

HCMUT HPC Summer School 2026

Partnership Brief

Start Local, Compute at Scale



17 - 19 June 2026 — Ho Chi Minh City University of Technology



AGENTIVUM AI

Executive Overview

A three-day academic and technical training program for HPC and AI infrastructure talent



HCMUT HPC Summer School 2026 introduces selected undergraduate students to the foundations and real-world applications of High Performance Computing, scalable AI workloads, and modern computing infrastructure.



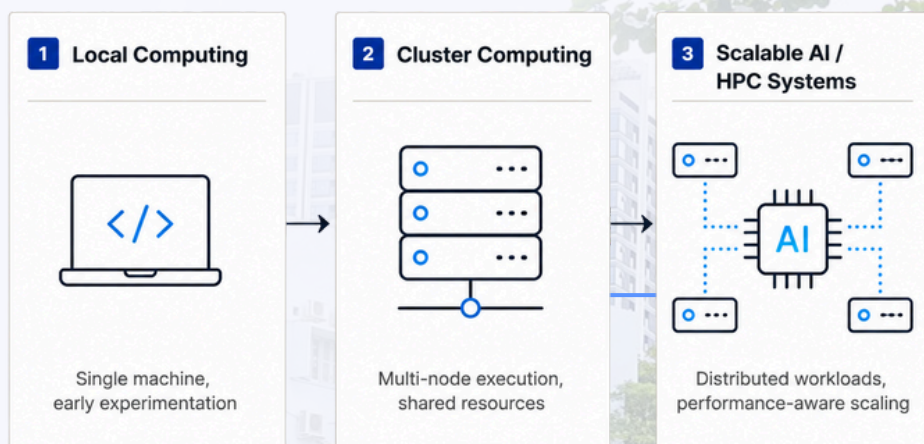
The program combines expert lectures, hands-on sessions, cluster-based practice, industry sharing, and a final HPC-AI challenge to strengthen technical depth and problem-solving skills.



Students connect with HPC professionals and industry practitioners, gaining insights into real projects, career pathways, and emerging technologies.



The Summer School provides a valuable platform to connect students, academia, and industry – starting local, and computing at scale together.



17–19 June 2026

Three days of learning, practice, and collaboration.



Ho Chi Minh City University of Technology, VNU-HCM

268 Ly Thuong Kiet Street, Dien Hong ward, Ho Chi Minh City, Vietnam.



Organized by HPC Lab, HCMUT

In collaboration with Faculty of Computer Science and Engineering

Vision & Strategic Relevance

Building a long-term platform for HPC-AI, and advanced computing systems in Vietnam.



AI is growing rapidly

Vietnam's digital economy is accelerating, driving unprecedented demand for computing power and intelligent systems.



Infrastructure talent is in high demand

Industry needs engineers who understand scalable computing infrastructure, GPU systems, distributed execution, and performance optimization.



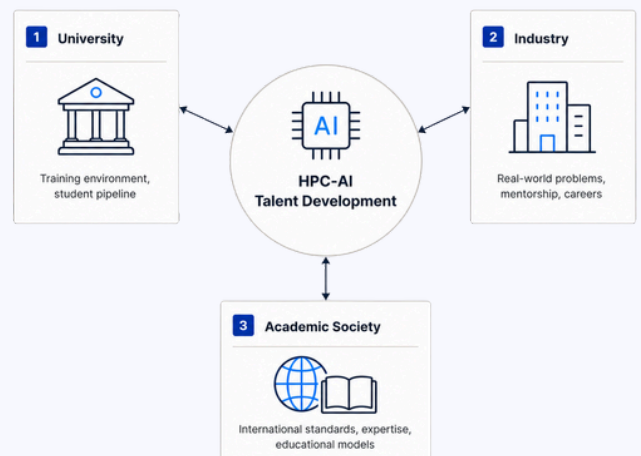
Attention often shifts to the application layer

While application-layer AI is important, systems and HPC talent remains critically needed to enable real-world impact.



Aligned with national priorities.

Our mission aligns with Vietnam's focus on AI, Digital Transformation, Big Data, and Advanced Digital Infrastructure.



Long-term ambition

From a local training activity to a nationally relevant and internationally connected education platform.



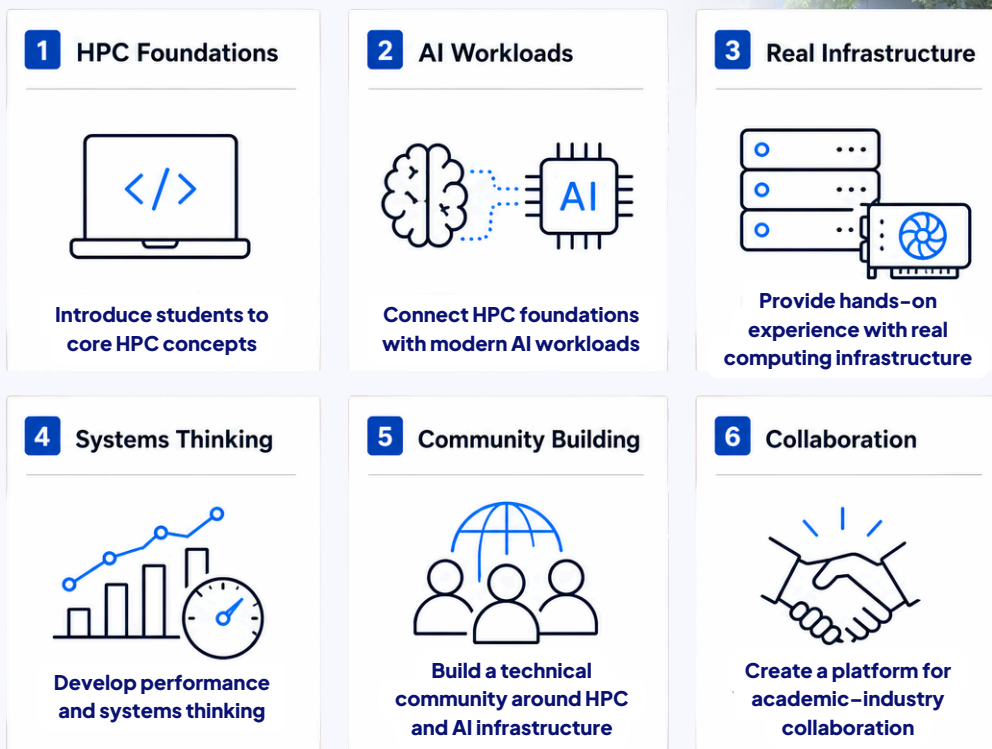
Future academic alignment

We aim to align our program with international HPC school models in terms of curriculum quality, hands-on training, and research engagement – while remaining rooted in Vietnam's needs and strengths.

This reflects our direction and aspiration, not a formal accreditation or affiliation.

Objectives & Target Participants

Start Local, Compute at Scale



Target Participants



Who

- Motivated undergraduate students from computer science, computer engineering, data science, AI, software engineering, and related disciplines.



Prerequisites

- Basic programming experience in any language, such as Python, C/C++, or Java

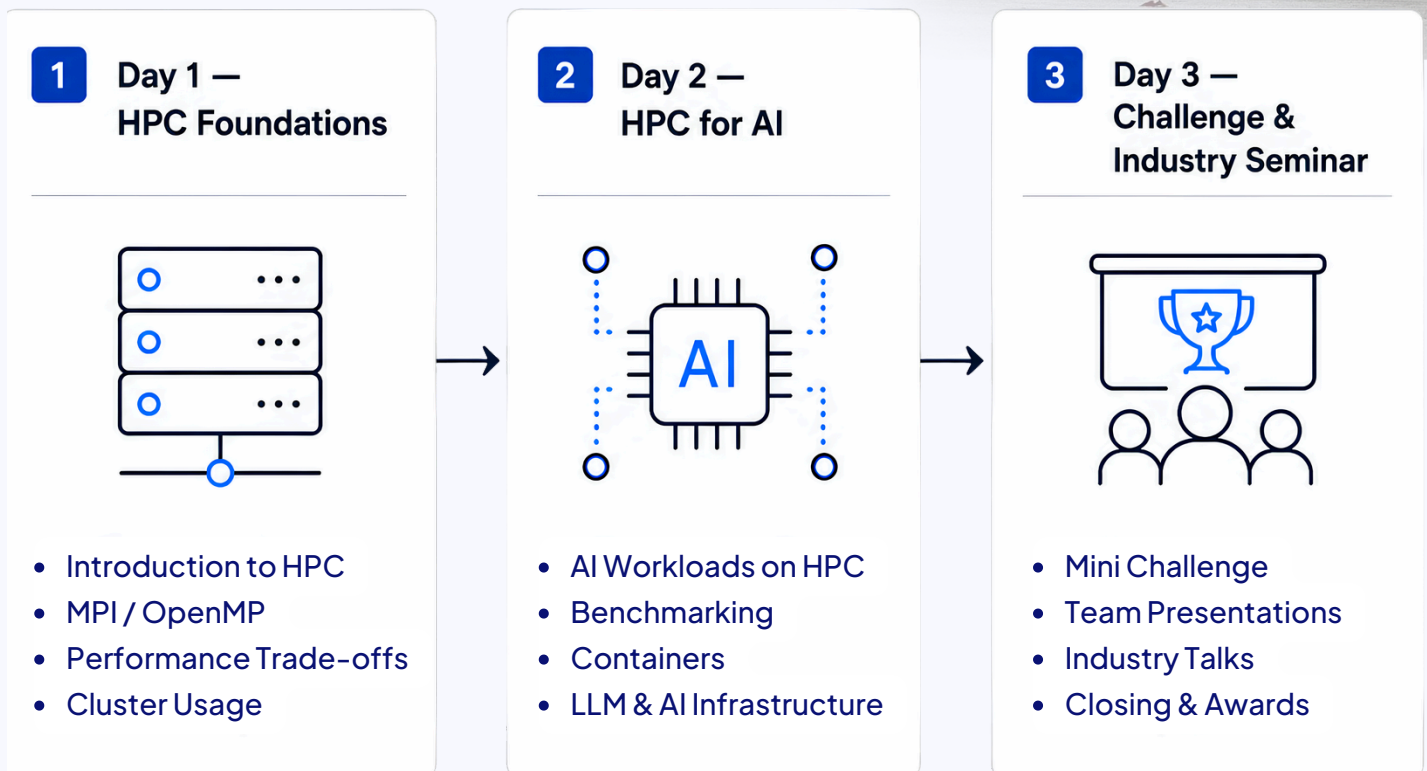


Interest Areas

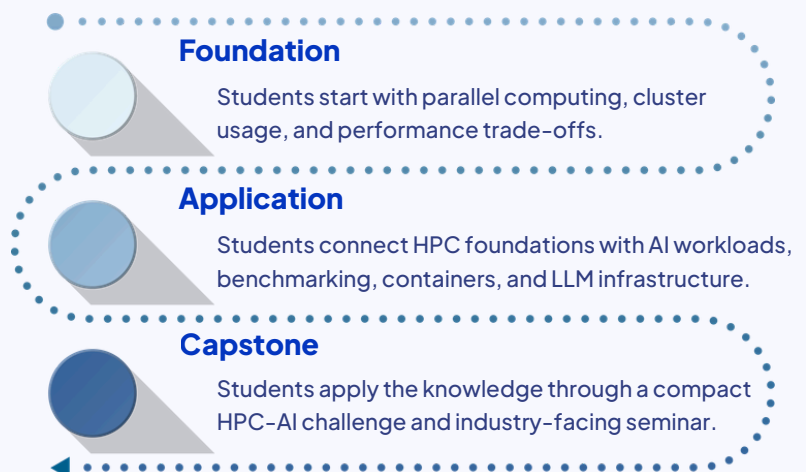
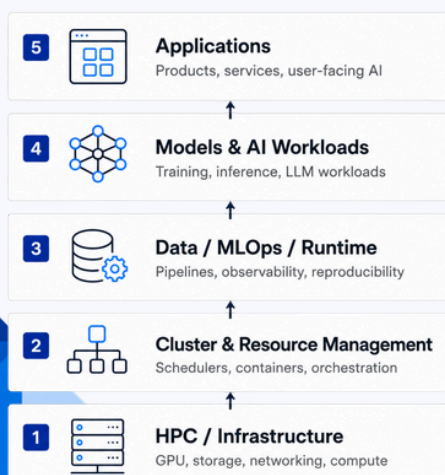
- HPC and high-performance computing
- Distributed systems and parallel computing
- AI/ML systems and infrastructure
- Large Language Models
- Data-intensive computing
- Cloud and infrastructure technologies
- Performance engineering and optimization

Program Structure

A three-day learning journey from HPC foundations to HPC for AI and an industry-facing capstone challenge.



LEARNING PROGRESSION

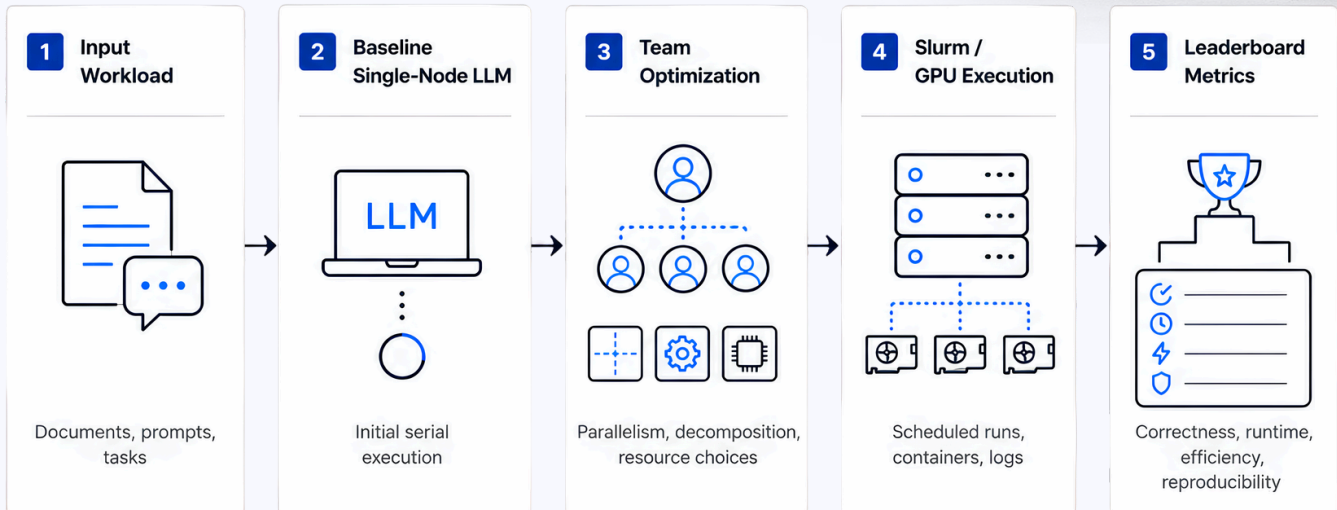


Mini Challenge Direction

THEME



Scaling LLM Processing with HPC:
From Single-Node to Multi-Node Distributed Execution



Teams enhance the execution of an AI/LLM workload under strict time and resource constraints. Focus areas include parallelism strategies, workload decomposition, resource allocation, and reproducible execution on the HPC platform.

EVALUATION CRITERIA



Correctness & Output Quality

The solution produces valid, accurate, and complete results.



Runtime Performance

Lower end-to-end time and improved throughput receive higher scores.



Resource Efficiency

Efficient use of GPUs, memory, and compute resources.



Reproducibility

Solutions can be reliably reproduced with provided instructions and code.



Technical Clarity

Well-structured code, clear design, and sound technical decisions.



Practicality

Solutions are practical, maintainable, and applicable to real-world scenarios.

Why Industry Participation Matters

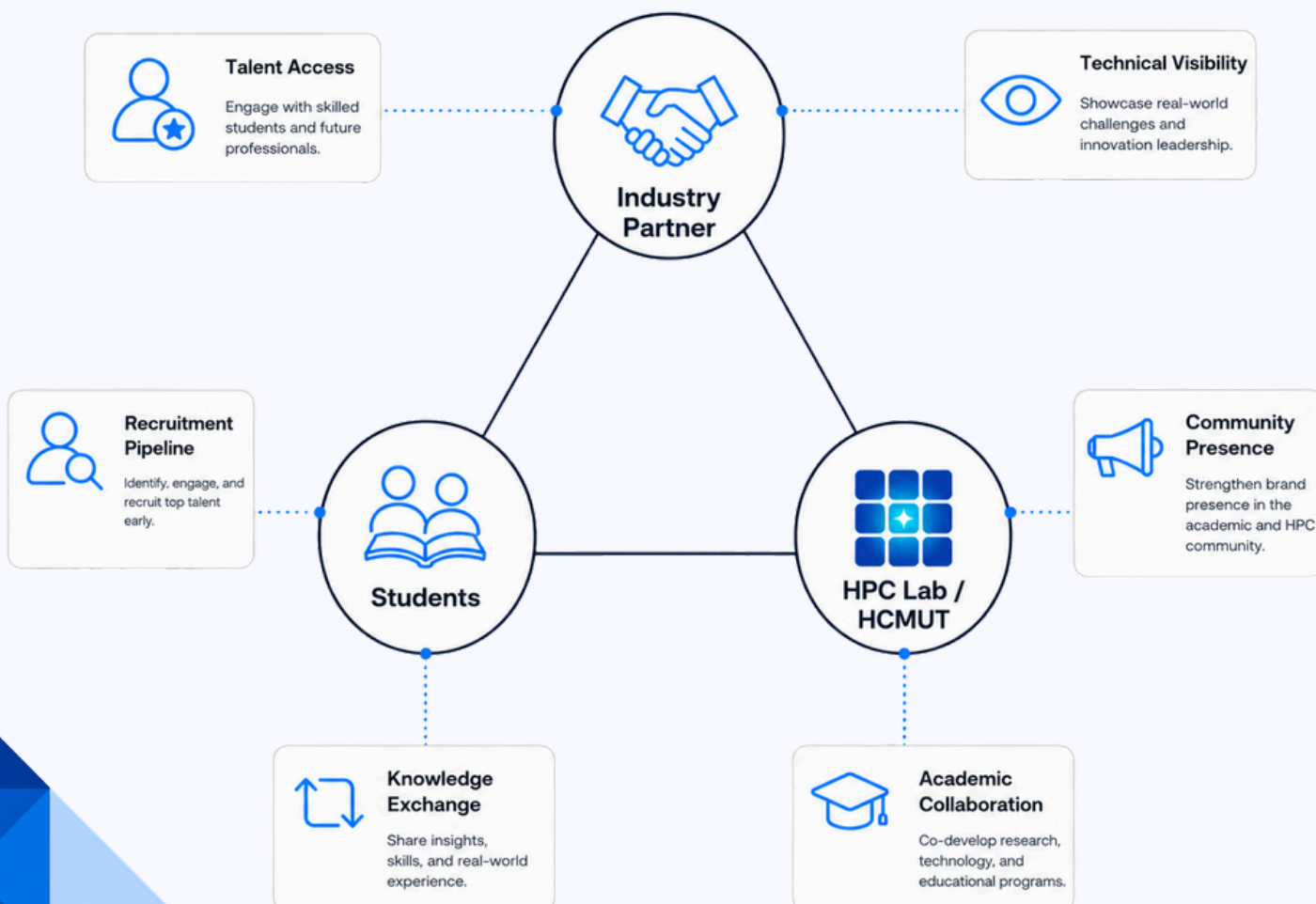
Connecting education to real-world infrastructure, deployment, and engineering practices.

Modern HPC-AI education must go beyond theory. It should connect students to the infrastructure, constraints, and engineering decisions that shape real systems in production.

Industry partners bring practical perspectives, technologies, and use cases that help learners understand how HPC and AI are built, deployed, and operated at scale.

Industry contributions can include:

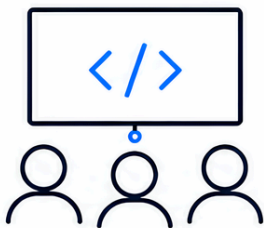
- ✓ Insights into AI infrastructure and GPU computing
- ✓ Experience with cloud and hybrid HPC environments
- ✓ Best practices for LLM deployment and optimization
- ✓ Data platforms, pipelines, and MLOps workflows
- ✓ Observability, reliability, and performance at scale
- ✓ Scalable software engineering and DevOps practices
- ✓ Enterprise use cases and domain-specific challenges



Partnership Opportunities

Flexible ways for partners to contribute and engage.

1 Technical Talk



Educational sessions
from practitioners

2 Challenge Support



Problem framing,
mentoring, judging

3 Student Mentoring



Q&A, clinics,
technical feedback

4 Sponsorship & Resources



Awards, credits, tools, logistics

5 Long-Term Collaboration



Internships, projects, research, workshops

Benefits for Industry Partners



Early Access to Motivated Technical Students

Engage with high-potential students who are eager to learn, build, and contribute to real-world impact.



Opportunity to Shape Student Awareness

Influence how the next generation understands infrastructure, tools, and career opportunities.



Visibility in an Academic Technical Program

Showcase your expertise and solutions to an audience of future AI infrastructure engineers.



Potential Recruitment & Internship Connection

Identify and connect with students who are a strong fit for internships and full-time roles.



Engagement with Emerging AI Infrastructure Topics

Highlight cutting-edge practices to a technically curious audience in areas critical to the AI era.



Long-Term Academic Collaboration

Build relationships that can lead to research projects, curriculum input, and joint initiatives.

Suggested Industry Session Themes



- AI Workloads on HPC



- Building and Operating GPU Clusters for AI



- Resource-Aware LLM Deployment



- Scalable Data Processing for AI Applications



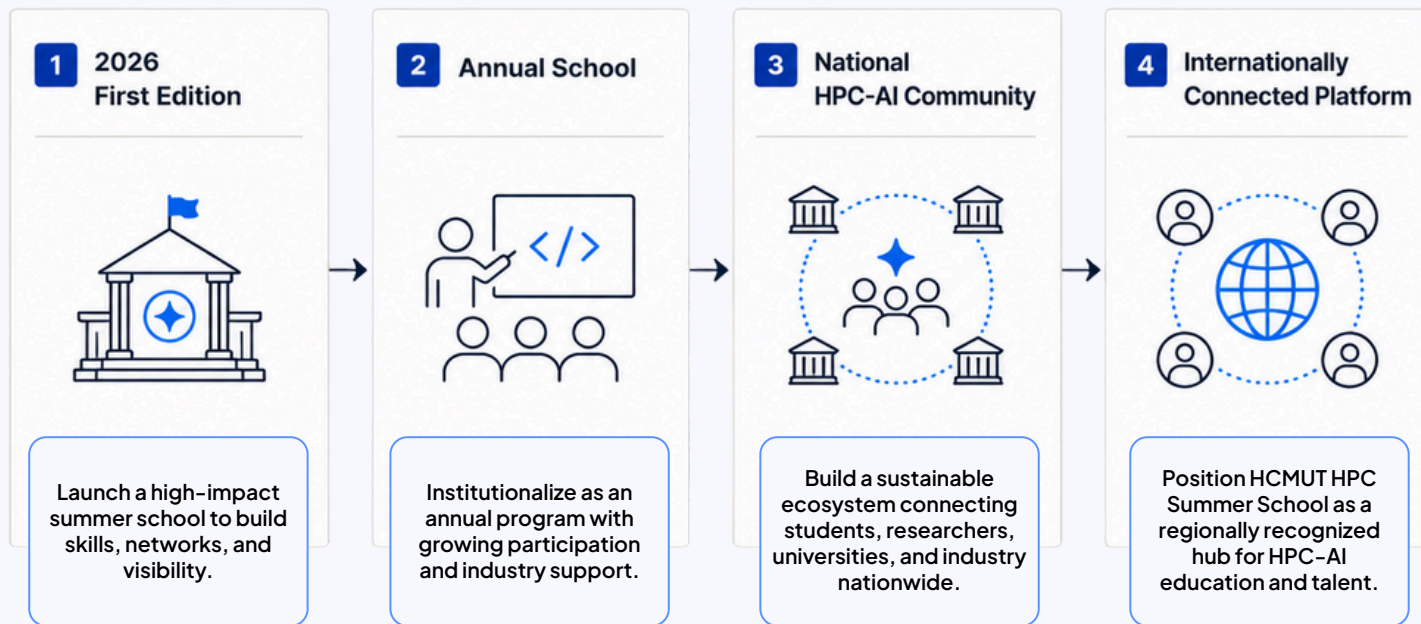
- Monitoring, Benchmarking, and Optimizing AI Workloads



- Career Pathways in AI Infrastructure Engineering

Long-Term Outlook

From the 2026 first edition toward a nationally relevant and internationally connected HPC-AI education platform.



Future Directions



Annual Undergraduate and Graduate Training

Offer structured tracks for beginners to advanced learners every year.



National Student Community

Foster a vibrant community focused on HPC and AI infrastructure across Vietnam.



Industry-Sponsored Technical Challenges

Engage students in real-world problems and innovation competitions.



University-Industry Joint Training

Co-develop content, projects, and mentorship with industry partners.



Preparation for International HPC Competitions

Equip students to represent Vietnam in regional and global contests.



Annual Undergraduate and Graduate Training

Convert training outcomes into high-impact student research and publications.



Deeper Connections with International Academic Communities

Build partnerships, exchange opportunities, and joint initiatives

Organizing Team & Contact



School Director

Assoc. Prof. Dr. Thoai Nam

High Performance Computing Lab,
HCMUT, VNU-HCM



Program Coordinator

MEng. Hoang Le Hai Thanh

Faculty of Computer Science and
Engineering, HCMUT, VNU-HCM



Contact for partnership discussion

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Website

hpcc.hcmut.edu.vn/hpc-school



Scan to visit the
HPC Summer School Website



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HO CHI MINH CITY UNIVERSITY OF TECHNOLOGY



HPCC



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BIG DATA CLUB



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“

Let's build Vietnam's HPC-AI talent pipeline together.

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