

**PEMETAAN PERUBAHAN DELTA DI MUARA KALI  
PORONG DENGAN CITRA LANDSAT  
MULTITEMPORAL**

**SKRIPSI**



Oleh:

**NAUFAL SANDRO**  
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**PROGRAM STUDI SARJANA TEKNIK GEODESI  
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UNIVERSITAS GADJAH MADA  
YOGYAKARTA  
2019**

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# **MAPPING OF DELTA CHANGES IN KALI PORONG ESTUARY WITH MULTITEMPORAL LANDSAT IMAGERY**

**FINAL PROJECT**



**By:**

**NAUFAL SANDRO**  
**NIM: 14/369702/TK/42658**

**Submitted to:**

**UNDERGRADUATE STUDY PROGRAM OF  
GEODETIC ENGINEERING  
DEPARTMENT OF GEODETIC ENGINEERING  
FACULTY OF ENGINEERING  
UNIVERSITAS GADJAH MADA  
YOGYAKARTA  
2019**

# **PEMETAAN PERUBAHAN DELTA DI MUARA KALI PORONG DENGAN CITRA LANDSAT MULTITEMPORAL**

## **SKRIPSI**

**Sebagai syarat untuk memenuhi satu persyaratan dalam mencapai  
derajat Sarjana Teknik Program Studi Teknik Geodesi**



**Diajukan oleh:**

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**Kepada:**

**PROGRAM STUDI SARJANA TEKNIK GEODESI**

**DEPARTEMEN TEKNIK GEODESI**

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**YOGYAKARTA**

**2019**

# **MAPPING OF DELTA CHANGES IN KALI PORONG ESTUARY WITH MULTITEMPORAL LANDSAT IMAGERY**

## **FINAL PROJECT**

**Submitted as a partial fulfillment of the requirements for obtaining the degree  
of Bachelor of Engineering in Geodetic Engineering Study Program**



**By:**

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**Submitted to:**

**UNDERGRADUATE STUDY PROGRAM OF  
GEODETIC ENGINEERING  
DEPARTMENT OF GEODETIC ENGINEERING  
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**2019**