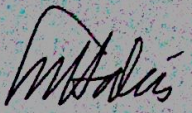


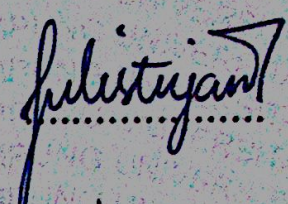
# MENGESAHKAN

## 1. Tim Penguji

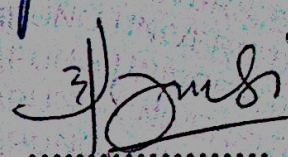
Ketua

: **Dr. Eng. Lukmanul Hakim, S.T., M.Sc.** ..... 

Sekretaris

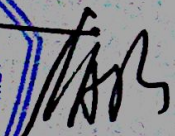
: **Dr. Ir. Sri Ratna Sulistiyanti, M.T.** ..... 


Penguji

Bukan Pembimbing : **Dr. Ahmad Saudi Samosir, S.T., M.T.** ..... 

## 2. Dekan Fakultas Teknik



  
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**Tanggal Lulus Ujian Skripsi : 11 Desember 2015**