

AUTOMATIC TRANSMISSION FOR BICYCLE

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ABSTRACT

This report is based on the findings and research conducted from January 2006 to March 2006 as a requirement for the Diploma Final Project Mechatronics Engineering program. This project consists of researches conducted to build an Automatic Transmission system for bicycle.

The automatic transmission for bicycle is a system whereby user would be riding a multi-speed bicycle regardless of the road condition being inclined or decline, the system will decide which optimum gear suits the cycling user's fitness with a couple initial preset settings made prior to ride.

The refreshing rate for the system is designed to recheck the load of the cyclist every 10 seconds to ensure cyclist remain in optimum gear load and maximum pedaling efficiency.

The project is designed in such a way that it would cater to everyone regardless of experience and fitness in cycling. User need only to preset the system to an optimum setting that suits them to have the system working at its best.