# ABSTRACT

Phone cellular technology in this time as a means of inseparable mobile communications of daily life because giving many amenity to its consumer. Each information, as text, voice, and also picture, can be delivered or received to a cellular phone. One of the easiest and useful service used these day is delivery of data in the form of message or plain text known as SMS.

SMS (Short Message Service) is a service that is used widely as one of communication means. Generally, data sent using SMS services its confidential is widely open. Its meaning one person with certain ability and enough privilege, can easily read information which we deliver.

In this thesis, implemented SMS data encryption application using ECC (Elliptic Curve Cryptography) written in Java Language. This application function is to send and accept public key and encrypted SMS.

Cellular phone based on Java represent appropriate base in making of this application because all cellular phone now have supported this technology. Java technology also supports addition security facility for example by doing message encryption before delivered so that can be obtained encrypted message delivery application which fast, secure, and ease to be used.