



**UNIVERSITAS NEGERI MEDAN**

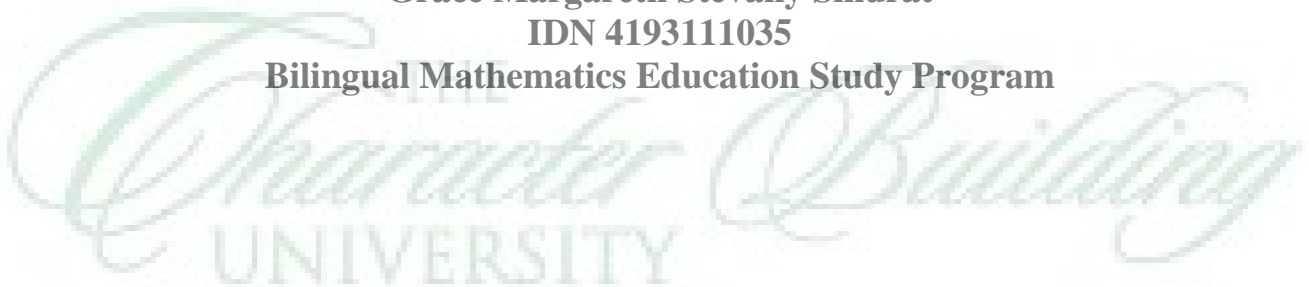
**THE IMPLEMENTATION OF PROBLEM BASED LEARNING  
MODEL ASSISTED BY GEOGEBRA SOFTWARE TO IMPROVE  
STUDENTS' MATHEMATICAL PROBLEM-SOLVING  
ABILITY IN GRADE X AT SMA NEGERI 8 MEDAN**

**THESIS**

**Submitted to Fulfill the Requirement for Degree of  
Sarjana Pendidikan**

**Grace Margareth Stevany Sinurat  
IDN 4193111035**

**Bilingual Mathematics Education Study Program**



**DEPARTMENT OF MATHEMATICS  
FACULTY OF MATHEMATICS AND NATURAL SCIENCES  
MEDAN  
AUGUST 2023**