

**FINAL YEAR PROJECT REPORT  
BACHELOR OF ENGINEERING (HONS) MECHANICAL**



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**DEVELOPMENT OF A COMPUTER PROGRAM FOR SHAFT DESIGN**

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## **ABSTRACT**

In this report, a computer program was written in order to determine the size of a shaft to be used for power transmission. The uniform or stepped solid shaft under consideration is supported on two bearings and to be made from any material with known properties. S.I. Units are used throughout the design.

The program consists of main program and nine subprograms to facilitate the computation at which is based on ASME Code (formula that establish by the American Society Of Mechanical Engineers in 1927) using the **FORTRAN POWERSTATION VERSION 4.0** where *The Microsoft Developer Studio* is an integrated development environment for Fortran applications. This will enable the Personal Computer to be used to run the program. Then the program been tested and the results obtained were compared with the manual calculation validation.

The author hope that this program will be useful for educational purpose and hopefully will help to certain extent the Mechanical Engineering Student who are studying about the shaft design.

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