

# ***DESIGN AND DEVELOPMENT OF EMAIL MESSAGE WEBSITE-BASED ENCRYPTION SYSTEM WITH ADVANCED ENCRYPTION STANDART (AES) ALGORITHM***

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## ***ABSTRACT***

*Data is very valuable for all computer users. Recently, cryptography has become a method used to secure data. Cryptography is a science that studies mathematical techniques in securing an original information or message (Plaintext) into a hidden text (Ciphertext) and then converted into the original message again. Cryptography has three important elements, namely key generation, encryption and description. In cryptography, there is a block cipher algorithm in which there is AES (Advanced Encryption Standard) which is part of the Modern Symmetric Key Cipher. This algorithm uses the same key during the encryption and description processes so that the data we have will be difficult to understand. The algorithm technique is used to convert data in the form of certain codes, for the purpose that the stored information cannot be read by anyone except those who have the right. Therefore, a data security system is needed to maintain the confidentiality of information so that it is maintained.*

***Keywords: Algorithm, Cryptography, AES, Encryption, Description.***