

**EFFECTIVENESS OF 5E LEARNING CYCLE MODEL
IN DYNAMIC ELECTRICITY KELAS X
SMA NEGERI 3 MEDAN**

By:

Carolina Nainggolan

409322001

Physics Bilingual Education Study Program



THESIS

**Submitted to fulfill requirement for the degree of
Sarjana Pendidikan**

**PHYSICS DEPARTMENT
FACULTY OF MATHEMATICS AND NATURAL SCIENCES
STATE UNIVERSITY OF MEDAN
MEDAN
2013**