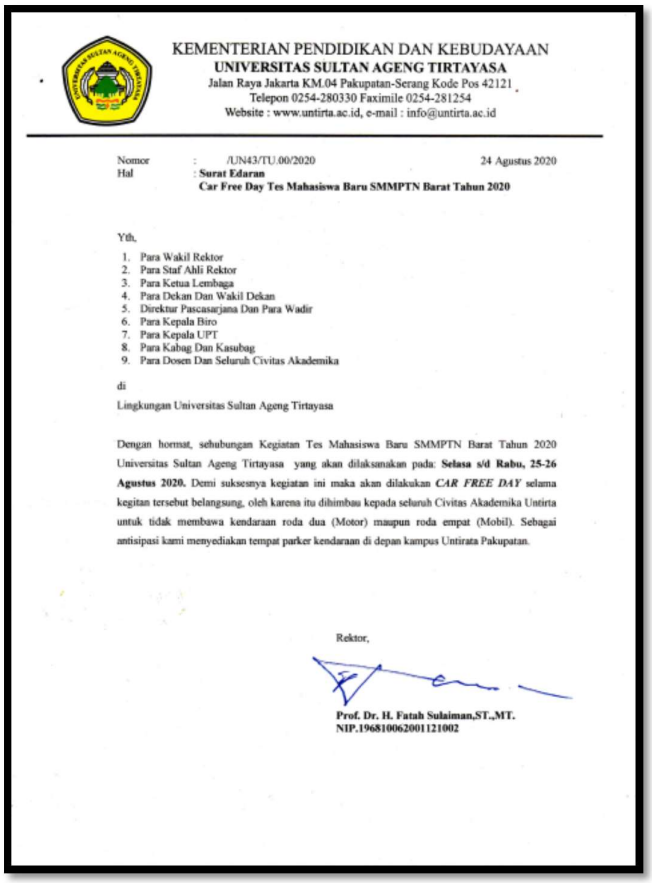
Lingkungan Universitas Sultan Ageng Tirtayasa

Dengan hormat,
Sehubungan dengan Kegiatan Dies Natalis Ke-38 Universitas Sultan Ageng Tirtayasa Tahun 2019 yang akan dilaksanakan pada :
Hari/Tanggal : ***Senin-Jumat, 7 s/d 11 Oktober 2019***
Demi suksesnya kegiatan ini maka akan dilakukan ***CAR FREE DAY*** selama kegiatan tersebut belangsung, oleh karena itu dihimbau kepada seluruh Sivitas Akademik Untirta untuk tidak membawa kendaraan roda dua (Motor) maupun roda empat (Mobil). Sebagai antisipasi kami menyediakan tempat parkir kendaraan di depan kampus Untirta Pakupatan.
Atas perhatian dan kerjasamanya kami ucapkan terimakasih.

Rektor

Dr. Ir. Fatah Sulaiman,ST.,MT.
NIP.196810062001121002

Tembusan *disampaikan kepada yth,*
1.Ketua Dies Natalis Untirta 2019



KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS SULTAN AGENG TIRTAYASA
Jalan Raya Jakarta KM.04 Pakupatan-Serang Kode Pos 42121
Telepon 0254-280330 Faximile 0254-281254
Website : www.untirta.ac.id, e-mail : info@untirta.ac.id

Nomor : /UN43/TU.00/2020 24 Agustus 2020
Hal : **Surat Edaran**
Car Free Day Tes Mahasiswa Baru SMMPTN Barat Tahun 2020

Yth,

1. Para Wakil Rektor
2. Para Staf Ahli Rektor
3. Para Ketua Lembaga
4. Para Dekan Dan Wakil Dekan
5. Direktur Pascasarjana Dan Para Wadir
6. Para Kepala Biro
7. Para Kepala UPT
8. Para Kabag Dan Kasubag
9. Para Dosen Dan Seluruh Civitas Akademika

di

Lingkungan Universitas Sultan Ageng Tirtayasa

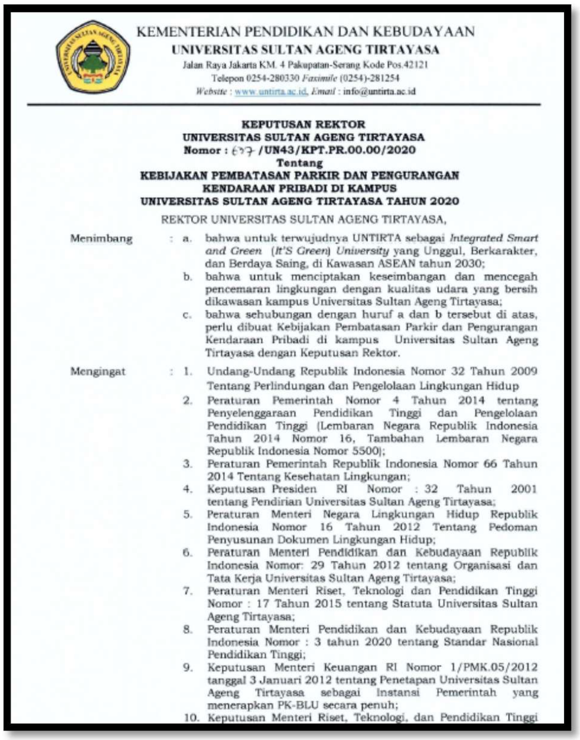
Dengan hormat, sehubungan Kegiatan Tes Mahasiswa Baru SMMPTN Barat Tahun 2020 Universitas Sultan Ageng Tirtayasa yang akan dilaksanakan pada: **Selasa s/d Rabu, 25-26 Agustus 2020.** Demi suksesnya kegiatan ini maka akan dilakukan ***CAR FREE DAY*** selama kegitan tersebut belangsung, oleh karena itu dihimbau kepada seluruh Civitas Akademika Untirta untuk tidak membawa kendaraan roda dua (Motor) maupun roda empat (Mobil). Sebagai antisipasi kami menyediakan tempat parker kendaraan di depan kampus Untirata Pakupatan.

Rektor,

Prof. Dr. H. Fatah Sulaiman,ST.,MT.
NIP.196810062001121002

Conditions of Car Free Day Implementation at Untirta

Universitas Sultan Ageng Tirtayasa's Policy is to Limit or Reduce the Number of Private Vehicles on Campus



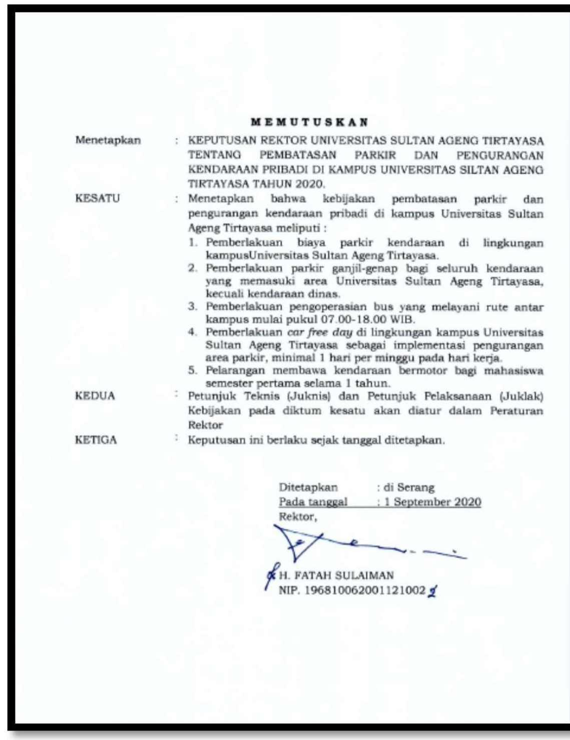
KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN
UNIVERSITAS SULTAN AGENG TIRTAYASA
Jalan Raya Jakarta KM. 4 Pakupatan-Serang Kode Pos.42121
Telepon 0254-280330 *Faximile* (0254)-281254
Website : www.untirta.ac.id, *Email* : info@untirta.ac.id

KEPUTUSAN REKTOR
UNIVERSITAS SULTAN AGENG TIRTAYASA
Nomor : 677 /UN43/KPT.PR.00.00/2020
Tentang
KEBIJAKAN PEMBATASAN PARKIR DAN PENGURANGAN KENDARAAN PRIBADI DI KAMPUS UNIVERSITAS SULTAN AGENG TIRTAYASA TAHUN 2020

REKTOR UNIVERSITAS SULTAN AGENG TIRTAYASA,

Menimbang :
a. bahwa untuk terwujudnya UNTIRTA sebagai *Integrated Smart and Green* (*It'S Green*) *University* yang Unggul, Berkarakter, dan Berdaya Saing, di Kawasan ASEAN tahun 2030;
b. bahwa untuk menciptakan keseimbangan dan mencegah pencemaran lingkungan dengan kualitas udara yang bersih dikawasan kampus Universitas Sultan Ageng Tirtayasa;
c. bahwa sehubungan dengan huruf a dan b tersebut di atas, perlu dibuat Kebijakan Pembatasan Parkir dan Pengurangan Kendaraan Pribadi di kampus Universitas Sultan Ageng Tirtayasa dengan Keputusan Rektor.

Mengingat :
1. Undang-Undang Republik Indonesia Nomor 32 Tahun 2009 Tentang Perlindungan dan Pengelolaan Lingkungan Hidup
2. Peraturan Pemerintah Nomor 4 Tahun 2014 tentang Penyelenggaraan Pendidikan Tinggi dan Pengelolaan Pendidikan Tinggi (Lembaran Negara Republik Indonesia Tahun 2014 Nomor 16, Tambahan Lembaran Negara Republik Indonesia Nomor 5500);
3. Peraturan Pemerintah Republik Indonesia Nomor 66 Tahun 2014 Tentang Kesehatan Lingkungan;
4. Keputusan Presiden RI Nomor : 32 Tahun 2001 tentang Pendirian Universitas Sultan Ageng Tirtayasa;
5. Peraturan Menteri Negara Lingkungan Hidup Republik Indonesia Nomor 16 Tahun 2012 Tentang Pedoman Penyusunan Dokumen Lingkungan Hidup;
6. Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor: 29 Tahun 2012 tentang Organisasi dan Tata Kerja Universitas Sultan Ageng Tirtayasa;
7. Peraturan Menteri Riset, Teknologi dan Pendidikan Tinggi Nomor : 17 Tahun 2015 tentang Statuta Universitas Sultan Ageng Tirtayasa;
8. Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor : 3 tahun 2020 tentang Standar Nasional Pendidikan Tinggi;
9. Keputusan Menteri Keuangan RI Nomor 1/PMK.05/2012 tanggal 3 Januari 2012 tentang Penetapan Universitas Sultan Ageng Tirtayasa sebagai Instansi Pemerintah yang menerapkan PK-BLU secara penuh;
10. Keputusan Menteri Riset, Teknologi, dan Pendidikan Tinggi



M E M U T U S K A N

Menetapkan : KEPUTUSAN REKTOR UNIVERSITAS SULTAN AGENG TIRTAYASA TENTANG PEMBATASAN PARKIR DAN PENGURANGAN KENDARAAN PRIBADI DI KAMPUS UNIVERSITAS SILTAN AGENG TIRTAYASA TAHUN 2020.

KESATU : Menetapkan bahwa kebijakan pembatasan parkir dan pengurangan kendaraan pribadi di kampus Universitas Sultan Ageng Tirtayasa meliputi :
1. Pemberlakuan biaya parkir kendaraan di lingkungan kampusUniversitas Sultan Ageng Tirtayasa.
2. Pemberlakuan parkir ganjil-genap bagi seluruh kendaraan yang memasuki area Universitas Sultan Ageng Tirtayasa, kecuali kendaraan dinas.
3. Pemberlakuan pengoperasian bus yang melayani rute antar kampus mulai pukul 07.00-18.00 WIB.
4. Pemberlakuan *car free day* di lingkungan kampus Universitas Sultan Ageng Tirtayasa sebagai implementasi pengurangan area parkir, minimal 1 hari per minggu pada hari kerja.
5. Pelarangan membawa kendaraan bermotor bagi mahasiswa semester pertama selama 1 tahun.

KEDUA : Petunjuk Teknis (Juknis) dan Petunjuk Pelaksanaan (Juklak) Kebijakan pada diktum kesatu akan diatur dalam Peraturan Rektor

KETIGA : Keputusan ini berlaku sejak tanggal ditetapkan.

Ditetapkan : di Serang
Pada tanggal : 1 September 2020
Rektor,

H. FATAH SULAIMAN
NIP. 196810062001121002

Description:

The Car Free Day activity is a routine agenda which is carried out by Universitas Sultan Ageng Tirtayasa in order to support and care for the condition of the campus environment as stipulated in several Rector's Decrees and Rector's Letters. By implementing the CFD activity, air quality on campus is protected from vehicle emissions that can endanger humans and the environment. The policy of the CFD program can create a new culture in transportation; using public transportation, cycling and walking.

As Untirta's main commitment to realizing a green campus, it is planned to build an integrated public transport service system, by implementing services and ticketing systems with low rates even free of charge. Then to support this service, Untirta will implement restrictions on the SRP (Parking Space Unit) as an effort to force motorized vehicle users, in this case, the academic community, to switch to public transportation. Currently, Untirta has provided free campus bus service facilities which are scheduled for Monday-Friday with routes to each Untirta campus which is spread across several different areas.

Another program to limit the use of motorized vehicles on the Untirta campus is to issue the following policies:

a. The application of vehicle parking fees in the Universitas Sultan Ageng Tiratayasa campus.
b. Enforcement of vehicle plate odd-even system for all vehicles entering the campus, except for official vehicles.
c. Enactment of the operation of buses serving inter-campus routes that operate from 07.00 - 18.00.
d. Enforcement of Car Free Day (CFD) on the campus of Sultan Ageng Tirtayasa University as an implementation of reducing the parking area, at least one day per week during weekdays.
e. Prohibition of bringing vehicles into the campus for one year for first semester students

Additional evidence link :

1. https://bidikutama.com/berita-mahasiswa/car-free-day-untirta-2/
2. http://fkip.untirta.ac.id/2019/08/08/pemberitahuan-car-free-day-terkait-pelaksanaan-spok-2019/
3. https://untirta.ac.id/2020/07/04/pelaksanaan-car-free-day-di-lingkungan-kampus-selama-utbk-sbmptn/
4. https://fisip.untirta.ac.id/2019/09/24/car-free-day-25-26-september-2019/
5. https://bidikutama.com/berita-mahasiswa/untirta-cfd-selama-2-hari-ke-depan/
6. https://bidikutama.com/berita-mahasiswa/gelar-utbk-ini-tanggal-cfd-untirta/
7. https://www.youtube.com/watch?v=7i0uRzBlEZE
8. https://www.youtube.com/watch?v=YSUVAiTXaJM

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Serang Banten
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[5] [TRANSPORTATION]

[5.16] Pedestrian Path Policy on Campus

Sidewalk (Pedestrian Paths) at Campus A Pakupatan

Sidewalk (Pedestrian Paths) at Campus B Cilegon


Sidewalk (Pedestrian Paths) at Campus C Ciwaru




Sidewalk (Pedestrian Paths) at Campus E Sindangsari

Description:

Sidewalk facilities in Untirta campus are intended to make pedestrians easier to reach their destination in comfort, safe and secure. Sidewalk facilities are made to protect pedestrians from hot and rain. Besides that, it is separated by distance from the vehicle line to make them quite safe when walking. Several areas of the campus are provided with increments to replace stages, and guide blocks for pedestrians with physical disabilities (difable).

Additional evidence link :

https://green.untirta.ac.id/transportasi/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : University of Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[6] Education and Research (ED)

[6.1] Number of Courses/Subjects Related to Sustainability Offered
University Courses

No	Course Title	Course Description
1	Ketahanan Pangan (Food Security)	The basis and importance of food security, aspects of food security from various aspects (legal, industrial and social aspect)
2	Studi Kebantenan (Study of Banten)	The history of Banten, the land of Surosoan, the political history of Banten, the philosophical thoughts of Syekh Nawawi Al Bantani, Banten and religious pluralism, the stratification of the people of Banten, the intellectual figures and statesmen Sultan Ageng Tirtayasa and Syekh Nawawi, Banten tourism destinations, Maintaining the environment based on AMDAL, Horizons of developing science and technology
3	Kewirausahaan (Entrepreneurship)	The scope of entrepreneurship that will be discussed and discussed in this course is oriented towards two main aspects, namely value-oriented and goal-oriented. One of the important content that needs to be introduced to students is the internalization of the value system contained in entrepreneurship, namely independence, creative thinking, soft skills, interpersonal skills, persuasive communication, hard work, persistence, and others. In the end, the expected long-term impact of the formation of these values is the ability to capture and create opportunities into something that has value and added value.
4	KKM (Students Community Service and Empowerment)	Lecture activities and fieldwork which is the integration of education and teaching, research and community service by students in a pragmatic, broad-dimensional manner through an interdisciplinary, comprehensive, and cross-sectoral approach

Faculty of Engineering
Department of Electrical Enginering

N0	Course Title	Course Description

5	Energi Baru dan Terbarukan (New & Renewable Enery)	Energy crisis, energy potential, New and Renewable Energy Conversion, Wind and seawater energy, Geothermal energy, solar energy and solar cells
6	Technopreunership	Market structure, quality control, economic analysis, entrepreneurship, marketing techniques, business plans
7	Rekayasa Perangkat Lunak +Tutorial (Software Engineering + Tutorials)	UML, software process and methodology, planning in software design, architecture and design, software implementation, software testing, software quality, software development and maintenance, project management, assistive software, software re-engineering
8	Kesehatan dan Keselamatan Kerja (Occupational Health and Safety)	The scope of Occupational Health and Safety, occupational safety, occupational health, occupational accident factors, Occupational Health and Safety principles, Occupational Health and Safety Law, Occupational Health and Safety standard personal protective equipment, occupational physiology ergonomics, Occupational Health and Safety nutrition, Occupational Health and Safety management, Occupational Health and Safety prevention
9	Etika Profesi (Professional ethics)	Definition and ethical philosophy; Ethics branches and their scope; Ethical approach method; Definition and specificity of norms; Definition of profession and professionalism; Definition of engineering profession ethics; The importance of engineering profession ethics in the present; Professional standards and competences in engineering; Definition of human relations; The scope and importance of human relations; Definition and role of code of ethics; The responsibility of the engineering profession to society

Department of Industrial Engineering

No	Course Title	Course Description
10	Sistem Lingkungan Industri (Industrial Environmental Systems)	Basic concepts of Industrial Environmental Systems, measurement of the physical work environment, work climate of NAB, workload, environmental influence on work physiology in the human body, the concept of human factors - ergonomics and work environment, the concept of industrial ecology, environmental impact analysis, Environmental Management Systems and ISO 14001, Good Manufacturing Practice (GMP)
11	Kesehatan dan Keselamatan Kerja (Occupational Health and Safety)	Basic concepts and general definitions o Occupational Health and Safety , Management System and Occupational Health, Audit system, Personal Protective Equipment

12	Green Productivity	Green Productivity is a strategy to increase productivity and environmental performance simultaneously for overall socio-economic development that leads to a continuous improvement in the quality of human life. It is the combined application of appropriate productivity and environmental management tools to engineering and technology that reduces the impact of the organization's product and service activities to increase profits and excellence.
13	Ergonomi Kesehatan (Health Ergonomics)	Ergonomic aspects, the concept of SHIP approach, appropriate technology, evaluation of the physiological condition of workers through the analysis approach of skeletal muscle complaints or musculoskeletal complaints, work fatigue (physical fatigue, motivation fatigue and activity fatigue), job satisfaction
14	Hygiene Industries	hygienic and sanitary management in industrial environments including hazard control in the workplace
15	Sistem Manajemen Mutu dan Lingkungan (Quality and Environmental Management Systems)	quality management systems and environmental management which are widely applied in the industrial world to improve competitiveness.The concepts and applications of Total Quality Management (TQM), ISO 9001, ISO 17025, ISO 14000, ISO 22000 and the concept of Hazard Analysis Critical Control Point (HACCP), and the concepts of Life Cycle Assessment (LCA), Kaizen, Six Sigma and added with the development of the current quality management system, both internationally and in Indonesia. This quality management system and related concepts are explained along with examples of applications in the industry for discussion

Department of Chemistry Engineering

No	Course Title	Course Description
16	Pengelolaan Air dan Limbah (Water and Waste Management)	Processing of liquid, solid and gas waste. The definition of waste, the history of waste management, the legal basis for environmental protection and management and technology for treating liquid, solid and gas waste. After getting the targeted course, students will have an increased
17	Keselamatan dan Kesehatan Kerja (Occupational Health and Safety)	Occupational safety and health issues are very important in an industry, because they will affect productivity and efficiency in a series of processes in the chemical industry. The rules and regulations including the practice of its application in the Chemical Industry

18	Teknologi Bersih (Clean Technology)	Clean technology definitions and principles. Waste, Potential and Its Processing in Industry. Application of Cleaner Production in Industry. Steps and implementation strategies in the Process Industry. Non-product output analysis in clean technology implementation. Implementation of clean technology in industrial estates
19	AMDAL dan proper (environmental impact analysis and its proper)	AMDAL principles, processes, and benefits; Formulation of Terms of Reference (KA); Preparation of ANDAL; RKL-RPL preparation; Implications of Environment Document Preparation Application

Department of Mechanical Engineering

No	Course Title	Course Description
20	Teknopreneurship (Technopreuneurship)	Providing insights in improving the abilities of students who not only have high competence in mechanical engineering, but also have an entrepreneurial spirit
21	Manajemen & Optimasi Energi (Energy Management & Optimization)	Mathematical modeling, simulation and optimization of an energy system through an economic and engineering approach. The Energy System Optimization lecture aims to complement a student's ability to understand mathematical models, simulations and optimization of a thermal system.
22	Energi Terbarukan (Renewable energy)	Provides an overview of the use of fuels other than basic fuels and bricks, sources and how to get them. Solar Energy: Photovoltaic Solar Cell, Photovoltaic Energy Conversion, Chimney and Solar Pool; Magma Energy; Biomass Energy; Firewood and agricultural waste; Forest energy and biomass for transport fuel; Biogas; Municipal waste; Oil and natural gas energy; Wind power: Multiple wind data and concentrators; Solar energy; Nuclear energy: Nuclear materials, Fusion, Nuclear reactors, Reactor coolers; Ocean energy; Tidal energy, Energy of waves and currents. Coal energy: Mining and use of coal, Combustion of coal conversion.
23	Mesin Konversi Energi (Energy Conversion) Machine)	Overview on energy sources, types and classifications of energy, energy conversion, energy consumption, basic concepts of energy conversion systems, resources and classification of energy conversion machines, including lab achievements of energy conversion machines.

24	Kesehatan dan Keselamatan Kerja (Occupational Health and Safety)	Aspects of safety, industrial health and environmental protection. Understand the basic laws and regulations in the field of work safety, understand the concept of risk, various types of hazards, disturbances to health, analysis of environmental impacts, etc.

Department of Metalurgical Engineer

No	Course Title	Course Description
25	Teknik tomografi metalurgi (Metallurgical tomography technique)	Tomography techniques and the development, the basic principles of tomography on how to get an image of a material, tomographic systems, image reconstruction techniques from projection data to measurement data, data processing and matrix sensitivity, image reconstruction algorithms, electrical capacitance tomography, Electrical Capacitance Volume Tomography (ECVT) , application and development of Capacitance Tomography in industry, applied Tomography Engineering in the metallurgical industry, Magnetic Impedance Tomography (MIT), Sensor Coil for MIT, MIT application and development, field practice: MIT application in metallurgical processes.
26	Material maju (Advanced material)	fundamental of chemical materials, ultra light materials, biomaterials (types and processes of coating materials and their applications), composite materials (cellular metal characterization and properties), refractory and coating materials for high temperature applications, thin film shape memory alloys for microelectromechanical systems (MEMS) applications , electronic materials, energy mate
27	Desain Standar dan Kendali Mutu (Standard Design and Quality Control)	standards to be applied in the industry and the quality assurance system in an industry., material testing standards (ASTM, BS, JIS, DIN, AISI, API, ASME, SAE, ISO, SNI or SII, quality assurance for final product inspection, quality control measurement, ISO 9000 standards and ISO 14000.
28	Teknologi nano (Nanotechnology)	Development of nanotechnology, top down methods, bottom up methods, physical, chemical and mechanical properties of nanomaterials, testing and characterization of nanomaterials, and application of nanomaterials.
29	Teknologi komposit (Composite technology)	Topik-topik yang dibahas meliputi: concept, definition, and classification of composites, composite fabrication, metal matrix composite (MMC), polymer matrix composite (PMC), ceramic matrix composite (CMC), reinforced fiber and whiskers, rule of mixture, matrix

		types for composites, interfaces in composite materials , interfacial area, interfacial wettability, interfacial bonding, measurement of interfacial strength, geometric aspec composites, laminae and laminates, elastic properties of camposite, fiber & effect (stress and strain distribution), lamination theory, strength of unidirection laminae, strength of laminates, strength of short fibers composite fracture energy of composite.
30	Teknologi polimer (Polymer technology)	polymerization process, polymer molecular weight, physical and mechanical properties of polymers, morphology and rheology of polymers, industrial polymers, polymer fabrication, advance polymers and polymer degradation.
31	Teknologi keramik dan gelas (Ceramic and glass technology)	Definition and utilization of ceramic and glass materials, chemical bonds in ceramics and glass, crystal structure of ceramics and glasses, mechanical properties of ceramic and glass materials, thermal properties of ceramic and glass materials, electrical and magnetic properties in ceramic and glass materials, bioceramics and bio-glass , ceramics, traditional / classical glass and degradation of ceramic materials.
32	Pengolahan limbah metalurgi (Metallurgical waste treatment)	Metallurgical waste treatment processes in physics, chemistry, biology, hydrometallurgy, pyrometallurgy, biotechnology and recycling of various kinds of metal waste. understanding the terms BOD, COD, coagulation, flocculation, sedimentation, adsorption and absorption. Management of liquid waste, solid waste from the metallurgical process, the sedimentation process and the filtration process. Metallurgical process exhaust gas management.
33	Desain dan Seleksi Material (Design and Material Selection)	The Material Design and Selection course aims to make students understand the principles of engineering design and be able to apply them according to the metallurgical engineering discipline. Students are also expected to be able to compare types of materials based on considerations of technical and economic aspects, so that students can choose materials that are suitable for the application of metallurgical engineering.

Department of Civil Engineering

No	Course Title	Course Description
36	Hidrologi (Hydrology)	The hydrological / water cycle on earth (rain, surface runoff, evaporation, condensation / clouds, groundwater, etc.), flooding, water discharge, etc
37	Drainase dan Sanitasi Lingkungan	Environmental drainage system, industrial / residential area drainage, sports field drainage, airport drainage, etc

	(Drainage and Environmental Sanitation)	
38	AMDAL - Analisis Dampak Lingkungan (Environmental impact analysis)	Environmental Impact Analysis of large-scale activities / risk to the environment, Environmental impact analysis
39	Irigasi dan Bangunan Air (rrigation and Water Construction)	Water needs for plants, irrigation systems, various water structures for irrigation water supply .
40	Teknik Pantai (Coastal Engineering)	Waves, wave defomation, coastal structures and protection
41	Mekanika Fluida Hidrolika (Hydraulics Fluid Mechanics)	Fluids, types of flow, fluids, channel dimensions
42	Waduk dan Tenaga Air (Reservoir and Hydropower)	Dams, reservoirs, water conservation, reservoir benefits (irrigation, flood mitigation, fisheries, tourism, etc.)
43	Teknik Sungai (River Engineering)	Morphology and characteristics of rivers, river flow, river management & maintenance, etc.
44	Traspor Sedimen (Sediment Transport)	Sediment transport problems, sediment transport, etc.

Faculty of Agriculture
Department of Agribusiness

No	Course Title	Course Description
45	Pengantar Ilmu Ekonomi (Introduction To Economics)	The fundamentals of economic analysis and reasoning. Describe and evaluate the models and methods used in economic analysis. Formulate real world examples in the language of economic modelling. Apply and use the economic models to analyse these issues. Assess the potential and limitations of the models and methods used in economic analysis.
46	Pengantar Ilmu Pertanian (Introduction to agriculture science)	the study of a wide range of agriculture areas and careers. Basic areas of study include careers in agriculture, Future Farmers, Plant Science, Animal Science, Agriculture Business and Agriculture Mechanics.
47	Sosiologi Pertanian (sociology of Agriculture)	Topics covered include public agricultural research and the Land Grant system; the diffusion and adoption of agricultural innovations; agricultural industrialization, consolidation, and power; agricultural industrialization, farm size, communities, and workers; commodities, consumption, and culture; sustainable agriculture; critiques of alternative agrifood movements; and race, class, and food justice. The course exposes students to the varied research designs and methods used by social scientists who study agriculture and food systems topics.

48	Biologi Umum (General Biology)	General biology encompass many aspects of the science, such as ecology, genetics, paleontology, physiology and zoology. Topics also include cell biology, human disease and genetics.
49	Ekonomi Mikro (Microeconomics)	Fundamentals of microeconomics, introduces microeconomic concepts and analysis, supply and demand analysis, theories of the firm and individual behavior, competition and monopoly, and welfare economics.
50	Ilmu Gizi dan Pangan (nutrition and food science)	The fundamental biological, chemical and physical scientific principles associated with the study of foods; topics include food composition and nutrition, food additives and regulations, food safety and toxicology, food processing, food engineering, food biotechnology, product development and sensory evaluation.
51	Dasar Agronomi (Basic Agronomy)	Topics are about the roles of plants in relation to culture, economic development and the supply of food and nutrition for a community or country in order to increase crop production; the concept of energy flow in agriculture and increase the efficiency of energy use for cultivation; the origins of plant classification, function and structure of plant morphology, stages of plant growth in relation to balancing the use and accumulation of carbohydrates; environmental factors that affect plant growth and crop production; plant propagation, plant breeding, breeding methods and seed technology; crop production techniques, multiple cropping, wetland rice, dry farming and estate crop production.
52	Dasar Ilmu Tanah (Soil Science)	This introductory course in soil science introduces the student to the study, management, and conservation of soils as natural bodies, as media for plant growth, and as components of the larger ecosystem. This course presents basic concepts of all aspects of soil science including; composition and genesis; physical, chemical, and biological properties; soil water; classification and mapping; soil conservation; management practices; and soil fertility and productivity (soil testing, use of fertilizers and manures, and liming). It introduces the relationships of soil to current concerns such as environmental quality and non-agricultural land use. This course should instill awareness of soil as a basic natural resource, the use or abuse of which has a considerable influence on human society and life in general.
53	Dasar-Dasar Penyuluhan Pertanian (Introduction to Agricultural Extension)	Meaning and objectives of agricultural extension, role of extension workers, history and organization of extension services in Nigeria, selected extension methods and techniques, the extension process, meaning of rural sociology, rural leadership pattern and community organization. Principles and philosophy of extension communication, extension teaching process and adult learning

54	Ekonomi Makro (Macroeconomics)	Fundamental economic ideas and the operation of the economy on a national Production,distribution and consumption of goods and services, the exchange process, the role of government, the national income and its distribution, GDP, consumption function, savings function, investment spending, the multiplier principle and the influence of government spending on income and output. Analysis of monetary policy, including the banking system
55	Kependudukan (Demography)	Demography and provides the basic information required to build on further through the course. It provides the definition and scope of Demography, the data requirements in Demography and sources of data are discussed in great detail. The various demographic events that play important role in population growth and composition are also discussed. Historical perspectives of the changes in population and of the demographic events are also included
56	Dasar - Dasar Komunikasi Pertanian (Introduction to Agriculture communication)	Introduces the broad field of agricultural communications and provides for the development of knowledge and skill in specific areas related to communications theory and practice. Content includes the meaning and process of communication, the role and history of print and electronic media, legal aspects of agricultural communications, news and feature writing in agriculture, news photography, layout and design, and ethics in agricultural communications. Content may also include web design and broadcast journalism in agriculture. Students will be encouraged to begin developing a portfolio in an area of interest such as print media, electronic media, or public relations.
57	Ekonomi Pertanian (Agricultural Economics)	This course explores the economic foundations for public policy analysis related to agricultural issues in rural areas. The emphasis of this course is on concepts and introduction of various tools required for policy analysis and empirical research in agricultural economics.
58	Ekonomi Produksi Pertanian (Agricultural Production Economics)	Resource allocation, production selection, scale of operation of agricultural firms including risk and uncertainty associated with agricultural production.
59	Pembangunan Pertanian (Agriculture development)	This course aims to analyse the performance of the agricultural sector, what had led to changes in performance of the sector and what accounts for these changes. It brings into focus the impact of agricultural performance on different sections of the rural population. The course also focusses on policy level developments that had impacted Indian agriculture in the pre-and post-reform period and the changing role of rural institutions to meet these challenges for a sustainable growth trajectory.
60	Perlindungan Tanaman (Plant Protection)	This course discusses basic knowledge about protection of plants from pest infestation and disease infection:

		importance, biomorphology, and ecology of plant pests; importance and concept of plant disease; classification of plant disease; symptom and the damage caused by plant pathogens; parasitism and disease development; the causal agents of plants disease; plant defense against infection plant disease; plant disease epidemy and the factors involved; principles of plant and disease management; and integrated pest management concept. Practicum: Observation of general insect morphological characteristics; insect metamorphosis; insect mouthparts; sympthom of damage by insect pests; observation of important orders and families of insects, mites, slugs, and snails, and rodents; insect collection; observation of disease symptom and plant damage as well as causal organism of plant disease
61	Teknologi Hasil Pertanian (Agricultural Product Technology)	The principle of food sciences i.e.: food chemistry, food microbiology, food safety, food engineering and processing, sensory science, and food biochemistry and nutrition; and use them in process design to increase the value of agricultural products to produce food and non-food products with high quality, safe, nutritious, in sustainable way.
62	Ekonomi Sumberdaya Alam (Natural Resource Economics)	The relationship between human activity and the world's natural resources necessitates choices; to live and produce we must utilize environmental resources, but to protect these same natural resources for future generations we must watch how we live and produce. This course uses an economic perspective to study these complex choices. Particular topics covered include: resource management models (for forests, fisheries, oil, and natural gas), pollution control models (for air and water pollution), sustainable development, and (if time) environmental justice. An emphasis on economic theory, concepts, and graphs will be stressed, but public policy applications will never be far behind.
63	Perencanaan Wilayah (Regional Planning)	Regional planning has a long history within advanced economies and over recent decades has been advanced as a key strategy for ensuring the economic competitiveness of major urban centres. The need for regional planning has also been boosted by the increasing connectedness of regions
64	Penanganan Pasca Panen (Post Harvest Technology)	Post harvest technology includes agrarian products finishing and storing technologies from material reception to its dispatch. Special programme unit will include technological procedures of product preserving by drying the mercantile and seed material, drier types and process automatization. Procedures of finished products storage, physiological and chemical processes during the storing and storage and silage types will also be elaborated. One of the programme units will include fundamentals of designing in post harvest technology

		with activity diagram drafting for family farms and large industrial plants.
65	Pengembangan Masyarakat (Community development)	The concept of community development concerns ways of thinking about and resolving community problems. Students examine the relationship between individual and community issues. In addition, they have opportunities to develop organizing skills on an agency and community level.
66	Dinamika Pembangunan Desa (Rural Development Dynamics)	The objective of this course is to introduce, discuss and frame aspects of rural development and to relate these to rural livelihoods. Tthe perseverance and determinants of rural poverty and food insecurity are also analysed.
67	Manajemen Sumberdaya Manusia (Human Resource Management)	Human Resource Management links people-related activities to business strategy. The course develops a critical understanding of the role and functions of the various human resource activities in an organisation, providing students with a comprehensive review of key HRM concepts, techniques and issues.

Department of Agroecotechnology

No	Course Title	Course Description
68	Biologi Dasar (Fundamentals of Biology)	The study of biology covers an incredibly wide range of themes; from simple molecules, cells, organelles and tissues to whole organisms and their interaction with the environment and their ability to evolve.
69	Biokimia Tanaman (Plant Biochemistry)	The course provides an overview on the important metabolic pathways in plants. It also introduces the integration of metabolic networks in plant physiology, with special emphasis on adaptation processes.
70	Botani & Sistematika Tanaman (Botany & Plant Systematics)	Plant systematics will explore the origin and diversification of land plants while emphasizing flowering plants. Taxonomy (identification, nomenclature, classification emphasizing flowering plants), evolution (speciation, reproductive biology, adaptation, convergence, biogeography), and phylogenetics (phenetics, cladistics, morphology and molecules) are also discussed
71	Mikrobiologi Umum (General Microbiology)	The course includes the following topics: bacterial cell structure and function; genetic systems of bacteria, bacteriophages and plasmids; microbial growth and metabolism; energy and nutrient harvesting; microorganisms and the environment; control of microorganisms; introduction to viruses; food and industrial application
72	Dasar - Dasar Agronomi (Basic Agronomy)	Topics are about the roles of plants in relation to culture, economic development and the supply of food and nutrition for a community or country in order to increase crop production; the concept of energy flow in agriculture and increase the

		efficiency of energy use for cultivation; the origins of plant classification, function and structure of plant morphology, stages of plant growth in relation to balancing the use and accumulation of carbohydrates; environmental factors that affect plant growth and crop production; plant propagation, plant breeding, breeding methods and seed technology; crop production techniques, multiple cropping, wetland rice, dry farming and estate crop production.
73	Dasar - Dasar Ilmu Tanah (Fundamental of Soil Science)	This introductory course in soil science introduces the student to the study, management, and conservation of soils as natural bodies, as media for plant growth, and as components of the larger ecosystem. This course presents basic concepts of all aspects of soil science including; composition and genesis; physical, chemical, and biological properties; soil water; classification and mapping; soil conservation; management practices; and soil fertility and productivity (soil testing, use of fertilizers and manures, and liming). It introduces the relationships of soil to current concerns such as environmental quality and non-agricultural land use. This course should instill awareness of soil as a basic natural resource, the use or abuse of which has a considerable influence on human society and life in general.
74	Dasar - Dasar Perlindungan Tanah (Fundamental of Plant Protectiom)	This course discusses basic knowledge about protection of plants from pest infestation and disease infection: importance, biomorphology, and ecology of plant pests; importance and concept of plant disease; classification of plant disease; symptom and the damage caused by plant pathogens; parasitism and disease development; the causal agents of plants disease; plant defense against infection plant disease; plant disease epidemy and the factors involved; principles of plant and disease management; and integrated pest management concept. Practicum: Observation of general insect morphological characteristics; insect metamorphosis; insect mouthparts; sympthom of damage by insect pests; observation of important orders and families of insects, mites, slugs, and snails, and rodents; insect collection; observation of disease symptom and plant damage as well as causal organism of plant disease
75	Ekonomi Pertanian (Agricultural Economics)	This course explores the economic foundations for public policy analysis related to agricultural issues in rural areas. The emphasis of this course is on concepts and introduction of various tools required for policy analysis and empirical research in agricultural economics.
76	Fisiologi Tanaman (Plant Physiology)	Focusing on the major physiological processes occurring in plants grown under ideal conditions as well touch on the physiology of stress-adaptation.

77	Keragaman Hayati (Biodiversity)	Focusing on the meaning of biodiversity and its subcomponents of biosystematics, species diversity, species loss, habitats and ecosystems.
78	Pengantar Ilmu Pertanian (Introduction to Agricultural Science)	the study of a wide range of agriculture areas and careers. Basic areas of study include careers in agriculture, Future Farmers, Plant Science, Animal Science, Agriculture Business and Agriculture Mechanics.
79	Teknologi Benih (Seed Technology)	The topics are seed biology, seed quality, seed production, seed storage and seed certification.
80	Budidaya Tanaman Pangan (Horticulture)	The course covers aspects of crop production technology (nurseries, planting systems, fertilization, irrigation, weed control, pest and disease control, harvesting), physiology, ecology, botany, seedling and breeding, post-harvest, and marketing.
81	Ekologi Tanaman (Plant Ecology)	Fundamental principles and concepts of plant ecology through an examination of plants within the environment
82	Genetika Tanaman (Plant Genetics)	Introduction of basic concepts of plant molecular biology and molecular techniques in current use. Topics include: organization and regulation of plant genes, gene cloning and analysis, transformation systems for plants, and molecular techniques for crop improvement.
83	Kesehatan dan Kesuburan Tanah (Soil Health and Fertility)	Focusing on soil nutrient pools, maximize on-farm recycling of nutrients, and reduce nutrient losses to the environment and improving the efficiency of external inputs.
84	Klimatologi Pertanian (Agroclimatology)	Focusing on measurement and in evaluation of the meteorological and biometeorological observations. To master the procedures of meteorological data analysis and their proper utilization in terrain
85	Pemuliaan Tanaman (Plant Breeding)	Introduction to general principles, practices, and techniques used to breed plants, select traits, and develop crop cultivars: including biomass feedstock crops.
86	Pengelolaan Air (Water Management)	a comprehensive approach to water resources management by integrating environmental science (geology, soils, hydrology) and policy (planning and regulatory analysis).
87	Pengelolaan Gulma (Weed management)	This course provides an overview of managing weeds. The topics are the impact of weeds, planning for their control, control options, surveillance, herbicide trials, control methods and use of herbicides, use of labels and safety data sheets
88	Bioteknologi Tanaman (Plant Biotechnology)	Involves numerous plant sciences specialties, including cell biology, genetics, physiology, bioinformatics, biochemistry and tissue biology.
89	Konservasi Tanah dan Air (Water and soil conservation)	The Soil and Water Conservation course is a combination of subject matter and planned learning experiences on the principles involved in the conservation and/or improvement of

		soil and water resources for economic and recreational purposes.
90	Mekanisasi Pertanian (Agricultural Mechanization)	Develop knowledge of the management principles involved in sizing agricultural tractors and machinery, current and future trends in agricultural machinery design and technology and also skill in repairing agricultural hydraulic equipment.
91	Penanganan Pasca Panen (Post Harvest Technology)	Post harvest technology includes agrarian products finishing and storing technologies from material reception to its dispatch. Special programme unit will include technological procedures of product preserving by drying the mercantile and seed material, drier types and process automatization. Procedures of finished products storage, physiological and chemical processes during the storing and storage and silage types will also be elaborated. One of the programme units will include fundamentals of designing in post harvest technology with activity diagram drafting for family farms and large industrial plants.
92	Pengelolaan Hama dan Penyakit Terpadu (Integrated Pest and Disease control)	This course discusses history and concepts of integrated pest management (IPM); understanding of agroecosystem process and structure; status and characteristics of pests and diseases in agroecosystem; damage and basis control decision making; pest and disease monitoring and forecasting; dissemination and implementation of IPM; prospects and constraints; pest risk analysis concept and methodology; plant protection policy.
93	Perbanyakan Tanaman (Plant Propagation)	Focusing on techniques and requirements for seed production, cuttings, division, grafting, budding and layering.
94	Budidaya Tanaman Rempah dan Obat (Cultivation of Spices and Medicines plant)	Introduction to the growth, culture, and science related to the production and use of herbs, and medicinal plant
95	Pertanian Organik (Organic Farming)	Principles of Organic Crop Production will cover the cultural practices (crop rotations, cover crops, pest management, etc.) and biological processes (composting, soil food web, plant and animal health, etc.)
96	Arsitektur Pertamanan (Landscape Architecture)	This major provides instruction in site planning and design, landscape history, landscape architectural graphics and presentation. It includes the use of plants and other features to enrich exterior spaces.
97	Bioteknologi Tanah (Soil Biotecnology)	Focusing on manipulation of soil micro-organisms and their metabolic processes to optimize crop productivity
98	Pengelolaan Lahan Kering (Dry Land Management)	Focusing on dryland farming; land preparation, crop production and management, land degradation versus crop production
99	Urban Farming	The role of sustainable urban agriculture in the community building process within predominately low income communities

100	Teknik dan Manajemen Perkebunan (Plantation Technology and Management)	The various aspects of Production Technology, Management and Information Technology needed by the agricultural and plantation sectors
101	Teknologi Pengolahan Hasil Pertanian (Agricultural Product Technology)	The principle of food sciences i.e.: food chemistry, food microbiology, food safety, food engineering and processing, sensory science, and food biochemistry and nutrition; and use them in process design to increase the value of agricultural product
102	Toksikologi Pestisida (Toxicology of Pesticide)	Comprehensive knowledge of the many compounds designed to kill specific target organisms and a clear understanding of how to use them most efficiently for their purpose and with the least detrimental effects for non-target organisms and biological systems.

Department of Fisheries

No	Course Title	Course Description
103	Biologi Dasar (Fundamentals of Biology)	The study of biology covers an incredibly wide range of themes; from simple molecules, cells, organelles and tissues to whole organisms and their interaction with the environment and their ability to evolve.
104	Pengantar Ilmu Pertanian (Introduction to agriculture science)	the study of a wide range of agriculture areas and careers. Basic areas of study include careers in agriculture, Future Farmers, Plant Science, Animal Science, Agriculture Business and Agriculture Mechanics.
105	Avertebrata Perairan (Aquatic Invertebrates)	Focusing on the life histories, ecology and importance of macroinvertebrates in freshwater aquatic systems.
106	Ekologi Perairan (Aquatic Ecology)	Focusing on physical, chemical, and biological processes occurring in lakes, streams, and wetlands areas, and also the physical and chemical aspects of aquatic systems and the life cycles and adaptations of aquatic organisms.
107	Ikhtiologi (Ikhtiology)	Focusing on the systematics, classfication, morphology, physiology, behavior and ecology of fishes
108	Oseanografi (Oceanography)	Deals with aspects of geology, chemistry, physics, climatology, environmental science and biology as they apply to the oceans
109	Pengantar Ilmu Perikanan (Introduction to Fishery Science)	Deals with water quality, habitat, and fish populations in natural systems and also related management and analyses, hypothesis formation and testing, and formulation of management practices for aquatic resources.
110	Budidaya Perikanan (Aquaculture)	the basic principles of aquaculture, including production systems, water quality, nutrition, spawning, larval culture and grow-out, and culture methodologies of fish, reptiles, invertebrates (zooplankton, molluscs, crustaceans, corals) and algae.

111	Fisiologi Hewan Air (Aquatic Animal Physiology)	the functional adaptations and adjustments animals use to cope with the various environmental and physiological challenges to life in aquatic environments
112	Komoditas dan Penanganan Hasil Perairan (Aquatic Food Processing and Technology)	Focusing on how processing and storage conditions influence the quality and shelf life of aquatic food
113	Limnologi (Limnology)	The study of study of inland waters including lakes, wetlands, ground water, and streams
114	Metode Penangkapan Ikan (Fishing Technology)	The design of a range of commercial fishing gears and methods as well as the fishing vessels that are required for their effective operation to produce high-quality seafood.
115	Mikrobiologi Perairan (Aquatic microbiology)	Deals with Nature of aquatic environment; Microbiology of water supply; Microbial flora of surface and ground waters; Water treatment, water supply and public health.
116	Biokimia Hasil Perairan (Biochemistry of aquatic products)	The study of the chemical processes of Aquatic products that drive biological systems
117	Manajemen Kesehatan Ikan (Fish Health Management)	Emphasize recognition of what is 'non-normal' in fish husbandry settings. The interactive lectures focus on recognition of types of diseases: (e.g., environmental, pathogenic, parasitic or genetic) combined with prevention and mitigation techniques.
118	Nutrisi Ikan (Fish nutrition)	The course deals with different aspects of fish nutrition and feed technology.
119	Pelabuhan Perikanan (Fishing Port Technology)	This course explains the planning techniques for the development and utilization of fishing ports starting from the location / land selection, layout, water management, port building, master plan to construction to utilization of fishing ports.
120	Konservasi Sumberdaya Perairan (Conservation of Aquatic Resources)	An overview of fisheries and fishery systems, developing understanding of population dynamics, identifying alternative management systems and policy instruments
121	Manajemen Kualitas Air Akuakultur	An overview of water quality management in aquaculture systems, physical, chemical and biological characteristics of water and their significance in different water systems; Water quality monitoring and monitoring strategy; sources of contaminants; water quality standards and indicators
122	Pengendalian Mutu Hasil Perairan (Quality Control of Aquatic Products	The quality and control in the production process of fishery products.
123	Penyuluhan Perikanan (Fisheries extension)	Introduction to extension education and fisheries extension - concepts, objectives and principles; extension education, formal and informal education; History and role of fisheries extension in fisheries development.
124	Manajemen Sumberdaya Perairan (Management of Aquatic Resources)	The course focuses to a certain extent on the use of resources in aquatic environments by humans, and thus the course contains aspects of such subjects as the economy of natural resources,

		ecotoxicology and conservation biology, alongside a systems ecology approach.
125	Teknologi Produksi dan Pemberian Pakan Ikan (Fish Production and Feed Technology)	Deals with the fish feed formulation and manufacturing of various forms of feeds
126	Ekowisata (Ecotourism)	The course provides an overview of the nature tourism and ecotourism as a market, the supply and demand sides and the main characteristics of them. During the course we examine issues associated with ecotourism and how it can be managed in the context of a sensitive, untouched, wilderness areas. The main elements are, broadly, a focus on the natural environment, ecological and cultural sustainability, education and interpretation, and local and regional benefits
127	Manajemen Sumberdaya Perikanan (Fishery Resource Management)	Knowledge of essential ecological, social, institutional, and economic dimensions of fisheries management; skills in fisheries systems analysis, interview and social survey techniques, resource assessment and modeling, institutional analysis
128	Teknologi Informasi Pengelolaan Perikanan Berkelanjutan (Sustainable Fisheries Management Information Technology)	Topics will include an overview of commercial fisheries fish collection and dissections, fishing gear types and modifications, age and growth techniques, quantitative data collection and analysis, current, past and future directions in fisheries management strategies, collaborative research and 'conservation' fishing gear, environmental changes, perspectives from different stakeholders

Department of Food Technology

No	Course Title	Course Description
129	Biologi Dasar (Fundamentals of Biology)	The study of biology covers an incredibly wide range of themes; from simple molecules, cells, organelles and tissues to whole organisms and their interaction with the environment and their ability to evolve.
130	Mikrobiologi Umum (General Microbiology)	The course includes the following topics: bacterial cell structure and function; genetic systems of bacteria, bacteriophages and plasmids; microbial growth and metabolism; energy and nutrient harvesting; microorganisms and the environment; control of microorganisms; introduction to viruses; food and industrial application
131	Biokimia Pangan (Food Biochemistry)	The material of this course aims to study and understanding of biochemical and physicochemical processes and sometimes changes that take place upon conversion of unprocessed raw materials, such as meat, milk, cereals, fruits and vegetables, edible product or a new type of food
132	Kimia Pangan (Food Chemistry)	Deals with the chemical, physical and functional properties of food constituents and the chemical changes these constituents

		undergo during handling, processing and storage including those that limit food shelf life.
133	Mikrobiologi Pangan (Food microbiology)	The course covers the biology and epidemiology of food- and water-borne microorganisms of public health significance; the microbiology of food preservation and food commodities; principles and methods for the microbiological examination of foods and microbiological quality control.
134	Pengantar Ilmu Pertanian (Introduction to agriculture science)	the study of a wide range of agriculture areas and careers. Basic areas of study include careers in agriculture, Future Farmers, Plant Science, Animal Science, Agriculture Business and Agriculture Mechanics.
135	Pengetahuan Bahan Pangan (Food Material technology)	the source and variability of raw food material and their impact on food
136	Analisis Pangan (Food Analysis)	The theory and practice of the analysis of food composition and characteristics. Analyses of nutritional, functional, safety and regulatory importance will be measured. Techniques and instrumentation used for the analysis of foods including spectroscopy, chromatography, and titration will be examined. Selection of the appropriate method for analytes and food systems will be discussed
137	Ekonomi Pangan (Food Economics)	Agriculture and food systems differ dramatically among regions, and change rapidly over time. This course will use economic principles to help explain these patterns and identify ways to improve agricultural practices, food markets and nutritional outcomes.
138	Metabolisme Zat Gizi (Nutrition of Metabolism)	The course focuses on the impact of nutrition and related exposures a wide range of clinical health outcomes.
139	Teknologi Fermentasi (Fermentation Technology)	Principles of using of microorganisms in fermentation process. Attain knowledge of production equipment in fermentation industry, application of microorganisms and enzymes in technological operation, substrate preparation and control of fermentative process and isolation of products
140	Pangan Fungsional (Functional Food)	overview the principles and processes necessary to evaluate and market functional foods, nutraceuticals, and dietary supplements.
141	Prinsip Teknik Pangan (Principles of Food Engineering)	Explain about basic principles and application of the unit operations such as units and dimensions, material and energy balance, and thermodynamics in processing engineering and preservation of food which is based on understanding of chemistry, physics, and mathematics
142	Sistem Jaminan Halal (Halal Assurance System)	he importance of halal foods in the perspective of consumer's protection and food trade, the principles of halal (lawful) and haram (unlawful) in Islamic law, especially related to foods, Islamic law cited in the Quran and Hadiths that are relevant to foods, national and international requirements
143	Sistem Jaminan Mutu Pangan (Food Quality Assurance System)	The principles of quality assurance, management and total quality management, HACCP (hazard analysis of critical control points)

		system implementation, flow charts and identification of hazards and critical points
144	Standar dan Regulasi Pangan (Food Standards and Regulations)	This course will include practical applications of the food laws and regulations including regulatory compliance, administrative procedure, products liability litigation, food and color additive approval, nutritional labeling and analysis of relevant caselaw and other legal precedents
145	Teknologi Pengolahan Pangan (Food Processing Technology)	Introduction to the food processing industry; general characteristics of raw food materials, processing, and preservation of food materials by heating, dehydration, concentration, irradiation, ohmic heating, and microwave heating; processing factors that influence quality. Field trips to processing facilities are included.
146	Keamanan dan Sanitasi Pangan (Food Safety and Sanitation)	Sanitation and Safety Covers the principles and practices of sanitation and hygiene as applied to the food service industry; emphasizes the training of supervisory personnel in sanitation procedures.
147	Teknologi Pengemasan dan Penyimpanan (Packaging and Storage Technology)	food packaging material including metal, glass, paper, paperboard, and plastics, putting emphasis on their chemical and physical properties, their functional properties, interaction with foods and applications in selected food commodities. Different industrial filling systems and recent techniques in food packaging development e.g., Active and Intelligent Packaging, Nanotechnology in Food Packaging, and Eco-friendly Packaging are also covered. This course also discusses the function and the role of food storage and overview the factors causing food losses and deterioration.
148	Marketing Pangan (Food Marketing)	understanding the modern food system within the developed world with particular emphasis on the thorny issues that are currently being debated: organics, buy local, genetic modification, sustainability, obesity, hunger and other topics of interest
149	Teknologi dalam Pangan Tradisional (Technology in Traditional Food)	basic introduction, health aspect and production process that is involved in sustaining the merit of Indonesian traditional food.
150	Teknologi Flavor (Flavor Technology)	Flavor chemistry and technology, interaction of flavors with food ingredients, application of flavors in food products, and the assessment of flavor quality changes.
151	Teknologi Pengolahan Limbah Industri Pangan (Food Processing Waste Management)	Characterization and utilization of by-products from various Food Processing Industries. Waste water characterization. Importance of various parameters. Unit concept of treatment of food industry effluent, Pre and Primary treatments. Secondary waste water treatments. Biological oxidations:Requirements and types. Advanced wastewater treatment systems. Physico-chemical separations, Membrane Processes Chemical

		oxidations and treatment Coagulation and flocculation. Handling & disposal of sludge.
152	Bioteknologi Pangan (Food Biotechnology)	the principles of food fermentation and enzyme technology. Specific processes related to food raw materials and food bioprocessing will be described. The course will describe benefits that food biotechnology can bring during food manufactuing.
153	Fisiologi dan Teknologi Pasca Panen (Post Harvest Physiology and Technology)	Understanding of (bio)-chemical and physicochemical methods for analysis of fruit and vegetables including the skills to identify and use such methods in the context of research and development of postharvest handling and storage processes.
154	Gizi Terapan (Applied Nutrition)	Deals with process how key nutrients (carbohydrates, lipids, proteins, vitamins, minerals, and water) affect health, disease, energy balance, and weight control. Additionally, you will gain knowledge of the impact culture has on health and food choices.
155	Produk Berbasis Minyak dan Lemak (Oil and Fat Based Products)	Understanding of Oil and Fat Based Products from the view of (a) melting point and melting profile (how the solid fat content changes with temperature), (b) crystallization characteristics, (c) storage stability (particularly oxidative stability) and (d) nutritional characteristics.
156	Produk Berbasis Protein (Protein Based Products)	Food proteins and details some of the techniques including complex molecular structure, methods in separating protein fractions etc
157	Teknologi Buah dan Sayur (Fruit and Vegetable Technology)	provide insight into specific product and process related factors in processing of fruits and vegetables through the different physical, chemical and nutritional properties of fruits and vegetable based products.

Faculty of Law
Department of Law

No	Course Title	Course Description
158	Hukum Adat (Customary law)	the application of legal anthropology to the study of custom law and indigenous legal traditions; describe the fundamental principles that underlie the customary legal system,
159	Pendidikan Anti Korupsi (Anti Corruption Education)	the importance of anti-corruption education teaching materials
160	Hukum Tata Negara (Constitutional law)	Exploration of constitutional law as it applies to the day-to-day work of a paralegal in criminal law, civil procedure, family law, administrative/employment law and personal injury litigation. Examination of the separation of powers among the branches of the federal government; federalism and states' rights; economic and property rights; and individual freedoms and protections under the Constitution, with an emphasis on due process.
161	Hukum Internasional (International law)	the substance and process aspects of international law.
162	Hukum Laut Internasional (International Law of the Sea)	Understanding of the international legal framework created by the 1982 United Nations Convention on the Law of the Sea;

		the evolution, and current status of the various jurisdictional zones and regimes that currently govern the utilisation of the world's oceans, and of the underlying policy considerations that led to the adoption of the compromises reflected in the contemporary Law of the Sea
163	Hukum Perjanjian Internasional (The Law of International Treaties)	Deals with historical development of law of treaties; concept of treaty; treaty as source of international and national law; stages of concluding treaty; reservations; accession to treaties, functions of depositary; publication of treaties; breach of treaty obligations; invalidity, termination
164	Hukum dan Masyarakat (Law and Society)	the course emphasizes the relationship between the internal logic of legal devices and economic, political and social processes
165	Hukum Ekonomi & Perdagangan Internasional (International Economic & Trade Law)	insight into one main branch of international economic law, international trade Law with a particular focus on the World Trade Organization, which covers trade in goods and services
166	Hukum Lingkungan (Environmental law)	The course will focus on environmental law, regulation, and enforcement, with some discussion of domestic policy and international environmental law. Environmental legal issues are often intertwined with complex moral and scientific questions, and this course will consider those issues.
167	Hukum Agraria (Agrarian Law)	legal awareness education, through the formation of knowledge about concepts, theories, agrarian law rules, the formation of positive attitudes to apply agrarian law in life and the formation of skills as a good citizen

Faculty of Economy and Business
Department of Accounting

No	Course Title	Course Description
168	Pengantar Ilmu Ekonomi (Introduction to Economics)	Introduction to Economics is a discussion of the basic concepts of economics concerning the aspects of Micro and Macro Economics. Able to explain the main economic problems and apply economic models. able to describe, explain, and apply the law and elasticity of demand and supply.
169	Aspek Hukum dalam Ekonomi (Legal Aspects in Economics)	This Legal Aspect in Economics reveals and explains concepts related to the implementation of law, both written and unwritten, which apply in the economic sector in general and business activities in particular, from the establishment of a company, management, development, to business dissolution, with the problem.
170	Manajemen Portofolio dan Investasi (Portfolio and Investment Management)	This course deals with the meaning of investment and the investment process, financial markets which includes their classification and how transactions can be carried out in these financial markets.
171	Studi Kelayakan Bisnis (Business Feasibility Study)	The Business Feasibility Study course discusses the analysis and assessment of the feasibility of a business based on various

		business aspects, so that students can assess the feasibility of a business and can compile a business feasibility study proposal.
172	Sistem Pengendalian Manajemen (Management Control System)	Management Control System is a system used by management to ensure that the organization has implemented it strategies efficiently and effectively in order to achieve predetermined goals. The management control system consists of a structure and management control process. The management control structure is the elements that make up the control system which consists of over the accountability centers. The management control process is how the management control system which consists of programming, budgeting, measurement, reporting and analysis
173	Manajemen Stratejik (Strategic Management)	The business strategic management course will discuss the scope of strategic management, the basic concepts of strategic management, strategic thinking, processes in strategic management, the flow of thought in strategic management and levels in strategic management.

Department of Accounting (Diploma)

No	Course Title	Course Description
174	Pengantar Ilmu Ekonomi (Introduction to Economics)	Introduction to Economics is a discussion of the basic concepts of economics concerning the aspects of Micro and Macro Economics. Able to explain the main economic problems and apply economic models. able to describe, explain, and apply the law and elasticity of demand and supply.

Department of Syaria Economy

No	Course Title	Course Description
175	Matematika Ekonomi (Economic math)	This course is a Basic Course. This lecture aims to develop students' ability to understand mathematics in economic applications. This course discusses the application of linear and nonlinear functions in economics, financial mathematics, linear programming and their application in economics, simple differential functions and their application in economics, as well as integrals and their application in economics. Assessment of student learning outcomes in this lecture includes assessing student tasks and mastery of course material.
176	Pengantar Ilmu Ekonomi (Introduction to Economics)	Introduction to Economics is a discussion of the basic concepts of economics concerning the aspects of Micro and Macro Economics. Able to explain the main economic problems and apply economic models. able to describe, explain, and apply the law and elasticity of demand and supply.
177	Dasar Dasar Manajemen Syariah	This course discusses basic matters in the management process in an organization or company, including the process of planning, organizing, implementing / directing and monitoring.
178	Tafsir dan Hadist Ekonomi	This course contains studies

	(Economic Tafseer and Hadith)	in-depth study of text context and contextualization of verses of the Koran that discuss regarding verses that talk about economic problems. This course will discuss economic principles in the Koran and the provisions of the muamalah contracts, the principles of production, consumption and distribution, Islamic public finance and the responsibility and role of the state in the economy.
179	Manajemen Sumber Daya Insani (Human Resource Management)	This subject is one of the personality development courses which is strategically positioned to support science and is planned to discuss various concepts and practices of resource management in a complex and dynamic world context in accordance with global change and progress.
180	Perekonomian Indonesia (Indonesian Economy)	This course discusses the Indonesian economy which can be grouped into three parts, namely Indonesian Macroeconomic Balances, Indonesian Economic Transformation, and Indonesian Economic Policy. In essence, the Indonesian economy discusses various kinds of issues and policies in the Indonesian economy that must be studied and understood by all economics faculty students. This course also introduces students to knowledge about the situation, conditions, stages and problems of economic development in Indonesia. Students will be equipped with the ability to understand the current state of the Indonesian economy, in Indonesia's position as an open country and predictions of Indonesia's economic conditions in the future.
181	Manajemen Bisnis Syariah (Sharia Business Management)	The material for this course contains Islamic business concepts which include Muhammad As a Business Actor; Principles of Sharia Business Management; Business Scope Sharia; Sharia Business as Noble Work; Ethics in Sharia Business; Various Businesses Contemporary Sharia; Human Resources and Work Ethic in Sharia; Responsible Social in Sharia Business; Buying and Selling in Sharia; Sharia Marketing (Sharia Marketing); Globalization and the Riba Problem; and Financial Management in Sharia.

Department of Development Economic

No	Course Title	Course Description
182	Pengantar Ekonomi 1 (introduction to economics 1)	This course discusses why and how economic actors as individuals produce and / or consume, and the consequences of these decisions for demand and / or supply that interact in the market and affect the welfare of all parties. This course also introduces the reasons and ways the government is involved in economic activities.
183	Ekonomi Koperasi & UKM (Economy of Cooperatives & UKM)	This course is designed to provide knowledge to students in order to understand concepts cooperatives and Small Micro and Medium Enterprises (MSMEs) and their role in the Indonesian economy. The first half semester courses focus on understanding cooperatives and their position within perfect competition market, monopoly market, and oligopoly market. The second half of the semester is

		about understanding and limitation of UMKM, contribution of UMKM in the national economy, various problems and UMKM regulations. In addition, it discusses government policies in development cooperatives and UMKM.
184	Pengantar Ekonomi 2 (Introduction to economics 2)	This course aims to discuss the framework of an economy. Students are introduced to important macroeconomic indicators such as GDP, economic growth, inflation, unemployment, interest rates and exchange rates. In addition, it also discusses how to determine these indicators and the monetary and fiscal policies used to reduce fluctuations in these indicators in the short term.
185	Ekonomi Industri (Industrial economics)	Industrial economics is economics that studies the economic aspects of industry, namely the market and company aspects. The objective of industrial economy is to explain the ways of development in the economic sector.
186	Ekonomi Pembangunan (Economic development)	Development Economics discusses an economy that is moving towards higher performance through various development strategies and policies. Various theories and models of economic development are discussed in the context of economic development policies that are part of national development policies. The main subjects: (1) Various theories and models of economic growth; (2) Foreign debt problems; and (3) the problem of inequality.
187	Ekonomi Publik 1 (Public Economy)	Public Economy discusses the role of government (public sector) in the economy, especially in overcoming market failures. The discussion is focused on examining the behavior of both individuals, governments and companies in relation to public policies established by the government, as well as the impact of public policies on welfare and justice. In other words, the course material focuses on microeconomic studies in economic management. Topics will be discussed in an integrated manner with one another, and packaged into case studies and project work. Students are very much required to look for references (information will be provided) for discussion material within and between groups in class.
188	Ekonomi SDM dan Ketenagakerjaan (Human resource economics and employment)	The human resources course discusses the basic concepts of ESDM which emphasize more on the application of deep microeconomic theory analysis of demand and supply of labor and analysis of the labor market as a basis for formulation of policies in the field of manpower both on a macro and micro level. ESDM discusses various topics, especially those related to supply and demand labor and the factors that influence it, the meeting process between job seekers and employment opportunities, problems arising from various aspects of provision, demand, and the labor market, and alternative policies in the field of manpower can be a solution to overcome these problems to support development and economic growth.
189	Ekonomi Internasional (International Economics)	The International Economics course aims to provide an understanding of various theories and policies on international trade and the financial side of international economics. Various

		topics that will be discussed in this course include: classical - modern trade theory, international trade policy and strategy issues, regional cooperation and MNCs, balance of payments issues, foreign exchange markets, exchange rate systems and international monetary institutions.
190	Ekonomi Regional 1 (Regional Economy 1)	This course discusses regional economics in both theoretical and empirical perspectives. In this case the regional economy is seen as a discipline that studies the economy in a regional context.
191	Ekonomi SDA dan Lingkungan (Natural Resource and Environmental Economics)	This course aims to provide basic concepts in natural resource economics. The discussion in this course is an introduction to the concepts in Natural Resource Economics. After taking this course, students are expected to be able to explain the relationship between economics and natural resources, economically optimal utilization of natural resources, and to analyze problems of scarcity and damage to natural resources and by using the concepts studied in microeconomic theory.
192	Ekonomi Pertanian (Agricultural economy)	The Agricultural Economics course discusses farming businesses operating in markets that are full of uncertainty. Using a microeconomic framework, it discusses how the efficiency of farming affects the welfare of farmers, as well as the various possible efforts to mitigate the risks faced by farming.
193	Kemiskinan (The economy of poverty)	The Poverty Economics course provides students with an understanding of how the economics discipline explains and analyzes the causes and effects of poverty and income inequality on various levels of society.
194	Perencanaan Pembangunan 1 (Development Planning 1)	This course discusses the basics of development planning in the economic sector, especially in Indonesia, and how economic development planning seeks to answer problems of prosperity and welfare.
195	Analisis dan Teknik Demografi (Demographic Analysis and Techniques)	This course aims to provide an understanding of the analysis used in various human resource and employment policies. This course focuses on the direct measurement of population human resource variables, which are linked and applied in the analysis of population dynamics. After taking this course, students are expected to understand and use human resource data for population analysis of various policies, phenomena and human resource problems, population and employment in Indonesia.
196	Perekonomian Indonesia (Indonesian economy)	The Indonesian Economy course is to introduce students to knowledge about the stages and problems of economic development in Indonesia. The discussion begins with several processes that accompany economic development: the processes of accumulation, allocation, demography and distribution.
197	Sistem Ekonomi (economic system)	This course explains the various economic systems adopted by the state. This course discusses the notion of an economic system, the functions and objectives of an economic system, the similarities and

		differences between the "free market" system, the "central planning" system, and the "mixed economy".
198	Ekonomi Industri dan Regulasi (Industrial Economics and Regulation)	This course is to provide an understanding of economic problems that arise in relation to various market structures. This course will emphasize the micro aspects of industrial economics. The subject is focused on developing policies related to the various behaviors of various economic actors in a market or an industry to achieve the highest efficiency for the economy as a whole.
199	Ekonomi Perkotaan (Urban Economy)	This course explains the emergence of a city with an economic approach. The discussion is also related to various urban problems and policies such as housing, transportation and congestion, and urbanization.
200	Masalah Kebijakan Pembangunan (Development Policy Issues)	This course examines the issues related to economic development, the factors that influence and how to strategy solve it.
201	Perencanaan Pembangunan 2 (Development Planning 2)	This course discusses Development Planning in Indonesia, especially regional development planning, starting from how to understand planning development, the process of regional development planning to the preparation of a Regional Development Plan.

Faculty of Social and Political Sciences
Department of Public Administration

No	Course Title	Course Description
202	Masalah-Masalah Publik (Public Matters)	This course invites students to conceptually formulate how public issues are distinguished from individual troubles. Methodologically, this course discusses three approaches to how public problems can be identified and analyzed. In addition, lecture participants are given the opportunity to carry out an analysis of their chosen public problem which is considered strategic for understanding the theory and practice of public administration.
203	Kebijakan Publik	Subjects that have studies related to the manufacturing process policies and service processes implemented by government
204	Administrasi Pembangunan (Development Administration)	Development Administration is a field science that is intended to study in the alternative selection process and implementation based on clear and transparent criteria, so that it can help provide rational and sensible alternative decisions
205	Studi Kependudukan dan Kesos (Population Studies)	The Population course is a study of the structure and processes of the population. Population structure includes the number, distribution and composition of the population. The structure of the population is always changing, and these changes are caused by demographic processes that involve birth, death and migration.
206	Perencanaan Pembangunan (Development Planning)	The development planning course aims to provide students with an understanding of the theory, concepts and tools of development planning analysis so that they are able to analyze potential resources, development planning problems, and be able to identify and formulate alternative development policies.

207	Studi Desa dan Kota (Village and City Studies)	this course studied about the relationship between villages and cities, then the existing institutions in village today, as well as the twists and turns involved in the development of the village community.
208	Pemberdayaan Masyarakat Pesisir (Coastal Community Empowerment)	The empowerment of coastal communities is an effort to improve the dignity of coastal communities who are still unable to escape poverty and underdevelopment.
209	Komunikasi Pembangunan Desa (Village Development Communication)	The course will examine development theories and concepts, the notion of communication for development and development support, the position of communication in development theory, communication as an integral and determinant factor in development.

Department of Communication Studies

No	Course Title	Course Description
210	Jurnalisme Lingkungan (Environmental Journalism)	Students are able to understand journalism comprehensively, add insight in the field of journalism, especially the development of contemporary journalism studies. Furthermore, students are able to analyze the development of the journalism genre in Indonesia and in the world, can understand the development of the contemporary journalism genre and are able to study contemporary issues in journalism based on the concept of factual journalism and based on clear guidelines, rules and guidelines used in the field of journalism.
211	Penulisan Seni Budaya (Writing Cultural Arts)	Provides theory and practice to stimulate and develop participation and appreciation, understand and appreciate the value of aesthetics, affiliation and imagination to develop self-potential
212	Komunikasi Bisnis (Business communication)	Business Communication is a course about knowledge and student skills by prioritizing mastery of the main topic, namely basic concepts of communication, communication in business, types and types of communication, the design of business messages, business reports and oral and written communications in business.
213	Komunikasi Lingkungan (Environmental Communication)	This course studies basic knowledge and understanding of the phenomenon of communication as a science, skill and art necessary to enter the profession in the field of communication. These areas include journalism, marketing communications, public relations, the media industry, and others.
214	Pengantar Sosiologi & Antropologi (Introduction to Sociology & Anthropology)	This course discusses the human aspect of social science studies; anthropological developments; scope of Anthropology and tourism development; the development of Sociology; the scope of Sociology and tourism development; humans, society and culture; cultural concept; cultural studies in tourism development; the concept of society; community studies in tourism development; the concept of personality; various personality colors and tourism development; social interaction; forms of social interaction in the

		development of tourism; social and tourism values; social and tourism norms; social group; social group classification and tourism development; social stratification; dimensions of social stratification in tourism development; social institutions; classification of social institutions and tourism development; social deviation; the effect of social deviation on tourism; analysis of cases of social deviations in tourism; the effect of social control on tourism; socio-cultural changes; the influence of socio-cultural changes on tourism.
215	Komunikasi Antar Budaya (Intercultural Communication)	Discuss the relationship between communication and culture, the significance of the study of socio-cultural communication in the context of the Indonesian situation as well as the cultural factors that underlie and influence the communication process.
216	Komunikasi bisnis dan Consumer Relation (Business Communication and Consumer Relations)	Business Communication discusses the concepts, patterns and channels of business communication and their barriers. As well, business, communication within organizations, intercultural communication, speaking and business skills and the following techniques in communication, verbal and nonverbal, as well as written and oral communication and how to practice them in the real world of work.
217	Wirausaha Komunikasi (Entrepreneurial Communication)	This course is a course that provides knowledge and student skills by prioritizing mastery of the main topic, basic concepts of communication, communication in business, types and types of communication, the design of business messages, business reports and oral and written communications in business.
218	Humas Pariwisata (Tourism Public Relations)	students learn about the principles, concepts and design of tourism communication. Tourism communication and destination brands is a very new problem, especially in communication science studies. Through this course, students are expected to be able to conceptualize and implement effective and efficient tourism communication according to the basic principles of communication.

Department of Governmental Studies

No	Course Title	Course Description
219	Pengantar Sosiologi & Antropologi (Introduction to Sociology & Anthropology)	This course discusses the human aspect of social science studies; anthropological developments; scope of Anthropology and tourism development; the development of Sociology; the scope of Sociology and tourism development; humans, society and culture; cultural concept; cultural studies in tourism development; the concept of society; community studies in tourism development; the concept of personality; various personality colors and tourism development; social interaction; forms of social interaction in the development of tourism; social and tourism values; social and tourism norms; social group; social

		group classification and tourism development; social stratification; dimensions of social stratification in tourism development; social institutions; classification of social institutions and tourism development; social deviation; the effect of social deviation on tourism; analysis of cases of social deviations in tourism; the effect of social control on tourism; socio-cultural changes; the influence of socio-cultural changes on tourism.
220	Kebijakan Sektor Publik (Public Sector Policy)	Public Policy studies, namely studies that cover concepts related to Public Policy theories, the form and dynamics of Public Policy in Indonesia, the static and dynamic aspects of Public Policy, and the functions of Public Policy covering the realm of public welfare
221	Tata Kelola SDM Pemerintahan (government governance)	Subjects that have a scope of national political phenomena and studies of national government systems, such as the legislature, executive and judiciary
222	Perencanaan Pembangunan (Development Planning)	The development planning course aims to provide students with an understanding of the theory, concepts and tools of development planning analysis so that they are able to analyze resource potential, development planning problems, and be able to identify and formulate alternative development policies.
223	Gerakan Sosial dan Masyarakat Sipil (Social Movements and Civil Society)	Subjects that have gender studies, multiculturalism and citizenship
224	Socioenterpreneurship	Subjects concerning the scope of human rights studies as the embodiment of democratic values

Faculty of Teacher Training and Education
Department of Non Formal Education

No	Course Title	Course Description
225	Antropologi Sosial (Social Anthropology)	This course aims to make students understand the concepts of social anthropology as a science, to understand that there is no society without culture, and also about culture that is always changing in society.
226	Landasan pendidikan (Educational foundation)	This educational foundation course consists of several subjects, which include the nature of the foundation of education, and its types educational foundation, namely philosophical foundation, psychological foundation, biological foundation, socio-cultural foundation, historical foundation, and juridical basis. The essence of the foundation of education discusses the definition, type, and basic function of education. The philosophical foundation of education discusses the flow of educational philosophy. The psychological foundation of education, discusses child development, learning theory, and theory personality. The socio-cultural foundation of education discusses understanding, the role of schools as agents of cultural renewal, and the implications for education.

227	Pendidikan Sepanjang Hayat (Lifelong Education)	This course discusses the definition of learning throughout life, the four pillars of lifelong education, basic lifelong education development, framework conceptual development of lifelong education, design lifelong education structures and indicators: Pillars, construction, indicators and measures.
228	Psikologi pendidikan dan bimbingan (Educational psychology and guidance)	This course discusses student factors in learning activities, understanding of the learning process, understanding of the conditions associated with learning effectiveness, and problems occurs in learning activities.
229	Sosiologi Pendidikan (Sociology of Education)	This course discusses the social structures and processes that occur in this subject educational institutions and their relation to other institutions. This education is not only formal education but also informal and non-formal education. That matter discussed in this course include: understanding the concept, sociology of education, placement basic sociology of education, understanding of education and social stratification, relationships education and mobility, education and mobility, education and economics, education and social change, education and employment, education as capital social
230	Bimbingan dan Penyuluhan PLS (Guidance and Outreach PLS)	This course, students are expected to be able to explain the concept of guidance and counseling includes the meaning, principles, principles, and functions of guidance and counseling; guidance and counseling approaches include curative, preventive, and developmental; the foundation of guidance and counseling includes a psychological foundation, philosophical, religious, socio-cultural, and scientific and technological foundation; strategy and technique guidance and counseling; types of guidance and counseling services; the basics understanding of students; guidance and counseling based learning; diagnostic and remedial teaching; as well as guidance for students with special needs.
231	Sosiologi Pembangunan (sociology of development)	Provide an understanding of sociological problems in development by looking at macro social changes, as well as interactions between countries in the context of development. Besides that, it also provides knowledge about socio-cultural factors that can accelerate or become an obstacle in the development process, with a modernization theory approach, dependency and the world system.
232	Analisis Kebutuhan dan Masalah Sosial (Analysis of Social Needs and Problems)	This course discusses the concept of program development and identification in the implementation of non-school education programs and community development
233	Komunikasi Sosial dan Pembangunan (Social Communication and Development)	This course discusses issues of development and social change. Students will be introduced to concepts and theories that come from communication disciplines relating to development and changes that occur in society.
234	Pengembangan Sosial dan Pembangunan Masyarakat (Social Development and	This course discusses the principles, strategies, planning approaches, and models in development society and community development.

	Community Development)	
235	Perubahan Sosial dan Pemberdayaan Masyarakat (Social Change and Community Empowerment)	This course examines the theory and concepts of social change, the principles social change, the concept of individuals and society and social problems.
236	Manajemen Kelembagaan Pendidikan Masyarakat (Management of Community Education Institutions)	This course discusses the basic concepts, roles and scope of education management, followed by an in-depth study of the management of the field of education management, which includes: students, curriculum, education personnel, educational facilities, education financing, management.
237	Manajemen Pembelajaran Koperasi dan Ekonomi Kreatif (Learning Management Cooperative and Creative Economy)	This course provides an overview of the role, concepts of cooperatives and SMEs and their role in the Indonesian economy.
238	Manajemen Program Pembelajaran Pada Pendidikan Masyarakat (Management of Learning Programs in Community Education)	This course discusses providing insight into characteristics and types of non-formal education, as well as basic concepts and management skills to manage non-formal educational institutions which includes planning skills, study pressure is centered on strategic plan and operational plan.
239	Model - Model Pembelajaran pada Pelatihan Sumber Daya Manusia dan Multi Keaksaraan (Learning Models in Human Resources and Multi Literacy Training)	This course examines training models in developing human resources based on the concepts, principles of learning theory in external education school.
240	Model - Model Pembelajaran pada Pendidikan Dasar dan Berkelanjutan (Learning Models in Basic and Continuing Education)	This course discusses the concept of program implementation life skills which include: understanding, goals, objectives, terminology, principles, characteristics, and life skill program learning models.
241	Model-Model Pembelajaran advokasi dan Rehabilitas Sosial (Learning Models for Advocacy and Social Rehabilitation)	The advocacy learning model demands that students focus on the topic pre-determined and put forward a related opinion with that topic.

242	Pembelajaran Pemanfaatan ICT dalam Pemberdayaan Masyarakat (Learning the Use of ICT in Community Empowerment)	This course discusses the basics of media and learning innovation, design, development and production of ICT-based learning
243	Program dan Model Pembelajaran pada pelatihan life Skills dan Penyuluhan Masyarakat (Learning Programs and Models in Life Skills training and Community Outreach)	courses on the concept of program implementation life skills which include: understanding, goals, objectives, terminology, principles, characteristics, and life skill program learning models.

Department of Primary School Teacher Education

No	Course Title	Course Description
245	Konsep Dasar IPA I (Basic concept of IPA I)	This course discusses the concepts of natural science. Broadly speaking, the scope of discussion in this course includes an introduction regarding (1) quantities and units, (2) matter, (3) energy and motion
246	Konsep Dasar PPKN SD (Basic concept of PPKN SD)	This course discusses the material and learning process of Civics in SD which is oriented towards developing intelligence and citizen participation, as well as facilitating elementary class teachers to be able to teach Civics based on the civic competence approach.
247	Pendidikan Karakter dan Pramuka (Character Education and Scouts)	In this course, students are specifically introduced to the history and scope of scouting, also introduced brief practical material that supports scouting activities. It introduces a number of potential kaiulinan / traditional children's toys as well as based toys on local natural potential. Students are provided with basic knowledge of management organization of extra-curricular activities in order to build on an ongoing basis. Besides that basic knowledge of extra-curricular project management.
248	Konsep Dasar IPA II (Basic concept of IPA II)	This course discusses the concepts of natural science. Broadly speaking, the scope of discussion in this course includes sound and light, electricity and magnetism, living things, and celestial bodies.
249	Pendidikan IPA SD I (Elementary Science Education I)	Science education discusses: the essence of Science, characteristics of elementary school age children, science in elementary school, various approaches, strategies, methods and techniques science learning, Thematic Learning Natural Science SD, Evaluation of Science Education, Understanding and characteristics of simple experimental and props, analysis of science subject matter, making RP for teaching simulations, and classroom teaching simulations low and high class.

250	Pendidikan IPS SD I (Elementary Scocial Education I)	This course examines social studies education in order to lead students to achieve competence (1) mastery of the basic substance and methodology of social studies science, (2) mastery of teaching materials in elementary social studies curriculum and textbooks, (3) mastery of the basic principles of educational learning
251	Sains Lingkungan, Teknologi, dan Masyarakat	This course discusses science and technology literacy, the development of science and technology, the relationship between science, technology and society, as well as the development and implementation of a community technology science model in contextual learning.

Department of Early Childhood Teacher Education

No	Course Title	Course Description
252	Pendidikan Anak dalam Keluarga (Child Education in the Family)	This course discusses the education of children in the family, parenting styles, family roles, effective communication, and improving family welfare.
253	Sosial, Emosi, Disiplin Anak Usia Dini (Social, Emotions, Early Childhood Discipline)	Discusses the theory of early childhood social and emotional development, the development of early childhood social emotional skills through various approaches, strategies and methods, media according to the stages of early childhood development.
254	Pengembangan Kemampuan agama dan Moral anak Usia dini(Early Childhood Religious and Moral Ability Development)	Discusses the theory of early childhood moral development. Development of early childhood moral and religious abilities through various approaches, strategies and methods, media, according to the stages of early childhood development.
255	Kesehatan dan Gizi anak usia dini (Health and nutrition of early childhood)	the definition of child health and nutrition, analysis of the relationship between nutrition and children's health and intelligence, balanced nutrition and assessment of children's nutritional status, health problems in children
256	Antropobiologi (Anthropobiology)	This course discusses the nature of maturity, marriage, conception, pregnancy, birth, breastfeeding, stimulation of children 0-6 years, and educational programs for parents.

Department of Pancasila and Civics Education

No	Course Title	Course Description

257	Studi Masyarakat Indonesia (Indonesian Society Studies	This course is an advanced subject from the introductory social science course, so students who take this course are encouraged to have graduated from a new social science education course can take this course as a follow-up. This course is given to students, to equip them after graduating to be able to master various concepts and theories about society, especially the socio-cultural conditions of Indonesian society. This Indonesian Society Studies course will discuss the diversity of Indonesian ethnic groups along with their origins and culture
258	Pendidikan Nilai dan Moral Value and Moral Education	The scope of the study is focused on the theory of values, norms, ethics, morals and moral development and motivation / motives.
259	Pendidikan Karakter (Character Education)	This course discusses human relations with each other and also the state, which includes the values of respect, honesty, discipline and responsibility, and patriotism..
260	Pendidikan Multikultur (Multicultural Education)	This subject discusses theories, approaches, history, meanings, implications, bases, goals and functions of multicultural education, the problems of multicultural education in Indonesia, and the important role of primary schools as cultural development institutions.
261	Literasi ICT dan Media Pembelajaran PKN	This course is an applicable course that trains student skills in using computer-based and multmedia information and communication technology in learning. This course also has a very important urgency for students because in addition they have a set of knowledge that supports them to become professional PPKn teacher candidates who also have skills in using computers and multimedia in classroom learning so that learning becomes interesting and effective and does not become a teacher who technologically Backward.

Department of Biology Education

No	Course Title	Course Description
262	Bioedupreneurship (Bio Edupreneurship)	Bioeduprenership is a course that facilitates one of the profiles of Biology Education graduates as entrepreneurs, bioeduprenership has knowledge gains namely forming an entrepreneurial spirit based on biology and utilizing and applying the concept of biology in the formation of businesses in the form of products and services.
263	Biokimia* (Biochemistry)	Subject biochemicalis a subject that describes the micro to the macro structure of a molecule in order to make the building blocks (skeleton) of a living creature. Another

		achievement from this course is that students are able to explain metabolic processes at the cellular level to the organism level in the context of the survival of living things and understand the conservation of energy in the body of living things. Subjects are needed for graduates of biology education as teachers who are required to be able to understand the concepts of metabolism and energy conservation.
264	Biologi Umum* (General Biology *)	This course provides basic knowledge of biology needed by students to take advanced biology courses and a general understanding for learning biology in high school. This course includes material; science and biology as well as the scientific method, the hierarchy of life, the cell as the basis of life, genetics, biodiversity, microorganisms, plants, animals, ecology and evolution.
265	Biologi Sel (Cell Biology)	biology is a comprehensive and integrative science, involving other fields of science such as biochemistry, biophysics, molecular biology, microscopy, genetics, physiology, computer science, and developmental biology. It is important for students to have knowledge of cells and molecules as a basic provision for other biology courses, because basically biology is always related to cells. This course discusses, among others, organelles and cell ultrastructures and their functions; DNA structure and function, replication, transcription, translation and protein folding; and the basic techniques used in molecular biology research.
266	Genetika* (Genetics)	This course aims to help students understand the basic concepts of inheritance. Topics that will be discussed include the basics of molecular genetics, Mendelian genetics, Mendelian law pseudo deviations, probability theory, mutations, sex determination, sex sequences, multiple alleles, population genetics and the application of molecular genetics tobiotechnology
267	Mikrobiologi Umum* (General Microbiology)	Courses This is a must for biology teacher candidate students in the fourth semester with a weight of 3 credits. Learning is carried out through lectures in the form of lectures, discussions and independently examining various scientific references so that students are able to achieve competency knowledge, attitudes and skills regarding the scientific basics of microbes and their application in various fields of life, have basic laboratory skills to support conceptual understanding and train scientific work, understand the world of microbes which includes aspects of morphology, physiology, genetics, microbial cultivation, the role of microbes in various fields of life.

268	Bioteknologi* (Biotechnology)	In this course students learn about the basic principles, roles and applications of biology, as well as the products produced through conventional and modern biotechnology in various fields, such as medicine, pharmacy, agriculture, food industry and the environment
269	Struktur Perkembangan Tumbuhan 1 (Plant Development Structure 1)	This subject is a compulsory subject. After attending lectures, students are expected to have competence in the fields of knowledge, attitudes, and skills. Students are facilitated to have the ability to identify the external structure and development of plant organs, which includes the morphology of leaves, stems, roots, flowers, fruits and seeds; organ modification of leaves, stems, roots; macrosporogenesis and microsporogenesis; pollination; fertilization; and embryogenesis in plants. In addition, students are also expected to develop attitudinal and moral competences related to religious values and environmental care; general skills in the form of scientific communication skills, as well as specific skills in developing local potential and wisdom.
270	Struktur Perkembangan Tumbuhan 2* (Plant Development Structure 2)	This course provides basic knowledge about the development structure of Angiosperms that students need to take further biology courses and a general understanding for learning biology in high school. This course includes material; the anatomical structure of cells, tissues and constituents of roots, stems, leaves and flowers which are the organs of the Angiosperms plant and their relation to function.
271	Keanekaragaman Cryptogamae* (Cryptogamae Diversity)	Introducing the diversity of groups of organisms belonging to Cryptogamae which include: Thallophyta (Algae and Lichen), Bryophyta and Pteridophyta; get to know more closely examples of species in the environment; as well as preserving it by utilizing their existence in nature wisely.
272	Keanekaragaman Phanerogamae* (Phanerogamae Diversity)	This course is a compulsory subject. After attending lectures, students are expected to have competence in the fields of knowledge, attitudes, and skills. Students are facilitated to have the ability to identify and classify high-level plant biodiversity, which includes Spermatophyta; Phinophyta; Magnoliophyta, Liliopsida; and Magnoliopsida. In addition, students are also expected to develop attitudinal and moral competences related to religious values and environmental care; general skills in the form of scientific communication skills, as well as specific skills in developing local potential and wisdom.

273	Fisiologi Tumbuhan* (Plant Physiology)	This course is a compulsory subject. After attending lectures, students are expected to have competence in the fields of knowledge, attitudes, and skills. Students are facilitated to have the ability to explain and analyze plant physiology, which includes cell and membrane transport; water transport and transpiration systems; nutrient elements and nutrient transportation; respiration and photosynthesis; phytohormones and ZPT; as well as plant growth and development. In addition, students are also expected to develop attitudinal and moral competences related to religious values and environmental care; general skills in the form of scientific communication skills, as well as specific skills in developing local potential and wisdom.
274	Keanekaragaman Invertebrata* (Invertebrate Diversity)	A compulsory subject that aims to guide students to understanding the theory, concepts and basic principles of taxonomy, nomenclature, diversity classification and the relationship between the structure and diversity of invertebrates. The material in this course includes animal characteristics, the history of animal development, diversity of animal bodies, systematic background, classification system, taxonomy, binomial nomenclature, phylogeny, basic classification, phylum porifera, phylum cnidaria, phylum Platyhelminthes, phylum rotifer, phylum entoprocta , phylum brachiopoda, phylum Mollusca, phylum annelida, phylum nematode, phylum arthropod and, phylum Echinodermata.
275	Keanekaragaman Vertebrata* (Vertebrate Diversity)	This course emphasizes understanding and basic application of Biosystematics and Vertebrate diversity. The topics covered include the basic concepts of Biosystematics, Phylum Chordata (Subphylum Vertebrate), Chondrichthyes, Osteichthyes, Amphibians, Reptiles, Aves, and Mammals. In addition, students are expected to be able to study contemporary scientific developments related to various aspects of vertebrates from journals or other scientific publications.
276	Ekologi Umum* (General Ecology)	This course is one of the main zoology and ecology courses that emphasize understanding ecological philosophy, concepts, principles and procedures as well as the application of basic methods and techniques in ecological research. Topics covered include: definition, scope and development of ecology; the organizational structure of life in ecological studies; Organism; Population Ecology; Community; Ecosystem; Human and Biosphere

277	Biologi Konservasi (Conservation Biology)	biology is a compulsory subject that can be taken by students in semester VI. This course is given to provide students with learning experiences regarding knowledge, skills, and values related to biodiversity. Knowledge deals with concepts and theories about biodiversity, skills are related to the process and skills of identifying, analyzing, drawing conclusions and designing biodiversity learning for high school. Value relates to a system of values and norms so that it can change attitudes, behaviors and beliefs: and personal concerns about biodiversity issues.
278	Lingkungan Hidup Dan Kependudukan** (Environment And Population)	This lecture discusses: Environment, Eco-centrism, Ecology and the Environment, Environmental Issues, Implications of population problems on the environment and the Linkage of Population and Environment in Improving the Quality of Life. To discuss its relationship with population, population theories, fertility and influencing factors, mortality and influencing factors, population change problems, population distribution (migration) and influencing factors are also discussed.
279	Bakteriologi** (Bacteriology)	This course is an elective course that can be followed by prospective biology teacher students in semesters V and VII with a weight of 2 credits. Learning is carried out through lectures in the form of lectures, discussions and independently examining various scientific references so that students are able to achieve competency knowledge, attitudes and skills regarding the scientific basics of biology and mushroom cultivation. This course explains the diversity, taxonomy and nomenclature of bacteria, aspects of morphology and physiology, and the role of bacteria in various aspects of life.
280	Mikologi** (Mycology)	This course is an elective course for biology teacher candidates in semester V and VII with a weight of 2 credits. Learning is carried out through lectures in the form of lectures, discussions and independently examining various scientific references so that students are able to achieve competency knowledge, attitudes and skills regarding the scientific basics of Fungi and their application in various fields of life, have basic laboratory skills to support conceptual understanding and train scientific work, understand the world of microbes which includes aspects of morphology, physiology, taxonomy, cultivation of fungi, and the role of fungi in various aspects of life in
281	Budidaya Jamur** (Mushroom Cultivation)	This course is an optional course that can be followed by prospective biology teacher students in semesters V and VII with a weight of 2 credits. Learning is carried out through lectures in the form of lectures, discussions and independently examining various scientific references so

		that students are able to achieve competency knowledge, attitudes and skills regarding the scientific basics of biology and mushroom cultivation. This course explains mushroom biology, covering aspects of morphology, physiology, taxonomy and cultivation, as well as practical knowledge of large-scale mushroom cultivation in utilizing biomass waste.
282	Etnobotani** (Ethnobotany)	This subject is an elective course. After attending lectures, students are expected to have competence in the fields of knowledge, attitudes, and skills. Students are facilitated to have the ability to explain the scope of ethnobotany; plants and traditional ceremonies; plants as household tools; economic botany; as well as designing ethnobotany research and scientific works. In addition, students are also expected to develop attitudinal and moral competences related to religious values and environmental care; General skills in the form of scientific communication skills, as well as specific skills in the development of potential and local wisdom in
283	Budidaya Tanaman** (Plant Cultivation)	This course is an optional course. After attending lectures, students are expected to have competence in the fields of knowledge, attitudes, and skills. Students are facilitated to have the ability to explain the basics of farming; tillage; the role of climate in agriculture; seeds and seeds; fertilization; growth regulator; plant propagation; cultivation of food and vegetable crops; diseases, pests, plant weeds and their control; as well as harvest and post-harvest processing. In addition, students are also expected to develop attitudinal and moral competences related to religious values and environmental care; General skills in the form of scientific communication skills, as well as specific skills in the development of potential and local wisdom.
284	Herpetologi** (Herpetology)	course is a course that explains the structure, anatomy, and physiology of the amphibian and reptile groups. Another achievement in this course is that students are able to understand the diversity of amphibians and reptiles in Indonesia and foster a conservation attitude towards the survival of the amphibians and reptiles. This course is a supporting course that can increase student expertise as research assistants in the field of focus on amphibians and reptiles, such as the ability to identify types of amphibians and reptiles diversity and the ability to inventory and create a database on the diversity of amphibians and reptiles in Indonesia.

285	Ornitologi** (Ornithology)	Ornithology course is a course that explains the structure, anatomy and physiology of the aves group or bird family, especially birds. Another achievement in this course is that students are able to understand the diversity of aves in Indonesia and foster a conservation attitude towards the survival of the aves group. This course is a supporting course that can add to the expertise of students as research assistants in the field of focus of aves or birds, such as the ability to identify species of bird diversity and the ability to inventory and create a database of bird diversity in Indonesia. .
286	Amdal**	This course is a service course for program students undergraduate with a weight of 2 credits. The AMDAL course is an elective course used to understand what development activities have significant impacts and major impacts on the environment. On the other hand, students can recognize the process of preparing and evaluating the AMDAL document. Broadly speaking, this course material discusses: 1) Definition of AMDAL, its objectives and benefits, 2) Environmental Law, 3) Amdal and environmental management, 4) Sustainable development, 5) UKL / UPL, 6) public consultation in AMDAL preparation , 7) aspects that need attention, 8) Screening, 9) Scoping Process, 10) Data Collection Methodology, 11 Compiling RLH, 12) estimating environmental impacts, 13) Evaluating impacts, 14) RKL and RPL.
287	Etologi** (Ethology)	Ecology course is a course that identifies the potential values obtained from the phenomenon of animal behavior. Another achievement in this course is that students are able to analyze phenomena of animal behavior in a proximate and ultimate way. This course is a supporting course that can increase student expertise as research assistants in the field of focus on animal behavior, animal behavior is a basic phenomenon in order to understand changes that occur in theenvironment.
288	Biologi Perairan** (Aquatic Biology)	This course is a service course for undergraduate students with weights 2 credits. The general objective of this course is to introduce and build students' knowledge to understand the characteristics of various freshwater habitats, be able to measure parameters of freshwater quality, be able to recognize types of freshwater biota and interactions with other biota. Can find out the nutrient cycle, and the dynamics of fresh water. In addition, students can understand the history and development of marine biology and understand the characteristics of the sea in relation to the diversity of marine life, the diversity

		of marine habitats and understand the relationship between humans and the marine environment.

Department of Indonesian Education

No	Course Title	Course Description
298	Etnolinguistik (Ethnolinguistics)	This course discusses the basic concepts of ethnolinguistics, the contribution of ethnological research to linguistics and vice versa, ethnolinguistic research methodology, and research on regional languages as cultural assets.

Department of English Education

No	Course Title	Course Description
299	Survival Speaking	This course combines the theme of Survival Speaking which focuses on cultural awareness with genre-based text based on local wisdom.
300	English for Science	This course discusses Basic Operations, Shapes and Dimentions, Position and Movement, Measurement, Processes, Properties and Classification, Description, Explanation and Definition, Equipment, and Information Communication Technology.

Department of Mathmatics Education

No	Course Title	Course Description
301	Kewirausahaan dalam Bidang Pendidikan Matematika (Entrepreneurship in the Field of Mathematics Education)	This subject discusses entrepreneurship and its application in the field of Mathematics Education in life.

Department of Sociology Education

No	Course Title	Course Description
302	Antropologi Sosial (Social Anthropology)	This course discusses the scope of anthropology, the basic concepts of individuals and society, cultural elements and forms, the unity of local life, the concept of ethnicity, the relationship between anthropology and other sciences and research methods in social anthropology.
303	Pengantar Ilmu Sosial (Introduction to Social Sciences)	This course discusses sociology, anthropology, psychology, economics, geography, history and political science, as well as examines issues and problems faced in the development of social sciences.
304	Pengantar Sosiologi (Introduction to Sociology)	This course discusses concepts, generalizations and theories related to the nature of sociology, sociological theories, social processes and social interactions, types of social groups, urban and rural communities, social institutions, social stratification or social layering systems including in it status and role, social mobility (vertical-horizontal), social changes that occur in society, social conflicts and their causes, and cultural changes.
305	Sistem Sosial Indonesia (The Indonesian Social System)	This subject discusses the character and dynamics of society, the social structure and social processes of Indonesian society as well as the problems faced in the processes of forming the Indonesian state.
306	Etnopedagogi (Etnopedagogy)	This course discusses the notion of ethnopedagogy, characteristics of local wisdom, ethnopedagogical approach in education, and understanding the role of ethnopedagogy in revitalizing.
307	Pendidikan Ilmu Pengetahuan Sosioal (Social Science Education)	This subject discusses the philosophical foundation of social studies education, concepts related to social studies, social studies definition, social studies education theories from experts, objectives and functions of social studies education, social studies education materials, both from historical and economic disciplines. , geography or other social science discipline. The relationship between social studies with other social science disciplines, approaches in social studies education, learning models and evaluation of social studies learning.
308	Sosiologi Pedesaan (Rural Sociology)	This course discusses the basic concepts of rural sociology; social interaction and social process processes; adaptation efforts and sociological processes; social structure; social group; social organization; social institutions; social stratification; power, authority and leadership; culture and society; as well as village and village development.

309	Globalisasi dan Perubahan Sosial (Globalization and Social Change)	This subject discusses globalization, theories of social change, the scope of study, and sociological theories about social change. The phenomenon of social change at the micro scale (community) and macro scale (global), cases that occur in contemporary Indonesian society.
310	Sosiologi Perkotaan (Urban Sociology)	This subject discusses the condition of urban communities in relation to organization, family systems, society, behavior patterns, culture, social change and urbanization with the impacts and problems that arise.
311	Sosiologi Keluarga dan Gender (Sociology of Family and Gender)	This course discusses the role and function of the family in society, the socialization function carried out by the family, understanding family problems, deviance and family in the context of social change, the basic concepts of gender, sex, gender roles, various paradigms that underlie the analysis. gender, theories of gender relations, types of feminism, gender-based methodologies for gender approaches to development and gender analysis in various fields of life.
312	Sosiologi Pembangunan dan Pemberdayaan Komunitas (Sociology of Development and Community Empowerment)	This subject discusses development and communication activities in society from a sociological perspective.
313	Demografi Sosial (Social Demography)	This course discusses the demographic basis and its relation to social change and social problems. Social
314	Patologi Sosial (Social Pathology)	This course discusses the Definition, Background and History of Social Pathology, forms of social pathology, Methodology and Theories of Social Pathology, and sociopathic individual.
315	Sosiologi Kebudayaan (Sociology of Culture)	This subject discusses culture as a result of a social construction which, as a cultural building, has been achieved in a relatively stable social system. Various sociological views on culture, as part of the social reality of the process of its formation, the elements that construct it, its role and influence on the social system
316	Sosiologi maritim (Maritime Sociology)	This course discusses the history and understanding of maritime sociology, geography and settlement patterns of maritime communities, the socio-cultural life patterns of maritime communities. , the main and additional livelihoods of the maritime community and the socio-cultural changes of the maritime community.

317	Sosiologi Pariwisata (Sociology of Tourism)	This subject discusses an introduction to the sociology of tourism, the concept of tourism, tourism and tourist destinations, tourism structures, systems and impacts, socio-cultural changes related to the development of tourism life.

Department of History Education

No	Course Title	Course Description
318	Pengantar Ilmu Sosial (Introduction to Social Sciences)	This course discusses sociology, anthropology, psychology, economics, geography, history and political science, as well as examines issues and problems faced in the development of social sciences.
319	Geografi Pariwisata (Tourism Geography)	This course discusses geography, tourism, the geographical conditions of several regions nationally and internationally as well as the behavior and activities of tourists that can be influenced by the conditions of regional resources.

Department of Inclusive Education

No	Course Title	Course Description
320	Gizi dan Kesehatan (Nutrition and Health)	This course discusses studying the types, content, sources and functions of nutrients in food ingredients; the function of nutrients for the body; digestion, absorption and utilization of nutrients in the body; disorders and diseases related to the consumption of nutrients; types and content of anti-nutritional substances in food ingredients and their effects on the body; calculation of nutritional needs and analysis of nutritional status.
321	Kesadaran dan Partisipasi Masyarakat (Community Awareness and Participation)	This course discusses the definition, form, influencing factors, theory of awareness and participation, analyzes cases of public awareness and participation.

Department of Counseling

No	Course Title	Course Description
322	Dinamika Kelompok (Group Dynamics)	subject discusses the nature of groups and group dynamics as well as concepts in group dynamics which include group structure, social influence in groups, communication in groups, group decision making, conformity, conflict, controversy in groups, leading discussion groups, leading group counseling, and team development.

Department of Natural Science Education

No	Course Title	Course Description
323	Biologi Umum (General Biology)	This course discusses the basic concepts of biology which include biology as a science and scientific work, cell structure and function as the basic unit of organisms, diversity of living things, metabolism: including anabolism and catabolism, structure and function in organisms. : Digestive system of food: circulatory system; respiratory system; excretory system; coordination system: including the nervous and endocrine systems; reproduction system; principles of genetics and protein synthesis; living things and the environment, and evolution.
324	Ilmu Lingkungan (Environmental Science)	This course discusses the basic principles of environmental biology, ecology, and the relationship between humans and their natural environment.
325	Ekologi* (Ecology)	This course discusses the definition and scope of ecology starting from the level of organization of the Population to the Ecosystem, describing and analyzing the characteristics of populations, communities, interactions between populations, abiotic factors, interactions between biotic factors and abiotic factors, food chains and webs, ecosystems and energy flow.
326	Ilmu kebumian* (Earth sciences)	This course discusses the basic concepts of earth science such as atmosphere, hydrosphere, lithosphere and biosphere, geodesy and geomatics engineering, geophysical and meteorological engineering, geological engineering and mineralogy, petroleum and mining engineering, and social and physical geography techniques and basic concepts. geodesy such as reference ellipsoids, geometric ellipsoids, coordinate systems, solving geodesic problems, coordinate transformations.
327	Keanekaragaman Hayati (Biodiversity)	This subject discusses biodiversity and its interactions with the environment, components of biodiversity, distribution, benefits, problems and threats of biodiversity in Indonesia, the form of funds for steps in its management and conservation.
328	IPA 1	Subjects on quantity, measurement and motion, matter, energy and waves, magnetism and electricity, living things, living things and the environment, universe and solar system.

329	Pengembangan ICT dan Media Pembelajaran IPA (ICT Development and Science Learning Media)	This subject discusses the meaning, role, function, use, benefits, and types of learning media in learning biology. In addition, it also discusses subject matter processing techniques based on discourse analysis and didactic reduction as the basis for making biological material that will be represented in various media. The material also discusses the benefits, roles, and use of communication and information technology-based media.
330	IPA 2	This course increases knowledge about science and its integration with how to study various materials and concepts from various fields of science at the same time linking them one another.
331	Mitigasi Bencana* (Disaster Mitigation)	This course discusses the causes of disasters, types of disasters, anticipations that need to be done, mapping disaster-prone areas, and rehabilitation of disaster areas.
332	Pembelajaran IPA 1 (Learning Science 1)	This course is about the aspects of the process student learning and the effects of this learning process on development students themselves and can use it for students. Science learning involves student activity, both physical activity and activity mentally, and focuses on students, which is based on students' daily experiences and student interest.
333	Bioteknologi (Biotechnology)	This course discusses biological concepts underlies the development and application of Biotechnology in various aspects of human life.
334	Pembelajaran IPA 2 (Learning Science 2)	This course examines the science curriculum, learning models and media, develops learning tools such as lesson plans, syllabus, student worksheets, teaching materials and evaluations in elementary science learning that are innovative and have a constructivist perspective.
335	Pendidikan Konservasi (Conservation Education)	This course discusses the basic concepts of the environment, the meaning of conservation, the concepts, values and character of conservation. In addition, this course also studies value conservation, resource conservation, both biological and non-living resources.
336	Etnopedagogi (Ethnopedagogy)	This subject discusses local wisdom related to biology material.

337	Mitigasi Bencana* (Disaster Mitigation)	This course discusses the causes of disasters, types of disasters, what needs to be anticipated, mapping disaster-prone areas, and rehabilitating disaster areas.
338	Toksikologi Lingkungan (Environmental Toxicology)	This course discusses environmental toxicology, types and sources of toxic chemicals, types of chemical contact with human organs, the influence of toxic substances on human organs, toxicokinetics (absorption, distribution, biotransformation, and excretion) of toxic materials, inorganic and organic toxic chemicals in the atmosphere, hydrosphere , and the lithosphere and its analysis methods.
339	Analisis Mengenai Dampak Lingkungan (AMDAL) [Environmental Impact Analysis (AMDAL)]	This course discusses the basic concepts of environmental impact analysis, is able to implement procedures for implementing environmental impact analyzes, can compile project descriptions, can evaluate and predict the impact of project plans, can develop a framework Environmental impact analysis references, can prepare RKL and RPL, and can understand various environmental impact analysis methodologies Environmental.
340	Kimia Lingkungan (Environmental Chemistry)	This course discusses environmental compartments both aquatic, air and soil environments from a chemical perspective. In addition, students are expected to be able to explain the various chemical transformation processes that take place in the environment and the various activities that cause environmental quality degradation and its countermeasures.

Department of Performing Arts Education

No	Ciurse Title	Course Descriptio
341	Kewirausahaan Seni (Arts Entrepreneurship)	This course discusses entrepreneurship and its application in the arts in life.

Department of Vocational Electrical Engineering

No	Ciurse Title	Course Descriptio
342	Keselamatan dan Kesehatan Kerja (K3) (Safety, Work Health)	This lecture discusses Government policies regarding the protection of occupational safety, occupational health and safety standards, prevention of work accidents, risk of work accidents, work safety management, safety equipment, labor regulations,

		methods and types of work methods both in laboratories, workshops, and at workplace
343	Proyek Mandiri (Personal Project)	The independent project is one of the courses in the Informatics Engineering Education Study Program curriculum that students must take. This course provides direction for students to create a project individually in accordance with their area of expertise in a guided manner. The objective of the Independent Project course is to optimize the ability to apply knowledge and skills in accordance with their field of expertise. The results of this independent project are expected to become an embryo for the thesis final project
344	Energi Terbarukan (Renewable Energy)**	This course discusses the introduction of renewable energy, various kinds of energy, the state of world energy, save the earth, fossil energy, bio gas, bio ethanol, renewable energy electricity, electricity from fruit, solar cells, wind energy, water energy, bio mass .
345	Konversi Energi (Electric Power Conversion)**	In this lecture, the basic concepts of energy and conversion are discussed which includes understanding of energy, energy resources and electrical energy, the basis of generation from conventional energy resources and new and renewable energy. Understanding of energy, energy resources and electrical energy, the basis of generation from conventional energy resources and new and renewable energy which includes solar energy, wind energy, biomass energy, marine energy, geothermal energy, thermionic converter, thermo electric converter, battery energy , Fuel cells, Magneto hydro dynamic, Energy fusion and Basics of conversion in electric machines.
346	Manajemen Energi (Energy Management)**	This subject matter is related to the application of auditing procedures for the use of electrical energy on various types of loads which function to increase efficiency in the use of electrical energy at various types of loads which include: (1) basic principles of energy management, (2) energy management planning, (3) Saving electrical energy for various types of electrical loads, (4) Calculating efficiency in the use of electrical energy, (5) Conducting an analysis of savings in electricity consumption, and (6) Case studies of implementing electrical energy consumption audits in accordance with applicable standard procedures and requirements.

Department of Vocational Machine Engineering

No	Course Title	Course Description
347	Kesehatan dan Keselamatan Kerja (Occupational Health and Safety)	fields related to health, safety, and human welfare who work in an institution or project location for.

348	Pendidikan Kepramukaan (Scouting Education)	an educational process that complements education in the school environment and family environment in the form of activities that are interesting, fun, healthy, organized, directed, practical, carried out in the open by applying the basic principles of Scouting and Scouting education methods of.
349	Pendidikan Lingkungan dan Sosial Budaya (Environmental and Socio-Cultural Education)	This course is to form and develop the personality and insight into the attention, knowledge and thoughts of students regarding the various symptoms that exist and arise in the environment, especially symptoms relating to society and the environment so that responsiveness, perception and reasoning about the relationship between humans and their environment
350	Green Technology	integration between modern technology and environmental science that is applied to preserve the fulfillment of community needs sustainably in the future without changing the environment and natural resources.
351	Teknologi Hibrid (Hybrid Technology)	combining the benefits of gasoline engines and electric motors. battery power, to reduce consumption of.
352	Energi Terbarukan (Renewable energy)	energy derived from "sustainable natural processes", such as solar power, wind power, biological process water currents, and geothermal.

Department of Medicine

No	Course Title	Course Description
353	Gizi dan Kesehatan (Nutrition and Health)	organic substances needed by organisms for normal functioning of body systems, growth, health care.
354	Biomolekular, Sel, Genetika (Biomolecular, Cell, Genetics)	This course studies genes and their activity at the molecular level as well as providing insight into molecular biology and its applications.
355	Pengelolaan Bencana (Disaster management)	an applied science (applied) that seeks, by systematic observation and disaster analysis to improve measures related to preventive (prevention), mitigation (reduction), preparation, emergency response, and recovery.
356	Sistem Pelayanan Kesehatan Primer dan Okupasi (Health Care System Primary and Occupational)	This Health Care System course will discuss: 1) National health system 2) Health Service Organization in Indonesia 3) National Health Referral System 4) Principles of handling patients in primary care 5) Basic Puskesmas programs, Primary Health Care policy and management, standards minimal service, excellent service in health services 6) Health financing 7) Excellent service in health services 8) Position and role of nutritionists in the health service system in Indonesia

Department of Sport Science

No	Course Title	Course Description
358	Ilmu Gizi Olahraga (Sports Nutrition Science)	the science that studies the relationship between food management and physical performance that is beneficial for health, fitness, child growth, and fostering sports achievement.
359	Permainan Tradisional (Traditional game)	a play activity carried out by children since ancient times with certain rules to get joy.
360	Wanita dan Olahraga (Women and Sports)	This course discusses the concept models of transaction transmission and transformation, models of organizing content, teaching / learning development, implementation and evaluation.
361	Dasar-Dasar Rekreasi dan Pariwisata (Recreation and Tourism Basics)	This course is a study material that provides provision for all students participating in the study program of tourism and hospitality in general. This includes providing an understanding of the meaning, system, scope, impact of tourism developments and trends in the future.

Department of Nutrition

No	Course Title	Course Description
363	Biologi (Biology)	the study of life and living organisms, including their structure, function, growth, evolution, distribution, and taxonomy. Modern biology is very broad, and eclectic, and consists of various branches and sub-disciplines of.
364	Gizi Daur Kehidupan (Life Cycle Nutrition)	This course discusses the characteristics of growth and development; nutritional needs and adequacy of the impact of excess and malnutrition; as well as efforts to overcome nutritional problems in various stages of human life, namely from infancy, toddlers, school age children, adolescents, adults and the elderly as well as during pregnancy and breastfeeding. The principles of preparing menus at various stages of age and physiological conditions are also studied.
365	Ilmu Bahan Pangan (Food Material Science)	a science that studies the physical and chemical properties of the components contained in animal and vegetable food ingredients, including the nutritional value of these foods; and these characteristics are related to the aspects of production and treatment before and after harvest.
366	Ekologi Pangan dan Gizi (Ecology of Food and Nutrition)	This course discusses the interaction between humans and between humans and the environment to meet food & nutritional needs while maintaining the sustainability of natural resources & the environment. In particular, the issue

		of food-nutrition and its determinants, such as culture, population, management, sex, economy (poverty, free trade), health, environment, is discussed; food and nutrition in the bio-cultural dimension; food resources; changes in eating habits; food resource management strategy.
367	Gizi dan Kesehatan (Nutrition and Health)	organic substances needed by organisms for normal functioning of body systems, growth, health care.
368	Ekonomi Pangan dan Gizi (Food and Nutrition Economics)	the science that studies human efforts in society to meet food & nutrition with limited resources and studies the role of food & nutrition in economic development.
369	Mutu dan Keamanan Pangan (Food Quality and Safety)	value is determined based on safety and nutritional content food is.
370	Pengelolaan Bencana (Disaster management)	an applied science (applied) that seeks, by systematic observation and disaster analysis to improve measures related to preventive (prevention), mitigation (reduction), preparation, emergency response, and recovery.
371	Gizi Masyarakat Pesisir dan Kepulauan (Coastal and Islands Community Nutrition)	This course discusses the basic theories of public health in coastal areas and islands, the potential of natural and human resources in coastal areas, environmental health aspects and their effects on the health of coastal and island communities as well as nutritional aspects and their effects on the health of coastal and island communities.
372	Makanan Fungsional dan Nutrasetikal (Functional and Nutritional Foods)	Introduction (relationship between diet, nutrition and health, phytochemicals for disease prevention), nutrition that provides cardiovascular protection, cancer prevention, overcoming disorders and postmenstrual diseases, antiaging, immunomodulators, the effect of dosage forms on food absorption, food safety and efficacy testing functional and nutritional.
373	Kesehatan dan Keselamatan Kerja (Occupational Health and Safety)	fields related to health, safety, and human welfare who work in an institution or project location for.
374	Sanitasi Pangan dan HACCP (Food Sanitation and HACCP)	food production with due regard to food microbiology and contaminant sources. Procedures and supervision of sanitary and hygienic objects to control microorganisms in processing, which aim to prevent food damage.

No	Course Title	Course Description
375	Perilaku Caring (Caring's Behavior)	form of caring, paying attention to others, centering on people, respecting self-respect, and humanity, commitment to preventing deteriorating health status, paying attention and respecting others.
376	Anthropologi Kesehatan (Health Anthropology)	the discipline that pays attention to the biological and socio-cultural aspects of the behavior of human beings, especially regarding the ways of interaction between the two throughout the history of human life, which affect health and disease in humans.
377	Farmakologi (Pharmacology)	This course describes pharmacology and therapeutics with an emphasis on pharmacodynamics, pharmacokinetics, drug classification, drug side effects, and the dangers of using / administering drugs to patients.
378	Gizi dan Diet (Nutrition and Diet)	This course describes the concept of nutrition, nutritional needs at various ages and their role in life and nutrition in patients with various body system disorders. Learning activities through Sutdent Center Learning (SCL), discussions and assignments.
379	Keperawatan Dasar (Basic Nursing)	forms the understanding of paradigms, the nursing profession, and the concept of human growth and development and understanding of several theories.
380	Komunikasi (Communication)	a process of conveying information (messages, ideas, ideas) from one party to another.
381	Manajemen Patient Safety	a system that creates patient care while in the hospital to be safer and calmer.
382	Metodologi Keperawatan (Nursing Methodology)	the five-stage clinical decision-making approach includes assessment, diagnosis, planning, implementation, and evaluation.
383	Kebijakan Pemerintah di Bidang Kesehatan (Government Policy in the Health Sector)	Government policies in the health service system will have an effect on policies on how health services are provided and who is bear the cost of health services.
384	Manajemen Keperawatan (Nursing Management)	su or a form of coordination and integration of nursing resources by implementing a management process to achieve the goals and objectivity of nursing care and nursing services.
385	Praktik Keperawatan Komprehensif (Comprehensive Nursing Practice)	application of the concepts and principles of the subject body system nursing science

Graduate Program Law

No	Course Title	Course Description
386	Perkembangan Hukum Tata Lingkungan (Development of Environmental Law)	A course that discusses the development of laws and regulations related to the arrangement environment.
387	Hukum Dan Politik Agraria (Agrarian Law and Politics)	The overall rules of law both written and unwritten that govern regarding the earth, water, and within certain limits also space and natural resources contained therein.
388	Hukum Pemerintahan Daerah Lanjut (Regional Government Law Continued)	Subjects that study legal rules related to governance, governance, governance in the regions.

Magister Public Administration

No	Course Title	Course Description
389	Ekonomi Politik dan Pembangunan (Political Economy and Development)	A course that discusses political economy issues, where the concept of economy in state practice cannot be separated from political issues. Study subjects ranging from political economy paradigms and systems, shifting values and development concepts, public choice, securing economic and social fundamentals, the ups and downs of political economy, political rationality and international economics.
390	Kebijakan Publik (Public policy)	The course provides a view of how the processes of public policy operate from agenda setting through formulation and legitimation, to implementation and eventual evaluation with examples drawn from several areas of policy (e.g., health, education, and environment)
391	Manajemen dan Inovasi Pelayanan Publik (Public Service Management and Innovation)	Discusses the management of various government actions or policies by using various concepts, theories and management models in order to realize people's welfare through the provision of public services.
392	Manajemen Sumber Daya Manusia Sektor Publik (Public Sector Human Resource Management)	Discusses the needs of human resource management, human resource planning, job analysis and design, resource development, career planning and job performance appraisal, maintenance of work relationships.
393	Konsep dan Praktek Desentralisasi (Decentralization Concepts and Practices)	Courses that study various understandings and theories about decentralization as a model of government administration. On a deeper level, students were also invited to analyze the dynamics of decentralization, such as relations and cooperation between regions and regional expansion.

Magister Accounting

No	Course Title	Course Description
394	Analisis Bisnis Strategik (Strategic Business Analysis)	Analysis of the business environment (internal and external) with an emphasis on environmental implications for the corporate strategy of.
395	Analisis Investasi dan Portofolio (Investment and Portfolio Analysis)	Subjects that discuss the theoretical basis and practical considerations required in the formation and management of investment portfolios. Topics include capital market efficiency, investment selection and portfolio performance evaluation, CAPM and APT theory. The emphasis is on common stocks, but bonds, options and futures.
396	Sistem Pengendalian Manajemen Lanjutan (Advanced Management Control System)	Subjects that discuss the conceptual framework of management control systems, global business environment and management paradigm changes, mindset formation, management control system structure design, information networks, performance-based reward systems, management control system process design, and manager reskilling.
397	Sistem Pengendalian Manajemen Sektor Publik (Public Sector Management Control Systems)	A subject that discusses ways to improve the performance of public sector organizations so that they are more oriented towards the creation of good public services and good governance as well as the realization of corporate social *responsibility*.

Magister Management

No	Course titla	Course Descript
398	Manajemen Investasi (Investment Management)	Investment management and capital market courses are courses to help students broaden their knowledge of investment and capital markets from theory, concept, process.
399	Manajemen Sumber Daya Manusia (Human Resource Management)	A process handles various problems in the scope of employees, employees, laborers, managers, and or all workforce who support all activities of the organization, institution, or company to achieve the objectives that have been set.
400	Manajemen Kinerja (Work management)	Deals with activities to ensure that organizational goals have been consistently achieved in effective and efficient ways.
401	Pemasaran Global / Internasional (Global / International Marketing)	Marketing activities by companies that have a global business, with global marketing strategies, global target markets, and the same global products (standards) in various countries.

402	Perencanaan SDM (Human Resource Planning)	Deals with the process of analysis and identification is carried out by organizations of human resource needs so that the organization can determine the steps that must be taken to achieve its goals.

Magister of English Education

No	Course Title	Course Description
403	English For Tourism (English For Tourism)	Using English to communicate and provide services in tourism business

Additional evidence link:

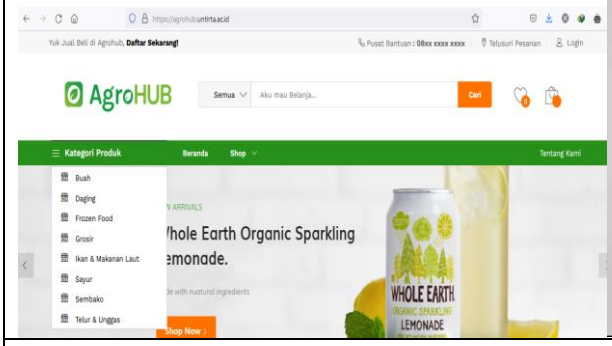
Additional evidence link: https://green.untirta.ac.id/pendidikan-dan-penelitian/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[6] Education and Research (ED)

[6.4] Total Research Funds Dedicated to Sustainability Research (in US Dollars)



Sustainability Research Fund (Sultan Ageng Tirtayasa University)

Description:

Total research fund dedicated to sustainability research in 2018 = 514785 US Dollars
Total research fund dedicated to sustainability research in 2019 = 223580 US Dollars
Total research fund dedicated to sustainability research in 2020 = 445215 US Dollars
The average annum last 3 years of research fund dedicated to sustainability research = 394,527 US Dollars

The ratio of research funds for research on the theme of Sustainability is 41%.

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/pendidikan-dan-penelitian/

Template for Evidence(s)
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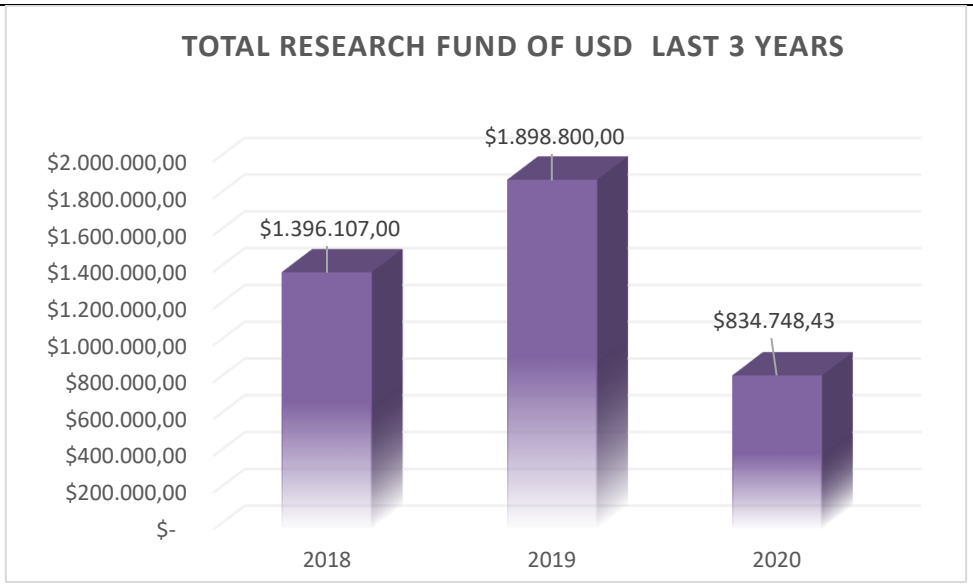
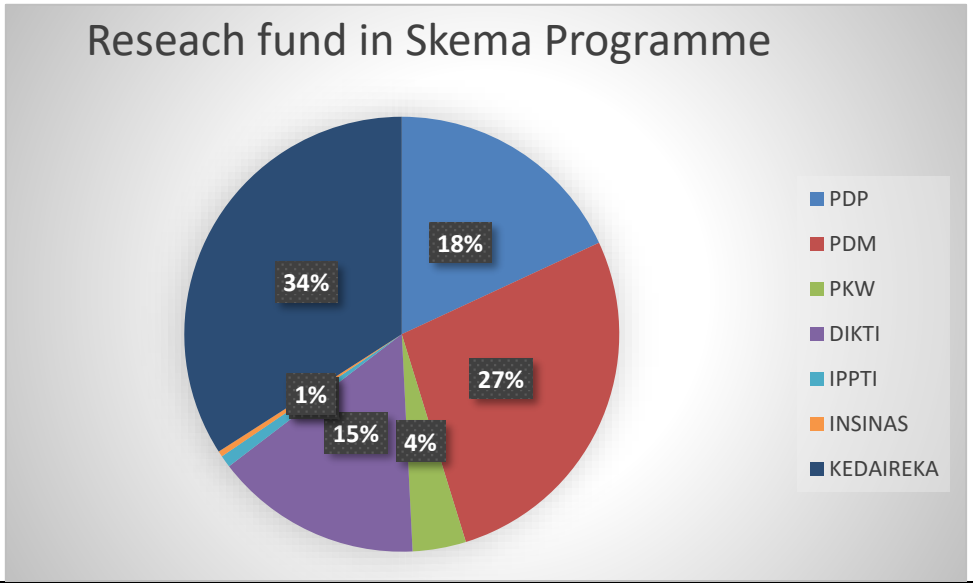
[6] Education and Research (ED)

[6.5] Total Research Funds (in US Dollars)

SAMPLE





Research Fund (Sultan Ageng Tirtayasa Unversity)

Description:

This year there was a 34% increase in research funds sourced from the Kedai Raka Matvhing fund scheme. Although on the other hand, there was a total decline in research funds due to the end of the research program funded by the IsDB.

Total research fund in 2018 = 1.396.107 US Dollars
Total research fund in 2019 = 1.898.800 US Dollars
Total research fund in 2020 = 834748 US Dollars
The averaged annum last 3 years of research fund = 1.376.552 US Dollars

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/pendidikan-dan-penelitian/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
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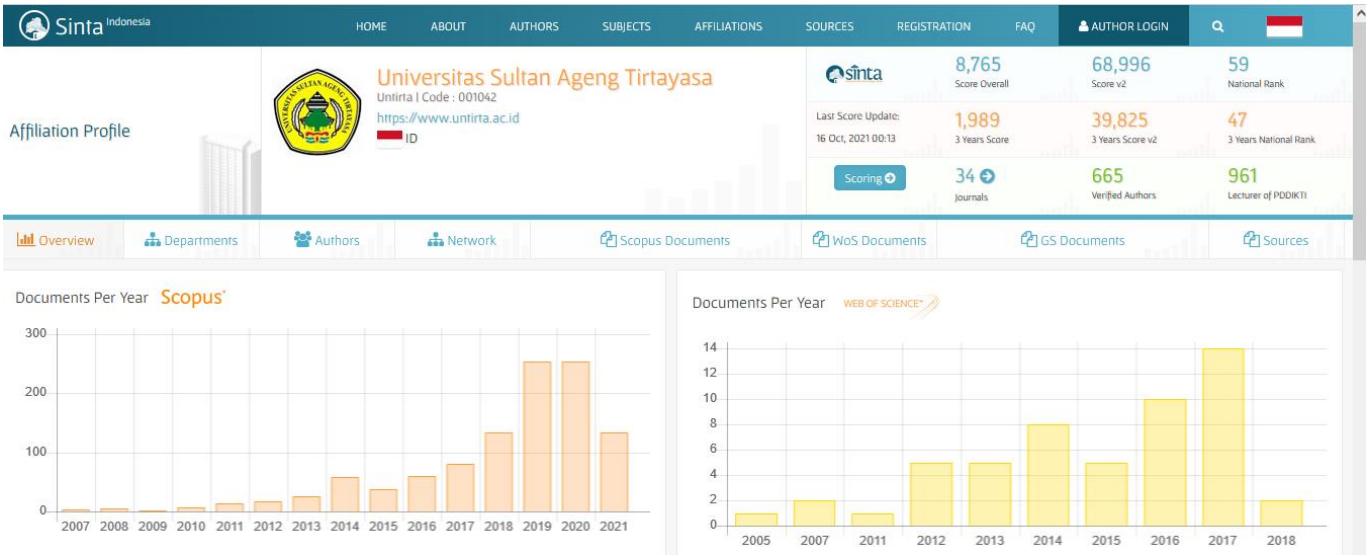
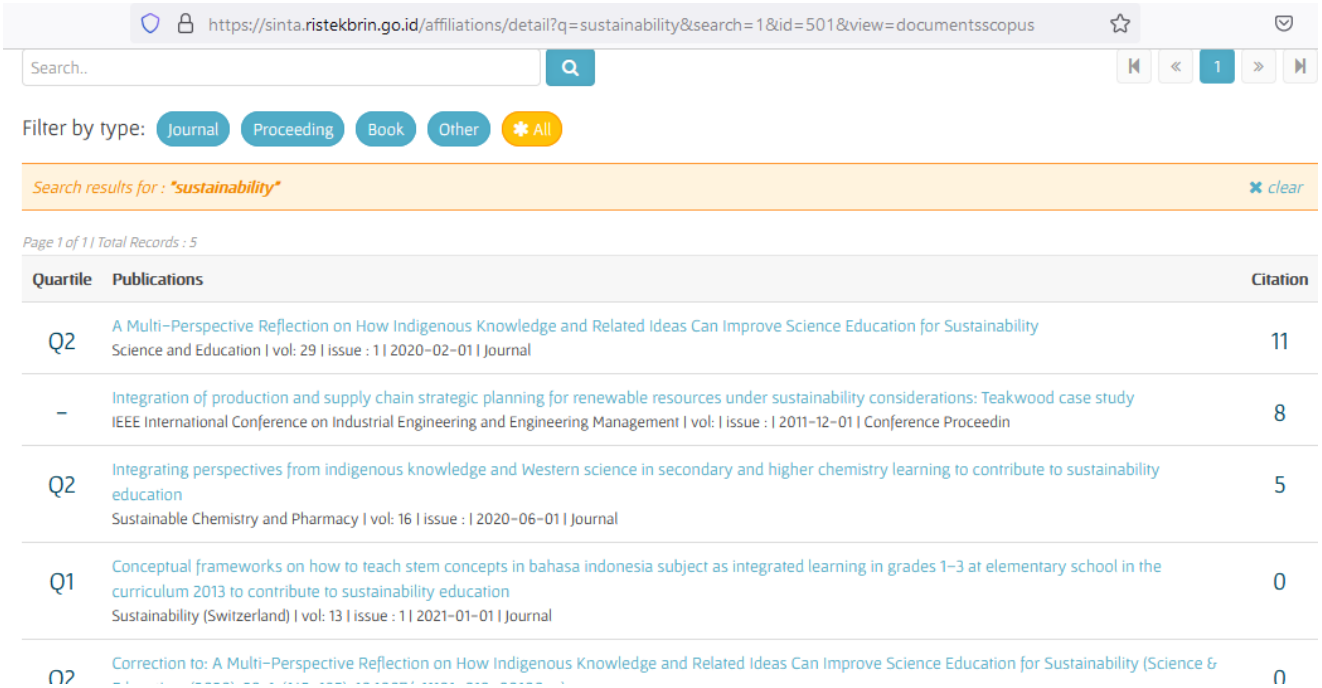
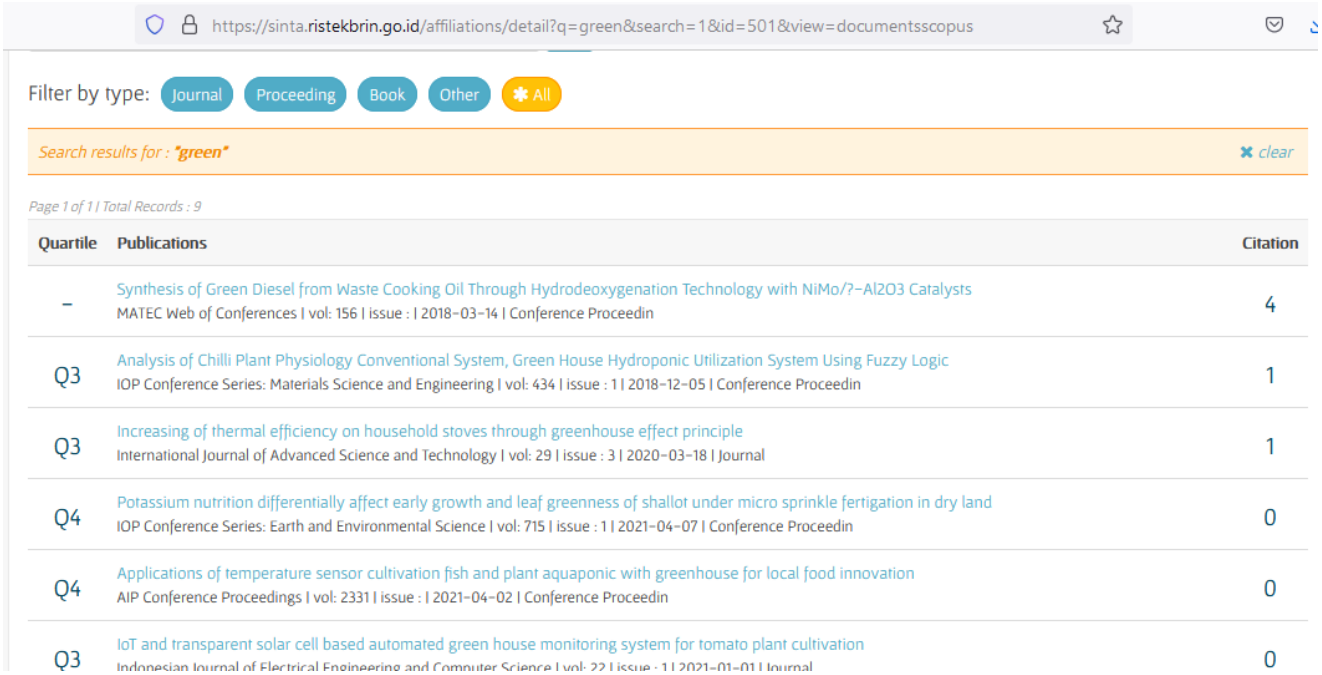
[6] Education and Research (ED)

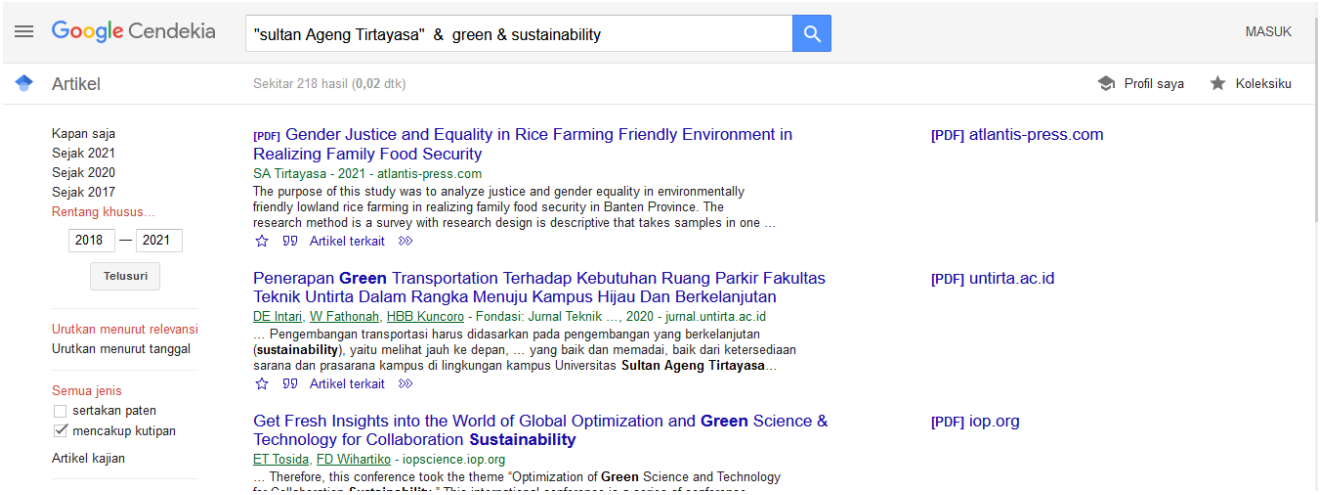
[6.7] Number of scholarly publications on sustainability.



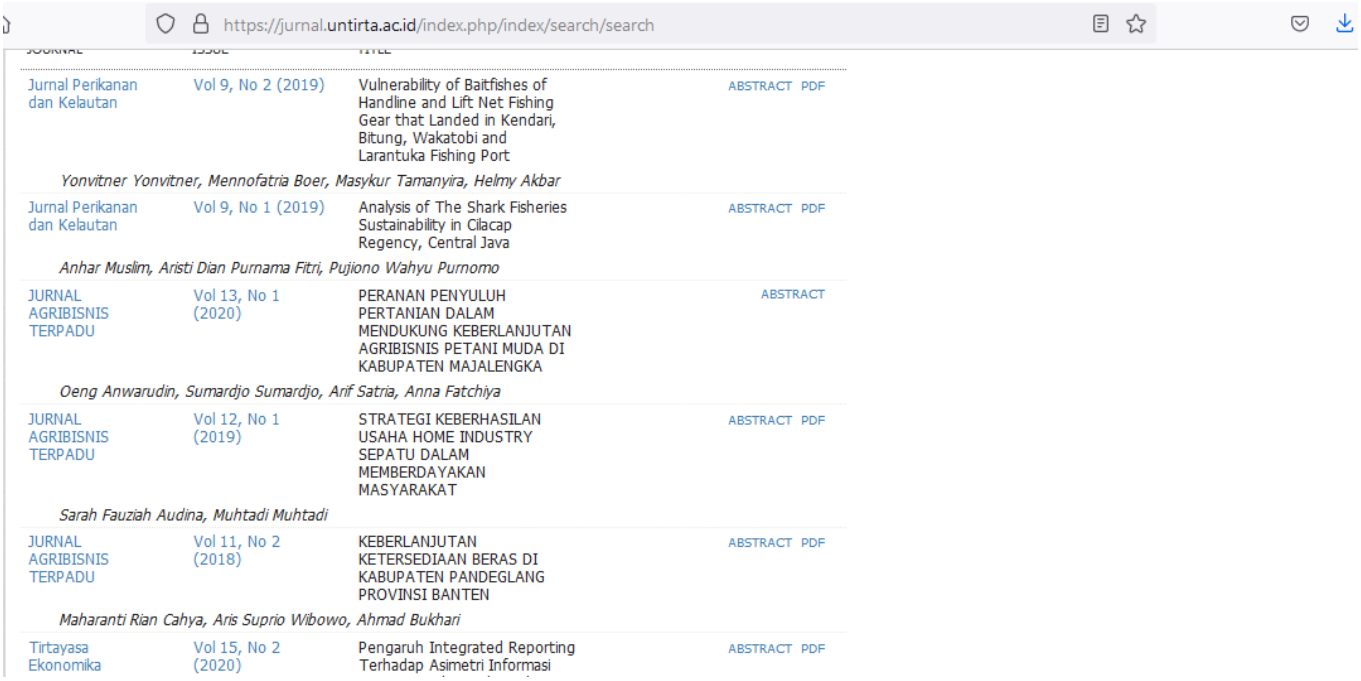




Sinta publications on sustainability (Universitas Sultan Ageng Tirtayaasa Indonesia)



Scholarly publications on Sustainability (Universitas Sultan Ageng Tirtayaasa Indonesia)



Untirta's Journal Publications on Sustainability (Universitas Sultan Ageng Tirtayaasa Indonesia)

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/pendidikan-dan-penelitian/

Template for Evidence(s)
UI GreenMetric Questionnaire

University : University of Sultan Ageng Tirtayasa
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[6] Education and Research (ED)
[6.8] Number of events related to sustainability. (average annualy for the past 3 years)
These events are annual program held by each Student Organization

Student Association of Agronomic- Himpunan Mahasiswa Agronomi (HIMAGRON)	
1	Serasi (Selasa Berprofesi), practices how to incorporate to improve soil quality manage crops and improve the environment starting with plantation until harvesting  
2	Community empowerment in Desa Cisalam, Baros, Kabupaten Serang as a Partner Village carried out once a moth  
3	Field Trip to Hidroponic garden  

4	Commemorate Earth days conducted by held several Scientifics studies program      
	Student Association of Agribisnis-Himpunan Mahasiswa Agribisnis (HIMAGRI) 
5	Himagri goes to village for community empowerment   
6	Public Discussion related with climate exchange and energy availability for Fisherman welfare   

7	Seminar and Culinary Contest on local food, Promotion and preservation of **traditional** Nice **cuisine** 
	Student Association of Fisheries Studies-Himpunan Mahasiswa Perikanan (HIMAPI)
8	Commemorate on Fisherman Days 
Faculty Student Activity Unit of the Plant Lovers Unit Kegiatan Mahasiswa Fakultas Pecinta Tanaman (UKMF-PCT)	

9	Training Activities for student- Local microorganism-MOL production, biopesticides, Kokedama, Hydroponics, Aquaponics, other crop cultivation,   
10	Ngebon (Cultivation training) 
11	Mangrove Plantation: planting mangrove seedlings in the area of Tunda Island, Banten, to conserve mangrove areas and prevent abrasion 
12	1000 Trees Programme in Munjul, Pandeglang. These activities are carried out through reforestation and environmental preservation efforts  

13	Bonsai Training: Give student skills on creating Bonsai as art and hobby 
Student Association of Biology Education –HMJ Pendidikan Biologi , 	
14	Specialization in Biology-Biologi Peminatan (BIOTAN): exploration of natural resources (SDA) in Tunda Island, Serang-Banten on 2019, Taman Hutan Raya Carita on 2018 and Gunung Pulosari 2017 
15	Bioeducare in Villages: community empowerment and concern with the environmental problem. 2019 in Sukatani village, 2018 in Curug Agung Village and 2017 in Sukageunah Village 
16	Biology Expo: to improves students skill on environmental conservation knowledge and skills 
Student Association of Natural Science Education –HMJ Pendidikan IPA	
17	Month of Forest in commemoration of Department of Natural Science Educations Dies Natalis -Bulan Rimba 

Student Association of Chemical Education –HMJ Pendidikan Kimia 	
18	Community empowerment in Jarakah Vilage Kasemen Banten 
Student Association of Primary School Education –HIMAGUSEDA 	
19	Community Empowerment in Village 
Student Excecutive Board Faculty of Economic and Business - Badan Eksekutif Mahasiswa (BEM FEB) 	
20	Cheerful with Orphans in the month of Ramadan - CERBAY (Ceria Bersama Anak Yatim dibulan Ramadhan) 

Student Excecutive Board Faculty of Law - Badan Eksekutif Mahasiswa (BEM FH) 	
21	Village Development Grant Program for Disaster Mitigation System 
Mapala Krakatau Fakultas Teknik Untirta 	
22	Tree Plantation: programme for increasing green areas in the city 
Student Association of Chemical Engineering-Himpunan Mahasiswa Teknik Kimia (HIMATEMIA) 	
23	Waste Treatment competition
24	Training onprocess safety management 
Sultan Ageng Tirtayasa University Student Nature Explorer- MAPALAUT	

-	
25	Kasepuhan Local Wisdom Exploration,Guidance Period of member
26	Mabim Gunung Hutan, The Journey of Mapalaut

Annual Events related to sustainability held by University

No	Events
Department of Biology education, Faculty of Teacher training and Education	
27	National Seminar on Biology and Biology Education: The Role of Biology Learning Based on Local Potentials for Industrial Revolution Era 4.0 
28	Field Trip Vertebrate animal diversity in HALIMUN SALAK National Parks 
29	Workshop “Combating Fusarium Wilt of Banana: Diagnosis, Preventive, and Genetic Improvement on Resistance plants” collaboration programme with R&D Great Giant Food.

	 
30	Studi Kebantenan: BANTEN DALAM GENGGAMAN Introduce Banten everything from history, culture, natural potential, and traditional culinary to foster a love for Banten land among teenagers by Biology education students  
31	Training of Trainers on Identification of Mycotoxin Producing Fungi in collaboration with Seameo BIOTROP 
32	Biology education students goes to Baluran for field trip and experiment in Ecology and Conservation biology course 
33	Community service in Pontang Village: How to use agriculture waste as Mushroom Cultivation media

	
34	Education Programme for Primary School students on Aves in SD PERADABAN CILEGON 
35	Community service to Primary School Student How to implemented 3R 
36	Ornithologi in action: Bird Watching in Taman Burung TMII (Taman Mini Indonesia Indah) for Student of Biology Education who take Ornithologi course 
37	Field trip forBiology Conservation and General Ecology in National Park of Ujung Kulon

	 
38	Field trip for Biology Conservation in Rawa Danau Nature Reserve  
39	Biology Education and Conservation-BIDIK: explore biodiversity in National Park of Ujung Kulon  
	Faculty of Agriculture
40	The 1st International Conference on Agriculture and Rural Development (ICARD) incollaboration ICEFORY, Balitbantan Kementrian Pertanian dan Perhimpunan Agronomi Indonesia to share knowledge, unite ideas, and find out suitable strategies for sustainable agriculture with empowering potency of rural area under global and local issues. 
	Community service and empowerment carried out by faculty, lecturer and student of Department of Agroecotechnology in 2017-2018

41	Urban Farming Wolkaponik System as a Solution to Scarcity of Chili Pepper in the Ciceri Permai Complex in 2017
42	Local Community Assistance for the Development of Organic Agriculture and Agribusiness Potentials to Create an Organic Village in Pandeglang Regency in 2017
43	Coastal Community Empowerment through the Introduction of Silvofishery Technology in Order to Utilize Idee Ponds in the North Coast area of Banten in 2017
44	Student / Alumni Assistance Program in Special Efforts (USAHA KHUSUS-UPSUS) to Increase Food Production for Rice and Corn Commodities, Kalanganyar & Warunggunung Districts, Lebak Regency, Banten Provincein 2017
45	Development Assistance for Horticultural Areas (Chili Pepper Commodities) in Cikuya Village, Sindangsari Village, Serang Regency, Banten in 2017
46	Community Empowerment by Improving the Quality of Fruit Seedlings Using the Mini Grafting Method in 2017
47	Empowerment of Farmer Groups through Utilization of Fruit and Papaya Seed Waste (Carica Papaya) in Efforts to Improve Farmers' Economy in Lebak Regency, Banten Province in 2017
48	Pemberdayaan Masyarakat dalam Pembentukan Klaster Tabulampot-Vertikultur Untuk Optimalisasi Pekarangan Rumah dan Industri Sebagai Ruang Kawasan Lindung dan Kawasan Budidaya TBSO di Sekitar Industri Modern Cikande Serang Menuju Perwujudan Agro-Eco-Industrial Park Bersih Hijau dan Sehat (BHS) in 2017
49	Local Community Assistance for the Development of Organic Agriculture and Agribusiness Potentials to Create an Organic Village in Pandeglang Regency in 2018
50	Pokdarwis Development Program (Tourism Awareness Group) through the use of agricultural waste into souvenir products to improve community welfare in Pandeglang district 2018
51	Empowerment of Rice and secondary crops Farmers in the Formation of Soybean Seed Breeding Groups to Ensure Independent Soybean Seed Availability in Serang Regency, Banten Province 2018
52	Community-based science and technology Increasing Rice Paddy Production Using Biotamax Organic Fertilizer and Humic Acid 2018
53	Assistance to the Program for Increasing Rice and Corn Production in Bojongmanik & Cimarga Subdistricts, Lebak Regency in 2018
	Community service and empowerment carried out by faculty, lecturer and student of Department of Agribusiness in 2017-2018
54	Product Development Technology Intoduction and Packaging Introduction to Palm Sugar UMKM to Increase Product Added Value in Communities Around the Halimun Mountain Conservation Area in 2017
55	Community empowerment through the development of ornamental plants and vegetables with the Vertical Garden System by utilizing waste for the development of the Old Banten Religious E-Tourism in 2018
56	Increasing Rice Paddy Production Using Biotamax Organic Fertilizer And Humic Acid in 2018
57	Socialization of Zero Waste Compost Making Technology in Serang City, Banten Province in 2018
Community service and empowerment carried out by faculty, lecturer and student of Department of Chemical Engineeringin 2017-2018	
58	2017/2018 Introduction Of Rubber Seed Waste Processing Technology Into Processed Snack Products To Achieve Local Food Security In Lebak Banten
59	2017/2018 Experts In Qualification, Evaluation And Verification Of Coal Tar As Raw Materials For Chemical Industry

60	2017/2018 Community Education To enhance information on utilization And Side Effects Of Chemical Compounds As Additional Materials in village
61	2017/2018 Water Purification Program With Combination Methods Of Conventional Water Purification And Ultrafiltration For Linduk Settlement Communities, Pontang Regency
62	2017/2018 Expert Research Team On Biomass Potential Technology Applied Study Activities In Banten Province
63	2017/2018 Kkm Mandiri In Kadugenep Village
Community service and empowerment carried out by faculty, lecturer and student of Department of Public Administration, Gaduate Programme 2017-2018	
64	2017 Extension of the Biopore Method as an Effort to Prevent Floods in Tegal Ratu Village, Ciwandan District, Cilegon City
65	2018 Pokdarwis (Tourism Awareness Group) Development Program Through the Use of Agricultural Waste as Souvenir Products to Improve Public Welfare in Pandeglang Regency
66	2018 Optimizing the Role of Community Groups in Realizing Community Empowerment and Environmental Care in Their Territories
67	2018 Training of Mantri Farmers Regeneration in an Effort to Strengthen Family Food Security in Sawarna Village, Lebak Regency, Banten

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/pendidikan-dan-penelitian/

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[6] Education and Research (ED)

[6.9] Number of student organizations related to sustainability

No	Name of student organizations	The program related with environment and sustainability
1	Student Association of Agronomic- Himpunan Mahasiswa Agronomi (HIMAGRON)	Serasi (Selasa Berprofesi), Community empowerment in Desa Cisalam, Baros, Kabupaten Serang , Field Trip to Hidroponic garden, Commemorate Earth days
2	Student Association of Agribisnis-Himpunan Mahasiswa Agribisnis (HIMAGRI)	Himagri goes to village, Public Discussion related with climate exchange and energy availability for Fisherman welfare in 2019, Seminar and Culinary Contest on local food in 2019
3	Student Association of Fisheries Studies-Himpunan Mahasiswa Perikanan (HIMAPI)	Commemorate on Fisherman Days in 2019
4	Faculty Student Activity Unit of the Plant Lovers Unit Kegiatan Mahasiswa Fakultas Pecinta Tanaman (UKMF-PCT)	Training Activities for student- Local microorganism-MOL production, biopesticides, Kokedama, Hydroponics, Aquaponics, other crop cultivation, Ngebon (Cultivation training), Mangrove Plantation, 1000 Trees Programme
5	Student Association of Biology Education –HMJ Pendidikan Biologi	Specialization in Biology-Biologi Peminatan (BIOTAN), Bioeducare in Villages, Biology Expo,

6	Student Association of Natural Science Education – HMJ Pendidikan IPA	Month of Forest in commemoration of Department of Natural Science Educations Dies Natalis -Bulan Rimba
7	Student Association of Chemical Education –HMJ Pendidikan Kimia 	Community empowerment in Jarakah Vilage Kasemen Banten
8	Student Association of Primary School Education – HIMAGUSEDA 	Community Empowerment in Sindangkarya VIllage
9	Student Excecutive Board Faculty of Economic and Business - Badan Eksekutif Mahasiswa (BEM FEB) 	Cheerful with Orphans in the month of Ramadan - CERBAY (Ceria Bersama Anak Yatim dibulan Ramadhan)
10	Student Excecutive Board Faculty of Law - Badan Eksekutif Mahasiswa (BEM FH) 	Village Development Grant Program for Disaster Mitigation System
11	Mapala Krakatau Fakultas Teknik Untirta 	Tree Plantation
12	Student Association of Chemical Engineering- Himpunan Mahasiswa Teknik Kimia (HIMATEMIA)	Waste Treatment competition, Training onprocess safety management

13	Sultan Ageng Tirtayasa University Student Nature Explorer- MAPALAUT	Kasepuhan Local Wisdom Exploration,Guidance Period of member- Mabim Gunung Hutan, The Journey of Mapalaut

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/pendidikan-dan-penelitian/

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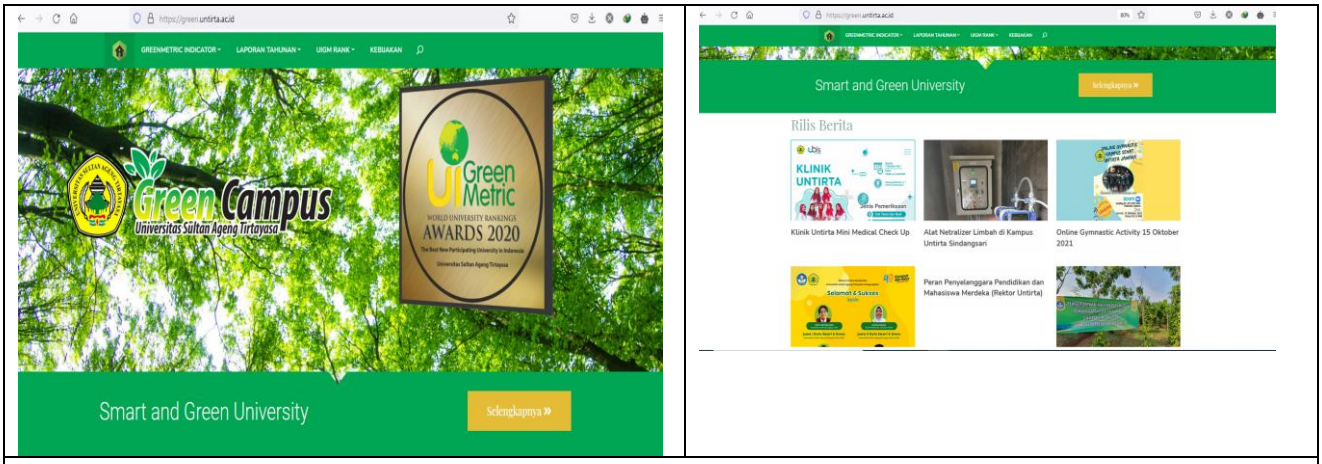
[6] Education and Research (ED)

[6.12] Sustainability Report



Wesbite Green Campus of Universitas Sultan Ageng Tirtayasa
https://green.untirta.ac.id

Sustainability report (Universitas Sultan Ageng Tirtayasa, 2020)

Every information and activity regarding Smart and Green Campus can be viewed on a specific website that is developed and managed by UPT. Smart, Green and SDGs and Relationship Affair of Untirta. The website covers all activities in UIGM assessment categories namely Setting and Infrastructure Energy and Climate Change Waste, Water, Transportation, Education and Research. In addition, some activities related to 17 Goals of SDGs including “Kampus Sehat” – Healthy Campus program. Everything is always up to date.

Sustainability report produced in 2020. In 2021, it is still under progress and is going to be issued at the end of December.

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/pendidikan-dan-penelitian/

Template for Evidence(s)
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[6] Education and Research (ED)

[6.13] Number of cultural activities on campus (e.g.Cultural Festival) including virtual activities (if any)

cultural activities on campus (Universitas Sultan Ageng Tirtayasa, Indonesia)

High-achiever students took part in a competition organized by the Association of Indonesian 'Sendratasik' (Dance and Music Art) Education Study Programs (AP2SENI). Janah, won the 1st place in the Monologue Contest with the title Galuh by Fauzian Ansyari. The other students won 1st place in the Dance Competition, supervised by lecturers of Performing Arts Education of Faculty of Teacher Training and Education UNTIRTA.

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/pendidikan-dan-penelitian/

Template for Evidence(s)
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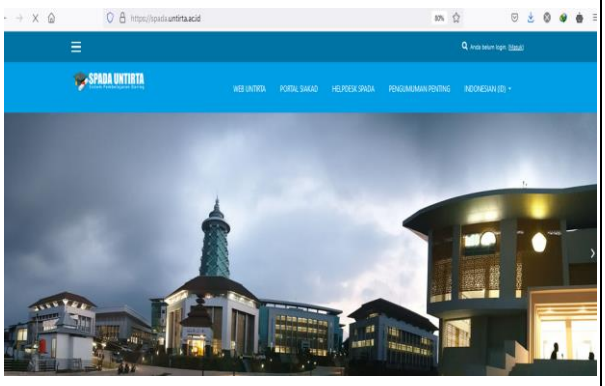
www.green.untirta.ac.id

[6] Education and Research (ED)

[6.14] Number of university program(s) to cope with Covid-19 pandemic



SPADA for E-Learning
(Universitas Sultan Ageng Tirtayasa)
https://spada.untirta.ac.id/

Vaccine Program in Two Stages

International Seminar: Broad Exposure to Science and Technology 2021 (BEST-2021)
hosted by Universitas Sultan Ageng Tirtayasa, Banten, Indonesia
https://best.untirta.ac.id/

	
Untirta facilitates Vaccine Booth organized by Bank of Indonesia Representative of Banten Province and Financial Services Authority (OJK)	To prevent Covid-19 spread, Untirta distributed freely hand sanitizer to all university members and public.
	
Some activities organized by university members to stay in a good shape and prevent Covid-19.	

Description:

SPADA Untirta, an online learning system Universitas Sultan Ageng Tirtayasa, develops to answer several challenges in higher education particularly conventional learning that is replaced by cross-boundaries learning. This life-long learning concept is very useful during this pandemic situation.

BEST-2021 will provide a wonderful forum for you to refresh your knowledge base and explore the innovations in Material science, Metallurgy and Material, Chemical, Mechanical, Electrical, Industrial, and Civil Engineering.

It will give you the opportunity to meet and interact with the leading scientists, engineers, and researchers, friends and colleagues as well as sponsors and exhibitors.

To respond the status of pandemic Covid-19 particularly in Banten Province, which was categorized into extraordinary situation, Untirta through a program named Untirta Peduli, produces and distributes hand sanitizer for free to university members and public.

For a vaccine program, all university members of Untirta have full vaccine Covid-19 shots. The first batch was on March 3rd and the second one was on March 22nd and 23rd. The total vaccinated people were 753. Furthermore, several national vaccination programs was conducted in Untirta. In collaboration with Bank of Indonesia Representative of Banten Province and Financial Services Authority (OJK), with Banten Police Department and Military Based in Banten, Government of Banten Province and Serang City, vaccination program for the first and second shot was held in Auditorium Campus E Sindang Sari. Not only in Campus E Sindang Sari, but also in Campus B Faculty of Engineering vaccination booth was also built, as the result of collaboration between Student Executive Board and District Military Command of SILIWANGI 0623.

For a preventive action, faculty of medicine Untirta organized a regular Friday aerobics program by virtual. In addition, medical check-up was initiated by Untirta clinic to check health condition for lecturers and university members in Untirta.

Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/pendidikan-dan-penelitian/

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Template for Evidence(s)
UI GreenMetric Questionnaire

University : Universitas Sultan Ageng Tirtayasa
Country : Indonesia
Web Address : www.untirta.ac.id
https://green.untirta.ac.id

[6] Education & Research

[6.15] Number of sustainability community services project organized and/or involving students

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[6] Education & Research

[6.16] Number of sustainability-related startups

The following table is the list of UNTIRTA's students' Startups which is in food security sector

NO	STUDENT NAMES	BRAND	SECTOR OF BUSINESS	PRODUCT
1	AZMI AULIA RYAN	Cwan Dimsum	Goods	Food
2	M. IHSAN PRATAMA PUTRA	Kini Cheese Tea	Goods	Food
3	FIRDA FEBRYANTI	Efftu Food	Goods	Food
4	TIA FITRIANI UTAMI	alleatdrink.id	Goods	Food
5	AULIA RAHMAN IMAN F	Cetak Prasasti	Service	Publisher
6	RAHMAT AJI MUKTAR	Roti bakar pelanggi	Goods	Food
7	NOVIANA	Nov_shopee /binder	Goods	stationery
8	IKA KURNIA RAHMA	Bidikmisi chicken	Goods	Food
9	GITA TASYA RAHMADANI	Nasi Bakar	Goods	Food
10	RESKA TRI RESMAWATI	Makaroni bentet renyah	Goods	Food
11	AZMI AULIA RYAN	Kokesnack	Service	Food
12	LILI INDRIYANI	Bola Pisang Crispy	Goods	Food
13	PUTRI FEBRI YANDITA	Banoffee by Putdit	Goods	Food
14	IRFANDI RAHMAN	Miracle Of Kedai (MiKedai)	Goods	Beverage
15	NURUNISSA PUTRI SETIAWAN	Corndog bandeng	Goods	Food
16	UMNIYATUL AMIROH	AMICHO	Goods	Cloth
17	SEPTHIO IQBAL MAULANA	Nata De Aleovera	Goods	Beverage

The documentation of the some of the products and activities is as the following.






Additional evidence link:

Additional evidence link: https://green.untirta.ac.id/pendidikan-dan-penelitian/