



UNIVERSITAS NEGERI MEDAN

**THE DEVELOPMENT OF E-MODULES BASED ON PROBLEM
BASED LEARNING ON WORK AND ENERGY MATERIALS
TO IMPROVE STUDENT LEARNING OUTCOMES
IN SMA NEGERI 1 TANAH PINEM**

THESIS

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

*THE
Character Building*
UNI

Anayosi Br Ginting

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Bilingual Physics Education Study Program

**DEPARTEMENT OF PHYSICS
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
MEDAN
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