



Study Plan for China

Tsinghua University Zijing College - Information Stream / Computer Science

Applicant	Roberto Ocaviantyo Tahta Laksmana
Academic Background	Diploma Tiga (D3) in Management Informatics, Universitas Gunadarma GPA/IPK 3.89/4.00
Target University	Tsinghua University, China
Target Program	Zijing College - Global Talents in Science and Engineering Program
Target Degree	Bachelor of Engineering in Interdisciplinary Engineering
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Study Plan Summary

Goal: strengthen Computer Science foundations inside Tsinghua Zijing College, build competence in AI-oriented software engineering and data-driven systems, and grow into a responsible AI Solution Architect with international leadership capacity.

1. Academic Background and Motivation

I completed a Diploma Tiga program in Management Informatics at Universitas Gunadarma with a GPA of 3.89/4.00. My academic background gave me practical knowledge in information systems, programming, databases, web development, system analysis, and applied IT. I now want to move from applied information systems into stronger Computer Science and Engineering foundations, especially in algorithms, systems, software engineering, artificial intelligence, and data-driven technologies.

2. Reason for Choosing Tsinghua and Zijing College

Tsinghua University represents academic excellence, discipline, innovation, and global engineering leadership. Zijing College is especially suitable because it provides an English-taught undergraduate engineering environment with international learning, interdisciplinary collaboration, AI fundamentals, design thinking, and practical education. I believe this environment can help me transform my applied IT foundation into deeper computer science competence.

3. Academic Fit

The Information Stream / Computer Science direction is the most suitable path for me because it aligns with my preparation in programming, databases, algorithms, data structures, software projects, AI-oriented learning, and data systems. My goal is not only to build applications, but to understand the scientific and engineering principles that make digital systems reliable, scalable, secure, and socially useful.

4. Study Objectives

- Build stronger foundations in mathematics for computing, algorithms, data structures, programming methodology, computer systems, databases, and networks.
- Develop software engineering competence in design, implementation, testing, system integration, API development, and project-based collaboration.
- Learn applied artificial intelligence, machine learning foundations, data-driven systems, intelligent decision support, and responsible technology design.
- Improve academic English, intercultural communication, teamwork, and leadership skills in an international engineering environment.



5. Planned Study Path

Stage	Focus	Expected Result
Foundation	Mathematics, programming, algorithms, data structures, databases, systems, and networks.	Strong CS foundation.
Engineering Practice	Software engineering, system design, data systems, API/web development, AI fundamentals, and team projects.	Reliable implementation ability.
Research Orientation	Applied AI, intelligent systems, data-driven decision support, responsible AI, presentations, and interdisciplinary projects.	Preparation for advanced research and leadership.

6. Link to Research Interest

My study plan is connected to Applied Artificial Intelligence for Intelligent Decision Support and Data-Driven Systems. I want to understand how machine learning, software engineering, databases, analytics, and user-centered system design can support prediction, classification, monitoring, prioritization, and responsible decision-making in practical domains such as education, IT operations, digital services, and public systems.

7. Future Career Goals and Commitment

After completing my undergraduate study, I aim to become an AI-oriented software engineer, AI developer, or solution architect. In the long term, I hope to contribute to intelligent systems, digital public services, responsible AI, and data platforms that benefit Indonesia, China, and the global technology community. If accepted, I will study seriously, adapt respectfully, and contribute actively to Zijing College.

Indonesia, 25 May 2026

Roberto Ocaviantyo Tahta Laksana
Applicant

