

**A STUDY ON GROUP TECHNOLOGY CLASSIFICATION AND CODING
SYSTEM APPLICATION TO QCADOO MANUFACTURING EXECUTION
SYSTEM (MES)**

by

DIZA AYUAGUSTIA

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SWISS GERMAN UNIVERSITY

EduTown BSD City

Tangerang 15339

Indonesia

Revision after the Thesis Defense on 5 August 2015

STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, it contains neither material previously published or written by another person, nor material which to a substantial extent has been accepted for the award of any other degree or diploma at any educational institution, except where due acknowledgement is made in the thesis.

Diza Ayuagustia

Student

Date

Approved by:

Ir. Prianggada Indra Tanaya, MME

Thesis Advisor

Date

Ir. Invanos Tertiana, MBA

Thesis Co-Advisor

Date

Dr. Ir. Gembong Baskoro, M.Sc.

Dean

Date

Diza Ayuagustia

ABSTRACT

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Ir. Prianggada Indra Tanaya, MME, Advisor

Ir. Invanos Tertiana, MBA, Co-Advisor

SWISS GERMAN UNIVERSITY

This thesis is aimed to implement of Group Technology (GT). There are four coding systems based on process and part shape. Opitz is typical coding system use for workpiece, machining code for describing the machining process for part, Forcod use for metal forming process and assembly code for coding system to defining the assembly process. An application using Java programming language is developed to generate an automated GT code. There are several steps to implementation GT classification and coding system including an application development. The results of this work are attribute table for coding system and prototype software application. Implement of GT code can be applied into Qcadoo Manufacturing Execution System (MES) application interactively.

Keywords: Group Technology, Classification and Coding System, Manufacturing Execution System, Java Programming Language, Qcadoo MES



DEDICATION

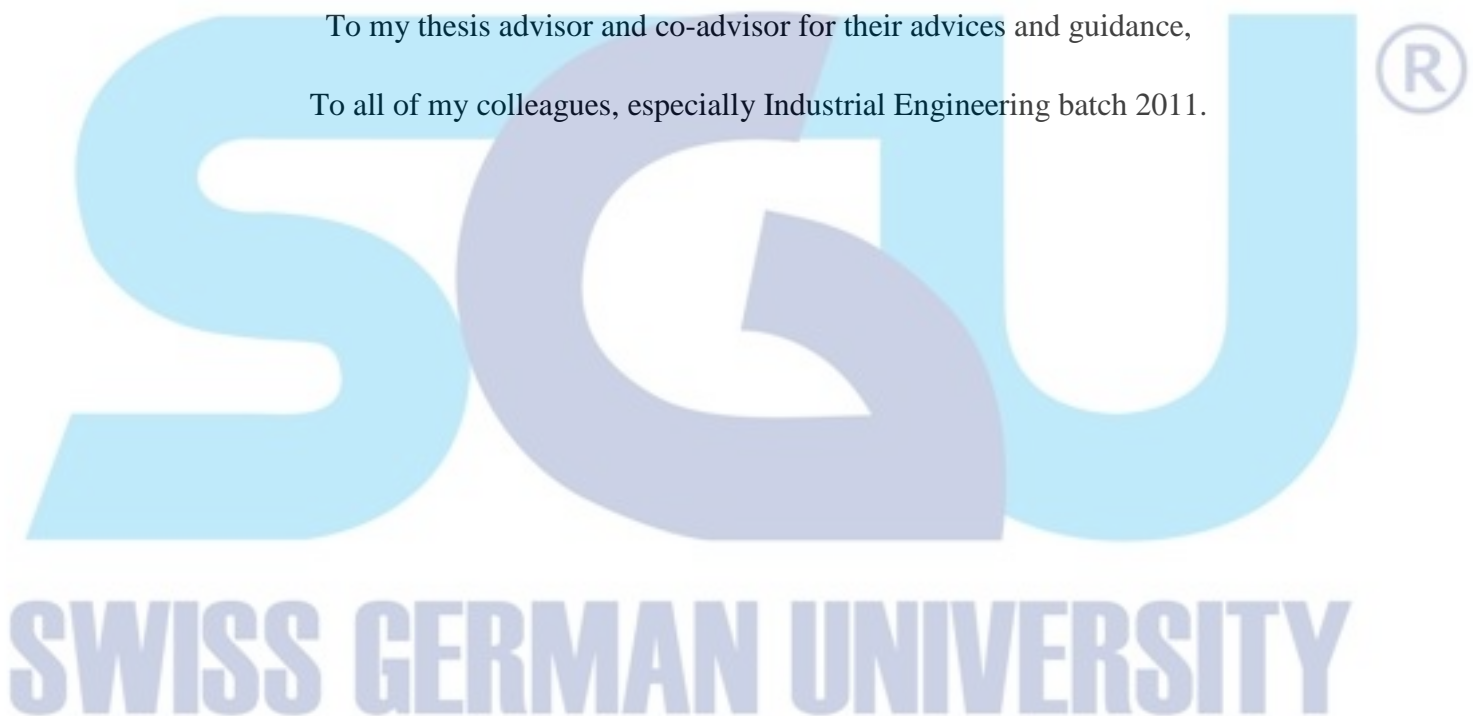
I dedicate this works

To The Almighty Allah SWT,

To my beloved family especially my parents and my sister who have become role models for me and for their infinite love,

To my thesis advisor and co-advisor for their advices and guidance,

To all of my colleagues, especially Industrial Engineering batch 2011.



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