SERTIFIKAT

MAGANG DAN STUDI INDEPENDEN BERSERTIFIKAT

Diberikan Kepada :

Ripan Nurpaujan

ID Kegiatan : 8099527 - Universitas Muhammadiyah Yogyakarta - Teknik Mesin

Sebagai :

Peserta MSIB Angkatan 6

Telah berhasil menyelesaikan tugasnya di PT CADFEM Simulation Technology Indonesia dalam progam **Studi Independen Bersertifikat** dengan kegiatan **Engineering Simulation #Bertaji by CADFEM Ansys : Computational Fluid Dynamics (CFD)** yang diselenggarakan pada tanggal **16 Februari - 30 Juni 2024**.

Jakarta, 28 Juni 2024
Ketua Program Studi Independen Bersertifikat
PT CADFEM Simulation Technology Indonesia,

Gilang Pradhypta

CAPAIAN PEMBELAJARAN PROGRAM

No.	Kompetensi	Definisi Kompetensi	Jam	Nilai Capaian	Deskripsi Nilai Capaian
1	Theory of Fluids (***Hard Skill***)	Participant can understand what are fluids, by examining the physical properties of the fluids, and the principles of fluid statics, which are the theory of fluids at rest conditions.	100	98	Participants have excellent understanding and mastery
2	Fluid Kinematics (***Hard Skill***)	Participant understands the rotation, visualization and measurement of fluid motion.	100	97	Participants have excellent understanding and mastery
3	Governing Equations of Fluid Flows (***Hard Skill***)	Participant understands the five governing equations of fluid dynamics — conservation of mass (one), momentum (three) and energy (one) — which are commonly referred to as the Navier-Stokes equations.	100	97.5	Participants have excellent understanding and mastery
4	Dimensional Analysis and Similarity (***Hard Skill***)	Participant can understand the idea and importance of geometric and dynamic similarity. And also identify some important dimensional numbers and use them to non-dimensionalize the Navier-Stokes equations.	100	100	Participants have excellent understanding and mastery
5	Simple Approximation of Fluid Flows (***Hard Skill***)	Participant knows how to obtain analytical solutions to some fundamental problems by making approximations to the fluid flow	100	100	Participants have excellent understanding and mastery
6	Viscous Flows and Turbulence Modeling (***Hard Skill***)	Participant understands about the basics of viscous laminar flows which can be bounded (internal) or unbounded (external) and the concept behind turbulence modeling.	100	100	Participants have excellent understanding and mastery
7	International Certification Exam (***Hard Skill***)	Participant is able to understand and perform advanced analyses of fluid.	50	84	Participants have good understanding and mastery
8	Renewable Energy Capstone Project (***Hard Skill***)	Participant is able to perform advanced analyses of fluid in real life case	250	80	Participants have good understanding and mastery

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