

## Accelerating the Creation of Next-Generation Programming Curricula

KICIT Pvt Ltd has engaged with the Intel® Academic Program for oneAPI to develop programming workshops that teach software developers to implement oneAPI for usages such as IoT, embedded systems, device drivers and Data Parallel C++ (DPC++).



Training developers to use the latest programming technologies requires curricula to constantly be refreshed. The faster technology changes, the more effective the conduit must be between the companies that create it and the practitioners who use it. KICIT Pvt Ltd of Nagpur meets that challenge in part through the Intel Academic Program for oneAPI. As an early adopter and evangelist for leading-edge coding tools and techniques, KICIT builds oneAPI training content used in universities and corporate settings that advance the state of open cross-platform programming.

Yashavant Kanetkar, Director at KICIT and an adjunct instructor at the Indian Institute of Information Technology (IIIT) Bangalore, has created programming and IT content such as books, tutorials and courseware for over three decades. His work is published in many languages.



Mr. Yashavant Kanetkar,  
Director KICIT,  
Adjunct Faculty IIIT

*"My focus is on creating top-notch developers. Parallel programming is the future, and oneAPI will help get you there by building knowledge on top of what you already know, with minimal unlearning."*

- Yashavant Kanetkar, Director at KICIT

No stranger to assessing and identifying high-impact future technologies, Mr. Kanetkar is committed to enabling the next generation of developers with open, cross-platform programming based on oneAPI. As an [Intel® Certified Instructor](#) for oneAPI DPC++ Essentials, he is well placed in the oneAPI ecosystem, drawing on expertise from Intel as well as contributing to training efforts.

Under Mr. Kanetkar's direction, KICIT has taken excellent advantage of the bridge between industry and academia provided by the Intel Academic Program for oneAPI. KICIT's strong relationship with Intel enables it to act as a technology ambassador, guiding institutions all over India and beyond with oneAPI tools and techniques for heterogeneous programming. As these development models continue to become more influential, KICIT will have positioned thousands of students to drive that future.

### Maximizing Timeliness, Quality and Impact

Creating educational content for emerging technologies always has an element of evangelism to it. Truly new topics need to have buzz built around them, and the foundational content provided by Intel Academic Program for oneAPI makes that critical mass more attainable. From that starting point, Mr. Kanetkar approaches each new oneAPI topic by first deciphering it himself and then creating videos and programs around it. "Once I have understood it thoroughly," says Mr. Kanetkar, "then I try to organize all that I have learnt in a way that the student community can understand easily."

This synergy empowers the content that KICIT creates, and by extension, the students themselves. In addition to creating a fast path for new knowledge into training materials, connections between content creators and the Intel Academic Program help spark student curiosity and enthusiasm. Putting the weight of Intel's reputation and roadmap behind the concepts being taught helps establish and maintain momentum.

Free [Intel® Developer Cloud](#) accounts provide students with access to the latest Intel hardware technologies, including instances based on CPUs, GPUs and FPGAs, with a comprehensive programming environment based on Intel oneAPI tools. These Intel resources help get student projects off the ground quickly, providing the basis for ongoing success that helps course participants advance their careers.

### Expanding the Future of Programming Expertise

Comprehensive technical training must contain equal parts of theoretical understanding and practical, hands-on experience. As data-parallel software-development techniques play an increasingly important role across computing disciplines from AI to HPC, programming with oneAPI on Intel architecture will become an increasingly valuable skill set. Training content created by KICIT in conjunction with the Intel Academic Program for oneAPI is preparing the developer community to meet the opportunity.



Participants gain hands-on programming experience from KICIT workshops

## 1 oneAPI: Programming for the New Era of Heterogeneous Computing

Hardware accelerators are critical for maximizing throughput and energy efficiency while driving down workload latency and cost on commercial-off-the-shelf (COTS) servers. Developers have used performance engines such as GPUs and FPGAs to supplement the CPU for years, although proprietary programming models such as CUDA have limited the reach of those efforts.

oneAPI changes all that, with a single, open model for code that can execute on CPU cores as well as various hardware accelerators. [Intel oneAPI toolkits](#) provide best-in-class compilers, performance libraries, frameworks, and analysis and debug tools, so developers can code once and run anywhere, from the largest supercomputers to compute nodes on the distributed edge.

Learn more:  
[Intel Academic Program for oneAPI](#)



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