



# HASANUDDIN UNIVERSITY

## ACADEMIC ACHIEVEMENT TRANSCRIPT

As an Enclosure of Certificate No: 149034-UN4-D/17450-421-2013

AWARDED TO : **MARDHIYYAH RAFRIN**  
REG. NO. : **D42109282**  
FACULTY : **ENGINEERING**  
STUDY PROGRAM : **INFORMATICS ENGINEERING**  
GRADUTION DATE : **2<sup>ND</sup> AUGUST, 2013**

### SUBJECTS THAT HAVE BEEN PASSED

| NO | CODE    | SUBJECTS                                           | LG | NG   | C | G     |
|----|---------|----------------------------------------------------|----|------|---|-------|
| 1  | 072U003 | ISLAMIC RELIGION EDUCATION                         | A- | 3.75 | 3 | 11.25 |
| 2  | 078U002 | MARITIME SOCIO-CULTURE CONCEPT                     | B+ | 3.50 | 2 | 7.00  |
| 3  | 079U002 | SCIENCE, TECHNOLOGY, AND ART CONCEPT               | A  | 4.00 | 2 | 8.00  |
| 4  | 080U002 | INDONESIAN LANGUAGE                                | A  | 4.00 | 2 | 8.00  |
| 5  | 081U002 | ENGLISH LANGUAGE                                   | B- | 2.75 | 2 | 5.50  |
| 6  | 082U003 | CIVICS EDUCATION                                   | B  | 3.00 | 3 | 9.00  |
| 7  | 085U003 | BASICS MATHEMATICS                                 | B- | 2.75 | 3 | 8.25  |
| 8  | 086U003 | BASIC PHYSICS                                      | B  | 3.00 | 3 | 9.00  |
| 9  | 089U003 | BASIC PHYSICS II                                   | B- | 2.75 | 3 | 8.25  |
| 10 | 090U003 | BASIC MATHEMATICS II/BASIC CALCULUS II             | B  | 3.00 | 3 | 9.00  |
| 11 | 101D442 | INTRODUCTION TO INFORMATION TECHNOLOGY             | B+ | 3.50 | 2 | 7.00  |
| 12 | 102D441 | BASIS OF COMPUTER PROGRAMMING                      | A  | 4.00 | 1 | 4.00  |
| 13 | 106D443 | STATISTICS FOR COMPUTATION                         | B+ | 3.50 | 3 | 10.50 |
| 14 | 111D441 | PRACTICE OF INTRODUCTION TO INFORMATION TECHNOLOGY | B  | 3.00 | 1 | 3.00  |
| 15 | 112D442 | PRACTICE OF COMPUTER PROGRAMMING BASIS             | A  | 4.00 | 2 | 8.00  |
| 16 | 131D442 | DISCRETE MATHEMATICS                               | B  | 3.00 | 2 | 6.00  |
| 17 | 132D442 | ALGORITHM AND PROGRAMMING                          | A- | 3.75 | 2 | 7.50  |
| 18 | 133D442 | DIGITAL SYSTEM                                     | A- | 3.75 | 2 | 7.50  |
| 19 | 141D441 | PRACTICE OF ALGORITHM & PROGRAMMING                | A  | 4.00 | 1 | 4.00  |
| 20 | 201D443 | LINEAR ALGEBRA                                     | A- | 3.75 | 3 | 11.25 |
| 21 | 202D442 | DATA STRUCTURE                                     | B- | 2.75 | 2 | 5.50  |
| 22 | 203D443 | ARCHITECTURE AND COMPUTER ORGANIZATION             | B+ | 3.50 | 3 | 10.50 |
| 23 | 205D442 | INTRODUCTION TO OPERATION SYSTEM                   | A- | 3.75 | 2 | 7.50  |
| 24 | 206D442 | BASIS OF MULTIMEDIA                                | C+ | 2.50 | 2 | 5.00  |
| 25 | 207D442 | OBJECT ORIENTED PROGRAMMING                        | A  | 4.00 | 2 | 8.00  |
| 26 | 211D441 | PRACTICE OF OBJECT ORIENTED PROGRAMMING            | A  | 4.00 | 1 | 4.00  |
| 27 | 231D443 | NUMERICAL COMPUTATION METHOD                       | A  | 4.00 | 3 | 12.00 |
| 28 | 232D422 | DIGITAL SIGNAL PROCESSING                          | B- | 2.75 | 2 | 5.50  |
| 29 | 232D442 | DATABASE I                                         | B+ | 3.50 | 2 | 7.00  |
| 30 | 233D443 | STRUCTURED PROGRAMMING                             | A  | 4.00 | 3 | 12.00 |
| 31 | 234D443 | INTRODUCTION TO ARTIFICIAL INTELLIGENCE            | B  | 3.00 | 3 | 9.00  |
| 32 | 235D442 | SOFTWARE ENGINEERING I                             | A  | 4.00 | 2 | 8.00  |
| 33 | 236D442 | COMPUTER MEMORY SYSTEM                             | C+ | 2.50 | 2 | 5.00  |
| 34 | 237D443 | MOBILE OPERATION SYSTEM                            | A- | 3.75 | 3 | 11.25 |
| 35 | 238D442 | VISUAL PROGRAMMING                                 | B  | 3.00 | 2 | 6.00  |
| 36 | 301D432 | COMPUTER NETWORK                                   | B  | 3.00 | 2 | 6.00  |
| 37 | 301D442 | HUMAN AND COMPUTER INTERACTION                     | A- | 3.75 | 2 | 7.50  |
| 38 | 302D442 | DATABASE II                                        | B+ | 3.50 | 2 | 7.00  |
| 39 | 303D402 | ENGINEERING ECONOMICS                              | A  | 4.00 | 2 | 8.00  |
| 40 | 303D442 | SOFTWARE ENGINEERING II                            | A- | 3.75 | 2 | 7.50  |

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NO: **D42109282**NAME : **MARDHIYYAH RAFRIN**

| No.                                                         | CODES   | SUBJECTS                           | LG | NG   | C          | G          |
|-------------------------------------------------------------|---------|------------------------------------|----|------|------------|------------|
| 41                                                          | 304D442 | INFORMATION SYSTEM                 | A  | 4.00 | 2          | 8.00       |
| 42                                                          | 305D443 | PATTERN RECOGNITION                | B+ | 3.50 | 3          | 10.50      |
| 43                                                          | 306D443 | LANGUAGE THEORY AND AUTOMATA       | B+ | 3.50 | 3          | 10.50      |
| 44                                                          | 307D443 | ANIMATION                          | A- | 3.75 | 3          | 11.25      |
| 45                                                          | 301D443 | COMPUTER GRAPHIC                   | B+ | 3.50 | 3          | 10.50      |
| 46                                                          | 332D443 | MODELING AND SIMULATION            | A  | 4.00 | 3          | 12.00      |
| 47                                                          | 333D442 | ENGINEERING PROCESSING             | A- | 3.75 | 2          | 7.50       |
| 48                                                          | 334D442 | WEB BASED PROGRAMMING              | B  | 3.00 | 2          | 6.00       |
| 49                                                          | 330D441 | PRACTICE WORK I                    | A  | 4.00 | 1          | 4.00       |
| 50                                                          | 401D442 | PROFESSIONAL ETHICS                | A  | 4.00 | 2          | 8.00       |
| 51                                                          | 402D443 | GAME THEORY                        | A- | 3.75 | 3          | 11.25      |
| 52                                                          | 403D443 | BASIS OF WEB ENGINEERING           | A- | 3.75 | 3          | 11.25      |
| 53                                                          | 404D443 | MOBILE PROGRAMMING                 | A- | 3.75 | 3          | 11.25      |
| 54                                                          | 411D441 | PRACTICE WORK II                   | A  | 4.00 | 1          | 4.00       |
| 55                                                          | 412D441 | SEMINAR                            | A  | 4.00 | 1          | 4.00       |
| 56                                                          | 442D444 | NATIONAL STUDY SERVICE SCHEME      | A  | 4.00 | 4          | 16.00      |
| 57                                                          | 456D442 | JAVA PROGRAMMING                   | A- | 3.75 | 2          | 7.50       |
| 58                                                          | 471D442 | CRYPTOGRAPHY                       | B+ | 3.50 | 2          | 7.00       |
| 59                                                          | 472D442 | CODING AND COMPRESSION             | B+ | 3.50 | 2          | 7.00       |
| 60                                                          | 473D442 | PROGRAMMING OF CLIENT-SERVER       | B+ | 3.50 | 2          | 7.00       |
| 61                                                          | 474D432 | MICRO COMPRESSOR TECHNOLOGY        | A- | 3.75 | 2          | 7.50       |
| 62                                                          | 475D442 | MACHINE LEARNING                   | A  | 4.00 | 2          | 8.00       |
| 63                                                          | 478D444 | THESIS/FINAL TASK                  | A  | 4.00 | 4          | 16.00      |
| 64                                                          | 491D442 | SELECTED TOPIC OF OPERATION SYSTEM | B+ | 3.50 | 2          | 7.00       |
| 65                                                          | 493D442 | SELECTED TOPIC OF COMPUTER NETWORK | B  | 3.00 | 2          | 6.00       |
| 66                                                          | 494D442 | SELECTED TOPIC OF COMPUTER SYSTEM  | A  | 4.00 | 2          | 8.00       |
| TOTAL                                                       |         |                                    |    |      | <b>150</b> | <b>531</b> |
| CUMULATIVE ACHIEVEMENT INDEX : 3.54 (THREE POINT FIVE FOUR) |         |                                    |    |      |            |            |
| GRADUATION NOTATION : CUM LAUDE                             |         |                                    |    |      |            |            |

## Remarks:

-LG : Letter Grade

C : Credit (Credit Content)

-NG : Numerical Grade

G: Grade ( NG x C)

THE TITLE OF THE THESIS WHICH HAS BEEN ACCOUNTED FOR:

**AN ANALYSIS OF MANAGEMENT OF INDUSTRIAL MACHINE MAINTENANCE BY USING ARTIFICIAL NERVE NETWORK OF FEED FORWARD-BACK PROPAGATION ( STUDY CASE AT PT. SEMEN BOSOWA MAROS)**

FACULTY OF ENGINEERING

Deputy Dean I,

Signed and stamped

**Dr. Ir. Muhammad Ramli, MT.**

NIP. 19680718 199309 1 001

MAKASSAR, 2<sup>ND</sup> AUGUST, 2013

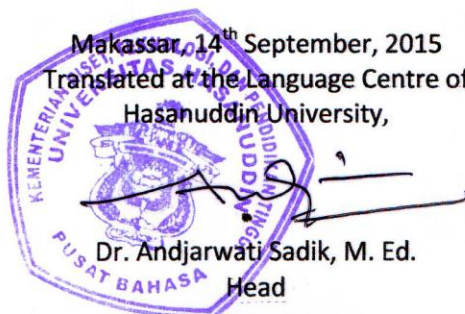
HEAD OF ACADEMIC ADMINISTRATION

BUREAU,

Signed and stamped

**Dra. Betty Evenly Duma, M.Ed.**

NIP. 19551111 198503 2 001

Makassar, 14<sup>th</sup> September, 2015Translated at the Language Centre of  
Hasanuddin University,


Dr. Andjarwati Sadik, M. Ed.  
Head