



CC25/GRAD/XXV-07/MC535D5Y0786

CERTIFICATE OF COMPLETION

is proudly presented to

MUHAMAD HAMZAH

for successfully completing **Coding Camp powered by DBS Foundation, specializing in Machine Learning Engineer.**

Coding Camp is a highly selective IT training program, developed in collaboration between DBS Foundation and Dicoding, designed to equip individuals with essential technical, financial, English, and soft skills for success in the workforce.

Program Period: February 10, 2025 - July 16, 2025

July 7, 2025

Narenda Wicaksono

Chief Executive Officer
Dicoding Indonesia

Mona Monika

Executive Director, Head of Group Strategic Marketing
& Communications PT Bank DBS Indonesia



STUDENT LEARNING ACHIEVEMENT

Cohort ID : MC535D5Y0786
Name : Muhamad Hamzah
University : Institut Teknologi Garut

Completion Status : Full Graduate
Learning Path : Machine Learning Engineer
Capstone Status : Finished

No	Courses/Specialization/Activities	Learning Outcome	Hours	Score (0-100)	Score Description
1	Basic Programming for Software Developers	Students are able to modify software using flow chart guidelines and programming with HTML, CSS, and JavaScript basic level appropriately according to application specifications and functionalities.	9	89.3	Students have been able to modify software using flow chart guidelines and programming with HTML, CSS, and JavaScript basic level precisely according to application specifications and functionalities.
2	Programming Logic 101	Students are able to understand basic programming logic and apply it in solving problems in the Software Developer job field.	6	88	Students have mastered the use of basic programming logic and applied it in solving problems in the Software Developer job field.
3	Basic Git and Github	In this class, students are able to manage their own code collections in the Github repository. And be able to collaborate with other developers on the same repository.	15	88	Students are able to manage their own code collections in the Github repository. And be able to collaborate with other developers on the same repository.
4	Introduction to AI	In this training, students are able to analyze various basics in AI and their application well.	10	89.3	Students are able to analyze various basic concepts in AI and their applications well.
5	Basic Data Visualization	At the end of the class, students are able to create effective data visualizations using Google Sheets according to industry best practices, thereby increasing their value in a career as a Software Developer.	16	92.5	Students are able to create effective data visualizations using Google Sheets according to industry best practices, thereby increasing their value in a career as a Software Developer.
6	Basic SQL	At the end of the class, students are able to master the various basic queries that are often used in managing data using the structured query language (SQL).	11	92.5	Students are able to master the various basic queries that are often used in managing data using the structured query language (SQL) well.
7	Basic Python Programming	At the end of the class, students are able to create programs with Python using various IDEs that have been learned, such as Visual Studio Code, Jupyter Notebook, and Google Colaboratory.	35	89.3	Students are able to create programs with Python using various IDEs that have been learned effectively, such as Visual Studio Code, Jupyter Notebook, and Google Colaboratory.
8	Applied Machine Learning	Students are able to create predictive analytic models for business and marketing, sentiment analysis, computer vision for image recognition and object detection in images, and recommendation systems.	40	92.5	Students are able to create predictive analytic models for business and marketing, sentiment analysis, computer vision for image recognition and object detection in images, and recommendation systems with scikit-learn.
9	Data Analysis with Python	Students are able to carry out various stages in data analysis to answer business challenges using the Python programming language.	30	88	Students are able to carry out various stages in data analysis to answer business challenges using the Python programming language well.
10	Fundamental Data Processing	At the end of the class, students are able to create quality datasets through various stages of data processing using the Python programming language.	60	88	Students are able to create quality datasets through various stages of data processing using the Python programming language well.
11	Machine Learning for Beginners	After completing this class, students are expected to have the ability to develop machine learning projects that focus on classification, regression, and clustering on tabular data.	75	92.5	Students have the ability to develop machine learning projects that focus on classification, regression, and clustering on tabular data well.
12	Deep Learning Fundamentals	At the end of the class, students are expected to be able to build deep learning projects that focus on processing and predicting text and image data.	90	88	Students are able to build deep learning projects that focus on processing and predicting text and image data.
13	Capstone / Final Project	Students are able to complete the final project, namely the development of an application/solution that is done to facilitate product development skills and add to the portfolio.	250	94.4	Students are able to complete the final project, namely the development of an application/solution that is done to facilitate product development skills and add to the portfolio.
14	Soft Skills & Career Development	Students are able to apply the materials related to personal development, communication, networking, and interview preparation.	289	90.5	Students are able to apply the materials related to personal development, communication, networking, and interview preparation well.

This is Coding Camp-system-generated certificate and valid without signature