**The High Performance Computing Center** (<http://www.hpcc.ttu.edu/>)

The High Performance Computing Center (HPCC) is a department within the Information Technology Division. HPCC provides computational and research resources for the Texas Tech community, including several Linux clusters and a grid computing environment.

Hrothgar, HPCC’s primary computing cluster, debuted at No. 110 on the Top 500 Supercomputer Sites in November 2010 with just 7,680 cores. Today, Hrothgar has been upgraded to 9,024 cores and, together with other cloud-based high performance computing resource, provides more than 92 million CPU hours to TTU researchers. In the highly competitive supercomputing world, Hrothgar managed to remain on the Top 500 list, sitting at No. 414 overall worldwide as of June 2012. The center also ranks among the nation’s best. In June 2012, Texas Tech ranked 414 overall worldwide, No. 3 in the Big 12 Conference, No. 3 among Texas academic institutions, No. 21 among U.S. academic institutions, and No. 88 in academic institutions worldwide.

Texas Tech partners with other state and national high-performance computing centers and initiatives such as the Texas Advanced Computing Center (Lonestar 4) at University of Texas and the Extreme Science and Engineering Discovery Environment, providing researchers access to some of the world’s most advanced computing resources.

HPCC research associates and technical staff assist TTU faculty, researchers and students with software and hardware needs, teach parallel programming, and support the high-performance computing clusters for researchers.