

# PERFORMANCE INDICATOR REPORT MES 2020



MASTER PROGRAM OF ENVIRONMENTAL SCIENCE  
SCHOOL OF POSTGRADUATE STUDIES  
DIPONEGORO UNIVERSITY





**PERFORMANCE REPORT  
(2017-2019)**

**MASTER ENVIRONMENTAL SCIENCE (MES)**

**DIPONEGORO UNIVERSITY**

**SEMARANG**

**2020**

## PROPOSER IDENTITY

College : Diponegoro University  
 Study Program Management Unit : Graduate School  
 Program Type : Master  
 Study Program Name : Master of Environmental Science  
 Address : Imam Bardjo, SH No. 5 Semarang  
 Phone number : (024) 8453635  
 E-mail and Website : mil@live.undip.ac.id and www.mil.undip.ac.id  
 PT Establishment Decree Number<sup>1)</sup> : Government Regulation Number 7 of 1961  
 Date of Decree of Establishment of PT : 15 October 1960  
 Signing Office :  
 SK Establishment of PT : President  
 PS Opening Decree Number<sup>2)</sup> : Decree of the Director General of Higher Education No. 130/Dikti/Kep/2000  
 PS Opening Decree Date : May 1, 2000  
 Signing Office :  
 PS Opening Decree : Directorate General of Higher Education  
 First Year :  
 Accepting Students : year 2000  
 Latest Rating :  
 PS Accreditation : A (EXCELLENT)  
 SK number BAN-PT : SK: 973/SK/BAN PT/Akred/M/IX/2015

### List of Study Programs in the Study Program Management Unit (UPPS)

No.	Program Type	Study Program Name	Study Program Accreditation			Number of students during TS 4)
			Status/Rank	No. and Date. SK	date Expired	
1	2	3	4	5	6	7
1	Master	Master of Environmental Science	A	SK: 973/SK/BAN-PT/Akred/M/IX/2015	03-09-2020	109
2	Master	Master in Epidemiology	A	LAM-PTKes No.0088/LAM-PTKes/Akr/Mag/II/2019	22-02-2024	67
3	Master	Master in Information Systems	A	1004/SK/BAN-PT/Akred/M/IV/2018	10-04-2023	125
4	Master	Master in Energy	B	4891/SK/BAN-PT/Akred/M/XII/2017	19-12-2022	24
5	Doctoral	Doctor of Environmental Sciences	A	543/SK/BAN-PT/Akred/D/II/2018	20-02-2023	75
<b>amount</b>						400

#### Information:

- 1) Attach a copy of the Decree on the Establishment of a Higher Education.
- 2) Attach a copy of the Decree on the Opening of the Study Program.
- 3) Attach a copy of the latest Study Program Accreditation Decree.

4) Filled with the number of active students in each PS during TS.

**DEVELOPMENT TEAM IDENTITY  
STUDY PROGRAM PERFORMANCE REPORT**

**Name** : Dr. Eng. Maryono, ST., M.T.  
**NIDN** : 0011087503  
**Position** :  
**Charging Date** :  
**Signature** :

**Name** : Dr. Ing. Sudarno, S.T., M.Sc.  
**NIDN** : 0031017402  
**Position** :  
**Charging Date** :  
**Signature** :

**Name** : Mochamad Arief Budihardjo, S.T., M.Eng.Sc., Ph.D.  
**NIDN** : 0030097402  
**Position** :  
**Charging Date** :  
**Signature** :

**Name** : Dr. Jafron Wasiq Hidayat, M.Sc.  
**NIDN** : 0025036407  
**Position** :  
**Charging Date** :  
**Signature** :

## MAIN PERFORMANCE INDICATOR FORM

### 1. Governance, Governance, and Cooperation

#### a. Cooperation

Write down the tridharma cooperation in the Study Program Management Unit (UPPS) in the last 3 years by following the format of Table 1 below.

Table 1. Tridharma Cooperation

No.	Partner Agency	Level *)			Title of Cooperation Activity	Benefits for Accredited PS	Time and Duration	Proof of Cooperation	Year of End of Cooperation (YYYY)
		International	National	Region/Local					
1	2	3	4	5	6	7	8	9	10
<b>Education</b>									
1	Australian Nuclear Science and Technology Organization	V			Forum for Nuclear Cooperation in Asia (FNCA) Workshop on Climate Change	Increase knowledge about climate change for lecturers and students	August 1 2018, 3 months	SPK	2018
2	The Joint Graduate School of Energy and Environment (JGSEE) King Mongkut's University of Technology Thonburi (KMUTT), Thailand	V			Joint degree, visiting staff/student, research	Development of education and research of Environmental and Energy Science study program	2019	MOU	still ongoing
3	Postgraduate University of Gorontalo		V		Tri Dharma College Development and Cooperation	Development of the Tri Dharma of Higher Education	March 22, 2016, 3 years	SPK	2019
4	Medan State University Postgraduate		V		Tri Dharma College Development and Cooperation	Development of the Tri Dharma of Higher Education	May 17, 2016, 2 years	SPK	2018
5	Indonesian Environmental Professional Certification Agency (LSP-LHI)		V		Cooperation of Work Competency Certification Services in the Environmental Sector	Environmental competency certification	January 27 2017, still ongoing	SPK	still ongoing

No.	Partner Agency	Level *)			Title of Cooperation Activity	Benefits for Accredited PS	Time and Duration	Proof of Cooperation	Year of End of Cooperation (YYYY)
		International	National	Region/Local					
1	2	3	4	5	6	7	8	9	10
6	AKAMIGAS College of Energy and Minerals		V		Educational implementation of learning assignments for 1 (one) civil servant of the Ministry of Energy and Mineral Resources in the Postgraduate Masters Program (S2)	Funding for S2 and S3 educational activities	January 31, 2017, 2 years	SPK	2019
7	Ministry of Research, Technology and Higher Education		V		Domestic postgraduate education (master/doctoral) scholarships are ongoing (on going)	Funding for S2 and S3 educational activities	February 16 2017, 2 semesters	SPK	2018
8	Marine and Fisheries Ministry		V		Administration of postgraduate degree education (study assignments)	Funding for educational activities	March 31, 2017, 1 year	SPK	2018
9	Ministry of Research, Technology and Higher Education		V		Domestic postgraduate doctoral education (S3) scholarships are ongoing (on going)	Funding for doctoral education activities	26 April 2017, 1 semester	SPK	2017
10	Ministry of Energy and Mineral Resources in the Postgraduate Masters Program (S2)		V		Educational implementation of learning assignments for 1 (one) civil servant of the Ministry of Energy and Mineral Resources in the Postgraduate Masters Program (S2)	Funding for postgraduate education activities	20 June 2017, 2 years	SPK	2019
11	Ministry of Research, Technology and Higher Education		V		Domestic postgraduate doctorate (S3) scholarships (BPP-DN) batch 2013 stage 2	Funding for doctoral education activities	06 July 2017, 1 semester	SPK	2017

No.	Partner Agency	Level *)			Title of Cooperation Activity	Benefits for Accredited PS	Time and Duration	Proof of Cooperation	Year of End of Cooperation (YYYY)
		International	National	Region/Local					
1	2	3	4	5	6	7	8	9	10
12	Ministry of National Development Planning/BAP PE-NAS		V		Substantive Education and Training Program (DIKLAT) Environmental Planning in Development	Funding for education and training activities	28 July to 11 August 2017	SPK	2017
13	Ministry of Energy and Mineral Resources in the Postgraduate Masters Program (S2)		V		Educational implementation of learning assignments for 1 (one) civil servant of the Ministry of Energy and Mineral Resources in the Postgraduate Masters Program (S2)	Funding for postgraduate education activities	07 August 2017, 2 years	SPK	2019
14	Ministry of National Development Planning/ National Development Planning Agency		V		Domestic Education and Training for Masters Degrees	Funding for education and training activities	11 August 2017, 1 year	SPK	2017
15	Ministry of Research, Technology and Higher Education		V		Postgraduate scholarships for outstanding education personnel (PasTi Scholarships)	Funding for educational activities	11 September 2017, 2 years	SPK	2019
16	Ministry of Research, Technology and Higher Education		V		Domestic postgraduate doctoral education (S3) scholarships (BPP-DN) batch 2014	Funding for doctoral education activities	19 September 2017, 1 semester	SPK	2018
17	Ministry of Research, Technology and Higher Education		V		Domestic postgraduate education (S2/S3) scholarships	Funding for S2 and S3 educational activities	October 18 2017, 1 semester	SPK	2018
18	Ministry of Research, Technology and Higher Education		V		Domestic postgraduate doctoral education scholarships (S3) class 2017	Funding for doctoral education activities	22 November 2017, 1 semester	SPK	2018

No.	Partner Agency	Level *)			Title of Cooperation Activity	Benefits for Accredited PS	Time and Duration	Proof of Cooperation	Year of End of Cooperation (YYYY)
		International	National	Region/Local					
1	2	3	4	5	6	7	8	9	10
19	Ministry of Research, Technology and Higher Education		V		Domestic postgraduate doctoral education (S3) scholarships (BPP-DN) batch 2014 stage 2	Funding for doctoral education activities	22 November 2017, 1 semester	SPK	2018
20	Ministry of Research, Technology and Higher Education		V		The implementation of domestic postgraduate (master/doctoral) education scholarships is ongoing (on going) for the 2018 fiscal year	Funding for S2 and S3 educational activities	February 13 2018, 1 year	SPK	2019
21	Ministry of Research, Technology and Higher Education		V		Postgraduate scholarships for outstanding education personnel (PasTi Scholarships)	Funding for educational activities	March 1 2018, 1 year	SPK	2019
22	Ministry of Research, Technology and Higher Education		V		Doctoral Program (S3) Study Extension Assistance for Domestic Postgraduate Education Scholarship Recipients (BPP-DN) Class of 2014 Semester 8	Funding for doctoral education activities	April 12 2018, 1 semester	SPK	2018
23	Indonesian Environmental Professional Certification Agency (LSP-LHI)		V		Cooperation of Work Competency Certification Services in the Environmental Sector	Environmental competency certification	April 16 2018, 5 years	SPK	2023
24	Ministry of Research, Technology and Higher Education		V		Distribution of 1 semester scholarship funds for domestic doctoral or doctoral program students for the 2018 fiscal year	Funding for doctoral education activities	23 April 2018, 1 semester	SPK	2018



No.	Partner Agency	Level *)			Title of Cooperation Activity	Benefits for Accredited PS	Time and Duration	Proof of Cooperation	Year of End of Cooperation (YYYY)
		International	National	Region/Local					
1	2	3	4	5	6	7	8	9	10
25	Ministry of National Development Planning/BAP PENAS		V		Environmental Planning Education and Training Program (DIKLAT) in Development	Funding for education and training activities	27 July 2018, still ongoing	SPK	still ongoing
26	Ministry of Research, Technology and Higher Education		V		Postgraduate scholarships for outstanding education personnel (PasTi Scholarships) for the 2018 fiscal year	Funding for educational activities	24 August 2018, 1 semester	SPK	2019
27	Ministry of Research, Technology and Higher Education		V		Implementation of the New State Higher Education (PTNB) affirmation scholarship for the 2018 fiscal year anggaran	Funding for educational activities	September 13 2018, 1 semester	SPK	2019
28	Ministry of Research, Technology and Higher Education		V		Extension of study for doctoral program (S3) for recipients of domestic postgraduate education scholarships (BPP-DN) batch 2015	Funding for doctoral education activities	24 September 2018, 1 semester	SPK	2019
29	Ministry of Research, Technology and Higher Education		V		Organizing master's education scholarships to doctorates for superior undergraduates (PMDSU) Batch 4 for the 2018 fiscal year	Funding for educational activities	27 September 2018, 1 semester	SPK	2019
30	Ministry of Research, Technology and Higher Education		V		1 semester scholarship for domestic doctoral program (S3) students for the 2018 fiscal year	Funding for doctoral education activities	October 11 2018, 1 semester	SPK	2019
31	Ministry of Research, Technology		V		New State Universities Affirmation Scholarship	Funding for educational activities	November 13	SPK	2019

No.	Partner Agency	Level *)			Title of Cooperation Activity	Benefits for Accredited PS	Time and Duration	Proof of Cooperation	Year of End of Cooperation (YYYY)
		International	National	Region/Local					
1	2	3	4	5	6	7	8	9	10
	and Higher Education				(PTNB) 1 semester		2018, 1 semester		
32	Ministry of Research, Technology and Higher Education		V		Domestic postgraduate (master/doctoral) education scholarships are ongoing (on going) for the 2019 fiscal year	Funding for educational activities	23 January 2019, 2 semesters	SPK	2019
33	Ministry of Research, Technology and Higher Education		V		Graduate scholarships for outstanding education staff (PasTi Scholarships) for student employees are ongoing (on going) for the 2019 fiscal year	Funding for educational activities	February 8, 2019, 1 semester	SPK	2019
34	Ministry of Research, Technology and Higher Education		V		Extended scholarship for doctoral/S3 program class 2015 8th semester	Funding for doctoral education activities	April 1 2019, 1 semester	SPK	2019
35	Ministry of Research, Technology and Higher Education		V		1 semester scholarship fund assistance for domestic doctoral/S3 program students for the 2019 fiscal year	Funding for doctoral education activities	15 July 2019, 1 semester	SPK	2019
36	Ministry of National Development Planning/BAP PENAS		V		Environmental Planning Education and Training Program (DIKLAT) in Development	Funding for education and training activities	19 July 2019, still ongoing	SPK	still ongoing
37	Ministry of National Development Planning/BAP PENAS		V		Domestic Education and Training for Masters Degrees	Funding for education and training activities	9 August 2019, 1 year	SPK	2020
38	Ministry of Research, Technology and Higher Education		V		Domestic postgraduate education scholarships (S2/S3) for the	Funding for S2/S3 educational activities	11 September 2019, 1 semester	SPK	2020

No.	Partner Agency	Level *)			Title of Cooperation Activity	Benefits for Accredited PS	Time and Duration	Proof of Cooperation	Year of End of Cooperation (YYYY)
		International	National	Region/Local					
1	2	3	4	5	6	7	8	9	10
					2019 fiscal year				
39	Ministry of Research, Technology and Higher Education		V		Organizing master's education scholarships to doctorates for superior undergraduates (PMDSU)	Funding for educational activities	11 September 2019, 1 semester	SPK	2020
40	Ministry of Research, Technology and Higher Education		V		Organizing master's education scholarships to doctorates for superior undergraduates (PMDSU) batch V in 2019	Funding for educational activities	11 September 2019, 1 semester	SPK	2020
41	Ministry of Research, Technology and Higher Education		V		Doctoral program extension scholarships (S3) class 2016 and scholarship funding assistance for the 2019 fiscal year	Funding for doctoral education (S3) activities	17 October 2019, 1 semester	SPK	2020
Σ	41	2	39	0					
<b>Research</b>									
1	PT H&M	V			Energy Research	Energy research development	March 31, 2017, 6 months	SPK	2017
2	PT H&M	V			Making Feasibility Study of Biomass Energy Utilization in Textile and Garment Industry	Energy research development	February 14 2018, 6 months	SPK	2018
3	Postgraduate University of Gorontalo		V		Tri Dharma College Development and Cooperation	Development of the Tri Dharma of Higher Education	March 22, 2016, 3 years	SPK	2019

No.	Partner Agency	Level *)			Title of Cooperation Activity	Benefits for Accredited PS	Time and Duration	Proof of Cooperation	Year of End of Cooperation (YYYY)
		International	National	Region/Local					
1	2	3	4	5	6	7	8	9	10
4	Medan State University Postgraduate		V		Tri Dharma College Development and Cooperation	Development of the Tri Dharma of Higher Education	May 17, 2016, 2 years	SPK	2018
5	Boyolali Regency Environmental Service		V		Preparation of Supporting Documents for the Implementation of Strategic Environmental Studies (KLHS) in Boyolali District	KLHS research development	03 April 2017, 60 days	SPK	2017
6	Boyolali Regency Environmental Service		V		Preparation of Environmental Carrying Capacity Based on Ecosystem Services for Boyolali Regency in 2017	Environmental carrying capacity research development	15 May 2017, 60 days	SPK	2017
7	Boyolali Regency Environmental Service		V		Inventory of Greenhouse Gases on Climate Change Impact Management Activities in Boyolali Regency in 2017	GHG research development	June 1 2017, 90 days	SPK	2017
8	Boyolali Regency Environmental Service		V		Preparation of the Master Plan for Boyolali Regency Green Open Spaces in 2017	RTH research development	15 September 2017, 90 days	SPK	2017
9	Boyolali Regency Environmental Service		V		Preparation of RAD for GHG Emission Reduction in Boyolali District Kabupaten	GHG research development	October 16, 2017, 40 days	SPK	2017
10	Boyolali Regency Environmental Service		V		Preparation of Technical Planning and Waste Management Documents (PTMP) Boyolali Regency 2018-2028	Waste research development	26 April 2018, 180 days	SPK	2018

No.	Partner Agency	Level *)			Title of Cooperation Activity	Benefits for Accredited PS	Time and Duration	Proof of Cooperation	Year of End of Cooperation (YYYY)
		International	National	Region/Local					
1	2	3	4	5	6	7	8	9	10
11	Boyolali Regency Environmental Service		V		Inventory of Greenhouse Gases (GHG) in Boyolali Kabupaten Regency	Greenhouse Gas research development	June 4 2018, 148 days	SPK	2018
12	PT Pupuk Kujang Cikampek		V		Implementation of Life Cycle Analysis (LCA) Audit	LCA research development	August 1 2019, 6 months	SPK	2020
13	Central Java Provincial Government		V		Tri Dharma College Development and Cooperation	Implementation of research and community service	August 1 2019, 5 months	SK	2019
14	Syah Kuala University		V		Tri Dharma College Development and Cooperation	Implementation of education, research, and community service	November 8, 2019,	SPK	Still ongoing
15	Haluoleo University		V		Tri Dharma College Development and Cooperation	Implementation of education, research, and community service	November 15, 2019, 5 years	Memo randu m of Under standi ng	2024
Σ		2	13	0					
<b>Community dedication</b>									
1	Postgraduate University of Gorontalo		V		Tri Dharma College Development and Cooperation	Development of the Tri Dharma of Higher Education	March 22, 2016, 3 years	SPK	2019
2	Provincial Office of the Ministry of Law and Human Rights		V		Higher Education Service in Improving Technology-Based Correctional Services	Development of the Tri Dharma of Higher Education	27 April 2016, 3 years	SPK	2019
3	Medan State University Postgraduate		V		Tri Dharma College Development and Cooperation	Development of the Tri Dharma of Higher Education	May 17, 2016, 2 years	SPK	2018

No.	Partner Agency	Level *)			Title of Cooperation Activity	Benefits for Accredited PS	Time and Duration	Proof of Cooperation	Year of End of Cooperation (YYYY)
		International	National	Region/Local					
1	2	3	4	5	6	7	8	9	10
4	Boyolali Regency Environmental Agency		V		Development, Utilization of Science and Technology, and Community Empowerment	Development, utilization of science and technology, and community empowerment	09 December 2016, 5 years	Memorandum of Understanding	2021
5	Syiah Kuala University		V		Tri Dharma College Development and Cooperation	Implementation of education, research, and community service	November 8, 2019,	SPK	Still ongoing
6	Haluoleo University		V		Tri Dharma College Development and Cooperation	Implementation of education, research, and community service	November 15, 2019, 5 years	Memorandum of Understanding	2024
Σ		0	6	0					

Information:

- 1) Put a V mark in the appropriate column.
- 2) Filled with the title of the cooperative activity that has been implemented, involves resources and provides benefits for the accredited Study Program.
- 3) Evidence of cooperation can be in the form of a Letter of Assignment, Cooperation Agreement (SPK), evidence of implementation (reports, results of cooperation, cooperation outcomes), or other relevant evidence. Documents of Memorandum of Understanding (MoU), Memorandum of Agreement (MoA), or similar documents that cover the implementation of cooperation, cannot be used as evidence of the realization of cooperation.

## 2. College student

### a. Quality of Student Input

Write down the capacity data, the number of prospective students (registrants and participants who passed the selection), the number of new students (regular and transfer) and the number of active students (regular and transfer) in the last 5 years in the accredited Study Program by following the format of Table 2.a the following.

Table 2.a Student Selection

Academic year	Capacity	Number of Prospective Students		Number of New Students		Number of Active Students	
		Registrant	Pass Selection	Regular	Transfer	Regular	Transfer
1	2	3	4	5	6	7	8
2015	50	51	42	42	-	149	-
2016	50	60	55	55	-	149	-
2017	50	53	22	22	-	113	-
2018	50	52	36	36	-	122	-
2019	50	58	34	34	-	109	-
amount		274	189	189	0	109	

Information:

TS = Last full academic year at the time of submitting the accreditation proposal.

## b. Foreign student

The following table 2.b is filled out by the proposer from the Study Program in the Applied Bachelor/Bachelor/Master/Applied Master/Doctoral/Applied Doctoral program.

Write down the number of foreign students registered in all study programs at UPPS in the last 3 years by following the format of Table 2.b below.

Table 2.b Foreign Students (Foreign Students)

No	Study program	Number of Active Students			Number of Full Time Foreign Students (Full Time)			Number of Part Time Foreign Students (Part Time)		
		2017	2018	2019	2017	2018	2019	2017	2018	2019
1	2	3	4	5	6	7	8	9	10	11
1	Master of Environmental Science	113	122	109	2	2	3	-	-	2
2	Master of Epidemiology	66	79	67	0	1	0	-	-	-
3	Master of Information Systems	112	129	125	0	1	0	-	-	-
4	Master of Energy	24	26	24	0	0	0	-	-	-
5	Doctor of Environmental Sciences	63	54	75	2	2	1	-	-	-
amount		378	410	400	4	6	4	-	-	-

Information:

Foreign students can be enrolled in an education program on a full-time or part-time basis. Part-time foreign students are students who are registered in the Study Program to participate in student exchange activities, credit earning, or similar activities that are relevant.

### 3. Human Resources

#### a. Lecturer Profile

Write down the data of Permanent Lecturers of Higher Education assigned as lecturers in the Accredited Study Program (DTPS) at the time of TS by following the format of Table 3.a.1 below.

Table 3.a.1 Permanent Lecturers of Higher Education

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
1	Prof. Drs. Sudharto P Hadi, MES, Ph.D.	<u>0009035404</u>	S2 : Environmental studies, York University, Canada	S3 : Community and Regional Planning, University of British Columbia, Canada	<ul style="list-style-type: none"> <li>• Environmental policy</li> <li>• Environmental planning and community empowerment</li> <li>• Environmental mediation and negotiation</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> <li>√</li> </ul>	Professor (Professor)	08100801348		<ul style="list-style-type: none"> <li>• Environmental planning theories</li> <li>• Philosophy of science and methodology</li> <li>• Social dimensions of the environment and natural resources</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> <li>√</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental management</li> <li>• Environmental planning</li> <li>• EIA</li> <li>• Human Resource Management</li> <li>• Environmental ethics</li> </ul>



No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
												<ul style="list-style-type: none"> <li>Development policy analysis</li> <li>Company environmental analysis</li> <li>Environmental issues in development</li> </ul>
2	Prof. Dr. Ir. Purwanto. DEA	<u>0028126103</u>	S2 : Chemical Process Technology , ENSIGC-INPT University of Toulouse, France	S3 : Chemical Process Technology, ENSIGC-INPT University of Toulouse, France	<ul style="list-style-type: none"> <li>Clean Technology</li> <li>Eco-efficiency and sustainable development</li> <li>Environmental and Natural Resources Modeling</li> <li>Solid waste and B3 .</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> <li>√</li> <li>√</li> </ul>	Professor (Professor )	09110080184		<ul style="list-style-type: none"> <li>Computer applications and environmental modeling</li> <li>Mass transfer and transformation</li> <li>System analysis and environmental modeling</li> <li>Pollution and damage</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> <li>√</li> <li>√</li> </ul>	<ul style="list-style-type: none"> <li>Catalyst technology</li> <li>Environmental audit and management system</li> <li>Energy planning and policy</li> <li>Hospital occupational safety and</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
					management  • Environmental management system	√				control concepts		health management
3	Prof. Dr. Ir. Azis Nur Bambang, MS	<u>0018095203</u>	S2 : Natural Resources and Environmental Management, Bogor Agricultural Institute	S3 : Economics of Fishery Resources, ENSAR Rennes France	• Environmental economics  • Water resources	√  √	Professor (Professor)	08100801406		Environmental economics and natural resources	√	• Introduction to economics  • Sociology of coastal communities
4	Prof. Dr. Ir. Sutrisno Anggoro, M. Si.	<u>011125205</u>	S2 : Aquatic Science, Bogor Agricultural University	S3 : Aquatic Science, Bogor Agricultural University	• Fishery  • waters	√  √	Professor (Professor)	08100801355		• Hydroclimatology  • Management of coastal and marine areas • System analysis and environmental modeling	√  √  √	• Coastal and marine spatial planning  • Conservation of aquatic resources  • Impact of contamination on organisms and physiology

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
												<ul style="list-style-type: none"> <li>Coastal resource modeling</li> <li>Coastal management and small islands</li> <li>Colloquium Methodology</li> <li>EMS engineering for coastal and marine areas</li> <li>Coastal resource policy analysis</li> </ul>
5	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App.Sc.	<u>0029046405</u>	S2 : Applied Science in Environmental science, University Of Western Sydney	S3 : Environmental Science, Gadjah Mada University	Environmental quality bioindicator	√	Professor (Professor )	091100809379		<ul style="list-style-type: none"> <li>Environmental chemistry and biology</li> <li>Pollution and damage control concepts</li> </ul>	√  √	<ul style="list-style-type: none"> <li>Bioconcent-vasi</li> <li>Marine biology</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
												<ul style="list-style-type: none"> <li>• Protist biology</li> <li>• Ichnology</li> <li>• Biomonitoring</li> </ul>
												<ul style="list-style-type: none"> <li>• Bioremediation</li> <li>• Micropaleontology</li> <li>• Aquatic ecology</li> <li>• Biomonitoring</li> <li>• Research methodology</li> </ul>
6	Prof. Ir. Didi Dwi Anggoro, M. Eng., Ph.D.	<u>001416702</u>	S2 : Chemical Engineering, Universiti Teknologi Malaysia	S3 : Chemical Engineering, Universiti Teknologi Malaysia	<ul style="list-style-type: none"> <li>• Catalyst</li> <li>• Technology and energy management planning</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> </ul>	Professor (Professor)	101100809732		<ul style="list-style-type: none"> <li>• Environmental Management</li> <li>• Technology and energy management planning</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> </ul>	<ul style="list-style-type: none"> <li>• Chemical reaction technique</li> <li>• Reactor</li> </ul>

No.	Lecturer Name	NIDN/NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
												<ul style="list-style-type: none"> <li>Advanced chemical reaction technique</li> <li>Ecology and environmental change</li> <li>Catalyst technology</li> <li>Thermodynamics</li> <li>Energy planning and policy</li> </ul>
7	Prof. Dr. rer. nat. Imam Buchori, S.T	<u>0023117006</u>	S2 : University of Vechta, Germany	S3 : Geomatics for Spatial Planning, University of Vecta, Germany	<ul style="list-style-type: none"> <li>Spatial and environment</li> <li>Geomatics of Spatial Planning</li> <li>Geomatics for Sustainable development</li> <li>Location analysis for public facilities</li> <li>Disaster Mitigation</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> <li>√</li> <li>√</li> <li>√</li> </ul>	Professor (Professor )	101100809704		Spatial planning and environment	√	<ul style="list-style-type: none"> <li>Geographic information system</li> <li>Planning information system</li> <li>Transportation planning</li> <li>Research methodology</li> <li>Planning studio (Spatial concentration)</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
					<ul style="list-style-type: none"> <li>Transportation modeling</li> </ul>	√						<ul style="list-style-type: none"> <li>Development planning information system studio</li> <li>Disaster mitigation</li> </ul>
8	Prof. Dr. Istadi, S.T., M.T.	<u>0001037106</u>	S2 : Chemical Engineering, Bandung Institute of Technology	S3 : Chemical Engineering, Universiti Teknologi Malaysia	Catalyst and plasma	√	Professor (Professor )	101100809736		Computer applications and environmental modeling	√	<ul style="list-style-type: none"> <li>Advanced chemical reaction technique</li> <li>Research data processing techniques</li> <li>Chemical product and process design</li> <li>Gas processing technology</li> <li>Catalyst technology</li> <li>chemical engineering principle II</li> <li>Inorganic chemistry</li> <li>Thermodynamics 1</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
9	Prof. Dr. Denny Nugroho Sugianto, S.T., M.Sc.	00100 87407	S2 : Oceanography, Bandung Institute of Technology	S3 : Civil Engineering, Diponegoro University	Oceanographic Physics	√	Professor (Professor )	1210010080 2934		Infrastructure development and environmental GIS	√	<ul style="list-style-type: none"> <li>• Marine &amp; oceanic alternative energy</li> <li>• Oceanographic programming</li> <li>• Coastal and marine disaster mitigation</li> <li>• Marine layout</li> <li>• Spatial planning for coastal and marine areas</li> <li>• Oceanographic dynamics</li> <li>• colloquium</li> <li>• Coastal resource modeling</li> <li>• Beach hydraulics</li> <li>• Oceanographic engineering</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
												<ul style="list-style-type: none"> <li>Coastal zone zoning</li> </ul>
10	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	<u>0029057502</u>	S2 : Chemical Engineering, Bandung Institute of Technology	S3 : Chemical Engineering, Universitat Duisburg-Essen, Germany	<ul style="list-style-type: none"> <li>Environmental management</li> <li>Materials engineering</li> <li>Membrane technology</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> <li>√</li> </ul>	Professor (Professor )	101100809734		<ul style="list-style-type: none"> <li>Philosophy of science and research methodology</li> </ul>	<ul style="list-style-type: none"> <li>√</li> </ul>	<ul style="list-style-type: none"> <li>The phenomenon of displacement</li> <li>Membrane technology</li> <li>Scientific writing and presentation techniques</li> <li>Engineering materials science</li> <li>Polymer technology</li> <li>Advanced composite and material technology</li> <li>Separation process</li> <li>Waste treatment technology</li> </ul>



No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
11	Prof. Dr. Hadiyanto, S.T., M.Sc.	<u>0028107503</u>	S2 : Food and Bioprocess, Wageningen Univ. Netherlands	S3 : Chemical Engineering, Wageningen Univ. Netherlands	<ul style="list-style-type: none"> <li>• Food and bioprocess</li> <li>• Chemical engineering</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> </ul>	Professor	11100100804269		<ul style="list-style-type: none"> <li>• Environmental system analysis</li> <li>• Philosophy of science and research methodology</li> <li>• Mass transfer and transformation</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> <li>√</li> </ul>	<ul style="list-style-type: none"> <li>• Basics of bioprocess</li> <li>• Chemical Engineering Mathematics</li> <li>• Process control</li> </ul>
12	Dr. Dra. Sunarsih, M.Si.	<u>0001095808</u>	S2 : University of Indonesia	S3 : Universitas Brawijaya	<ul style="list-style-type: none"> <li>• Environmental statistics</li> <li>• System dynamic analysis</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> </ul>	Head Lecturer	091100809387		<ul style="list-style-type: none"> <li>• Environmental statistics</li> <li>• Environmental system analysis</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> </ul>	<ul style="list-style-type: none"> <li>• Statistical Method</li> <li>• Risk modeling</li> <li>• Advanced ecological model</li> <li>• Statistics dynamic system Sistem</li> <li>• Research methodology</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
												<ul style="list-style-type: none"> <li>Stochastic modeling</li> <li>Mathematical modeling</li> </ul>
13	Dr. Ir. Hermawan, DEA	<u>0023026003</u>	S2 : Electrical Power, ECL France	S3 : Electrical Power, ECL France	<ul style="list-style-type: none"> <li>Technology and energy management planning</li> <li>Electrical measurement</li> <li>Micro hydro</li> <li>Electric power planning</li> <li>Power system stability</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> <li>√</li> <li>√</li> <li>√</li> </ul>	Head Lecturer	08100803754		Technology and energy management planning	√	<ul style="list-style-type: none"> <li>Conservation of new and renewable electrical energy</li> <li>Computational methods and analysis of electric power systems</li> <li>Programming in power systems</li> <li>Electric power distribution system design</li> <li>Ecology and global environmental change</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
					<ul style="list-style-type: none"> <li>• Labor law</li> </ul>	√						<ul style="list-style-type: none"> <li>• Energy and environment</li> <li>• Conservation and audit of electricity consumption</li> <li>• Electric power conservation model and simulation concept</li> <li>• Renewable energy</li> <li>• Power plant</li> </ul>
14	Dr. Rini Budihastuti, M.Sc.	<u>0021026103</u>	S2 : Environment, Gadjah Mada University	S3 : Environmental Science, Diponegoro University	Environmental science and natural resources	√	Head Lecturer	091100809377		<ul style="list-style-type: none"> <li>• Ecology and Environmental Pollution</li> <li>• Ecology and biodiversity</li> </ul>		<ul style="list-style-type: none"> <li>• Phytopathology</li> <li>• Medicinal plant biology</li> <li>• Post-harvest handling</li> <li>• Biofuels</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
												<ul style="list-style-type: none"> <li>Industrial plant biology</li> <li>Food plant biology</li> <li>Vegetable bioproducts</li> </ul>
15	Dr. Kismartini, M.Si.	<u>0028036111</u>	S2 : Environmental Planning, University of Indonesia	S3 : Public Administration, Universitas Brawijaya	<ul style="list-style-type: none"> <li>Environmental planning</li> <li>Environmental policy</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> </ul>	Head Lecturer	091100806197		<ul style="list-style-type: none"> <li>Ecology and environmental science</li> <li>Conservation of natural resources and the environment</li> <li>Social dimensions of the environment and natural resources</li> <li>Environmental planning theories</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> <li>√</li> <li>√</li> </ul>	<ul style="list-style-type: none"> <li>Public policy analysis</li> <li>Environmental management</li> <li>Public policy</li> <li>Regional autonomy issues and policies</li> <li>Administrative research methodology</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
												<ul style="list-style-type: none"> <li>Disaster management</li> <li>Governance by network</li> </ul>
16	Dr. Hartuti Purnaweni, MPA	<u>0002126105</u>	S2 : Public Administration, School of Public Administration, Canada	S3 : Environmental Science, Gadjah Mada University	<ul style="list-style-type: none"> <li>Environmental planning</li> <li>Environmental policy</li> <li>EIA</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> <li>√</li> </ul>	Head Lecturer	091100806246		<ul style="list-style-type: none"> <li>EIA</li> <li>Environmental planning basics</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> </ul>	<ul style="list-style-type: none"> <li>Transnational crime in the environmental field</li> <li>Public policy comparison</li> <li>Public policy analysis</li> <li>Implementation and evaluation of public policies</li> <li>Environmental planning</li> <li>Environmental planning theories</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
												<ul style="list-style-type: none"> <li>• Human ecology</li> <li>• Public policy</li> <li>• Ecology, human ecology and industrial ecology</li> <li>• Capacity building</li> </ul>
17	Dr. Ir. Setia Budi Sasongko, DEA	<u>0026126104</u>	S2 : Chemical Engineering, Universite de Technologie de Compiègne France	S3 : Modeling, Universiti Teknologi Malaysia	<ul style="list-style-type: none"> <li>• Modeling</li> <li>• System dynamic analysis</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> </ul>	Head Lecturer	101100809738		Environmental system analysis	√	<ul style="list-style-type: none"> <li>• Reactor</li> <li>• Chemical reaction technique</li> <li>• Pollution and damage control concepts</li> <li>• Process modeling and computing</li> <li>• Advanced chemical reaction technique</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
												<ul style="list-style-type: none"> <li>• New and renewable energy sources</li> <li>• System dynamic analysis</li> </ul>
18	Dr. Fuad Muhammad, S.Si., M.Sc.	<u>017067301</u>	S2 : Biology, Gadjah Mada University	S3 : Natural Resources and Environmental Management, Bogor Agricultural University	Conservation of natural resources and the environment	√	Head Lecturer			Conservation of natural resources and the environment Job training	√  √	<ul style="list-style-type: none"> <li>• Introduction to bioconservation</li> <li>• Ecotourism</li> <li>• Biodiversity</li> <li>• Scientific communication techniques</li> <li>• Environmental science</li> <li>• Ecology</li> <li>• Animal biodiversity</li> <li>• Introduction to social science</li> <li>• Ecological system</li> <li>• Ecotourism</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
19	Dr. Ing. Sudarno, S.T., M.Sc.	<u>00310</u> <u>17402</u>	S2 : Environmental Technology, Wageningen Univ. Netherlands	S3 : Environmental Technology, Karlsruhe Institute of Technology, Germany	<ul style="list-style-type: none"> <li>• Environmental Engineering</li> <li>• Environmental pollution control</li> </ul>	<p>√</p> <p>√</p>	Head Lecturer	12100100807178		<ul style="list-style-type: none"> <li>• Environmental pollution control</li> <li>• Mass transfer and transformation</li> <li>• Solid waste and B3 . treatment</li> </ul>	<p>√</p> <p>√</p> <p>√</p>	<ul style="list-style-type: none"> <li>• Clean technology and waste minimization</li> <li>• Scientific publications</li> <li>• Planning of waste water treatment buildings</li> <li>• Dissertation design</li> <li>• Pollution control technology</li> <li>• Scientific article writing</li> <li>• Waste water distribution</li> <li>• Introduction to environmental science and</li> </ul>



No.	Lecturer Name	NIDN/NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
												<p>engineering</p> <ul style="list-style-type: none"> <li>• Urban waste management system</li> <li>• Sludge treatment</li> <li>• Basic understanding of ecology</li> <li>• Environmental microbiology</li> </ul>
20	Mochamad Arief B., S.T., M.Eng.Sc., Ph.D.	<u>0030097402</u>	S2 : Environmental Engineering Science, Griffith University	S3 : Geo Environmental Engineering, Curtin University Of Technology	Environmental management	√	Head Lecturer	15100100802786		Ecology and environmental pollution	√	<ul style="list-style-type: none"> <li>• Research methodology</li> <li>• Engineering research methods</li> <li>• Waste management</li> <li>• Water resources engineering</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
												<ul style="list-style-type: none"> <li>• Environmental science</li> <li>• Introduction to environmental science and engineering</li> <li>• English</li> <li>• Environmental management system</li> </ul>
21	Dr. rer. nat. Thomas Triadi Putranto, S.T., M.Eng.	<u>011127705</u>	S2 : Geological Engineering, Gadjah Mada University	S3 : Hydrogeology, Rheinisch West Falische Technische Hochschule Aachen	Geotechnical	√	Head Lecturer	15100100804440		Mass transfer and transformation	√	<ul style="list-style-type: none"> <li>• Remote sensing geology</li> <li>• Watershed hydrology</li> <li>• Engineering economics</li> <li>• Geological drawing technique</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
												<ul style="list-style-type: none"> <li>• Engineering geology/dam foundation</li> <li>• Hydrogeology</li> <li>• Environmental science</li> <li>• Geostatistics-ka</li> <li>• Groundwater geochemistry</li> <li>• Geocomputing</li> </ul>
22	Dr. Jafron Wasiq Hidayat, M.Sc.	<u>0025036407</u>	S2 : Marine Biology, University of Wales	S3 : Coastal Resource Management, Diponegoro University	Bioecology of planktonic invertebrates	√	Lecturer	13100100800284		<ul style="list-style-type: none"> <li>• Ecology and biodiversity</li> <li>• Ecology and environmental pollution</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> </ul>	<ul style="list-style-type: none"> <li>• Marine biology</li> <li>• Biomonitoring</li> <li>• Research methodology</li> <li>• Ecotourism</li> <li>• Animal biodiversity</li> <li>• Carcinology</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
												<ul style="list-style-type: none"> <li>• Environmental science</li> <li>• Wildlife ecology</li> <li>• Molecular Biology</li> <li>• Experimental ecology</li> <li>• Ecotourism</li> </ul>
23	Dr. Eng. Maryono, S.T., M.T.	<u>0011087503</u>	S2 : Urban and Regional Planning, Bandung Institute of Technology	S3 : Urban and Environmental Engineering, Kyushu University	Environmental management planning	√	Lecturer	11100100807130		<ul style="list-style-type: none"> <li>• Environmental planning theories</li> <li>• Environmental psychology</li> <li>• Environmental management</li> <li>• Spatial planning and environment</li> </ul>	<ul style="list-style-type: none"> <li>√</li> <li>√</li> <li>√</li> <li>√</li> </ul>	<ul style="list-style-type: none"> <li>• Planning analysis method</li> <li>• Infrastructure planning</li> <li>• Spatial planning studio</li> <li>• City area infrastructure</li> <li>• Planning evaluation</li> <li>• Disaster mitigation</li> <li>• Spatial planning</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
												<ul style="list-style-type: none"> <li>theory and practice</li> <li>• Spatial and environmental dimensions</li> <li>• Residential systems and regional infrastructure</li> <li>• Advanced spatial analysis</li> <li>• Planning and development information system</li> <li>• Sustainable infrastructure management</li> </ul>
24	Dr. Budi Warsito, S.Si., M.Sc.	<u>0024087502</u>	S2 : Mathematics, Gadjah	S3 : Mathematics, Gadjah	Neural network	√	Lecturer	11100100802001		Environmental statistics	√	<ul style="list-style-type: none"> <li>• Data mining</li> <li>• Statistics</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
			Mada University	Mada University								<ul style="list-style-type: none"> <li>• Computational methods and statistics</li> <li>• Information system audit</li> <li>• Algorithms and programming</li> <li>• Advanced statistical computing</li> <li>• Control planning and project management</li> <li>• Basic statistics</li> </ul>
25	Dr. Ing. Suherman, S.T., M.T	<u>0004087601</u>	S2 : Chemical Engineering, Bandung Institute of Technology	S3 : Chemical Engineering, Otto Von Guericke Universitat	Clean technique	√	Lecturer	1110010081482		Clean technology	√	<ul style="list-style-type: none"> <li>• Humidification and drying</li> <li>• I separation technology</li> <li>• Solids and solids</li> </ul>

No.	Lecturer Name	NIDN/ NIDK	Postgraduate Education		Areas of expertise	Compatibility with PS Core Competencies	Academic Position	Professional Educator Certificate	Certificate of Competence/ Profession / Industry	Courses Taught at Accredited PS	The suitability of the field of expertise with the subject being taught	Courses Taught at Other PS
			Masters/ Applied Masters/ Specialist	Doctoral/ Applied Doctor/ Specialist								
1	2	3	4		5	6	7	8	9	10	11	12
				Magdeburg								transportation <ul style="list-style-type: none"> <li>• Advanced drying technology</li> <li>• Operation unit 1</li> <li>• Operation unit 3</li> <li>• Energy efficiency and pinch . technology</li> </ul>

**Information:**

NDT = Number of Permanent Lecturers of Higher Education assigned as tutors in accredited Study Programs.

NDTPS = Number of Permanent Lecturers of Higher Education assigned as tutors with areas of expertise that are in accordance with the core competencies of the accredited study program.

- 1) To be completed with the type of program (Master/Applied Master/Doctoral/Applied Doctorate) and the name of the study program in undergraduate education that you have attended.
- 2) Filled with areas of expertise according to post-graduate education that is relevant to the subject being taught.
- 3) Filled with a check mark V if the area of expertise is in accordance with the core competencies of the accredited study program.
- 4) Filled with Professional Educator Certificate number.
- 5) Filled with field of certification and certificate issuing agency. This data is filled in by the proposer and the study program in the Diploma Three program and the Applied Bachelor program
- 6) To be completed with the name of the course taught in the accredited study program at the time of TS-2 to TS.

7) Filled with a check mark V if the area of expertise corresponds to the subject being taught.

8) Filled with the name of the course taught by the DTPS outside of other study programs during TS-2 to TS.

Write down the DTPS assigned as the main supervisor for the student's final project (Final Report/Thesis//Thesis/Dissertation) 1) in the last 3 years by following the following format.

Table 3.a.2 Main Advisor for Final Project

No.	Lecturer Name	Number of Supervised Students								Average Number of Tutoring in all Programs/ Semesters
		on Accredited PS				on Other PS on the same Program at PT				
		TS-2	TS-1	TS	Average	TS-2	TS-1	TS	Average	
1	2	3	4	5	6	7	8	9	10	11
1	Prof. Drs. Sudharto P Hadi, MES, Ph.D.	1	3	1	1.7	6	6	4	5.3	3.5
2	Prof. Dr. Ir. Purwanto. DEA	2	2	4	2.7	6	6	6	6.0	4.3
3	Prof. Dr. Ir. Azis Nur Bambang, MS	2	1	1	1.3	6	6	4	5.3	3.3
4	Prof. Dr. Ir. Sutrisno Anggoro, M.Si.	2	1	1	1.3	6	6	5	5.7	3.5
5	Prof. Dr. Dra. Tri Retnaningsih Soeprobowati, M. App. Sc	1	5	1	2.3	2	2	2	2.0	2.2
6	Prof. Ir. Didi Dwi Anggoro, M. Eng., Ph.D.	1	1	1	1.0	6	6	2	4.7	2.8
7	Prof. Dr. rer. nat. Imam Buchori, S.T.	1	1	1	1.0	1	3	6	3.3	2.2
8	Prof. Dr. Istadi, S.T., M.T.	1	1	1	1.0	4	6	1	3.7	2.3
9	Prof. Dr. Denny Nugroho Sugianto, S.T., M.Si.	1	2	1	1.3	6	6	5	5.7	3.5
10	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	1	1	1	1.0	6	6	2	4.7	2.8
11	Prof. Dr. Hadiyanto, S.T., M.Sc.	2	6	5	4.3	2	4	4	3.3	3.8
12	Dr. Dra. Sunarsih, M.Si.	1	1	1	1.0	6	6	2	4.7	2.8
13	Dr. Ir. Hermawan, DEA	1	1	1	1.0	6	6	1	4.3	2.7
14	Dr. Rini Budihastuti, M.Sc.	1	1	1	1.0	6	1	1	2.7	1.8
15	Dr. Kismartini, M.Si.	1	4	1	2.0	6	6	6	6.0	4.0



No.	Lecturer Name	Number of Supervised Students								Average Number of Tutoring in all Programs/ Semesters
		on Accredited PS				on Other PS on the same Program at PT				
		TS-2	TS-1	TS	Average	TS-2	TS-1	TS	Average	
1	2	3	4	5	6	7	8	9	10	11
16	Dr. Hartuti Purnaweni, MPA	1	2	1	1.3	6	6	5	5.7	3.5
17	Dr. Ir. Setia Budi Sasongko, DEA	1	1	1	1.0	6	6	2	4.7	2.8
18	Dr. Fuad Muhammad, S.Si., M.Sc.	2	5	5	4.0	2	6	1	3.0	3.5
19	Dr. Ing. Sudarno, S.T., M.Sc.	1	2	1	1.3	6	4	4	4.7	3.0
20	Mochamad Arief B., S.T., M.Eng.Sc., Ph.D.	1	2	1	1.3	6	6	6	6.0	3.7
21	Dr. rer. nat. Thomas Triadi Putranto, S.T., M.Eng.	1	1	1	1.0	6	6	6	6.0	3.5
22	Dr. Jafro Wasiq Hidayat, M.Sc.	2	2	1	1.7	4	6	1	3.7	2.7
23	Dr. Eng. Maryono, S.T., M.T.	2	6	6	4.7	5	2	6	4.3	4.5
24	Dr. Budi Warsito, S.Si., M.Si.	1	1	1	1.0	3	3	6	4.0	2.5
25	Dr. Ing. Suherman, S.T., M.T.	1	2	1	1.3	1	1	1	1.0	1.2
									Average	3.1

Information:

- 1) Assignment as a student final project supervisor is evidenced by an assignment letter issued by UPPS.
- 2) Filled with the name of the lecturer assigned to be the main supervisor.
- 3) Filled with data on the number of students who are mentored in the Accredited Study Program.
- 4) Filled with data on the number of students who are mentored in other Study Programs in the same Program at the Higher Education.

Table 3.a.3 Equivalent Full Teaching Time (EWMP) of Permanent Lecturers in Higher Education

No.	Lecturer Name (DT)	DTPS	Equivalent Full Teaching Time (EWMP) at the time of TS in semester credit units (credits)						Amount (credit)	Average per Semester (credits)
			Education: Learning and Mentoring			Research	PKM	Additional and/or Supporting Tasks		
			Accredited PS	PS Other in PT	PS Other outside PT					
1	2	3	4	5	6	7	8	9	10	11
1	Prof. Drs. Sudharto P Hadi, MES, Ph.D.	V	0.34	15.75	0.00	8.20	2.08	6.50	32.87	16.44
2	Prof. Dr. Ir. Purwanto. DEA	V	0.34	16.52	0.00	9.20	2.80	5.50	34.36	17.18
3	Prof. Dr. Ir. Azis Nur Bambang, MS	V	1.18	16.18	0.00	9.00	2.00	4.00	32.36	16.18
4	Prof. Dr. Ir. Sutrisno Anggoro, M.Si.	V	0.34	16.07	0.00	8.00	2.00	6.75	33.16	16.58
5	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc	V	0.83	14.80	0.00	8.80	4.30	6.50	35.23	17.62
6	Prof. Ir. Didi Dwi Anggoro, M. Eng., Ph.D.	V	0.50	16.57	0.00	4.40	1.50	4.50	27.47	13.74
7	Prof. Dr. rer. nat. Imam Buchori, S.T.	V	0.50	11.75	0.00	9.60	2.20	7.05	31.10	15.55
8	Prof. Dr. Istadi, S.T., M.T.	V	0.50	14.01	0.00	5.20	4.70	7.00	31.41	15.71
9	Prof. Dr. Denny Nugroho Sugianto, S.T., M.Si.	V	0.67	16.04	0.00	6.40	2.90	5.25	31.26	15.63
10	Prof. Dr. rer. nat. Heru Susanto, ST., M.M., M.T.	V	0.17	16.02	0.00	8.20	5.10	6.25	35.74	17.87
11	Prof. Dr. Hadiyanto, S.T., M.Sc.	V	2.68	15.82	0.00	8.80	5.72	6.05	39.07	19.54
12	Dr. Sunarsih, M.Si.	V	0.84	14.76	0.00	6.20	1.50	7.65	30.95	15.48
13	Dr. Ir. Hermawan, DEA	V	0.50	16.84	0.00	4.80	3.00	6.50	31.64	15.82
14	Dr. Rini Budiastuti, M.Sc.	V	0.50	3.31	0.00	5.20	1.50	2.00	12.51	6.26
15	Dr. Kismartini, M.Si.	V	1.84	16.05	0.00	5.50	1.50	6.10	30.99	15.50
16	Dr. Hartuti Purnaweni, MPA	V	0.51	16.86	0.00	6.60	1.67	6.25	31.89	15.95
17	Dr. Ir. Setia Budi Sasongko, DEA	V	0.51	13.14	0.00	5.40	3.10	8.26	30.41	15.21
18	Dr. Fuad Muhammad, S.Si., M.Sc.	V	2.86	10.35	0.00	6.40	4.20	3.75	27.56	13.78
19	Dr. Ing. Sudarno, S.T., M.Sc.	V	2.35	15.00	0.00	5.80	5.56	5.75	34.46	17.23
20	Mochamad Arief B., S.T., M.Eng, Env.Eng, Ph.D	V	0.68	10.51	0.00	5.60	5.60	6.80	29.19	14.60
21	Dr. rer. nat. Thomas Triadi Putranto, ST, M.Eng.	V	0.85	13.92	0.00	7.00	5.00	5.95	32.72	16.36

No.	Lecturer Name (DT)	DTPS	Equivalent Full Teaching Time (EWMP) at the time of TS in semester credit units (credits)						Amount (credit)	Average per Semester (credits)
			Education: Learning and Mentoring			Research	PKM	Additional and/or Supporting Tasks		
			Accredited PS	PS Other in PT	PS Other outside PT					
1	2	3	4	5	6	7	8	9	10	11
22	Dr. Jafron Wasiq Hidayat, M.Sc.	V	0.68	9.64	0.00	6.00	3.00	2.90	22.22	11.11
23	Dr. Eng. Maryono, S.T., M.T.	V	2.67	12.41	0.00	3.20	3.00	7.05	28.33	14.17
24	Dr. Budi Warsito, S.Si., M.Si.	V	0.83	14.55	0.00	6.40	2.00	6.75	30.53	15.27
25	Dr. Ing. Suherman, S.T., M.T.	V	0.50	15.50	0.00	6.00	1.50	3.75	27.25	13.63
<b>Average</b>									<b>30.59</b>	<b>15.29</b>

Information:

1) Filled with check mark V for Permanent Lecturers of Higher Education assigned as tutors with areas of expertise that are in accordance with the core competencies of the accredited Study Program.

Write down the data of Non-Permanent Lecturers who are assigned as subject teachers in Accredited study programs (DTT) during TS by following the following Table 3.a.4 format.

Table 3.a.4 Non-Permanent Lecturers

No.	Lecturer Name	NIDN	Postgraduate Education 1)	Area of Expertise 2)	Academic Position	Professional Educator Certificate 3)	Courses Taught at Accredited PS4)	The suitability of the field of expertise with the subjects taught 5)
1	2	3	4	5	6	7	8	9
-	-	-	-	-	-	-	-	-

Σ	NDTT =							
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**Information:**

NDTT = Number of Non-Permanent Lecturers assigned as tutors in accredited Study Programs

- 1) To be completed with the type of program (applied master/master/doctor/applied doctor) and the name of the study program in post-graduate education that you have attended.
- 2) Filled with areas of expertise according to post-graduate education that is relevant to the subject being taught.
- 3) Filled with professional educator certificate number.
- 4) Filled with the name of the course taught in the accredited study program at the time of TS-2 to TS.
- 5) Filled with a check mark V if the area of expertise corresponds to the subject being taught.

## b. Lecturer Performance

Write down the acknowledgment/recognition of the expertise/achievement/performance of DTSPS received in the last 3 years by following the format of Table 3.b.1 below.

Table 3.b.1 DTSPS Recognition/Recognition

No.	Lecturer Name	Areas of expertise	Recognition and Supporting Evidence	Level			Year (YYYY)
				Region	National	International	
1	2	3	4	5	6	7	8
1	Prof. Drs. Sudharto P Hadi, MES, Ph.D.	Environmental policy	Resource Person for Pertamina Green and Gold Proper Evaluation, Denpasar, Bali			V	2017
		Environmental planning and community empowerment	Keynote speaker International Conference on Environment and Information System (ICENIS) Postgraduate School Diponegoro University			V	2017
		Environmental mediation and negotiation	Keynote speaker International Conference on Tropical Coastal Region Eco-Development LPPM UNDIK			V	2017
			Keynote speaker International Conference on Business, Economics and Social Science UNS Surakarta			V	2017
			Resource person University Tropical Course Ecotourism and Sustainable Development in Coastal Region, providing a topic on Sustainable Coastal Management. Organized by International Office, Diponegoro University, Semarang			V	2017
			Keynote speaker International Conference on Water Resource and Environment I-Shou University, Kaohsiung, Taiwan			V	2018
			Resource person for the Conference on Environmental Conservation through Language, Arts, Culture and Education. FBS UNNES			V	2019
			PROPER Advisory Council at the Ministry of Environment		V		2017
			Member of the Adiwiyata Advisory Council of the Ministry of Environment and Forestry		V		2017
			Giving a Public Lecture on BMKG World Meteorology Day, Jakarta		V		2017
			WIC Interconference resource person, Women in the Era of Globalization		V		2017
			Resource person for the Banten DRD Coordination Meeting, entitled Innovation for Community Welfare and Prosperity. Serang City		V		2017

No.	Lecturer Name	Areas of expertise	Recognition and Supporting Evidence	Level			Year (YYYY)
				Region	National	International	
1	2	3	4	5	6	7	8
			Resource Person for Proper Workshop on Sustainable Performance Improvement, PT PHE WMO, Surabaya		V		2017
			Resource person for Indonesia International Defense Science Seminar (IIDSS) with a paper entitled Social Dimension of Alternative Dispute Resolution (ADR) organized by the Defense University, Sentul Bogor		V		2017
			Resource Person for CSR Training Towards Gold Proper. PT PKT Bontang, East Kalimantan		V		2017
			Resource persons for Coordination Meeting on Natural Resources Management and Food Sovereignty with the title Material Management of Natural Resources Realizing Food Sovereignty. Organized by the Bureau of Infrastructure and Natural Resources (SDA), Semarang		V		2017
			Resource person for Workshop on Green Business, PHE, Jakarta		V		2017
			Presented a paper entitled Community Based Coastal Management: Lesson from the Field at ICTCRED, Yogyakarta		V		2017
			Resource person for the National Conference on ASBIS. Banjarmasin State Polytechnic		V		2017
			Resource Person for Proper Talkshow with the topic of Creating Value Collaboration between Government, Business and Society, KLHK, Jakarta		V		2017
			Resource Person for Proper Evaluation of PHE ONWJ, Sentul, Bogor		V		2018
			Resource Person for 2017 Proper Evaluation Workshop and Strategy for Sustainability of Proper Gold in 2018, PT PHE WMO, Nusa Dua, Bali		V		2018
			Resource persons, Proper Gold Knowledge Sharing Workshop, PT PKT Bontang, East Kalimantan		V		2018
			Resource persons for FGD Mapping Environmental and Forestry Issues. Organized by Center for Strategic Policy Studies, KLHK, Jakarta		V		2018

No.	Lecturer Name	Areas of expertise	Recognition and Supporting Evidence	Level			Year (YYYY)
				Region	National	International	
1	2	3	4	5	6	7	8
			Resource Person for 2018 Kalimantan Ecoregion Technical Working Meeting, Balikpapan		V		2018
			Resource person for Regional Coordination Meeting for Research and Development, Palangkaraya City Research and Development Agency		V		2018
			Resource Person for Multi-stakeholder Synergy Workshop in order to strengthen the Institutional Environmental Service to Support the Protection and Management of the Regional Environment in the Sumatra Ecoregion, Pekanbaru		V		2018
			Resource Person for Proper Workshop PT PHE WMO: Sustainable Environmental Management and Protection, Surabaya		V		2018
			Resource Person for Environmental Planning Training in Development. PSIL Cooperation with Bappenas		V		2018
			Resource Person for the Seminar on Good Corporate Governance Development of PT Indonesia Power UPJP Priok Based on Gold Proper, Jakarta		V		2018
			Resource persons for Monitoring the Implementation of Law 32 of 2009 concerning Environmental Protection and Management with the Expert Team of the DPR RI and PPLH Lemlit UNDIP, Semarang		V		2018
			Green and Gold Proper Workshop, Star Energy, Jakarta		V		2018
			Resource Person for Knowledge Sharing of Proper Participating Companies in Green and Gold Ranks at the Proper Environmental Award Night, entitled Synergizing the Triple Bottom Line through Proper. Jakarta		V		2018
			Resource persons for the 2018 Proper Evaluation Workshop and the Preparation of the 2019 Proper Road Map for AP PHE, Bogor		V		2019
			Resource Person for Environmental Management Performance Evaluation of PT PJB, Bromo, Probolinggo		V		2019
			Resource Person for Pertamina and AP Proper Evaluation Workshop, Banyuwangi		V		2019

No.	Lecturer Name	Areas of expertise	Recognition and Supporting Evidence	Level			Year (YYYY)
				Region	National	International	
1	2	3	4	5	6	7	8
			Resource Person for Sharing Session Proper Evaluation of PT Indonesia Power and AP, Pullman Hotel, Legian, Kuta, Bali		V		2019
			Resource Person for Proper Workshop of PT Pertamina Hulu Indonesia (PHI), Balikpapan		V		2019
			Resource person for ADR Training, Cooperation between PT PHE and PPLH LPPM UNDIP, Jakarta		V		2019
			Resource person for Knowledge Sharing about Proper PT PKT Bontang		V		2019
			Speaker of the Talk Show with the topic of the Company's Role in Environmental Protection in the context of Nature & Sustainability Days, Danone, Hotel Santika, Bogor		V		2019
			Resource persons for Proper PHE WMO Workshop, Ubud, Bali		V		2019
			Resource Person for Discussion of Corporate Social and Environmental Responsibility Book Contextualization of PT PKT Bontang. Bontang, East Kalimantan		V		2019
			Resource person for Seminar on Bio-Farma Sustainable Business: Mainstreaming the Environment and Social Responsibility. Bio Farma, Bandung		V		2019
			Resource Person for Green and Gold Proper Technical Guidance at PT Danone-Aqua, Ciherang, Bogor		V		2019
			Resource Person for PT Pertamina Gas (Pertagas) Proper Workshop, Lubricant Building, Jakarta		V		2019
			Resource Person for Workshop on Proper Performance Improvement of PT Semen Indonesia Tuban, Tretes, Prigen, Pasuruan Factory Pabrik		V		2019
			Resource Person for CSR Synergy Talk Show. PT PJB, Paiton Probolinggo, East Java		V		2019
			Resource Person Launching Extra-Curricular Waste Management Module for Elementary and Junior High School Students in Klungkung Regency, Bali		V		2019



No.	Lecturer Name	Areas of expertise	Recognition and Supporting Evidence	Level			Year (YYYY)
				Region	National	International	
1	2	3	4	5	6	7	8
			Resource Person for CSR and Environment Workshop, Badak LNG, Bontang, East Kalimantan		V		2019
			Resource Person for Discussion on Draft Book of KLHS Potpourri, P3EJ, Yogyakarta		V		2019
			Resource person and moderator of the Environmental Partnership's FGD for the Achievement of the SDGs. Cooperation between KLHK and I-SER UI. Jakarta		V		2019
			Resource Person for Sustainable Space Utilization Workshop. Balitbang and DRD West Sumatra, Padang		V		2019
			Speaker of the Talkshow Cultivating CSR in the context of the 74th National Electricity Day. PLN Jakarta		V		2019
			Workshop Resource Person Towards PT Phapros Gold Proper, Semarang	V			2017
			FGD resource persons for the preparation of the UNNES Conservation Values Book	V			2017
			Resource person for Central Java DRD Coordination Meeting, entitled Innovation for Community Welfare. Kebumen	V			2017
			Inspirational Leadership Forum (ILF) resource person, HMJ Business Administration FISIP UNDIP, Semarang	V			2017
			Resource person for Sustainable Development Planning Training with a paper entitled Sustainable Development. Cooperation between Bappenas and PSIL SPS UNDIP, Semarang	V			2017
			Resource Person for Regional and Urban Planning Briefing with the title of Environmental Dimensions of Spatial Planning. Organized by the Association of Planning Experts with MPWK UNDIP	V			2017
			Resource persons on the topic of Humans and the Environment, AMDAL Training, PPLH UNDIP	V			2017
			Resource persons for Workshop on Knitting the Future of Rawapening Lake, PSIL and BP2TPDAS, KLHK), Semarang	V			2017

No.	Lecturer Name	Areas of expertise	Recognition and Supporting Evidence	Level			Year (YYYY)
				Region	National	International	
1	2	3	4	5	6	7	8
			Speaker of the Low Carbon Society Discussion in Semarang. Cooperation of PSIL SPS UNDIP with IGES, Japan. Semarang	V			2018
			Speaker of the National Waste Care Day Talkshow (HSPN). DLH Semarang City	V			2018
			Resource person for Public Lecture on Social and Environmental Issues on Forest in Indonesia Cooperation of FISIP UNDIP with American Institute for Indonesian Studies, Semarang	V			2018
			Resource persons for FGD Partnership in Efforts to Preserve and Protect Water Resources in the framework of HAD XXVI 2018. Semarang	V			2018
			Speaker of the Seminar on the PKS MPR Faction with the theme State Policy as a Model for National Development Planning in a Constitutional Perspective. Semarang	V			2018
			Resource Person for Discussion Commemorating Environment Day with the theme of Environmental Improvement for the Welfare of the People of Central Java. Held by PSIL SPS UNDIP	V			2018
			Resource Person for Guiding the Duties and Roles of Lecturers at USM, Semarang	V			2018
			Head of the Jury Team for Writing Competititon Beswan Djarum Central Java-DIY, Semarang	V			2018
			Resource persons Plenary Session, ICISPE 2018, presented a paper entitled Sustainable Development: Current Problems and Future Challenges, Semarang	V			2018
			Resource person for the International Seminar on Water as Leverage for Resilient Cities Asia, Towards a Resilient Semarang through Integrated Water Management. Semarang City Government	V			2019
			Resource person for the National Seminar on Community Development for Environmental Management. Cooperation between HMJ Environmental Engineering FT UNDIP with PT Indonesia Power, Semarang	V			2019

No.	Lecturer Name	Areas of expertise	Recognition and Supporting Evidence	Level			Year (YYYY)
				Region	National	International	
1	2	3	4	5	6	7	8
			Teaching Human Ecology and Social Aspects of AMDAL, AMDAL Basics Course, PPLH Lemlit UNDIP, Semarang	V			2019
			Resource persons for Kendal Industrial Estate Workshop: Sustainable Environment, Regional Economic Growth and Job Opportunities. Organized by IKA PMII Kendal Regency	V			2019
			Resource person for FGD on Climate Change, KLHK, Semarang	V			2019
			Book Author and Resource Person for Book Review and Discussion on Air Quality in the context of Commemorating Environmental Day 2019, SPS UNDIP	V			2019
			Resource person for the National Seminar on Post-Disaster Health and Environmental Mitigation. Udinus, Semarang	V			2019
			Resource Person for Environmental Planning Training in Development, SPS UNDIP, Oak Tree Hotel, Semarang	V			2019
			Lecturer on Growing a Culture of Environmental Care, Dharma Wanita Work Meeting, Central Java Province. Semarang	V			2019
			Resource Person for Metro News Dialogue Land Subsidence in Semarang City, Studio Metro TV, Madukoro Raya Puri Anjasmoro, Semarang	V			2019
2	Prof. Dr. Ir. Purwanto. DEA	Clean Technology	Speaker of the National Chemistry Seminar at the 2019 National Chemistry Fair at Yogyakarta State University		V		2019
		Eco-efficiency and sustainable development	Resource Person for EIA Fundamental Education and Training Institute for Research and Community Service at Diponegoro University	V			2019
		Environmental and Natural Resources Modeling	Speaker of the Public Lecture of the Graduate School of Hasanuddin University with the theme "Improving the Quality of Research and Writing of Postgraduate Scientific Papers"		V		2019
		Management of solid waste and B3	Expert Team of Center for Excellence in Science and Technology Batch II in June 2019		V		2019

No.	Lecturer Name	Areas of expertise	Recognition and Supporting Evidence	Level			Year (YYYY)
				Region	National	International	
1	2	3	4	5	6	7	8
		Environmental management system	Expert Team of Center for Excellence in Science and Technology Batch II in July 2019		V		2019
			Speaker of the Workshop "Managing the Environment and Guarding Sustainable Capital Development" at the Association of Environmental Professionals		V		2019
			Resource Person for Training of Trainer Activities for Non-Degree Environmental Planning in Development: Cooperation between Pusbindiklatren Bappenas-Master of Environmental Science Study Program, Postgraduate School of Diponegoro University	V			2019
			Speakers of Non-Degree Education and Training on Environmental Planning in Development 2019 Collaboration between the Pusbindiklatren of Bappenas and the Postgraduate Environmental Science Masters Study Program and the Center for Excellence in Environmental and Sustainability Sciences DRPMI Padjadjaran University		V		2019
			Speaker at the Inaugural Lecture with the Theme "Competence of Graduates Facing the Industrial Revolution 4.0" at Mataram University		V		2019
			Speaker of the Plastic Waste Management Workshop at the Association of Indonesian Muslim Intellectuals		V		2019
			Expert Team of Center for Excellence in Science and Technology September 2019		V		2019
			Keynote Speaker on International Conference on Environmental and Science Education (ICESE) 2019			V	2019
3	Prof. Dr. Ir. Azis Nur Bambang, MS	Natural resources and environment	Resource Person in Public Discussion "Back to the sea: Ministry of Marine Affairs and Fisheries Policy on Fishing Governance"	V			2017
			Speaker of the OPD Forum in the framework of Compiling the 2018 Central Java Provincial RKPD with the policy title "Strengthening Food and Energy Security Supported by Agricultural Development and Sustainable Energy Development"		V		2018

No.	Lecturer Name	Areas of expertise	Recognition and Supporting Evidence	Level			Year (YYYY)
				Region	National	International	
1	2	3	4	5	6	7	8
4	Prof. Dr. Ir. Sutrisno Anggoro, M. Si.	Fisheries and waters	Keynote Speaker at the National Seminar "The Effect of Coastal Reclamation on Community Welfare and Environmentally Sustainable Development"		V		2017
			Resource Person for Marine Protected Area Management : KLHK		V		2017
			Resource person Reclamation and its impact on coastal ecosystems: Enviroxiland National Seminar		V		2017
			Resource Person for Coastal and Marine Conservation: KKP Jakarta		V		2017
			KLHS Expert Team-Revised Zoning Plan for Coastal Areas & Small Islands Central Java Province	V			2017
			Resource Person for the Department of Marine Affairs and Fisheries of Central Java Province	V			2017
			Resource Person for Java Sea Spatial Plan	V			2017
			Expert Team for Revised Zoning Plan for Coastal Zone & Small Islands Prov. Central Java	V			2017
			Member of the Semarang City Development Advisory Council (DP2K)	V			2017
5	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc	Environmental quality bioindicator	Member of the Nuclear Association			V	2017
			Expert Team- Ministry of Environment RI		V		2017
			Expert in PSDA TARU Central Java Province	V			2017
6	Prof. Ir. Didi Dwi Anggoro, M. Eng., Ph.D.	Catalyst	Reviewer of the journal Chemical Engineering Transactions (CET) - Q2			V	2017
		Technology and energy management planning	Journal Analytical and Application Pyrolysis (JAAP) reviewer - Q1			V	2018
7	Prof. Dr. rer. nat. Imam Buchori, S.T.	Spatial and environment	Invited speaker at The 2nd International Conference on SMART CITY Innovation			V	2019
		transportation modeling	Journal reviewer on Applied Spatial Analysis and Policy			V	2019
		Geomatics for Sustainable development	JCIT journal reviewer			V	2019
		Location analysis for public facilities	Reviewer of the Journal of Regional and Rural Development Planning-JP2WD		V		2017

No.	Lecturer Name	Areas of expertise	Recognition and Supporting Evidence	Level			Year (YYYY)
				Region	National	International	
1	2	3	4	5	6	7	8
		Geomatics of Spatial Planning	Reviewer of the Journal of Regional and Rural Development Planning-JP2WD		V		2018
		Disaster Mitigation	Mitra Bestari Journal of Sociotechnology Bandung Institute of Technology		V		2018
8	Prof. Dr. Istadi, S.T., M.T.	Catalyst and plasma	The 3rd International Conference on Chemical and Material Engineering 2018, Semarang-Indonesia, 19 September 2018, title: "A Hybrid Catalytic-Plasma Reactor for Energy and Chemical Conversions".			V	2018
9	Prof. Dr. Denny Nugroho Sugianto, S.T., M.Si.	Infrastructure development and GIS	Mitra Bestari Journal of Meteorology and Geophysics Volume 20 No 1 Year 2019		V		2019
10	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	Membrane technology and materials	Reviewer Journal of Food Engineering			V	2017
		Water treatment technology	Reviewer at ICSCI Journal			V	2019
11	Prof. Dr. Hadiyanto, S.T, M.Sc.	Chemical engineering	Keynote Speaker at the International Conference on Climate Change, Wangfujing, China			V	2019
			Keynote speaker at the 7th European Conference on Renewable Energy System, Madrid/Spain			V	2019
			External assessor at Universiti Malaysia Terengganu . Institute of Oceanography and Surroundings			V	2019
			External assessor at Faculty of Marine and Informatics Vocational Technology			V	2019
			Reviewer paper at The 2nd International Conference on SMART CITY Innovation			V	2019
			Reviewer of the process engineering journal of the Department of Chemical Engineering, Gadjah Mada University		V		2019
			Speaker at Upgrading and Assistance Workshop on Journal Governance Towards an International Reputation		V		2019

No.	Lecturer Name	Areas of expertise	Recognition and Supporting Evidence	Level			Year (YYYY)
				Region	National	International	
1	2	3	4	5	6	7	8
			Reviewer of the process engineering journal of the Department of Chemical Engineering, Gadjah Mada University		V		2019
12	Dr. Sunarsih, M.Si.	Environmental statistics	Keynote speaker at The 13th International Conference on QIR (Quality in Research) 20 Modeling of Domestic Waste water Treatment Facultative Stabilization Ponds, Organized by :Faculty of Engineering Universitas Indonesia			V	2017
13	Dr. Ir. Hermawan, DEA	Technology and energy management planning	Semarang City Building Expert Team for the 2019 service period	V			2019
14	Dr. Kismartini, M.Si.	Environmental policy	DPP Indonesian Qualitative Research Association Management		V		2017
15	Dr. Hartuti Purnaweni, MPA	AMDAL, Environmental policy and planning	Keynote speaker workshop 1 Proper IP Grati Pasuruan "Results of Review of Social Mapping Proper IP Grati Pasuruan Document Draft"		V		2017
			Keynote speaker workshop 2 Proper IP Grati Pasuruan "Results of the Review of the Social Mapping Proper IP Grati Pasuruan Document Draft"		V		2017
			Member of the Kendeng KLHS Drafting Team (KLHK team-Presidential Staff Office)		V		2017
			LSP LH INKALINDO Assessor (Inkalindo Environmental Professional Certification Agency)		V		2017
			Keynote speaker Coordination on Environmental Services for Nature Tourism in Production Forests, Bureau of Infrastructure and Natural Resources, Central Java Province	V			2017
			Keynote speaker Talkshow about Caring for Garbage by the Department of Environment and Cleanliness of the City of Semarang Protecting the Beauty of Nature, Mountains and the Sea from Garbage "	V			2017
			Keynote speaker commemorating Semarang City Environment Day "One with Nature"	V			2017
			The resource person in the Good To Great (GtG) Idola Radio 92.6 FM Semarang interview, on Monday 12 June 2017, at 8.35 WIB, about "The Java Sea is increasingly polluted, what are the	V			2017

No.	Lecturer Name	Areas of expertise	Recognition and Supporting Evidence	Level			Year (YYYY)
				Region	National	International	
1	2	3	4	5	6	7	8
			dangers and how to overcome them"				
16	Dr. Ing. Sudarno, S.T., M.Sc.	Environmental pollution control	Quality Manager in LSP LH INKALINDO (Inkalindo Environmental Professional Certification Institute)		V		2017
			Expert/Honorary Council for Environmental Engineering Vocational Board – BKTL Indonesian Engineers Association		V		2017
			Quality Manager in LSP LH INKALINDO (Inkalindo Environmental Professional Certification Institute)		V		2018
			Expert/Honorary Council for Environmental Engineering Vocational Board – BKTL Indonesian Engineers Association		V		2018
			Quality Manager in LSP LH INKALINDO (Inkalindo Environmental Professional Certification Institute)		V		2019
			Expert/Honorary Council for Environmental Engineering Vocational Board – BKTL Indonesian Engineers Association		V		2019
17	Dr. rer. nat. Thomas Triadi Putranto, S.T., M.Eng.	Geotechnical	The Best Poster Paper at the Second Annual Scientific Meeting of the Indonesian Association of Groundwater Experts		V		2017
			Speakers of Community Preparedness Training in Facing Disasters for the Tangguh Semarang City Partnership Coalition Program		V		2018
			Resource Person for Workshop on Development Results in the Energy and Mineral Resources Sector in Central Java		V		2018
18	Dr. Eng. Maryono, S.T., M.T.	Environmental risk, disaster and waste management	Keynote Speaker International Conference of 6th Annual Meeting Low Carbon Society Bangkok			V	2017
			Keynote Speaker International Conference of Sustainable City in Asia Pacific			V	2017
			Keynote Speaker of the National Seminar on Disaster Waste Management			V	2018
			Invited speaker special session of disaster waste management in 3RINC's Bangkok February 2019		V		2019



No.	Lecturer Name	Areas of expertise	Recognition and Supporting Evidence	Level			Year (YYYY)
				Region	National	International	
1	2	3	4	5	6	7	8
			Resource Person for Solid Waste Management in Asia Pacific Islands (SWAPI) Meeting, Tokyo		V		2019
			Resource persons in field assessment activities in the context of accreditation at the Environmental Engineering Undergraduate Study Program, Faculty of Engineering, Malang Institute of Technology		V		2019
			Resource persons in field assessment activities in the context of accreditation at the Environmental Science Masters Study Program, Padang State University Postgraduate Program		V		2019
			Resource persons in field assessment activities in the context of accreditation at the Environmental Engineering S1 Study Program, Faculty of Engineering, Mulawarman University		V		2019
			Semarang Climate Village National Seminar	V			2018
19	Dr. Budi Warsito, S.Si., M.Sc.	Statistics	The Int. Seminar on Mathematics in Industry & International Conference on Theoretical and Applied Statistics (ISMI-ICTAS) UTM Kuala Lumpur			V	2018
			Invited speaker at the National Seminar on Statistics, Tadulako University Palu		V		2018
			Resource Person for Scientific Writing Training with Latex at TNI AL Headquarters Cilangkap		V		2019
			Resource Person for Structural Equation Model Training with AMOS at TNI AL Headquarters Cilangkap		V		2019
			FGD Resource Person for Increasing Community Initiatives in Climate Change (KemenLHK-UNDIP)		V		2019

Information:

- 1) Recognition/recognition of the expertise/achievement/performance of DTPS can be in the form of:
  - a) become a visiting lecturer or visiting scholar in an accredited A/Excellent study program/college or reputable international study program/college.
  - b) be a keynote speaker/invited speaker at national/international scientific meetings.
  - c) Become an editor or peer reviewer in an accredited national journal/international journal with a reputation in the field according to the field of study program.

- d) become an expert staff/resource person at regional/national/international institutions in fields that are in accordance with the field of study program (for proposers from study programs in Bachelor/Master/Doctoral programs), or become experts/consultants at regional/national institutions/industry levels /international in a field that is in accordance with the field of study program (for applicants from study programs in the Diploma Three/Applied Bachelor/Applied Master/Applied Doctorate program).
- e) received awards for achievements and performance at the regional/national/international level.

2) Filled with a check mark V in the appropriate column.

Write down the number of research titles 1) that are relevant to the field of study program based on the source of funding carried out by DTPS in TS-2 to TS, following the format of Table 3.b.2 below.

Table 3.b.2 DTPS Research

No.	Sources of financing	Number of Titles			amount
		TS-2	TS-1	TS	
1	2	3	4	5	6
1	a) College b) Independent 2)	16	10	3	29
2	Domestic Institutions (outside PT)	22	19	25	66
3	Overseas Institutions	0	7	1	8
amount		38	36	28	103

Information:

- 1) Research activities are registered in the unit/institution that manages research activities at the Higher Education/Upps level.
- 2) Research with funding sources from DTPS.

Write down the number of titles for Community Service (PkM) 1) that are relevant to the field of study program based on the source of funding carried out by DTPS in TS-2 to TS, following the format of Table 3.b.3 below.

Table 3.b.3 Community Service (PkM) DTPS

No.	Sources of financing	Number of Titles			amount
		TS-2	TS-1	TS	
1	2	3	4	5	6
1	a) College b) Independent 2)	16	15	19	50
2	Domestic Institutions (outside PT)	7	13	6	26
3	Overseas Institutions	2	0	1	3
amount		25	28	26	79

Information:

- 1) PkM activities are recorded in the unit/institution that manages PkM activities at the Higher Education/Upps level.
- 2) PkM with funding sources from DTPS.

The following table 3.b.4 is filled out by the proposer from the Study Program in the Bachelor/Master/Doctorate program.

Write down the number of scientific publications with titles relevant to the field of study program produced by DTPS in the last 3 years, following the format of Table 3.b.4 below.

Table 3.b.4 DTPS Scientific Publications

No.	Publication Media	Number of Titles			amount
		TS-2	TS-1	TS	
1	2	3	4	5	6
1	Unaccredited national journal	9	10	8	27
2	Accredited national journal	70	62	48	180
3	International Journal	44	37	12	93
4	Reputable international journal	38	71	42	151
5	Regional/local/college seminars	8	0	0	0
6	National Seminar	13	12	4	29
7	International Seminar	30	57	19	106
8	Writing in regional mass media	0	0	0	0
9	Writing in the national mass media	1	0	0	1
10	Writing in international mass media	0	0	0	0
amount		<b>213</b>	<b>249</b>	<b>133</b>	<b>595</b>

The following table 3.b.4 is filled out by the proposer from the Study Program in the Diploma Three/Applied Bachelor/Applied Master/Applied Doctoral program.

Write down the number of scientific performances/exhibitions/presentations/publications with themes relevant to the field of study program produced by DTPS in the last 3 years, following the format of Table 3.b.4 below.

Table 3.b.4 DTPS Scientific Shows/exhibitions/presentations/publications

No.	Publication Media	Number of Titles			amount
		TS-2	TS-1	TS	
1	2	3	4	5	6
1	Publications in non-accredited national journals				NA1 =
2	Publication in accredited national journals				NA2 =
3	Publication in international journals				NA3 =
4	Publication in reputable international journals				NA4 =
5	Publication at regional/local/college seminars				NB1 =
6	Publication at national seminars				NB2 =
7	Publication at international seminars				NB3 =
8	Performances/exhibitions/presentations in forums at the regional level				NC1 =
9	Performances/exhibitions/presentations in forums at the national level				NC2 =

10	Performances/exhibitions/presentations in international forums				NC3 =
amount					

The following table 3.b.5 is filled out by the proposer from the study program in the Applied Bachelor/Bachelor/Master/Applied Master/Doctorate/Applied Doctoral program.

Write the title of the DTPS scientific work article cited in the last 3 years by following the format of Table 3.b.5 below. The title of the cited article must be relevant to the field of study program.

Table 3.b.5 DTPS Scientific Works cited in the last 3 years

No.	Lecturer Name	Article Title Citation (Journal, Volume, Year, Number, Page)	Number of Citation
1	2	3	4
1	Prof. Drs. Sudharto P. Hadi, MES, Ph.D.	In search for sustainable coastal management: A case study of Semarang, Indonesia (IOP Conference Series: Earth and Environmental Science, Vol 55, 2017, No 1, Page 012054)	6
2	Prof. Drs. Sudharto P. Hadi, MES, Ph.D.	Sedulur Sikep's Environmental Wisdom in Conservation of North Kendeng Mountains Sukolilo (Advanced Science Letters, Vol 23, 2017, No 3, Page 2504-2506)	5
3	Prof. Drs. Sudharto P. Hadi, MES, Ph.D.	Challenges for the Development of Resilient Coastal Area Program in Timbulsloko Village Sayung District Demak Regency (Advanced Science Letters, Vol 23, 2017, No 3, Page 2582-2583)	4
4	Prof. Drs. Sudharto P. Hadi, MES, Ph.D.	Settlement adaptation on a seawater tide overflow area at the north part of Semarang, Indonesia (Journal of Flood Risk Management, Vol 10, 2017, No 4, Page 535-545)	3
5	Prof. Drs. Sudharto P. Hadi, MES, Ph.D.	Indigenous Peoples Involment At The Environmental Impact Assessment (EIA) Process in Tabi Mamta Area Of Papua Province (E3S Web of Conferences, Vol 31, 2018, Pg 08017)	3
6	Prof. Drs. Sudharto P. Hadi, MES, Ph.D.	Mangrove Cultivation For Dealing With Coastal Abrasion Case Study Of Karangsong (E3S Web of Conferences, Vol 31, 2018, Hal 08028)	3
7	Prof. Drs. Sudharto P. Hadi, MES, Ph.D.	Gendering the Climate Change Policy: A Study of Gender Analysis on Semarang's Integrated City Climate Strategy (Advanced Science Letters, Vol 23, 2017, No 3, Page 2556-2558)	2
8	Prof. Drs. Sudharto P. Hadi, MES, Ph.D.	Quantification of Greenhouse Gas Emissions from Municipal Solid Waste Recycling and Disposal in Malang City Indonesia (Journal of Ecological Engineering, Vol 18, 2017, No 3)	2
9	Prof. Drs. Sudharto P. Hadi, MES, Ph.D.	Coastal Community Group for Coastal Resilient in Timbulsloko Village, Sayung, Demak Regency, Indonesia (E3S Web of Conferences, Vol 31, 2018, Page 09009)	2

No.	Lecturer Name	Article Title Citation (Journal, Volume, Year, Number, Page)	Number of Citation
1	2	3	4
10	Prof. Drs. Sudharto P. Hadi, MES, Ph.D.	Analysis on the Implementation of Green Budgeting in Central Java Province (Advanced Science Letters, Vol 23, 2017, No 3, Page 2268-2272)	1
11	Prof. Drs. Sudharto P. Hadi, MES, Ph.D.	Current Problems of Environmental Policy: Case Studies of Central Java, Indonesia (Advanced Science Letters, Vol 23, 2017, No 3, Pages 2489-2491)	1
12	Prof. Drs. Sudharto P. Hadi, MES, Ph.D.	Environmental and Social Dimension of CSR: Case Study of PT PKT Bontang, East Kalimantan, Indonesia (Advanced Science Letters, Vol 23, 2017, No 3, Page 2579-2581)	1
13	Prof. Drs. Sudharto P. Hadi, MES, Ph.D.	The Environmental Impact Study Of Micro Hydro Power In Pekalongan Indonesia (E3S Web of Conferences, Vol 31, 2018, Pg 08007)	1
14	Prof. Dr. Ir. Purwanto. DEA	Reversible Anaerob-Evapotranspiration Process for Removal of High Strength Ammonium in Leachate from Tropical Landfill (Advanced Science Letters, Vol 23, 2017, No 3, Page 2586-2588)	4
15	Prof. Dr. Ir. Purwanto. DEA	Developing Environmentally Friendly Campus at Diponegoro University (Advanced Science Letters, Vol 23, 2017, No 3, Page 2584-2585)	3
16	Prof. Dr. Ir. Purwanto. DEA	A kriging method for mapping underground mine air pollution (Advanced Science Letters, Vol 23, 2017, No 3, Page 2329-2332)	3
17	Prof. Dr. Ir. Purwanto. DEA	Quantification Of Greenhouse Gas Emissions from Municipal Solid Waste Recycling and Disposal in Malang City Indonesia (Journal of Ecological Engineering, Vol 18, 2017, No 3, pp 74-82)	2
18	Prof. Dr. Ir. Purwanto. DEA	Characteristics and Household Toxic Hazardous Waste Generation Based on Economic Status and Topographic Regions in Semarang City, Indonesia (Journal of Ecological Engineering, Vol 18, 2017, No 5)	2
19	Prof. Dr. Ir. Purwanto. DEA	Application of aspen plus for municipal solid waste plasma gasification simulation: case study of Jatibarang Landfill in Semarang Indonesia (Journal of Physics: Conference Series, Vol 1025, 2018, No 1, Page 012006)	2
20	Prof. Dr. Ir. Purwanto. DEA	The Potential of KemiriSunan as Feedstock for the Production of Biodiesel (Advanced Science Letters, Vol 23, 2017, No 3, Page 2524-2526)	1
21	Prof. Dr. Ir. Purwanto. DEA	The Management Of Toxic and Hazardous Waste Materials In The Food Industry (E3S Web of Conferences, Vol 73, 2018, Pg 07020)	1
22	Prof. Dr. Ir. Purwanto. DEA	Evaluation of Livestock Waste Management to Energy Biogas (Case Study: Jetak Village, Getasan Sub District) (E3S Web of Conferences, Vol 73, 2018, Page 07013)	1
23	Prof. Dr. Ir. Purwanto. DEA	Managing Campus Energy: Compromising between Rapid Needs and Environmental Requirements (E3S Web of Conferences, Vol 31, 2018, Pg 01003)	1

No.	Lecturer Name	Article Title Citation (Journal, Volume, Year, Number, Page)	Number of Citation
1	2	3	4
24	Prof. Dr. Ir. Purwanto. DEA	Decreasing of BOD Concentration on Artificial Domestic Wastewater Using Anaerobic Biofilter Reactor Technology (E3S Web of Conferences, Vol 31, 2018, Pg 03016)	1
25	Prof. Dr. Ir. Purwanto. DEA	Performance of Anaerobic Baffled Reactor with Three Compartments in Removal of COD of Wastewater of Chilly Sauce (E3S Web of Conferences, Vol 31, 2018, Pg 03008)	1
26	Prof. Dr. Ir. Purwanto. DEA	Water Quality Analysis for Fluoride Concentrations in Fluoridated Drinking Water Distribution Network Systems (ENSAINS JOURNAL, Vol 2, 2019, No 1, Pages 11-18)	1
27	Prof. Dr. Ir. Azis Nur Bambang, MS	Strategy to Improve the Sustainability Status of Batu City as an Agropolitan Area (Ekosains, Vol 5, 2013)	14
28	Prof. Dr. Ir. Azis Nur Bambang, MS	Vegetation Structure of Natural Forests and Redegraded Forests in Tesso Nilo National Park (Journal of Environmental Science, Vol 14, 2016, Pages 19-26)	12
29	Prof. Dr. Ir. Azis Nur Bambang, MS	Water quality of the Garang River, Semarang, Central Java, Indonesia based on the government regulation standard (Journal of Physics: Conference Series, Vol 1025, 2018, No 1, Page 012037)	8
30	Prof. Dr. Ir. Azis Nur Bambang, MS	Analysis of heavy metal content of Pb in ballast water tank of commercial vessels in port of Tanjung Emas Semarang, Central Java Province (AIP Conference Proceedings, Vol 1818, 2017, Pg 020061)	5
31	Prof. Dr. Ir. Azis Nur Bambang, MS	The Effect of Mangrove on Fish Catch Using Belat at Teluk Pemedas and Sanipah of Kutai Kartanegara Regency, East Kalimantan Province, Indonesia (E3S Web of Conferences, Vol 31, 2018, Page 08029)	4
32	Prof. Dr. Ir. Sutrisno Anggoro, M. Si.	Relationship of Organic Matter with Water Productivity in Water Hyacinth Covered Areas, Open Waters of Floating Cages in Rawa Pening, Semarang Regency, Central Java (Management of Aquatic Resources Journal, Vol 3, 2014, pp 37-43)	24
33	Prof. Dr. Ir. Sutrisno Anggoro, M. Si.	Study of Environmental Quality and Suitability of Tanjung Pesona Beach Tourism, Bangka Regency (Undip E-Journal, 2013, Pages 356-362)	20
34	Prof. Dr. Ir. Sutrisno Anggoro, M. Si.	Potential harmful algal blooms (HABs) in Segara Anakan lagoon, Central Java, Indonesia (E3S Web of Conferences, Vol 47, 2018, Pg 04010)	1
35	Prof. Dr. Ir. Sutrisno Anggoro, M. Si.	Environmental Study on Phytoplankton in Garang Watershed, Central Java, Indonesia and Its Water Quality (IOP Conference Series: Earth and Environmental Science, Vol 246, 2019, No 1, Page 012070)	1

No.	Lecturer Name	Article Title Citation (Journal, Volume, Year, Number, Page)	Number of Citation
1	2	3	4
36	Prof. Dr. Ir. Sutrisno Anggoro, M. Si.	Evaluation of the Interaction Among Microalgae Spirulina sp, Plastics Polyethylene Terephthalate and Polypropylene in Freshwater Environment (Journal of Ecological Engineering, Vol 20, 2019, No 6)	1
37	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc	Bioaccumulation of Pb, Cd, Cu, and Cr by Porphyridium cruentum (SF Gray)(International Journal of Marine Science, Vol 3, 2013, pp 212-213)	24
38	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc	The Trophic Status of Lake Rawapening and Its Management Solutions (Journal of Science and Mathematics, Vol 18, 2010, Pages 158-169)	21
39	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc	The Diatom stratigraphy of Rawapening Lake, Implying Eutrophication History (American Journal of Environmental Science, Vol 8, 2012, pp. 334-344)	19
40	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc	Diatoms and Water Quality of Telaga Warna Dieng, Java Indonesia ( IOP Conference Series: Earth and Environmental Science, Vol 55, 2017, No 1, Page 012051)	4
41	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc	Diatom assemblage in the 24 cm upper sediment associated with human activities in Lake Warna Dieng Plateau Indonesia (Environmental Technology & Innovation, Vol 10, 2018, Pages 314-323)	3
42	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc	The evaluation of water hyacinth (Eichhornia crassiper) control program in Rawapening Lake, Central Java Indonesia (IOP Conference Series: Earth and Environmental Science, Vol 142, 2018, No 1, Page 012016)	2
43	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc	Analysis of environmental carrying capacity based on land balance in Solok regency, West Sumatra (Advanced Science Letters Vol 23, 2017, No 3, Page 2407-2409)	2
44	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc	The phycoremediation of textile wastewater discharge by chlorella pyrenoidosa H. Chick, arthrospira platensis gomont, and chaetoceros calcitrans (Paulson) H. Takano (AACL Bioflux, Vol 10, 2017, No 3, Hal 640-651)	1
45	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc	Implementation of State Obligations and Responsibility Ensuring the Availability of Clean Water in Karimunjawa Islands (E3S Web of Conferences, Vol 31, 2018, Pg 09004)	1
46	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc	Shoreline and mangrove analysis along semarang-demak, Indonesia for sustainable environmental management (JPII, Vol 8, 2019, No 1, Pages 1-11)	1
47	Prof. Ir. Didi Dwi Anggoro, M. Eng., Ph.D.	Optimization of Direct Conversion of Methane to Liquid Fuels Over Cu Loaded W/ZSM-5 Catalyst (Fuel, Vol 83, 2004, pp 487-494)	94
48	Prof. Ir. Didi Dwi Anggoro, M. Eng., Ph.D.	Electro-catalysis system for biodiesel synthesis from palm oil over dielectrict-barrier discharge plasma reactor (BCREC, Vol 9, 2014, Pg 110-120)	16

No.	Lecturer Name	Article Title Citation (Journal, Volume, Year, Number, Page)	Number of Citation
1	2	3	4
49	Prof. Ir. Didi Dwi Anggoro, M. Eng., Ph.D.	Waste Cooking Oil Utilization as Bio-plasticiser through Epoxidation using Inorganic Acids as Homogeneous Catalysts (Chemical Engineering Transactions, Vol 56, 2017, Hal 1861-1866)	2
50	Prof. Ir. Didi Dwi Anggoro, M. Eng., Ph.D.	The Potential of KemiriSunan as Feedstock for the Production of Biodiesel (Advanced Science Letters, Vol 23, 2017, No 3, Page 2524-2526)	1
51	Prof. Ir. Didi Dwi Anggoro, M. Eng., Ph.D.	Effect of Doping Concentration on Emission Intensity of Luminescent Material ZnO: Zn (Journal of Physics and Its Applications, Vol 14, 2018, No 1, pp 20-23)	1
52	Prof. Dr. rer. nat. Imam Buchori, S.T.	Sustainable metropolitan development: towards an operational model for the Semarang metropolitan region (The International Journal of Environmental, Cultural, Economic, and Social Sustainability, Vol 7, 2011, pp 301-323)	16
53	Prof. Dr. rer. nat. Imam Buchori, S.T.	A predictive model to assess spatial planning in addressing hydro-meteorological hazards: A case study of Semarang City, Indonesia (International journal of disaster risk reduction, Vol 27, 2018, pp 415-426)	14
54	Prof. Dr. rer. nat. Imam Buchori, S.T.	Adaptation to coastal flooding and inundation: Mitigations and migration pattern in Semarang City, Indonesia (Ocean & Coastal Management, Vol 163, 2018, pp 445-455)	12
55	Prof. Dr. rer. nat. Imam Buchori, S.T.	An empricial examination of sustainable metropolitan development in Semarang City, Indonesia ( Australian Planner, Vol 53, 2016, Pages 163-177)	11
56	Prof. Dr. rer. nat. Imam Buchori, S.T.	The Impact of Urbanization to Forest Degradation in Metropolitan Semarang: A Preliminary Study (IOP Conference Series: Earth and Environmental Science, Vol 123, 2018, No 1, Page 012011)	8
57	Prof. Dr. Istadi, S.T., M.T.	Preliminary Study of Development Surfactant Sodium Ligno Sulfonate (SLS) from Waste Biomass in the Application of Enhanced Oil Recovery (EOR) Yield Increase in Production for Crude Oil Indonesia (Advanced Science Letters, Vol 23, 2017, No 6, Page 5803-5805)	4
58	Prof. Dr. Istadi, S.T., M.T.	Modeling of heating value of municipal solid waste based on ultimate analysis using multiple stepwise regression linear in Semarang (ARPN Journal of Engineering and Applied Sciences, Vol 12, 2017, No 9, Hal 2870-2876)	4
59	Prof. Dr. Istadi, S.T., M.T.	Effects of weight hourly space velocity and catalyst diameter on performance of hybrid catalytic-plasma reactor for biodiesel synthesis over sulphated zinc oxide acid catalyst (Bulletin of Chemical Reaction Engineering & Catalysis, Vol 12, 2017, No 2, Pg 227-234)	2
60	Prof. Dr. Istadi, S.T., M.T.	Synthesis of biodiesel on a hybrid catalytic-plasma reactor over K <sub>2</sub> O/CaO-ZnO catalyst (Scientific Study & Research. Chemistry & Chemical	1



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1	2	3	4
		Engineering, Biotechnology, Food Industry, Vol 18, 2017, No 3, Pages 303-318)	
61	Prof. Dr. Denny Nugroho Sugianto, S.T., M.Si.	Waves induce sediment transport at the coastal region of Timbulsloko, Demak (IOP Conference Series: Earth and Environmental Science, Vol 55, 2017, Page 012048)	5
62	Prof. Dr. Denny Nugroho Sugianto, S.T., M.Si.	The use of water exchange for feeding rate and growth promotion of shortfin eel <i>Anguilla bicolor bicolor</i> in recirculating water system (IOP Conference Series: Earth and Environmental Science, Vol 55, 2017, No 1, Page 012015)	4
63	Prof. Dr. Denny Nugroho Sugianto, S.T., M.Si.	Analysis of ocean waves in 3 sites potential areas for renewable energy development in Indonesia (Ocean Engineering, Vol 165, 2018, Pages 34-42)	4
64	Prof. Dr. Denny Nugroho Sugianto, S.T., M.Si.	Identification of wave energy potential with floating oscillating water column technology in Pulau Baai Beach, Bengkulu (IOP Conference Series: Earth and Environmental Science, Vol 55, 2017, No 1, Page 012040)	3
65	Prof. Dr. Denny Nugroho Sugianto, S.T., M.Si.	Deformation and Stability Analysis of Breakwater Structure in Morosari Coast, Demak, Central Java (IOP Conference Series: Earth and Environmental Science, Vol 145, 2018, No 1, Page 012081)	1
66	Prof. Dr. Denny Nugroho Sugianto, S.T., M.Si.	Climate Change In Indonesia (Case Study: Medan, Palembang, Semarang) (E3S Web of Conferencas, Vol 31, 2018, Page 09017)	1
67	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	Separation of antiscalants from reverse osmosis concentrates using nanofiltration (Desalination, Vol 429, 2018, Hal 105-110)	9
68	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	Ionic conductivity and cycling stability improvement of PVDF/Nano-clay using PVP as polymer electrolyte membranes for $\text{LiFePo}_4$ batteries (Membranes, Vol 8, 2018, No 3, Pg 36)	7
69	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	Experimental study of the natural organic matters effect on the power generation of reverse electro dialysis (International Journal of Energy Research, Vol 41, 2017, No 10, Hal 1474-1486)	6
70	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	Searching for ultrafiltration membrane molecular weight cut-off for water treatment in recirculating aquaculture system (Journal of Water Process Engineering, Vol 21, 2018, Page 133-142)	5
71	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	Wastewater treatment by nanofiltration membranes (IOP Conference Series: Earth and Environmental Science, Vol 142, 2018, No 1, Page 012017)	4
72	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	Enhanced Enzymatic Hydrolysis of Chitosan by Surfactant Addition ( Periodica Polytechnica Chemical Engineering, Vol 62, 2018, No 3, Hal 286-291)	2

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1	2	3	4
73	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	Hydrolysis of chitosan using cellulase enzyme with addition of polyethylene Glycol ( Advances Science Letters, Vol 23, 2017, No 6, Hal 5675-5677)	2
74	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	Performance Evaluation of Flocculation and Membrane Filtration for Microalgae Harvesting (Pertanika Journal of Science & Technology, Vol 25, 2017, No 4, Page 1159-1172)	1
75	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	Polymeric Membrane Made of Cellulose Isolated from Tropical Water Hyacinth Blended with Chitosan (IOP Conference Series: Earth and Environmental Science, Vol 55, 2017, No 1, Page 012004)	1
76	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	Response surface method (RSM) for optimization of ionic conductivity of membranes polymer electrolyte poly (vinylidene fluoride) (PVDF) with polyvinyl pyrrolidone (PVP) as pore forming agent (IOP Conference Series: Materials Science and Engineering, Vol 206, 2017, No 1 , p.012052)	1
77	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	microwave irradiation-assisted chitosan hydrolysis using cellulase enzyme (Bulletin of Chemical Reaction Engineering & Catalysis, Vol 13, 2018, No 3, Hal 466-474)	1
78	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	The influence of Photoinitiator on the Characteristics of Electrospun Poly (vinyl alcohol)/Chitosan Based Nanofibers (IOP Conference Series: Materials Science and Engineering, Vol 367, 2018, No 1, Hal 012028)	1
79	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	Characterization of Coal Acid Water in Void Pools of Coal Mining in South Kalimantan (E3S Web Conference, Vol 73, 2018, Page 05030)	1
80	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	Influence of microwave irradiation on extraction of chitosan from shrimp shell waste (Reactor, Vol 18, 2018, No 1, Page 45-50)	1
81	Prof. Dr. rer. nat. Heru Susanto, S.T., M.M., M.T.	Variability of TOC and DBPs (THMs and HAA5) in drinking water Source and Distribution System in Drought Season: the North Iran Case Study (Environmental Technology, Vol , 2019, No , Pages 1-28)	1
82	Prof. Dr. Hadiyanto, S.T., M.Sc.	Multi-criteria decision making (MCDM) approach for selecting solar plants site and technology: A review (International Journal of Renewable Energy Development, Vol 8, 2019, No 1, Page 15-25)	8
83	Prof. Dr. Hadiyanto, S.T., M.Sc.	The development of heterogeneous catalyst C/CaO/NaOH from waste of green mussel shell (Perna varidis) for biodiesel synthesis (Journal of environmental chemical engineering, Vol 5, 2017, No 5, Hal 4559-4563)	8
84	Prof. Dr. Hadiyanto, S.T., M.Sc.	Evaluation of growth and biomass productivity of marine microalga Nannochloropsis sp. cultured in palm oil mill effluent (POME) (Philippine J Sci, Vol 146, 2017, Pg 355-360)	5
85	Prof. Dr. Hadiyanto, S.T., M.Sc.	Modeling and PSO optimization of Humidifier-Dehumidifier desalination (international journal of renewable energy development (International	4

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1	2	3	4
		Journal of Renewable Energy Development, Vol 7, 2018, No 1, page 59)	
86	Prof. Dr. Hadiyanto, S.T., M.Sc.	kinetic study on the effects of sugar addition on the thermal degradation of phycocyanin from spirulina sp. (food bioscience, Vol 22, 2018, pp. 85-90)	3
87	Prof. Dr. Hadiyanto, S.T., M.Sc.	Production of Biodiesel from Mixed Waste Cooking and Castor Oil (MATEC Web of Conferences, Vol 156, 2018, Page 03056)	2
88	Prof. Dr. Hadiyanto, S.T., M.Sc.	Response surface optimization of lipid and protein extractions from spirulina platensis using ultrasound assisted osmotic shock method (Food Science and biotechnology, Vol 27, 2018, No 5, Hal 1361-1368)	1
89	Prof. Dr. Hadiyanto, S.T., M.Sc.	Bioelectricity Production from Microalgae-Microbial Fuel Cell Technology (MMFC) (MATEC Web of Conferences, Vol 156, 2018, Pg 01017)	1
90	Prof. Dr. Hadiyanto, S.T., M.Sc.	Pretreatment of Starch-Free Sugar Palm Trunk (Arenga pinnata) to Enhance Saccharification in Bioethanol Production (MATEC Web of Conferences, Vol 156, 2018, Pg 01003)	1
91	Prof. Dr. Hadiyanto, S.T., M.Sc.	Climate Change In Indonesia (Case Study: Medan, Palembang, Semarang) (E3S Web of Conferences, Vol 31, 2018, Page 09017)	1
92	Prof. Dr. Hadiyanto, S.T., M.Sc.	Find the future from the past: Paleolimnology in Indonesia (E3S Web of Conferences, Vol 31, 2018, Page 08002)	1
93	Prof. Dr. Hadiyanto, S.T., M.Sc.	Biogas Production from Rice Husk Waste by using Solid State Anaerobic Digestion (SSAD) Method (E3S Web of Conferences, Vol 31, 2018, Hal 02007)	1
94	Prof. Dr. Hadiyanto, S.T., M.Sc.	Application of Pesticide Phytoremediation in Irrigated Rice Fields System Using Water Hyacinth (Eichhornia crassipes) Plants (E3S Web of Conferences, Vol 31, 2018, Pg 03019)	1
95	Prof. Dr. Hadiyanto, S.T., M.Sc.	Application of Life Cycle Assessment (LCA) in Sugar Industries (E3S Web of Conferences, Vol 31, 2018, Pg 04011)	1
96	Prof. Dr. Hadiyanto, S.T., M.Sc.	Ozone Application for Tofu Waste Water Treatment and Its Utilization for Growth Medium of Microalgae Spirulina sp (E3S Web of Conferences, Vol 31, 2018, Pg 03002)	2
97	Prof. Dr. Hadiyanto, S.T., M.Sc.	Thermal degradation kinetics of phycocyanin encapsulation as an antioxidant agent (IOP Conference Series: Earth and Environmental Science, Vol 102, 2018, No 1, Page 012055)	1
98	Prof. Dr. Hadiyanto, S.T., M.Sc.	flare gas recovery as one of the clean development mechanism (CDM) practices (IOP Conference Series: Earth and Environmental Science, Vol 200, 2019, No 1, Page 012023)	1

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1	2	3	4
99	Dr. Dra. Sunarsih, M.Si.	Mathematical modeling regime steady state for domestic wastewater treatment facultative stabilization ponds (Journal of Urban and Environmental Engineering, Vol 7, 2013, Hal 293-301)	7
100	Dr. Dra. Sunarsih, M.Si.	Modeling of domestic wastewater treatment facultative stabilization ponds (International Journal of Technology, Vol 4, 2015, pp 689-698)	4
101	Dr. Dra. Sunarsih, M.Si.	System Dynamic Modeling and Simulation for Cultivation of Forest Land: Case Study of Perum Perhutani, Central Java, Indonesia (Journal of Ecological Engineering, Vol 18, 2017, No 4)	1
102	Dr. Ir. Hermawan, DEA	Arduino UNO-based room light intensity controller uses the fuzzy logic method (Journal of Control and Instrumentation Automation, Vol 7, 2017, No 2, Page 73)	8
103	Dr. Ir. Hermawan, DEA	Development of Problem Solving Skills Test Instruments on Vibration, Waves, and Sound Materials (Journal of Research & Development of Physics Education. Vol 3, 2017, No 2, Pages 157-166)	6
104	Dr. Ir. Hermawan, DEA	Geotourism: Solutions for Using Environmentally Friendly Geological Wealth (Journal of Applied Tourism Science, Vol 3, 2018, No 3, Pages 391-408)	4
105	Dr. Ir. Hermawan, DEA	Optimization of Recloser Placement to Minimize SAIFI and SAIDI Values on PDP Feeders 04 Using Particle Swarm Optimization (PSO) (TRANSIENT, Vol 5, 2017, No 3, Page 315-319)	3
106	Dr. Ir. Hermawan, DEA	Thermal evaluation for exposed stone house with quantitative and qualitative approach in mountainous area, Wonosobo, Indonesia (IOP Conference Series: Earth and Environmental Science, Vol 99, 2017, No 1, Page 012017)	1
107	Dr. Ir. Hermawan, DEA	Synthesis of Chitosan Silica Membrane From Bagasse Ash (Al-Kimia, Vol 5, 2017, No 1, Pages 81-88)	1
108	Dr. Rini Budihastuti, M.Sc.	The effect of the application of wanamina on the environmental quality of ponds and shrimp growth in the city of Semarang (Undip E-Journal, 2013, pp. 374-377)	8
109	Dr. Rini Budihastuti, M.Sc.	The application of silvofishery on tilapia ( <i>Oreochromis niloticus</i> ) and milkfish ( <i>Chanos chanos</i> ) fattening within mangrove ecosystem of northern coastal area of Semarang City (Journal of Coastal Development, vol 6, 2013, pp. 89-93)	7
110	Dr. Rini Budihastuti, M.Sc.	Models and Strategies for Optimizing the Management of Wanamina Ponds with Environmental Insight on the Semarang Coast (Undip E-journal, 2013)	4
111	Dr. Rini Budihastuti, M.Sc.	Nutrient accumulation in the sediment of silvofishery ponds in Semarang (Makara Journal of Science, 2018, Pages 195-201)	2

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1	2	3	4
112	Dr. Kismartini, M.Si.	Community-Based Waste Management Through Waste Banks (Indonesian Journal of Conservation, Vol 4, 2015)	5
113	Dr. Kismartini, M.Si.	Evaluation of the Rain Water Harvesting Program of the Semarang City Environment Agency (GEMA PUBLICA, Vol 3, 2018, No 1)	1
114	Dr. Kismartini, M.Si.	Mining Permits and Supervision Implementation Policy within the Framework of Environmental Management in Bandar Lampung (Advanced Science Letters, Vol 23, 2017. Pages 2567-2569)	1
115	Dr. Hartuti Purnaweni, MPA	The effect of mangrove on fish catch using belat at Teluk Pemedas and Sanipah of Kutai Kartanegara regency, east Kalimantan province, Indonesia (E3S Web of Conferences, Vol 31, 2018, Hal 08029)	4
116	Dr. Hartuti Purnaweni, MPA	Mangrove Cultivation Community Based in Karangsong, Indramayu, West Java (IOP Conference Series: Earth and Environmental Science, Vol 145, 2018, No 1, Page 012139)	2
117	Dr. Hartuti Purnaweni, MPA	The land use change from agricultural to non-agricultural in Bungo Regency, Jambi Province, Indonesia (E3S Web of Conferences, Vol 31, 2018, Page 09019)	2
118	Dr. Hartuti Purnaweni, MPA	Environmental Analysis of The Impacts of Batik Waste Water Pollution on The Quality of Dug Well Water in The Batik Industrial Center of Jenggot Pekalongan City (E3S Web of Conferences, Vol 31, 2018, Pg 09008)	2
119	Dr. Hartuti Purnaweni, MPA	Implementation of the Policy for the Assessment of Company Performance Ratings in Environmental Management (PROPER) in the City of Semarang (Journal of Public Policy and Management Review, Vol 8, 2018, Vol 1, Pages 128-141)	1
120	Dr. Ir. Setia Budi Sasongko, DEA	Water Quality Analysis and Water Pollution Control Strategies Blukar River Kendal Regency (Journal of Precipitation: Communication Media and Development of Environmental Engineering, Vol 9, 2012, pp 64-71)	71
121	Dr. Ir. Setia Budi Sasongko, DEA	The effect of COD/N ratios and pH control to biogas production from vinasse (International Journal of Biochemistry Research & Review, Vol 3, 2013, pp 401-413)	24
122	Dr. Ir. Setia Budi Sasongko, DEA	Production of Spirulina platensis biomass using digested vinasse as cultivation medium (Trends in Applied Sciences Research, Vol 9, 2014, pp 93-102)	16
123	Dr. Ir. Setia Budi Sasongko, DEA	Kinetic Study on Ultrasound Assisted Biodiesel Production from Waste Cooking Oil (Journal of Engineering and Technologies Sciences, Vol 47, 2015, pp 374-388)	5
124	Dr. Ir. Setia Budi Sasongko, DEA	Enhancement of energy efficiency and food product quality using adsorption dryer with zeolite (International journal of renewable energy development, Vol 2, 2013, Page 81)	4

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125	Dr. Fuad Muhammad, S.Si., M.Sc.	Ecotourism Potential in Mangrove Area, Mororejo Village, Kendal Regency (Bioscience: Journal of Biology & Biology Education, Vol 7, 2015)	11
126	Dr. Fuad Muhammad, S.Si., M.Sc.	Study of Ecotourism Supporting Capacity of the Blanakan Mangrove Forest, Subang, West Java (Bioma: Biological Scientific Periodic, Vol 14, 2010, Pages 64-72)	4
127	Dr. Fuad Muhammad, S.Si., M.Sc.	Planning of Educational Tourism Activities in the Rinjani Lombok Geopark Area Based on Environmental Carrying Capacity (Aik Berik Regional Study) (Undip Journal of Environmental Science, Vol 14, 2016, Pages 103-107)	3
128	Dr. Fuad Muhammad, S.Si., M.Sc.	Carrying capacity of Kedungombo reservoir for net cage culture (E3S Web of Conferences, Vol 73, 2018, Pg 03018)	1
129	Dr. Fuad Muhammad, S.Si., M.Sc.	The study of environmental carrying capacity for sustainable tourism in Telaga Warna Telaga Pengilon Nature Park, Dieng Plateau, Central Java, (IOP Conference Series: Earth and Environmental Science, Vol 70, 2017, No 1, Page 012003)	1
130	Dr. Ing. Sudarno, S.T., M.Sc.	Comparison of three sequential extraction procedures to describe metal fractionation in anaerobic granular sludges (Talanta, Vol 65, 2005, pp 549-558)	150
131	Dr. Ing. Sudarno, S.T., M.Sc.	Effect of varying salinity, temperature, ammonia, and nitrous acid concentrations on nitrification of saline wastewater in fixed-bed reactors (Bioresource Technology, vol 102, 2011, Pg 5665-5673)	110
132	Dr. Ing. Sudarno, S.T., M.Sc.	Effect of dilution and stirring on biogas production in anaerobic digestion using cow rumen extract as a starter and kitchen waste as a substrate (Journal of Precipitation: Communication Media and Development of Environmental Engineering, Vol 13, 2016, Pages 88-93)	7
133	Dr. Ing. Sudarno, S.T., M.Sc.	Effect of chemical compounds in tidal water on asphalt pavement mixture (International Journal of Pavement Research and Technology Vol 10, 2017, No 2, Page 122-130)	6
134	Dr. Ing. Sudarno, S.T., M.Sc.	Removal of Fe, Color, and Turbidity in Peat Water Using Electrocoagulation Method (Journal of Environmental Engineering, Vol 6, 2017, No 2, Pages 1-12)	1
135	Mochamad Arief B., S.T., M.Eng.Sc., Ph.D.	Experimental evaluation of construction waste and ground granulated blast furnace slag as alternative soil stabilizers (Geotechnical and Geological Engineering, Vol 34, 2016, pp. 1707-1722)	16
136	Mochamad Arief B., S.T., M.Eng.Sc., Ph.D.	Black carbon concentration in kitchens using fire-wood and kerosene fuels (Journal of Applied Sciences in Environmental Sanitation, Vol 4, 2009, pp 55-62)	14

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137	Mochamad Arief B., S.T., M.Eng.Sc., Ph.D.	Study on the potential of municipal waste composting as an alternative to waste management in landfill using EM4 (Effective Microorganism) activator (Journal of Precipitation, Vol 1, 2006, pp. 25-30)	14
138	Mochamad Arief B., S.T., M.Eng.Sc., Ph.D.	Distribution Pattern of Nitrate and Phosphate with Aquatox2.2 Model and Relationship to Water Hyacinth Plants on Lake Surface (Case Study of Rawa Pening Lake, Semarang Regency) (Journal of Precipitation, Vol 3, 2007, pp 58-66)	11
139	Mochamad Arief B., S.T., M.Eng.Sc., Ph.D.	Cobalt-exchanged natural zeolite catalyst for catalytic oxidation of phenolic contaminants in aqueous solutions (Journal of Water Process Engineering, Vol 12, 2016, pp 47-51)	8
140	Mochamad Arief B., S.T., M.Eng.Sc., Ph.D.	Study of Clean Water Supply System Sub-System of Bribin in Gunungkidul Regency (Journal of Precipitation: Communication Media and Development of Environmental Engineering, Vol 10, 2013, Pages 18-29)	8
141	Mochamad Arief B., S.T., M.Eng.Sc., Ph.D.	Leaves Composting Process and the Influence of Rumen Content and Bran Addition (MATEC Web of Conferences, Vol 159, 2018, Pg 01033)	6
142	Mochamad Arief B., S.T., M.Eng.Sc., Ph.D.	Characteristic of total suspended particulate (TSP) containing Pb and Zn at solid waste landfill (Journal of Physics: Conference Series, Vol 1022, 2018, No 1, Hal 012030)	1
143	Dr. rer. nat. Thomas Triadi Putranto, S.T., M.Eng.	Developing groundwater conservation zone of unconfined aquifer in Semarang, Indonesia (IOP Conference Series: Earth and Environmental Science, Vol 55, 2017, No 1, Page 012011)	4
144	Dr. rer. nat. Thomas Triadi Putranto, S.T., M.Eng.	Assessment of Groundwater Quality to Achieve Sustainable Development in Semarang Coastal Areas (IOP Conference Series: Earth and Environmental Science, Vol 79, 2017, No 1, Page 012001)	3
145	Dr. rer. nat. Thomas Triadi Putranto, S.T., M.Eng.	Application of Geospatial Analysis for Determination of Groundwater Recharge Zones in Wonosobo CAT, Central Java Province (TATALOKA, Vol 19, 2017, No 3, 175-191)	1
146	Dr. rer. nat. Thomas Triadi Putranto, S.T., M.Eng.	Stakeholder Interactions Model of Groundwater Management In Semarang City/Indonesia (International Journal, Vol 15, 2018, No 47, pp 170-177)	1
147	Dr. rer. nat. Thomas Triadi Putranto, S.T., M.Eng.	Application of Spatial Analysis for Determination of Recharge Zone and Groundwater Release Zone, Karangobar Groundwater Basin (CAT), Central Java Province (Journal of Environmental Science, Vol 16, 2018, No 2, Pages 162-172)	1
148	Dr. rer. nat. Thomas Triadi Putranto, S.T., M.Eng.	Mapping the Water Usage Behavior of Presto Milkfish Processing Industries in Semarang City (E3S Web of Conferences, Vol 73, 2018, Page 03020)	1

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149	Dr. rer. nat. Thomas Triadi Putranto, S.T., M.Eng.	Study Of Spatial Effect Distribution Of Groundwater Quality On Rob Disaster In Semarang City (E3S Web of Conferences, Vol 73, 2018, Page 03027)	1
150	Dr. rer. nat. Thomas Triadi Putranto, S.T., M.Eng.	Groundwater Quality Analysis in Nusakambangan Groundwater Basin/Indonesia (E3S Web of Conferences, Vol 73, 2018, Pg 04024)	1
151	Dr. rer. nat. Thomas Triadi Putranto, S.T., M.Eng.	Spatial Analysis to Determine Groundwater Recharge Area in Purworejo Regency, Central Java Province/Indonesia (E3S Web of Conferences, Vol 73, 2018, Pg 03025)	1
152	Dr. rer. nat. Thomas Triadi Putranto, S.T., M.Eng.	Application of Cluster Analysis and Principal Component Analysis for Assessment of Groundwater Quality—A Study in Semarang, Central Java, Indonesia (IOP Conference Series: Earth and Environmental Science, Vol 248, 2019, No 1, Page 012063)	1
153	Dr. Drs. Jafron Wasq Hidayat, M.Sc.	Assessment of water quality using macrobenthos as bioindicator and its application on Abundance-Biomass Comparison (ABC) curves (International Journal of Science and Engineering, Vol 8, 2014)	9
154	Dr. Drs. Jafron Wasq Hidayat, M.Sc.	Turbidity Based Benthic Mollusca Community Structure in Tanjung Emas Port Waters Semarang (Bioma, Vol 6, 2004, pp 53-56)	7
155	Dr. Drs. Jafron Wasq Hidayat, M.Sc.	Potential Test of Eupatorium odoratum Leaf Extract as Alternative Insecticide Material: Toxicity and Anti-feeding Effect Against Heliothis armigera Hubner Larvae (Journal of Science and Mathematics, Faculty of Mathematics and Natural Sciences Undip, 2000)	7
156	Dr. Drs. Jafron Wasq Hidayat, M.Sc.	Methods of Controlling Wideng (Sesarma spp) of Mangrove Seedling Pests through Crab Cultivation Activities of Mangrove Sycla spp (Bioma: Biological Scientific Periodic, Vol 13, 2011, Pages 25-33)	4
157	Dr. Drs. Jafron Wasq Hidayat, M.Sc.	Phytoplankton community structure as the basis for managing the quality of mangrove coastal waters at the Tugurejo Site, Semarang (Bioma: Biological Scientific Periodic, Vol 19, 2017, No 2, Pages 164-169)	2
158	Dr. Eng. Maryono, S.T., M.T.	Solidwaste management in Bangkok at 2011 Thailand floods (Journal of Disaster Research, Vol 8, 2013, pp 456-464)	12
159	Dr. Eng. Maryono, S.T., M.T.	Theorizing spatial dynamics of metropolitan regions: A preliminary study in Java and Madura Islands, Indonesia (Sustainability cities and society, Vol 35, 2017, pp 468-482)	7
160	Dr. Eng. Maryono, S.T., M.T.	Motivation and Perception of Tourists as Push and Pull Factors to Visit National Park (E3S Web of Conferences, Vol 31, 2018, Pg 08022)	4
161	Dr. Eng. Maryono, S.T., M.T.	Adaptation to coastal flooding and inundation: Mitigations and migration pattern in Semarang City, Indonesia (Ocean & Coastal Management, Vol 163, 2018, pp 445-455)	3



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162	Dr. Eng. Maryono, S.T., M.T.	Analysis of Urban Forest Needs as Anthropogenic (CO <sub>2</sub> ) Gas Absorbent in Semarang City (E3S Web of Conferences, Vol 31, 2018, Page 07007)	1
163	Dr. Eng. Maryono, S.T., M.T.	Comparing Value of Urban Green Space Using Contingent Valuation and Travel Cost Methods (E3S Web of Conferences, Vol 31, 2018, Pg 07008)	1
164	Dr. Budi Warsito, S.Si., M.Si	Clustering of Industrial Sector Air Pollution Data in Central Java with the Kohonen Neural Network (Journal of Precipitation, vol 4, 2008, Pages 1-6)	7
165	Dr. Budi Warsito, S.Si., M.Si	Mixed Geographically Weighted Regression Using Adaptive Bandwidth to Modeling of Air Polluter Standard Index (ARPN Journal of Engineering and Applied Sciences, Vol 12, 2017, No 15, pp 4477-4482)	4
166	Dr. Budi Warsito, S.Si., M.Si	Effect of Voltage and Time on Treatment of Uranium and Thorium Radioactive Waste by Electrocoagulation Process (Journal of Nuclear Forum, Vol 10, 2017, pp 102-107)	4
167	Dr. Budi Warsito, S.Si., M.Si	General Regression Neural Network Modeling for Predicting Air Pollution Levels in Semarang City (Media Statistics, Vol 1, 2008, pp 43-51)	4
168	Dr. Ing. Suherman, ST, MT	Potential of LiNO <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> Catalyst for Heterogeneous Transesterification of Palm Oil to Biodiesel (BCREC, Vol 5 (1), 2010, pp 51-56)	10
169	Dr. Ing. Suherman, ST, MT	Biodiesel Production From Rubber Seed Oil via Esterification Process (International Journal of Renewable Energy Development, Vol 1, 2012, p. 57)	9
170	Dr. Ing. Suherman, ST, MT	Analysis of the Application of Clean Production Towards an Environmentally Friendly Nata De Coco Industry (Journal of Research on Industrial Pollution Prevention Technology, Vol 5, 2014, pp 45-50)	7
171	Dr. Ing. Suherman, ST, MT	Biodiesel production from vegetable oil over plasma reactor: optimization of biodiesel yield using response surface methodology (Bulletin of Chemical Reaction Engineering & Catalysis, Vol 4, 2009, Page 23-31)	7
172	Dr. Ing. Suherman, ST, MT	Energy Efficient Dryer with Rice Husk Fuel for Agriculture Drying (International Journal of Renewable Energy Development, Vol 4, 2015, Pg 20)	4

Write the title of the research output or the title of the PkM output produced by DTSPS in the last 3 years by following the format of Table 3.b.7 below. The type and title of the output must be relevant to the field of study program.

Table 3.b.7 Outcomes of Other Research/PkM by DTSPS

No	Title of Research Outcome/PKM	Year	Information
1	2	3	4
I	IPR 1)		
	a) Patent		
	b) Simple Patent		
	1. Plasma-Catalytic Integrated Process for Generating Fuel from Plastic Waste	2017	Prof. Dr. Istadi, ST, MT
	2. Plasma Catalytic Hybrid Reactor Methods and Equipment for Biodiesel Production	2018	Prof. Dr. Istadi, ST, MT
	3. Method of Determining Optimal Architecture for Combination Model of Wavelet and Neural Network	2018	Dr. Budi Warsito, S. Si., M.Sc.
	4. Air Recirculating Rack Dryer	2018	Dr. Suherman, ST, MT
	5. Process for Making Glycerol Mono Laurate Using Dealuminated Zeolite Y Catalyst	2019	Prof. Ir. Didi Dwi Anggoro, M. Eng., Ph.D.
	6. Method of Measurement of Ocean Wave Height and Period Using Ultrasonic Sensors and Drones	2019	Dr. Denny Nugroho Sugianto, ST, M.Sc.
	7. Panel Data Modeling Method Using Mixed Geographical Weighted Fixed Effects Panel Regression	2019	Dr. Budi Warsito, S. Si., M.Sc.
	8. Process of Making Gelatin from Fish Scale Waste Limbah	2019	Dr. Suherman, ST, MT
	amount	NA = 8	
II	HK 1)		
	a) Copyright,		
	1. Clean Production Technology	2017	Prof. Dr.Ir. Purwanto, DEA
	2. Protist Biology	2017	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc
	3. Utilization of Yogyakarta Natural Zeolite as a Toxic Gas Adsorbent in Shrimp Pond Water	2018	Prof. Ir. Didi Dwi Anggoro, M. Eng., Ph.D.
	4. MGTWR GUI application; Spatio Temporal Modeling Using Mix Geographically and Temporally Weighted Regression (MGTWR)	2018	Dr. Budi Warsito, S.Si., M.Sc.
	5. Predictive Control Approach for Restricted Areas Avoidance of Autonomous System	2018	Dr. Dra. Sunarsih, M.Si.
	6. Book entitled Ecosystem-Based Coastal and Marine Management	2019	Prof. Dr. Ir. Sutrisno Anggoro, M. Si.
	7. Book with the title Shrimp Domestication - Future Prospects of Food Sources from the Sea	2019	Prof. Dr. Ir. Sutrisno Anggoro, M. Si.
	8. Sukabumi Natural Zeolite Potential to Absorb Toxic Gas from Shrimp Pond Water	2019	Prof. Ir. Didi Dwi Anggoro, M. Eng., Ph.D.
	9. Oceanographic Methods Module	2019	Prof. Dr. Denny Nugroho Sugianto, ST, M.Si
	10. Beach Hydraulics Module	2019	Prof. Dr. Denny Nugroho Sugianto, ST, M.Si
	11. Improvement and Analysis on Domestic Waste Water Treatment Stabilization Ponds Using Mathematical Approach	2019	Dr. Dra. Sunarsih, M.Si.
	12. Rain Prediction Graphical Interface with General Regression Neural Network (GRNN) Model	2019	Dr. Budi Warsito, S.Si., M.Sc.

No	Title of Research Outcome/PKM	Year	Information
1	2	3	4
	13. GSTAR Spatial Model-Based Ocean Wave Early Warning System	2019	Dr. Budi Warsito, S.Si., M.Sc.
amount		NB = 13	
III	Appropriate Technology, Products (Standardized Products, Certified Products), Artwork, Social Engineering		
	1. Liquid Waste Treatment Equipment		Prof. Dr. Ir. Purwanto. DEA
amount		NC = 1	
IV	Books with ISBN, Book Chapters		
	1. Environmental Research Methodology in the Social Sector	2017	Prof. Sudharto P. Hadi, MES, Ph.D.
	2. Zeolite Engineering Theory and Applications	2017	Prof. Ir. Didi Dwi Anggoro, M. Eng., Ph.D.
	3. Geocomputing Practical Handbook	2017	Dr. rer. nat. Thomas Triadi Putranto, ST, M.Eng.
	4. Multi Gears Fishery Bioeconomic Modeling: A Case Study of Cantrang and Gill Net in Rembang Regency	2018	Prof. Dr. Ir. Azis Nur Bambang, MS.
	5. Engineering Zeolite for Waste Treatment	2018	Prof. Ir. Didi Dwi Anggoro, M. Eng., Ph.D.
	6. Hydrogeology	2018	Dr. rer. nat. Thomas Triadi Putranto, ST, M.Eng.
	7. Anthology on Environmental Management Part Two	2019	Prof. Sudharto P. Hadi, MES, Ph.D.
	8. Corporate Social and Environmental Responsibility	2019	Prof. Sudharto P. Hadi, MES, Ph.D.
	9. Ecosystem-Based Coastal and Marine Management	2019	Prof. Dr. Ir. Sutrisno Anggoro, M. Si.
	10. Management of Waste that Arises from Disasters (PSTAB)	2019	Dr. Eng. Maryono, ST, MT
amount		ND = 12	

Information:

- 1) Outcomes of research/PKM that are recognized by Intellectual Property Rights (HKI) are proven by a letter of determination by the Ministry of Law and Human Rights or other competent ministries.

#### 4. Finance, Facilities and Infrastructure Pra

Write down data on the use of funds managed by UPPS and data on the use of funds allocated to accredited study programs in the last 3 years by following the format of Table 4 below.

Table 4. Use of Funds

No	Usage Type	Study Program Management Unit (Rp)				Study Program (Rp)			
		TS-2	TS-1	TS	Average	TS-2	TS-1	TS	Average
1	2	3	4	5	6	7	8	9	10
1	Education Operational Cost								
	a. Lecturer Fee (Salary, Honor)	6,752,439,390	5,641,443,273	8,184,457,523	6,859,446,729	1,056,181,962	968,904,484	1,588,635,792	1,204,574,079
	b. Education Personnel Cost (Salary, Honor)	4,443,850,493	3,510,906,123	2,949,098,339	3,634,618,318	79,502,740	154,560,525	102,961,193	112,341,486
	c. Operational and Learning Costs (Consumable Materials and Equipment)	79,903,300	112,166,520	240,968,800	144,346,207	18,165,700	18,012,042	34,894,702	23,690,814
	d. Indirect Operational Costs (Electricity, Gas, Water, Building Maintenance, Facility Maintenance, Overtime, Telecommunication, Consumption, Local Transport, Taxes, Insurance, etc.)	1,872,795,408	2,008,027,290	2,002,128,593	1,960,983,764	253,613,648	330,742,503	259,622,032	281,326,061
2	Student Operational Costs (reasoning, interests, talents, guidance, career, and welfare)	-	22,112,000	3,800,000	8,637,333	-	3,762,000	3,800,000	2,520,667
	<b>amount</b>	<b>13,148,988,591</b>	<b>11,294,655,206</b>	<b>13,380,453,255</b>	<b>12,608,032,351</b>	<b>1,407,464,050</b>	<b>1,475,981,553</b>	<b>1,989,913,718</b>	<b>1,624,453,107</b>
3	Research Fee	-	-	650,000,000	216,666,667	-	-	180,000,000	60,000,000
4	PKM fee	-	-	70,000,000	23,333,333	-	-	12,000,000	4,000,000
	<b>amount</b>	<b>-</b>	<b>-</b>	<b>720,000,000</b>	<b>240,000,000</b>	<b>-</b>	<b>-</b>	<b>192,000,000</b>	<b>64,000,000</b>
5	HR investment costs	25,351,000	22,950,259	18,200,000	22.167,086	-	-	-	-
6	Facility investment costs	645,378,592	469,644,740	1,050,500,000	721,841,111	236,602,976	108,409,173	473,050,000	272,687,383

No	Usage Type	Study Program Management Unit (Rp)				Study Program (Rp)			
		TS-2	TS-1	TS	Average	TS-2	TS-1	TS	Average
1	2	3	4	5	6	7	8	9	10
7	Infrastructure investment costs	197,630,000	1,591,920,000	89,308,000	626,286,000	32,938,333	265,320,000	14,884,667	104,381,000
	<b>amount</b>	<b>868,359,592</b>	<b>2,084,514,999</b>	<b>1,158,008,000</b>	<b>1,370,294,197</b>	<b>269,541,309</b>	<b>373,729,173</b>	<b>487,934,667</b>	<b>377,068,383</b>
	<b>TOTAL</b>	<b>14,017,348,183</b>	<b>13,379,170,205</b>	<b>15,258,461,255</b>	<b>14,218,326,548</b>	<b>1,677,005,360</b>	<b>1,849,710,727</b>	<b>2,669,848,385</b>	<b>2,065,521,490</b>

## 5. Education

### a. Curriculum

Write down the program structure and completeness of the course data in accordance with the curriculum document of the study program that is in effect at the time of TS by following the format of Table 5.a below.

Table 5.a Curriculum, Learning Outcomes, and Lesson Plans

No	Semester	Course Code	Course Name	Competency Course 1)	Credit Weight (credit)			Convert Credits to Hours 2)	Learning Outcomes 3)				Lesson plan document 4)	Organizing Unit
					Lecture/ Response/ Tutorial	Seminar	Practicum/Practice/ Field Practice		Attitude	Knowledge	Skills General	Special skill		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	I	CIL-2-2-600	Philosophy of Science and Research Methodology	V	3	-	-	150	-	V	V	-		PSIL
2		CIL-2-2-601	Environmental Economics and Natural Resources	V	3	-	-	150	V	V	V	V		PSIL

No	Semester	Course Code	Course Name	Competency Course 1)	Credit Weight (credit)			Convert Credits to Hours 2)	Learning Outcomes 3)				Lesson plan document 4)	Organizing Unit
					Lecture/ Response/ Tutorial	Seminar	Practicum/Practice/ Field Practice		Attitude	Knowledge	Skills General	Special skill		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
3		CIL-2-2-602	Environmental Statistics	V	3	-	-	150	-	V	V	V		PSIL
4		CIL-2-2-603	Ecology and Environmental Pollution	V	3	-	-	150	V	V	V	-		PSIL
5		CIL-2-2-604	Computer Applications and Environmental Modeling	V	3	-	-	150	-	V	V	V		PSIL
6	II	CIL-2-2-605	Environmental Law and Policy	V	2	-	-	100	V	V	V	V		PSIL
7		CIL-2-2-606	Environmental System Analysis	V	2	-	-	100	-	V	V	V		PSIL
8		CIL-2-2-607	Environmental Planning Theories	V	3	-	-	150	-	V	V	V		PSIL
9		CIL-2-2-608	Natural Resources and Environment Conservation	V	3	-	-	150	V	V	V	V		PSIL
10		CIL-2-2-609	Spatial Planning and Environment	V	2	-	-	100	V	V	V	V		PSIL
11		CIL-2-2-610	Environmental Pollution Control	V	2	-	-	100	V	V	V	V		PSIL

No	Semester	Course Code	Course Name	Competency Course 1)	Credit Weight (credit)			Convert Credits to Hours 2)	Learning Outcomes 3)				Lesson plan document 4)	Organizing Unit
					Lecture/ Response/ Tutorial	Seminar	Practicum/Practice/ Field Practice		Attitude	Knowledge	Skills General	Special skill		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
12		CIL-2-2-611	Disaster Management Strategy	V	2	-	-	100	-	V	V	V		PSIL
13		CIL-2-2-612	Disaster Mitigation and Adaptation	V	3	-	-	150	-	V	V	V		PSIL
14		CIL-2-2-613	Disaster Management Method	V	2	-	-	100	-	V	V	V		PSIL
15		CIL-2-2-614	EIA	V	3	-	-	150	V	V	V	V		PSIL
16	III	CIL-2-2-615	Capita Selecta	V	3	-	-	150	V	V	V	V		PSIL
17		CIL-2-2-616	Job training	V	-	-	1		-	V	V	V		PSIL
18		CIL-2-2-617	Thesis proposal	V	-	2	-	100	-	V	V	V		PSIL
19	IV	CIL-2-2-618	Seminars and Scientific Publications	V	-	2	-	100	V	V	V	V		PSIL
20		CIL-2-2-619	Thesis	V	-	6	-	300	V	V	V	V		PSIL
21		CIL-2-2-701	Infrastructure Development and Environmental GIS		2	-	-	100	-	V	V	V		PSIL

No	Semester	Course Code	Course Name	Competency Course 1)	Credit Weight (credit)			Convert Credits to Hours 2)	Learning Outcomes 3)				Lesson plan document 4)	Organizing Unit
					Lecture/ Response/ Tutorial	Seminar	Practicum/Practice/ Field Practice		Attitude	Knowledge	Skills General	Special skill		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
22		CIL-2-2-702	Technology and Energy Management Planning		2	-	-	100	V	V	V	V		PSIL
23		CIL-2-2-711	Clean Technology		2	-	-	100	V	V	V	V		PSIL
24		CIL-2-2-726	Transfers and Mass Transportation		2	-	-	100	-	V	V	V		PSIL
25		CIL-2-2-727	Regional Planning and Infrastructure		2	-	-	100	V	V	V	V		PSIL
26		CIL-2-2-728	Environmental Chemistry and Biology		2	-	-	100	-	V	V	V		PSIL
27		CIL-2-2-730	Hydroclimatology		2	-	-	100	-	V	V	V		PSIL

**Information:**

- 1) Filled with a check mark V if the course is included in the competency course of the study program.
- 2) Filled with credit conversion to the hours of Practicum/Practice/Field Practice. This data is filled in by the proposer from the study program in the Diploma Three/Bachelor/Applied Bachelor program.
- 3) Filled with check mark V in the column of elements forming Graduate Learning Outcomes (CPL) in accordance with the RPS.
- 4) Filled with the name of the lesson plan document used.



## b. Integration of Research/PkM Activities in Learning

Write the title of the DTSP research/PKM integrated into the learning/course development in the last 3 years by following the format of Table 5.b below.

Table 5.b Integration of Research/PkM Activities in Learning

No.	Research Title/PKM	Lecturer Name	Courses	Integration Form	Year(YYYY)
1	2	3	4	5	6
1	Stratigraphy Diatoms and Reconstruction of the Past Environment of Telaga Warna Dieng	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc.	Environmental Chemistry and Biology	Lecture material	2017
2	Making Glycerol Monolaurate from Glycerol Using Zeolite Y . Dealumination Catalyst	Prof. Dr. Didi Dwi Anggoro, M.Eng.	Technology and Energy Management Planning	Lecture material	2017
3	Geographic Information System (GIS) Model for Monitoring Spatial Dynamics of Urban Metropolitan Areas in Java and Madura Island	Prof. Dr. rer. nat. Imam Buchori, S.T	Spatial Planning and Environment	Lecture material	2017
4	Development of a Plasma-Catalytic Hybrid Reactor Prototype with Transesterification Process for Biodiesel Production from Plant Oils	Prof. Dr. Istadi, ST, MT	Computer Applications and Environmental Modeling	Lecture material	2017
5	Application of BwN Technology (Building with Nature) Hybrid Structure as an Effort for Disaster Mitigation of Coastal Damage and Rehabilitation of Coastal Areas in Demak Regency	Prof. Dr. Denny Nugroho Sugianto, ST, M.Sc.	Environmental Planning Theories	Lecture material	2017
6	Investigation of Fouling Behavior of Ultrafiltration of Natural Organic Matter in High Saline Water	Prof. Dr. rer. nat. Heru Susanto, ST, MM, MT	Philosophy and Research Methodology	Lecture material	2017
7	The Development of Fly Ash Supported CaO Derived from Mollusk Shells as a Heterogeneous Catalyst in Biodiesel Synthesis	Prof. Dr. Hadiyanto, ST, M.Sc.	Environmental Chemistry and Biology	Lecture material	2017
8	Production of Encapsulated Phycocyanin from Microalgae as Antioxidant with High Stability and Activity Aktivitas	Prof. Dr. Hadiyanto, ST, M.Sc.	Environmental Chemistry and Biology	Lecture material	2017
9	Ecological Engineering Using Mangrove Ecosystems to Increase Fertility of Ponds on the North Coast of Central Java for Sustainable Fisheries	Dr. Fuad Muhammad, S.Si., M.Sc.	Natural Resources and Environment Conservation	Lecture material	2017
10	Application of Biosensor Technology to Detect Water and Nutrient Quality in Mass Culture of Tubifex sp. by Utilizing Industrial Waste to Increase Production of Catfish Hatchery ( <i>Clarias gariepenus</i> )	Dr. Fuad Muhammad, S.Si., M.Sc.	Natural Resources and Environment Conservation	Lecture material	2017
11	Empowerment of Tofu Producers SMEs through Utilization of Waste into Biogas Type of Fixed Dome Reactor and Organic Fertilizer and Cracker Processed Products in Langensari Village, Ungaran Barat District, Semarang Regency	Dr. Fuad Muhammad, S.Si., M.Sc.	Natural Resources and Environment Conservation	Lecture material	2017
12	Long Term Stability of Three on Site Sanitation Types in Semarang	Dr. Ing. Sudarno, ST, M.Sc.	Environmental Pollution Control	Lecture material	2017
13	Integrated Hydrogeological Mapping and Human Awareness Index for Establishing Groundwater Vulnerability Maps in Semarang Urban Area	Dr. rer. nat Thomas Triadi P., M.Eng	Mass Transfer and Transformation	Lecture material	2017

No.	Research Title/PKM	Lecturer Name	Courses	Integration Form	Year(YYYY)
1	2	3	4	5	6
14	Ecological Engineering Using Mangrove Ecosystems to Increase Fertility of Ponds on the North Coast of Central Java for Sustainable Fisheries	Dr. Drs. Jafron Wasiq Hidayat, M.Sc.	Ecology and Environmental Planning	Lecture material	2017
15	Design and Optimization of Energy Efficient Fluidized Bed Dryer For Production High Quality Paddy	Dr. Ing. Suherman, ST, MT	Clean Technology	Lecture material	2017
16	Impact of Human Activities on the Pengilon Dieng Lake Ecosystem and Development of Sustainable Management Strategies	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc	Environmental Chemistry and Biology	Lecture material	2018
17	Synthetic zeolite-based catalyst engineering for the production of Glycerol Mono Stearate from Glycerol	Prof. Dr. Didi Dwi Anggoro, M.Eng	Technology and Energy Management Planning	Lecture material	2018
18	Synthesis of Heterogeneous Ca/MgO Catalyst Using Sol Gel Method For Monoglyceride Production Pembuatan	Prof. Dr. Didi Dwi Anggoro, M.Eng	Technology and Energy Management Planning	Lecture material	2018
19	The Role of Spatial Planning Towards Better Resilience to Hydro-Meteorological Hazard; Case Study: Coastal Areas of Semarang City	Prof. Dr. rer. nat. Imam Buchori, ST	Spatial Planning and Environment	Lecture material	2018
20	Treatment of Pesticide Contaminated Water Using Nanofiltration Membranes: Efforts to Provide Drinking Water to Improve Public Health	Prof. Dr. rer. nat. Heru Susanto, ST, MM, MT	Philosophy and Research Methodology	Lecture material	2018
21	Characterization and Fabrication of Polyethersulfone/Chitosan/Nanoparticle Hollow Fiber Membranes for Hemodialysis Applications	Prof. Dr. rer. nat. Heru Susanto, ST, MM, MT	Philosophy and Research Methodology	Lecture material	2018
22	Synthesis of Low Fouling Ultrafiltration Membrane by Incorporating Natural Antifouling and Nanomaterials	Prof. Dr. rer. nat. Heru Susanto, ST, MM, MT	Philosophy and Research Methodology	Lecture material	2018
23	Development of Dalangan Hamlet, Sumogawe, Getasan, Semarang Regency as a Tourism Village Based on Local Potential	Prof. Dr. rer. nat. Heru Susanto, ST, MM, MT	Philosophy and Research Methodology	Lecture material	2018
24	Biorefinery of Oil and Protein from Microalgae and Palm Oil Liquid Waste Using ZnO:Ag Photocatalyst	Prof.Dr. Hadiyanto, ST, M.Sc.	Environmental Chemistry and Biology	Lecture material	2018
25	Mini Plant Production of Antioxidant Phycocyanin Encapsulated from Microalgae Spirulina plantesis as an Effort to Support National Nutrition Security	Prof.Dr. Hadiyanto, ST, M.Sc.	Environmental Chemistry and Biology	Lecture material	2018
26	Development of Mathematical Model of Domestic Wastewater Pollutant Transport Phenomenon Based on Advection-Dispersion Process in Stabilization Pond	Dr. Sunarsih, MSi	Environmental System Analysis	Lecture material	2018
27	Characteristics of leachate and investigation of groundwater pollution at the Undip TPST location	Mochamad Arief Budihardjo., ST., M.Eng Sc., Ph.D.	Environmental Chemistry and Biology	Lecture material	2018
28	Preparation of Groundwater Vulnerability Risk Zones for Pumping and Seawater Intrusion and Design of Stakeholder Mental Models in Groundwater Management as the Basis for Determining Monitoring Well Networks in Semarang City	Dr.rer.nat Thomas Triadi P., M.Eng.	Mass Transfer and Transformation	Lecture material	2018

No.	Research Title/PKM	Lecturer Name	Courses	Integration Form	Year(YYYY)
1	2	3	4	5	6
29	Spatio Temporal Modeling of Air Pollutants Using Mxed Geographically and Temporally Weighted Multivariate Regressions (MGTWMR)	Dr. Budi Warsito, S.Si., M.Sc.	Environmental Statistics	Lecture material	2018
30	Application of Eco-turban Rice Field Model to Increase Food Diversity Based on Lake Conservation that Engages Communities Productively.	Dr. Drs. Jafron Wasiq Hidayat, M.Sc.	Ecology and Environmental Planning	Lecture material	2018
31	IbPUD Contemporary Batik Association in Semarang City, Central Java	Dr. Budi Warsito, S.Si., M.Sc.	Environmental Statistics	Lecture material	2018
32	Green Infrastructure Resilience Modeling as a Base for Low Carbon City Development in Semarang	Dr. Eng. Maryono, S.T., M.T.	Environmental Planning Theories	Lecture material	2018
33	Acceleration of Rural Economic Development in Central Java through the Implementation of Tapioca Production Technology with Hybrid Solar Dryers as Raw Materials for the Food and Beverage Industry Based on Local Resources	Dr. Ing. Suherman, ST, MT	Clean Technology	Lecture material	2018
34	Development of Hybrid Solar Dryers for Production of High Quality Seaweed As Raw Materials for Industry Based on Local Resources: Design, Scale-Up, And Optimization	Dr. Ing. Suherman, ST, MT	Clean Technology	Lecture material	2018
35	Sustainable Utilization of Kendeng Mountain for Water Resources and Food Security	Prof. Dr. Sudharto P Hadi, MES, Ph. D	Environmental Planning Theories	Lecture material	2019
36	Development of an Air Quality Monitoring System Based on a Wireless Sensor Network as an Effort to Support a Clean City and Industrial Air Environment	Prof.Dr. Ir. Purwanto, DEA	Computer Applications and Environmental Modeling	Lecture material	2019
37	Paleolimnological Assessment of Anthropogenic Activities in Galela Lake Halmahera	Prof. Dr. Dra. Tri Retnaningsih Soeprobowati, M. App. Sc.	Environmental Chemistry and Biology	Lecture material	2019
38	Utilization of Natural Zeolite as a Toxic Gas Adsorbent in Pond Water	Prof. Dr. Didi Dwi Anggoro, M.Eng.	Technology and Energy Management Planning	Lecture material	2019
39	Theorizing the Phenomenon of De-urbanization in Metropolitan Regions of Central Java Province, Indonesia	Prof. Dr. rer. nat Imam Buchori, ST	Spatial Planning and Environment	Lecture material	2019
40	Palm Oil Cracking to Renewable Liquid Fuels over Plasma-Assisted Catalytic Continuous Reactor to Supply National Energy Demand	Prof. Dr. Istadi, ST, MT	Computer Applications and Environmental Modeling	Lecture material	2019
41	Coastal Protection Using Submerged Breakwater as a Disaster Mitigation Effort for Beach Damage on Panjang Island, Jepara Regency	Prof. Dr. Denny Nugroho Sugianto, ST, M.Sc.	Environmental Planning Theories	Lecture material	2019
42	Mathematical Analysis and Optimization of Stabilization Pond System for Wastewater Treatment	Dr. Sunarsih, M.Si.	Environmental System Analysis	Lecture material	2019
43	Improvement of Hydraulic and Stability Performance of Composite Landfill Liner	Mochamad Arief Budihardjo., ST., M.Eng Sc., Ph.D.	Ecology and Environmental Planning	Lecture material	2019

No.	Research Title/PKM	Lecturer Name	Courses	Integration Form	Year(YYYY)
1	2	3	4	5	6
44	Groundwater Potential Analysis for Water Footprint Evaluation (Hydrology, Economics, & Public Health) in the Sumowono Groundwater Basin (CAT) Area, Central Java Province	Dr.rer.nat Thomas Triadi P., M.Eng.	Mass Transfer and Transformation	Lecture material	2019
45	Application of Spatial Analysis to Develop Groundwater Vulnerability Using Drastic and Sintacs Methods in Semarang Coastal Aquifer	Dr.rer.nat Thomas Triadi P., M.Eng.	Mass Transfer and Transformation	Lecture material	2019
46	Building Disaster Waste Management Resilience By Using Independent System Treatment in Indonesian Small Island Hazard Region	Dr. Eng. Maryono, ST, MT	Disaster Management Method	Lecture Method	2019
47	Ambient Air Quality Modeling Based on Hybrid Artificial Neural Networks and Particle	Dr. Budi Warsito, S.Si., M.Sc.	Environmental Statistics	Lecture material	2019

**Information:**

- 1) The title of research and PkM is recorded in the unit/institution that manages research/PKM activities at the Higher Education/UPPS level.
- 2) The form of integration can be in the form of additional lecture materials, case studies, chapters/sub-chapters in textbooks, or other relevant forms.

**c. Student Satisfaction**

Write down the results of measuring student satisfaction with the educational process by following the following table 5.c format. The data is taken from the results of a search study conducted during TS.

Table 5.c Student Satisfaction

No	Measured Aspect	Student Satisfaction Rate (%)				Follow Up Plan by UPPS/PS
		Very good	Good	Enough	Less	
1	2	3	4	5	6	7
1	Reliability: the ability of lecturers, education staff, and managers in providing services	56	40	3	2	
2	Responsiveness: the willingness of lecturers, education staff, and managers to help students and provide services quickly	53	42	4	3	
3	Assurance: the ability of lecturers, education staff, and managers to give confidence to students that the services provided are in accordance with the provisions	48	49	3	1	

No	Measured Aspect	Student Satisfaction Rate (%)				Follow Up Plan by UPPS/PS
		Very good	Good	Enough	Less	
1	2	3	4	5	6	7
4	Empathy (emphaty): willingness/caring for lecturers, education staff, and managers to pay attention to students	53	44	2	1	
5	<i>Tangible</i> : student assessment of the adequacy, accessibility, quality of facilities and infrastructure	47	49	5	1	
	<b>amount</b>	51.4	44.8	3.4	1.6	

## 6. Research

### a. DTSP Research Involving Students

The following table 6.a is filled out by the proposer from the Study Program in the Applied Bachelor/Bachelor/Master/Applied Master/Doctoral/Applied Doctoral program

Write down DTSP research data which in its implementation involves Study Program students at TS-2 to TS by following the format of Table 6.a below.

Table 6.a DTSP research involving students

No.	Lecturer Name	Research Theme according to the Roadmap	Student name	Activity Title 1)	Year
1	2	3	4	5	6
1	Prof. Dr. Ir. Purwanto, DEA	Environment	Destha Aji Kesuma	Thesis	2017
2	Prof. Dr. Ir. Purwanto, DEA	Environment	Tri Setyo Wibowo	Thesis	2017
3	Prof. Dr. Ir. Sutrisno Anggoro, M. Si.	Environment	Bayu Purnomo	Thesis	2017
4	Prof. Dr. Ir. Sutrisno Anggoro, M. Si.	Environment	Marta Shabran Kharja	Thesis	2017
5	Prof. Dr. Ir. Sutrisno Anggoro, M. Si.	Environment	Andrian Garbono	Thesis	2017
6	Prof. Dr. Dra. Tri Retnaningsih Soeprobowati, M. App. Sc	Environment	Alvan Pahulan	Thesis	2017
7	Prof. Dr. rer. nat. Imam Buchori, ST	Environment	Elijah Sawitri	Thesis	2017
8	Dr. Hartuti Purnaweni, MPA	Environment	Topo Budi Dhanarko	Thesis	2017
9	Dr. Fuad Muhammad, SSI., M. Si	Environment	Alexander Melat Aryasa	Thesis	2017
10	Dr. Ing. Sudarno utomo, ST M.Sc.	Environment	Erwin Bahar	Thesis	2017

No.	Lecturer Name	Research Theme according to the Roadmap	Student name	Activity Title 1)	Year
1	2	3	4	5	6
11	Prof. Drs. Sudharto P Hadi, MES, Ph.D.	Climate	Beautiful Kurniasih Wahyu Sari	Thesis	2018
12	Prof. Dr. Ir. Purwanto, DEA	Environment	Wijayanto Setyo Aji	Thesis	2018
13	Prof. Dr. Ir. Purwanto, DEA	Environment	Aulia Firda Alfiana	Thesis	2018
14	Prof. Dr. Ir. Purwanto, DEA	Energy	Ana Yustika	Thesis	2018
15	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc.	Environment	Anisa Putri Febriani	Thesis	2018
16	Prof. Dr. Dra. Tri Retnaningsih Soeprbowati, M. App. Sc.	Environment	Yulis Hindarwati	Thesis	2018
17	Prof. Dr. Denny Nugroho Sugianto, ST, M.Sc.	Climate	Yadi Suryadi	Thesis	2018
18	Prof. Dr. Hadiyanto, ST, M.Sc.	Environment	Hashfi Hawali Abdul Matin	Thesis	2018
19	Prof. Dr. Hadiyanto, ST, M.Sc.	Environment	Arieyanti Dwi Astuti	Thesis	2018
20	Prof. Dr. Hadiyanto, ST, M.Sc.	Environment	Chalid Afif Alfajrin Achmad	Thesis	2018
21	Dr. Sunarsih, M.Si.	Environment	Ihsan Wira	Thesis	2018
22	Dr. kismartini, M.Si.	Environment	Masitoh Ernawati	Thesis	2018
23	Dr. kismartini, M.Si.	Environment	Nur Anisa Eka Ariyani	Thesis	2018
24	Dr. kismartini, M.Si.	Disaster Management	Hendra Wirawan Zakariah	Thesis	2018
25	Dr. Hartuti Purnaweni, MPA	Environment	Riwayatningsih	Thesis	2018
26	Dr. Fuad Muhammad, SSi, M.Sc.	Environment	Alfan Eka Suardana	Thesis	2018
27	Dr. Fuad Muhammad, SSi, M.Sc.	Coastal	Raditya Ahmad Rifandi	Thesis	2018
28	Dr. Ing. Sudarno, ST, M.Sc.	Environment	Purnamasari Ethics	Thesis	2018
29	Dr. Ing. Sudarno, ST, M.Sc.	Environment	Anom Guritno	Thesis	2018
30	Dr. Jafron Wasiaq Hidayat, M.Sc.	Coastal	Achmadah Kurniawati	Thesis	2018
31	Dr. Eng. Maryono, ST, MT	Environment	Noor Amalia Chusna	Thesis	2018
32	Dr. Eng. Maryono, ST, MT	Environment	Aji Uhfatun Muzdalifah	Thesis	2018
33	Dr. Eng. Maryono, ST, MT	Environment	Dea Chintanya	Thesis	2018

No.	Lecturer Name	Research Theme according to the Roadmap	Student name	Activity Title 1)	Year
1	2	3	4	5	6
34	Dr. Ing. Suherman, ST, MT	Environment	Elza Rizkiawalia	Thesis	2018
35	Dr. Ing. Suherman, ST, MT	Environment	Sumardianto Nugroho	Thesis	2018
36	Prof. Dr. Ir. Purwanto, DEA	Environment	Sri Maharani	Thesis	2019
37	Prof. Dr. Ir. Purwanto, DEA	Environment	Aulia Firda Alfiana	Thesis	2019
38	Prof. Dr. Azis Nur Bambang, M.Sc.	Environment	Nurul Elmi Faid	Thesis	2019
39	Prof. Dr. Dra. Tri Retnaningsih Soeprobowati, M. App. Sc.	Coastal	Ikha Jayanti Mamayu Utami	Thesis	2019
40	Prof. Dr.rer.nat. Heru Susanto, ST, MM, MT	Environment	Nofiana	Thesis	2019
41	Prof. Dr. Hadiyanto, ST, M.Sc.	Environment	Havid Widiyanto	Thesis	2019
42	Prof. Dr. Hadiyanto, ST, M.Sc.	Environment	M. Arief Rahman Halim	Thesis	2019
43	Dr. Sunarsih, M.Si.	Environment	Ihsan wira senjaya	Thesis	2019
44	Dr. Sunarsih, M.Si.	Environment	Satryani Kartika Ningrum Ika	Thesis	2019
45	Dr. kismartini, M.Si.	Disaster Management	Yuliana Rachmawati	Thesis	2019
46	Dr. kismartini, M.Si.	Environment	Masitoh Ernawati	Thesis	2019
47	Dr. Hartuti Purnaweni, MPA	Environment	Endang Rini	Thesis	2019
48	Dr. Hartuti Purnaweni, MPA	Environment	Dwito Darmawan	Thesis	2019
49	Dr. Fuad Muhammad, SSi, M.Sc.	Environment	Ari Wulandari	Thesis	2019
50	Dr. Ing. Sudarno, ST, M.Sc.	Environment	Solikul Abdi	Thesis	2019
51	Dr. Ing. Sudarno, ST, M.Sc.	Environment	Purnamasari Ethics	Thesis	2019
52	Dr.rer.nat.Thomas Triadi Putranto, ST., MEng.	Environment	Dwi Nur Yuliyani	Thesis	2019
53	Dr. Eng. Maryono, ST, MT	Environment	Aji Uhfatun Muzdalifah	Thesis	2019
54	Dr. Eng. Maryono, ST, MT	Environment	Fajar Adie Nugraha	Thesis	2019
55	Dr. Ing. Suherman, ST, MT	Environment	Sumardianto Nugroho	Thesis	2019

Information:

- 1) The title of activities that involve students in lecturer research can be in the form of Final Project, Design, Product/Service Development, or other relevant activities.

The following table 6.b is filled out by the proposer from the Study Program in the Applied Master/Master/Doctoral/Applied Doctoral program

Write down the DTPS research data that becomes the reference for the thesis/dissertation theme of the Study Program students at TS-2 to TS by following the following table 6.b format Table 6.b DTPS research which is the reference for the thesis/dissertation theme

No.	Lecturer Name	Research Theme according to the Roadmap	Student name	Title of Thesis/Dissertation 1)	Year
1	2	3	4	5	6
1	Prof. Dr. Ir. Purwanto, DEA	Environment	Ayunda Putri Andini	Assessing Water Quality Of Ciujung River In Lebak Regency By Using Pollution Index	2017
2	Prof. Dr. Ir. Purwanto, DEA	Environment	Velantika	The Textile Waste Degradation of Indigosol Blue Dye by Fention Electrical Process	2017
3	Prof. Dr. Ir. Sutrisno Anggoro, M. Si.	Environment	Eni Maulidiyah	Groundwater conservation in Batu City East Java: An ecohydrological approach	2017
4	Prof. Dr. Denny Nugroho Sugianto, ST, M.Sc.	Climate	Anindya Wirasatriya	The Influence of Madden Julian Oscillation on the Formation of the Hot Event in the Western Equatorial Pacific	2017
5	Dr. Hartuti Purnaweni, MPA	Environment	Anita Listiara	Environmental Concerns in the Eyes Of University Students	2017
6	Dr. Fuad Muhammad, S.Si., M.Sc.	Environment	Abdul Malik	Analysis of Vegetation Ecosystem Litoral, Supralitoral, and Central Forests in Panjang Island, Jepara, Central Java	2017
7	Prof. Drs. Sudharto P Hadi, MES, Ph.D.	Environment	Sri Sulistyowati	The existence of High Conservation Value Forest (HCVF) in Perum Perhutani KPH Kendal to support Implementation of FSC Certification	2018
8	Prof. Drs. Sudharto P Hadi, MES, Ph.D.	Environment	Wiwik Yulianti	The Effectiveness of Building Permit Regulation for Green Open Space at Housing Estates: Case Study of Kendal Regency, Central Java, Indonesia	2018
9	Prof. Dr. Ir. Sutrisno Anggoro, M.Sc.	Environment	Bambang Sujono	Study of Carrying Capacity Assessment for Natural Fisheries in Jatibarang Reservoir in Semarang City	2018
10	Dr. Kismartini, M.Si.	Environment	Dawn Ifan Dolly	The Land Use Change from Agricultural to Non-Agricultural in Bungo Regency, Jambi Province, Indonesia	2018
11	Dr. Hartuti Purnaweni, MPA	Environment	Theresia Vika Ayuningrum	Activities in the Mining Sector: Current Status and Challenges Ahead Limestone Mining in Nusakambangan	2018
12	Dr. Hartuti Purnaweni, MPA	Environment	Son of Rizal Ichsan Syah Putra	Land Use and River Degradation Impact of Sand and Gravel Mining	2018
13	Dr. Fuad Muhammad, S.Si., M.Sc.	Environment	Muhammad Arif Setiawan	Stakeholder Analysis in Utilizing of Environmental Services and Natural Attractions in Tuk Semuncar Utilization Zone of Mount Merbabu	2018



No.	Lecturer Name	Research Theme according to the Roadmap	Student name	Title of Thesis/Dissertation 1)	Year
1	2	3	4	5	6
14	Dr. Jafron Wasiq Hidayat, M.Sc.	Environment	Rahmawati Ervina	Vegetation Structure of Ebony Leaf Monkey ( <i>Trachypithecus auratus</i> ) Habitat in Kecubung Uluanang Nature Preservation Central Java-Indonesia	2018
15	Dr. Eng. Maryono, ST, MT	Environment	Noor Amalia Chusna	Preliminary Evaluation of Method to Monitor Landfills Resilience Against Methane Emission	2018
16	Dr. Eng. Maryono, ST, MT	Environment	Aji Uhfatun Muzdalifah	Preliminary Identification of Urban Park Infrastructure Resilience in Semarang Central Java	2018
17	Dr. Eng. Maryono, ST, MT	Environment	Dea Chintanya	Comparing Value of Urban Green Space Using Contingent Valuation and Travel Cost Methods	2018
18	Prof.Dr.Ir. Purwanto, DEA	Environment	Armas Arifin Arbunowo	CO-Benefit Approach in Utilizing Textile Industry WWTP Sludge as Mixture Material for Bricks	2019
19	Prof. Dr. Ir. Purwanto, DEA	Environment	Aulia Firda Alfiana	Study of Opportunities for the Application of Clean Production in the Soy Sauce Making Industry of Shrimp Cap in Grobogan Regency	2019
20	Prof. Dr. Ir. Azis Nur Bambang, MS	Environment	Mohamad Heri Hidayattuloh	Determination of Environmental-Based Budget Planning Priorities in the Tegal Regency Government	2019
21	Prof. Dr. Ir. Azis Nur Bambang, MS	Environment	Siti Robiah Nurbaiti	Community Participation in the Program for Providing Clean Water Facilities Based on Community Management (Case of Implementation of Exxon Mobil Cepu Limited Corporate Social Responsibility (CSR) in Gayam Village)	2019
22	Prof. Ir. Didi Dwi Anggoro M.Eng., Ph.D.	Environment	Muhammad Muslihun	Environmental Studies in Paid Plastic Bag Policy in Semarang City	2019
23	Prof. Dr. rer. nat. Imam Buchori, S.T	Environment	Indraya Kusyuniadi	Effectiveness of Supervision of Spatial Planning Policy in the Karangsambung Geological Reserve Area	2019
24	Prof. Dr. Denny Nugroho Sugianto, ST, M.Sc.	Coastal	Atmari	Growth of Mangrove Vegetation in the Coastal Area of North Demak Based on Remote Sensing Data	2019
25	Prof. Dr. Hadiyanto, ST, M.Sc.	Environment	Vita Rosmiati	Environmental Impact Assessment on Plastic Waste Recycling Process with Lift Cycle Assessment Approach	2019
26	Prof. Dr. Hadiyanto, ST, M.Sc.	Environment	Yoyon Wahyono	Life Cycle Assessment on Biodiesel Multi Feedstock Production Process from Used Cooking Oil, Crude Palm Oil and Crude Rapeseed Oil	2019
27	Dr. kismartini, M.Si.	Environment	Masitoh Ernawati	The Effectiveness of the KOTAKU (City Without Slums) Program in Reducing the Area	2019

No.	Lecturer Name	Research Theme according to the Roadmap	Student name	Title of Thesis/Dissertation 1)	Year
1	2	3	4	5	6
				of Slums in the City of Semarang	
28	Dr. Kismartini, M.Si.	Environment	Harfin Nurulhaq	implementation of bogor city government policies on reducing plastic waste	2019
29	Dr. Hartuti Purnaweni, MPA	Environment	Diah Setianingsih	Stakeholder Analysis in Groundwater Basin Management (CAT)	2019
30	Dr. Ing. Sudarno, ST, M.Sc.	Environment	Agus Makfur	Blorong River Water Pollution Control Strategy as a Raw Water Source for Kendal Regency	2019
31	Mochamad Arief Budihardjo, ST, M.Eng, Env.Eng, Ph.D.	Environment	Nurul Yaqin	Mocaf (Modified Cassava Flour) Wastewater Quality Bioindicator Based on Peroxidase Enzyme	2019
32	Dr.rer.nat Thomas Triadi P, ST, M.Eng.	Environment	Tri Retnaning Nur Amanah	Multivariate Statistical Analysis and Spatial Analysis for Hydrochemical Assessment of Groundwater in Semarang City	2019
33	Dr. Jafron Wasiq Hidayat, M.Sc.	Environment	Reszi Ariefianda	Assessment of the Suitability of Marine Tourism on Natural Tourism Objects on Lengkuas Island, Sijuk District, Belitung Regency, Bangka Belitung Islands	2019
34	Dr. Jafron Wasiq Hidayat, M.Sc.	Environment	Lukman Ari Bahtiar	Control of Crude Oil Waste Pollution Using Water Hyacinth (Eichhornia Crassipes) Phytoremediation	2019
35	Dr. Eng. Maryono, ST, MT	Environment	Herianto	Technical Study of Waste Management in Palangka Raya City Kota	2019

Information:

- 1) Student Thesis/Dissertation which is part of the lecturer's research agenda.

## 7. Community Service (PKM) DTPS PKM Involving Students

The following table 7 is filled out by the proposer from the Study Program in the Diploma Three/Bachelor/Applied Bachelor program.

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## 8. Outcomes and Achievements of Tridharma a. Learning Outcomes

Write down the data on the Grade Point Average (GPA) of graduates in the last 3 years by following the format of Table 8.a below. The data is complemented by the number of graduates in each year of graduation.

Table 8.a Graduate GPA

		Grade Point Average (GPA)

Graduation year	Number of Graduates	Min.	Average	Max.
1	2	3	4	5
TS-2	22	3.30	3.65	3.90
TS-1	51	3.15	3.60	3.95
TS	47	3.30	3.63	3.95

### b. Student Achievement

The data is accompanied by a description of the achievement activities followed (name of activity, year, level, and achievements).

Table 8.b.1 Academic Achievement

No.	Name of activity	Acquisition Time (YYYY)	Level			Achievements
			Local/Region	National	International	
1	2	3	4	5	6	7
1	The 3rd International Conference on Energy, Environmental and Information System	2018			V	1st Place Best Presenter
2	The 4th International Conference on Energy, Environmental and Information System	2019			V	1st Place Best Presenter
3	International publication	2019			V	Publications in international journals Q1
4	Batang Regency Regional Research Competition 2018	2018		V		Winner

Information:

1) Put a check mark V in the appropriate column.

### c. Educational Effectiveness and Productivity

Write down student and graduate data by following the following Table 8.c format.

Table 8.c. Study Period Graduates of the Study Program

To be completed by the proposer from the Study Program in the Applied Master/Master Program

Entry Year	Number of Students Accepted	Number of Graduates				Number of Graduates to the End of TS	Average study period
		End of TS-3	End of TS-2	End of TS-1	End of TS		
1	2	3	4	5	6	7	8
TS-3	55		2	33	5	40	2.3
TS-2	22			7	13	20	1.8
TS-1	36				13	13	1.7

Information:

1) Does not include transfer students.

TS = Last full academic year.

TS-n = Academic year n years before TS.

#### d. Graduate Competitiveness

The following table 8.d.2 is filled out by the proposer from the Study Program in the Diploma Three/Bachelor/Applied Bachelor/Master/Applied Master program.

Write down the data on the suitability of the graduate's field of work when he gets his first job in 3 years, starting from TS-4 to TS-2, following the format of Table 8.d.2 below. The data is taken from the results of graduate tracing studies.

Table 8.d.2 Suitability of Graduates' Field of Work

Graduation year	Number of Graduates	Number of Graduates Tracked	Number of graduates with appropriate level of work field		
			Low 1)	Medium 2)	3) Height
1	2	3	4	5	6
TS-4 (2015)	57	57	6	34	17
TS-3 (2016)	31	31	4	19	8
TS-2 (2017)	32	32	4	19	9
amount	120	120	14	72	34

Information:

- 1) The type of work/position in the job does not match or is not in accordance with the graduate profile planned in the curriculum document.
- 2) The type of work/position in the job is quite in accordance with the graduate profile planned in the curriculum document.
- 3) The type of work/position in the job is appropriate or very in accordance with the graduate profile planned in the curriculum document.

#### e. Graduate Performance

The following table 8.e.2 is filled out by the proposer from the Study Program in the Diploma Three/Bachelor/Applied Bachelor/Master/Applied Master program.

Write down the results of measuring graduate user satisfaction based on the following aspects: 1) ethics, 2) expertise in the field of science (main competence), 3) foreign language skills, 4) use of information technology, 5) communication skills, 6) cooperation and 7) development yourself, by following the following Table 8.e.2 format. The data is taken from the results of graduate tracing studies.

Table 8.e.2 User Satisfaction

No	Ability Type	User Satisfaction Level				Follow Up Plan by UPPS/PS
		Very good	Good	Enough	Less	
1	2	3	4	5	6	7
1	Ethics	75	23	2	0	

No	Ability Type	User Satisfaction Level				Follow Up Plan by UPPS/PS
		Very good	Good	Enough	Less	
1	2	3	4	5	6	7
2	Expertise in the field of science (main competence)	73	24	3	0	
3	Foreign language skills	79	16	5	0	
4	Use of information technology	80	19	1	0	
5	Communication skills	76	21	3	0	
6	Teamwork	71	17	12	0	
7	Self-development	77	13	10	0	
amount		75.9	19	5.1	0	

#### f. Student Research and PkM Outcomes

The following table 8.f.1 is filled out by the proposer from the Study Program in the Bachelor/Master/Doctorate program.

Write down the number of student scientific publications, produced independently or with DTPS, in the last 3 years by following the format of Table 8.f.1 below. The title of the publication must be relevant to the field of study program.

Table 8.f.1 Student Scientific Publications

No	Publication Media	Number of Titles			amount
		TS-2	TS-1	TS	
1	2	3	4	5	6
1	Unaccredited national journal	0	0	0	NA1= 0
2	Accredited national journal	0	0	1	NA2= 1
3	International Journal	3	7	1	NA3= 11
4	Reputable international journal	8	8	1	NA4= 17
5	Regional/local/college seminars	0	0	0	NB1= 0
6	National Seminar	0	0	15	NB2= 15
7	International Seminar	26	80	25	NB3= 131
8	Writing in regional mass media	0	0	0	NC1= 0
9	Writing in the national mass media	0	0	0	NC2= 0
10	Writing in international mass media	0	0	0	NC3= 0

The following table 8.f.1 is filled out by the proposer from the Study Program in the Applied Bachelor/Applied Master/Applied Doctorate program.

Write down the number of student shows/exhibitions/presentations/scientific publications, which were produced independently or with DTPS, in the last 3 years by following the format

of Table 8.f.1 below. The title of the show/exhibition/presentation/scientific publication must be relevant to the field of study program.

Table 8.f.1 Shows/exhibitions/presentations/Scientific publications of students

No	Type	Number of Titles			amount
		TS-2	TS-1	TS	
1	2	3	4	5	6
1	Publications in non-accredited national journals				
2	Publication in accredited national journals				
3	Publication in international journals				
4	Publication in reputable international journals				
5	Publication at regional/local/college seminars				
6	Publication at national seminars				
7	Publication at international seminars				
8	Performances/exhibitions/presentations in regional forums				
9	Performances/exhibitions/presentations in national level forums				
10	Performances/exhibitions/presentations in international forums				

The following table 8.f.2 is filled out by the proposer from the Study Program in the Applied Master/Masters/Doctoral/Applied Doctoral program.

Write the title of the student's scientific article, which was produced independently or with DTPS, which was cited in the last 3 years by following the format of Table 8.f.2 below. The title of the cited article must be relevant to the field of study program.

Table 8.f.2 Student Scientific Works cited

No	Student name	Title of Citation Article (Journal/Book, Volume, Year, Number, Page)	Number of Citation
1	2	3	4
1	Said Jumrin	Motivation and Perception of Tourists as Push and Pull Factors to Visit National Park (E3S Web Conferences, Vol 31, 2018, Pg 08022)	4
2	Dea Chintatya	Comparing Value of Urban Green Space Using Contingent Valuation and Travel Cost Methods (E3S Web Conferences, Vol 31, 2018, Pg 07008)	1
3	Herry Setiawan	The Management of Toxic and Hazardous Waste Materials In The Food Industry (E3S Web Of Conferences, Vol 73, 2018, Pg 07020)	1
4	Mardhika Sapto Sari	Flare Gas Recovery As One Of The Clean Development Mechanism (CDM) practices (IOP Conferences Series: Earth and Environmental Science, Vol 200, 2018, No 1 Page 012023)	1

No	Student name	Title of Citation Article (Journal/Book, Volume, Year, Number, Page)	Number of Citation
1	2	3	4
5	Alexander Melat Aryasa	The study of environmental carrying capacity for sustainable tourism in Telaga Warna Telaga Pengilon Nature Park, DiengPlateu, Central Java (IOP Conference Series: Earth and Environmental Science, Vol 70, 2017, Page 012003)	2
6	Agus Tjahjono	Analysis of Heavy Metal Content of Pb in Ballast Water Tank of Commercial Vessels in Port of Tanjung Emas Semarang, Central Java Province (AIP Conference Proceedings, Vol 1818, 2017, No 1, Hal 020061)	5
7	Siti Robiah Nurbaiti	Factors Affecting Community Participation in the Implementation of Corporate Social Responsibility Program (Biology Education Conference, Vol 14, 2017, No 1, Page 224-228)	9
8	Rina Mulyanti	Wastewater treatment by nanofiltration membranes (IOP Conference Series: Earth and Environment Science, Vol 142, 2018, No 1, Page 012017)	6
9	Elijah Sawitri	The difference of level CO2 emissions from the transportation sector between weekdays and weekend days on the CityCentre of Pemalang (IOP Conference Series : Earth and Environment Science, Vol 70, 2017, No 1, Page 012010)	1
10	Ainie Khuriati	Modeling of Heating Value of Municipal Solid Waste Based on Ultimate Analysis Using Multiple Stepwise Linear Regression in Semarang (ARPN Journal of Engineering and Applied Science, Vol 12, 2017, No 9, Page 2870-2876)	4
11	Fianda Revina Widyastuti	Biogas Potential from the Treatment of Solid Waste of Dairy Cattle: Case Study at Bangka Botanical Garden Pangkalpinang (International Journal of Waste Resources, Vol 3, 2014, No 2, Pages 1-4)	3
12	Jimmy Margomgom Tambunan	Study of Environmental Quality and Suitability of Tanjung Pesona Beach Tourism, Bangka Regency (Undip E-Journal, 2013, Pages 356-362)	17
13	Abdul Fatah	Theology-Based Waste Management Concept (Journal of Environmental Science, Vol 11, 2013, No. 1, Pages 84-91)	6
14	Mukhlisi	Status of the Sustainability of Mangrove Forest Management in Sidodadi Village, Padang Cermin District, Pesawaran Regency, Lampung Province (Geography Journal: Information Media for Geographical Development and Profession, Vol 11, 2014, No 1, Pages 58-70)	2
15	Hendri Micky	Mining Permits and Supervision Implementation Policy within the Framework of Environmental Management in Bandar Lampung (Advanced Science Letters, Vol 23, 2017, No 3, Page 2567-2569)	1
16	Toto Aryanto	Carrying Capacity of the Bukit Raya Hiking Trail in the Bukit Baka Raya National Park, West Kalimantan (Journal of Environmental Science, Vol 14, 2016, No 2, pp 72-76)	1
17	Elesvera Destry	Evaluation on Sustainability of Technological Dimension BioporeAbsorption Hole Management For Soil Water Conservation in Semarang City (Journal of Soil Science and Agroclimatology, Vol 12, 2015, No 1, Pages 1-9)	1
18	Ira Adiatma	Fishermen Adaptation to Climate Change in the Utilization of Coastal Space (Case Study: Batu Behole Village, Bangka) (Proceedings of the National Seminar on Natural Resources and Environmental Management, 2013)	1
19	Abdul Rowiq	Rainwater Harvesting as Fulfillment of Clean Water Needs for Flood Refugees (Proceeding Biology Education Conference: Biology, Science, Environmental, and Learning, Vol 10, 2013, No 1)	1

No	Student name	Title of Citation Article (Journal/Book, Volume, Year, Number, Page)	Number of Citation
1	2	3	4
20	Dwi Hardoyo	Planning of Educational Tourism Activities in the Rinjani Lombok Geopark Area Based on Environmental Carrying Capacity (Aik Berik Regional Study) (Journal of Environmental Science Undip, Vol 14, 2016, No 2, Page 103-107)	3
21	Iwan Chandra Binsar Hamonangan Simanjuntak	Carrying capacity of Kedungombo reservoir for net cage culture (E3S Web of Conferences, Vol 73, 2018, Pg 03018)	1
22	Dyah Agustinarsih	Water Quality Analysis and Water Pollution Control Strategies of the Blukar River, Kendal Regency (Journal of Precipitation: Communication Media and Development of Environmental Engineering, Vol 9, 2012, No 2, pp 64-71)	44
23	Ma'in	Study of Environmental Impacts of Application of Biofloc Technology in Vaname Shrimp Cultivation Activities with the Life Cycle Assessment Method (Journal of Environmental Science, Vol 11, 2013, No 2, Pages 110-119)	6
24	Ira Tri Susanti	The Trophic Tatus of the Manggar Reservoir in Balikpapan City and its Management Strategy (Journal of Precipitation: Communication Media and Environmental Engineering Development, Vol 9, 2012, No 2, pp 72-78)	3
25	I Mohamed Oukhan	The Ability of Aquatic Weed Water Hyacinth and Water Lettuce To Reduce Heavy Metal Manganese (Mn), Zinc (Zn) and Iron (Fe) (Science Journal of Pure and Applied Chemistry, Vol 2015, 2015, Pages 1-15)	1
26	Purwono	Use of Microbial Fuel Cells (MFCs) Reactor Technology in Tofu Industrial Liquid Waste Treatment to Generate Electrical Energy (Journal of Precipitation: Communication Media and Development of Environmental Engineering, Vol 12, 2015, No 2, Pages 57-65)	3
27	Yulian Mara Alkusma	Development of Alternative Energy Potential by Utilizing Palm Oil Liquid Waste as a New Renewable Energy Source in East Kotawaringin Regency (Undip Journal of Environmental Science, Vol 14, 2016, No 2, pp 96-102)	2
28	Yadi Suryadi	Climate Change In Indonesia (Case Study : Medan, Palembang, Semarang) (E3S Web of Conferences, Vol 31, 2018, Page 09017)	2
29	Diah Auliyani	The Effect of Mangrove Rehabilitation on the Socio-Economic Condition of Coastal Communities in Rembang Regency (Undip E-Journal, 2013, pp. 317-321)	6
30	Yusa Eko Saputro	Community Based Waste Management Through Waste Banks (Indonesian Journal of Conservation, Vol 4, 2015, No 1)	5
31	Yusdi Vari Afandi	Community-Based Domestic Communal Wastewater Management in Probolinggo City (E-Journal Undip, 2013, pp 96-103)	1
32	Nur Anisa Ariyani	Implementation of Conservation Policy for Preservation and Sustainable Use of Biological Resources and Their Ecosystems in Karimunjawa National Park (Proceeding Biology Education Conference: Biology, Science, Environmental, and Learning, Vol 14, 2017, No 1, Page 206-213)	1
33	Anisa Putri Febriani	Analysis of Urban Forest Needs as Anthropogenic (CO <sub>2</sub> ) Gas Absorbent in Semarang City (E3S Web of Conferences, Vol 31, 2018, Page 07007)	1
34	Melia Ariyanti	Analysis of the Application of Clean Production Towards an Environmentally Friendly Nata De Coco Industry (Journal of Research on Industrial Pollution Prevention Technology, Vol 5, 2014, No 2, Page 45-50)	7



No	Student name	Title of Citation Article (Journal/Book, Volume, Year, Number, Page)	Number of Citation
1	2	3	4
35	Tri Retnaning Nur Amanah	Application of Cluster Analysis and Principal Component Analysis for Assessment of Groundwater Quality—A Study in Semarang, Central Java, Indonesia (IOP Conference Series: Earth and Environmental Science, Vol 248, 2019, No 1, Page 012063)	2
36	Dwi Nur Yuliyani	Study Of Spatial Effect Distribution Of Groundwater Quality On Rob Disaster In Semarang City (E3S Web of Conferences, Vol 73, 2018, Page 03027)	1
amount			156

The following table 8.f.4 is filled out by the proposer from the Study Program in the Applied Bachelor/Bachelor/Master/Applied Master/Doctorate/Applied Doctoral program.

Write down the research outputs and other PKM outputs produced by students, either independently or with DTSP, in the last 3 years by following the following table 8.f.4 format. The type and title of the output must be relevant to the field of study program.

Table 8.f.4 Other research/PKM outputs produced by students

No	Title of Research Output/PKM	Year	Information
1	2	3	4
I	Books with ISBNs, Book Chapters		
	1. Formulation of a Thousand Infrastructure Development Programs	2019	MIL students and Dr. Eng. Maryono, ST, MT
	2. Method of Prioritizing Infrastructure Development	2019	MIL 2 students and Dr. Eng. Maryono, ST, MT
	3. Indonesia's Compliance Pattern with the Convention on International Trade in Endangered Species of Wild Flora and Fauna in Overcoming the Illegal Trade in Pangolins between Indonesia and China	2019	Afifah Rahmi Andini and Dr. Hartuti Purnaweni, MPA
amount		ND = 3	

Information:

- 1) Outcomes of research/PKM that are recognized by Intellectual Property Rights (IPR) must be proven by a letter of determination by the Ministry of Law and Human Rights or other competent ministries.