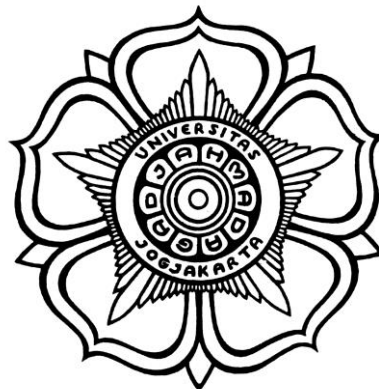


**HORIZONTAL COLLABORATION AND COST ALLOCATION IN CITY  
LOGISTICS UNDER DEMAND UNCERTAINTY: A CASE STUDY OF  
YOGYAKARTA, INDONESIA**

*PENERAPAN KOLABORASI HORIZONTAL DAN ALOKASI BIAYA PADA  
LOGISTIK PERKOTAAN DENGAN MEMPERTIMBANGKAN  
KETIDAKPASTIAN PERMINTAAN: STUDI KASUS YOGYAKARTA,  
INDONESIA*

**Thesis**



**Written By:**

**RAMADHANI NUR**

**17/437561/PTK/12594**

**MASTER PROGRAM OF INDUSTRIAL ENGINEERING  
DEPARTMENT OF MECHANICAL AND INDUSTRIAL ENGINEERING  
FACULTY OF ENGINEERING UNIVERSITAS GADJAH MADA  
YOGYAKARTA**

**2019**