IMPLEMENTATION AGREEMENT

BETWEEN

UNDERGRADUATE PROGRAM OF INDUSTRIAL ENGINEERING
DEPARTMENT OF MECHANICAL AND INDUSTRIAL ENGINEERING
FACULTY OF ENGINEERING
UNIVERSITAS NEGERI MALANG
AND
FACULTY OF TECHNOLOGY MANUFACTURING & INDUSTRY ENGINEERING,
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

ON
RESEARCH COLLABORATION ON "DESIGN AND OPTIMIZATION OF UNDERWATER CABLE NETWORKS FOR MARINE CURRENT POWER PLANTS USING KRUSKAL'S ALGORITHM AND DIFFERENTIAL EVOLUTION ALGORITHM"

Ref: 26.8.53/UN32.5.5.1.9/KS/2026

This Implementation Agreement is entered into force on Wednesday, August 26, 2026 by and beteween:

1. Rudi Nurdiansyah, S.T., M.T., Ph.D.: Head of Undergraduate Program of Industrial Engineering, whom therefore legally represents and acts for and on behalf of the Undergraduate Program of Industrial Engineering, Faculty of Engineering, Universitas Negeri Malang, whose address is at Jalan Semarang 5, Malang, hereinafter referred to as Party I.
2. Prof. Effendi Mohammad: Dean of Faculty of Industrial and Manufacturing Technology and Engineering, Universiti Teknikal Malaysia Melaka, whose address is at Jalan Hang Tuah Jaya, 76100 Durian Tunggal, Melaka, Malaysia, hereinafter referred to as Party II.

PARTY I and **PARTY II** hereinafter referred to collectively as **THE PARTIES**. The parties hereby agree to jointly arrange an Implementation Agreement on the program Research Collaboration on "Design and Optimization of Underwater Cable Networks for Marine Current Power Plants Using Kruskal's Algorithm and Differential Evolution Algorithm" organized by the parties as regulated in the following articles.

Article 1
PURPOSES AND OBJECTIVES

(1) The purpose of this Implementation Agreement is to serve as the basis for the Implementation Agreement arranged by **THE PARTIES** in accordance with the scope of this Implementation Agreement Regulation.
(2) The objective of this Implementation Agreement is to support the activities of **THE PARTIES** in relation to cooperation with regard to the program research collaboration

Paraf Pihak Kesatu ☐
Paraf Pihak Kedua ☐

on "Design and Optimization of Underwater Cable Networks for Marine Current Power Plants Using Kruskal's Algorithm and Differential Evolution Algorithm".

Article 2
SCOPE OF ACTIVITIES

(1) The scope of this agreement includes the program Research Collaboration on "Design and Optimization of Underwater Cable Networks for Marine Current Power Plants Using Kruskal's Algorithm and Differential Evolution Algorithm", wherein Rudi Nurdiansyah, S.T., M.T., Ph.D. has been assigned as the Person In Charge (rudi.nurdiansyah.ft@um.ac.id)
(2) The implementation of cooperation for this agreement is carried out by **the parties**.
(3) **The parties** shall monitor the implementation of the program research collaboration on "Design and Optimization of Underwater Cable Networks for Marine Current Power Plants Using Kruskal's Algorithm and Differential Evolution Algorithm" not less than 2 (two) times in one period of activity.

Article 3
FUNDING

The fee incurred from the activities born in this Implementation Agreement is borne by the respective **PARTY** according to the applicable regulations and shall be specified in a separate specific written agreement.

Article 4
DURATION

This implementation agreement of cooperation is valid from Wednesday, August 26, 2026 until Thursday, August 26, 2027.

Article 5
CLOSING

(1) Any amendment to this Implementation Agreement shall only be made with the mutual approval of **THE PARTIES**
(2) This Implementation Agreement is deemed to be terminated if one **PARTY** or **THE PARTIES** fails to fulfill the provisions in this implementation agreement.
(3) Particulars that are not / yet to be determined in this implementation agreement shall be addressed further by **THE PARTIES** in the basis of mutual discussion and agreement which shall be set forth in an addendum, which is an integral part of this Implementation Agreement.
(4) This document of implementation agreement is made and signed by **THE PARTIES** in 2 (two) copies, all of which shall constitute the equal legal force.

Paraf Pihak Kesatu
Paraf Pihak Kedua

Article 6
FORCE MAJEURE

(1) In the event of force majeure, including natural disasters, fires, security disturbances and other matters that result in the **PARTIES** being unable to carry out the obligations as referred to in article 3, the losses suffered by the parties shall be borne by the **PARTIES** and the **PARTIES** shall be released from claims for the implementation of this implementation agreement including claims for the losses arising from this force majeure.

(2) The circumstances as referred to in paragraph (1) must have a direct causal relationship with the losses suffered by the **PARTIES** and be proven by a certificate from an authorized official no later than 30 (thirty) working days from the occurrence of the event as referred to in paragraph (1).

Party I	**Party II**
Rudi Nurdiansyah, S.T., M.T., Ph.D. Head of Undergraduate program of Industrial Engineering Faculty of Engineering Universitas negeri malang	Prof. Effendi Mohammad Dean of Faculty of Industrial and Manufacturing Technology and Engineering, Universiti Teknikal Malaysia Melaka

IN WITNESS WHEREOF

Prof. Dr. Ir. Andoko, S.T., M.T.
Dean
Faculty of engineering
Universitas Negeri Malang

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