



DIPONEGORO UNIVERSITY

CERTIFICATE OF COMPLETION

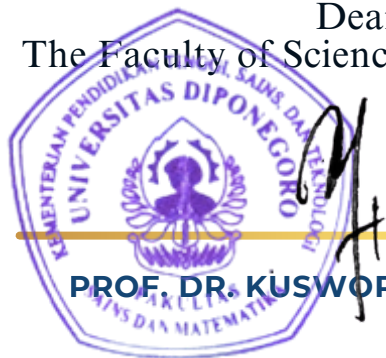
NO : 81/UN7.F8/HK/VIII/2025

PROUDLY PRESENT TO

Om Jha

In recognition of your participation in the **Summer Course in Medical Physics 2025**
held by **The Physics Department, The Faculty of Science and Mathematics, Diponegoro University, Semarang**
with successful completion of the program through passing the examination
from August 12 until August 21, 2025 (1400 minutes)

Dean
The Faculty of Science and Mathematics



PROF. DR. KUSWORO ADI, S.SI., M.T.

Chairman

DR. PANDJI TRIADYAKSA, S.SI., M.SC., F.MED



Learning Content of Summer Course in Medical Physics 2025

1. Introduction to CT Scan	100 minutes
2. Introduction to CT Image Quality	100 minutes
3. IndoQCT Installation, IndoQCT as DICOM viewer	100 minutes
4. DICOM hierarchy, DICOM tags, and Computational phantom	100 minutes
5. PACS connection with IndoQCT	100 minutes
6. CT number (consistency, uniformity, homogeneity, linearity) and its measurements	100 minutes
7. Noise, NPS, noise uniformity, and its measurements	100 minutes
8. Spatial resolution (visual observation, MTF, and TTF) and its measurements	100 minutes
9. Low-contrast detectability (visual, SNR, CNR, statistical LCD) and its measurements	100 minutes
10. Human observer (HO) and model observer (MO) for low-contrast detectability and their measurements	100 minutes
11. Slice thickness, slice spacing, and their measurements	100 minutes
12. CT alignment and gantry tilts, and their measurements	100 minutes
13. Advanced image quality (measurement from patient image) and its measurements	100 minutes
14. Noise reduction (MF, AMF, SMF, BF, and NLM) and its measurements	100 minutes
	1400 minutes