

RESEARCH ROADMAP
LABORATORY SURVEYING AND CADASTRE
GEOMATICS ENGINEERING - FTSPK ITS

	2020	2021	2022	2023	2024
Surveying	Development of 3D Laser Scanning and Modelling				
	Ground control survey for tide survey, UAV inspection, etc, including point moving.				
	Land subsidence monitoring and modelling by utilizing GNSS technology, including the design of low cost prototype survey equipment.				
	Development of activities related to area boundary mapping, plan surveying, including road design with horizontal curves.				
Cadastr	Cadastr 3D development				
	Utilization of Information Technology in geospatial acquisition for the Marine Cadastre Database System		Development of Marine Space by presenting it in a Marine Cadastre Map with 3D Visualization		
	Researching the value of land and property in the implementation of land in Indonesia	Analyzing Land Value and Land Property / Real Estate / Flats by developing a Land Information System		Implementing some Land Value Modeling Algorithms in the Environment and Urban Development zone	

RESEARCH LIST 2020

No	Year	Research Title	Research Schemes	Competitive Level	The Chairman Name	The lead researcher comes from the laboratory concerned (1 = yes ; 0 = from another lab)	Name of Lecturer Member 1	Name of Lecturer Member 2	Name of Lecturer Member 3	Name of Lecturer Member 4	Name of Student Member 1 & Id Number Student	Name of Student Member 2 & Id Number Student	Name of Student Member 3 & Id Number Student	Source of Funds	Amount of Funds (in million Rp)
1	2020	Coastal Vulnerability Analysis As a Result of Sea Level Rise Using Altimetry Satellite Data (Case Study: The Beach Area of Gresik, Surabaya and Sidoarjo)	PLAB - Laboratory Research	Local	Dr. Eko Yuli Handoko, ST, MT.	0	Dhan Saptarini	Yuwono						D22020 - ITS Local 2020 (Research)	50
2	2020	Magnitude Analysis of Ionosphere Disturbance with Plate Shifts in the Earthquake and Tsunami (Case Study: Lombok-Palu Earthquake and Palu Tsunami 2018)	FDUPDT - College Leading Basic Research	National	Moh. Nur Cahyadi, ST, M.Sc., Ph.D	1	Ira Mutiara Anjasmaru	Yuwono						RistekBRIN - RistekBRIN	74
3	2020	Development of Low Cost Dual Frequency GPS for Autonomous Vehicle Navigation at Sea	PROTOTYPE - Prototype Research	Local	Moh. Nur Cahyadi, ST, M.Sc., Ph.D	1	Romy Mardiyanto	Eko Yuli Handoko	Yuwono	Khomsin				D22020 - ITS Local 2020 (Research)	60
4	2020	Water Change Monitoring Surface Using Data Multi-Temporal SAR Satellite Image (Case Study: Sertani Flood, Jayapura, Indonesia)	PD - Fund Research Department	Local	Fisa Bioresta, ST, M. Sc., Ph.D	1	Yuwono	Yanto Budiyanto	Udzana Wahyu Dewantari	Mokamad Nur Cahyadi	Torani Arya Gasica (0331174000032)	Meifun Eka Putra (0331174000059)	Burhamuddin Nur (0331174000048)	D42020 - ITS Local 2020 (Department Funds)	25
5	2020	Data-Based DTM Establishment Lidar Using Slope Based and Land Use-Morphology Filter Methods to Support Flood Modeling	FDB - New Doctoral Research	Local	Hepi Hapsari Handayani, ST, M.Sc., Ph.D	0	Yuwono	Agung Budi Cahyono			Mahardi Wirantiko (0331164000077)	Ike Nurrita Sari (0331164000057)	Muhammad Fadhil Ramadhani (0331164000007)	D22020 - ITS Local 2020 (Research)	47.7
6	2019 - 2020	Ionosphere Correction on Prototype Low Cost GPS Dual Frequency to Improve Accuracy of Soil Parcel Mapping	College Leading Applied Research		Moh. Nur Cahyadi, ST, M.Sc., Ph.D	1	Romy Mardiyanto, ST, M.Sc., Ph.D	Dr. Eko Yuli Handoko, ST, MT.			Rini Wuri Rahayu (03311950010005)	Mohammad Rizki Ubaidillah (03311640000092)	DRPMITS	DRPMITS	196
7	2020	Ionosphere Interference Analysis For Detecting Earthquakes Using Three-Dimensional Tomography Method (Case Study: Banten Earthquake August 2, 2019)	Master Thesis Research		Moh. Nur Cahyadi, ST, M.Sc., Ph.D	1	Dr. Eko Yuli Handoko, ST, MT.				Niswah Selmi Kaffa (03311850012002)	Rini Wuri Rahayu (03311950010005)	DRPMITS	DRPMITS	39.1
8	2020	i-boat			Moh. Nur Cahyadi, ST, M.Sc., Ph.D	1									60

*Columns can be added if needed

Rp. 551.80

Example:
 Grant (1) Local
 Competency Grants (2) National
 National Strategic (3) International

Source of Funds:
 (1) Independent
 (2) ITS Local
 (3) Ministry of Research, Technology and Higher Education
 (4) Domestic agencies outside the Ministry of Research, Technology and Higher Education
 (5) Foreign Agencies