

## **One day workshop on Intel OneAPI was organised by Deanery of Digital and Computing Services on 1<sup>st</sup> June, 2023**

Deaneries of Digital and Computing Services organised a training on Intel OneAPI in collaboration with Intel, where it was delve into advanced topics and explore the various tools available. This workshop aims to provide valuable insights and practical knowledge to enhance the understanding and utilization of the Intel OneAPI framework.

### **Agenda:**

**DPC++ Advance Topics:** Dive into the advanced features of DPC++ and explore its capabilities to optimize performance and productivity.

**DPC++ Compiler:** Learn about the powerful DPC++ compiler and how it enables developers to write code that targets a range of hardware architectures, including CPUs, GPUs, and FPGAs.

**SYCL:** Gain an understanding of SYCL (pronounced "sickle"), a higher-level programming model built on C++ that enables developers to write single-source code that targets different devices.

**LLVM Introduction:** Explore the fundamentals of LLVM (Low-Level Virtual Machine) and its role in optimizing and transforming code to achieve high-performance execution.

**VTune+ITAC:** Discover the VTune Profiler and ITAC (Intel Trace Analyzer and Collector), tools that enable performance analysis and optimization of parallel and multithreaded applications.

**Demo Tools:** Witness practical demonstrations showcasing the utilization of various tools in real-world scenarios.

