

# CHPC STUDENT CLUSTER COMPETITION

## The CHPC invites applications... from suitably qualified candidates to enter the CHPC Student Cluster Competition

The Centre for High Performance Computing's (CHPC) Student Cluster Competition gives undergraduate students at South African universities exposure to the High Performance Computing (HPC) industry. At the CHPC 2019 National Conference teams will build small HPC clusters on the exhibition floor from hardware provided by the CHPC and its industrial partners. The winning team will be entered into the International Supercomputing Conference (ISC) Student Cluster Competition hosted at ISC 2020 in Germany.

The competition is only open to South African students enrolled in a computer science related degree who are in their 2nd year of study if enrolled in a 3 year degree, or in their 2nd or 3rd year of study if enrolled in a 4 year degree. There are no fees for successful applicants. The CHPC will cover the costs of accommodation during all events as well as travel and conference fees.

An initiative of:



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NICIS

NATIONAL INTEGRATED  
CYBER INFRASTRUCTURE SYSTEM

## TEAM SELECTION

1 – 6 July 2019

The Team Selection round is designed to impart critical knowledge for building a cluster, this includes: using Linux systems, the basic software stack of a cluster and cluster design. Teams chosen in the selection round proceed to the CHPC Student Cluster Competition. The Team Selection round will be held at the University of Pretoria.

## STUDENT CLUSTER COMPETITION

30 November – 4 December 2019

Each team is assigned a budget and a parts list from which they design their cluster. The hardware, as specified in the cluster design, is delivered to the exhibition floor of the CHPC National Conference. During the competition week, the teams build their HPC clusters on the exhibition floor and run a set of benchmarks to demonstrate their design's performance.

The winning team will be entered into the 2020 ISC Student Cluster Competition to represent South Africa.

Closing Date for applications:  
**13 May 2019**

To apply and for more information visit:  
<http://scc.chpc.ac.za>.