Allocation Policy for HPC Time
HPC Stakeholder Group

Introduction

The High Performance Computing (HPC) facilities are focused firmly on research and are not available to undergraduates or to taught-course postgraduate students (PGTs).

The HPC facilities are intended to support computational work of a scale larger than can be reasonably supported by a typical desktop PC. This includes non-parallel High Throughput Computing (HTC) work.

Applications for time are subject to approval by the HPC Stakeholder Group, which aims to ensure that applications are realistic and will make efficient use of the facilities.

Allocations are made in units of *core hours*. One core hour is equivalent to the use of one CPU core for one hour, or to the use of twelve cores for five minutes.

Externally-funded research
- includes Research Council, Charity and industrially-funded research
- enabled by bid for up to 10% FEC of a Service Manager, pro rata
- up to 2 million core hours per annum

Researchers are encouraged to quote in their bids the full economic cost value of the computing resource the University is effectively providing, as a source of 'match funding', to make their bids appear more competitive.

Researchers are required to bid for up to 10% FEC (depending upon funding body) of the staff time of a Service Manager for Research Computing, pro rata, in order to be awarded up to 2 million core hours per annum. (NB. This requirement does not currently apply to EU-funded projects due to auditing rules.)

Exceptionally, larger projects may be possible by negotiation but must raise the request with the HPC Stakeholder Group prior to submission of the project proposal for grant funding.

PhD Students
- free at point of use
- up to 2 million core hours

In support of University research strategy, HPC resources are provided free at the point of use up to a maximum of 2 million core hours for all PhD students whose research employs HPC and/or HTC methods.

The 2 million core hours is an upper limit for the total allocated to a PhD student during the whole of their studies. Multiple applications for time for a particular PhD student are acceptable as long as their total does not exceed the 2 million core hour limit.

Consultancy
- charged at marginal cost
- amount by arrangement

Processing time should be costed and bid for on the basis of marginal economic costing (i.e. the cost of compute nodes, fast networking and power used for the computation). This needs to be flagged on form RX2 when making the bid; funds so secured will be credited back to the HPC investment fund, and duly reinvested in additional HPC capacity.

Unfunded and proof of concept research
- free at point of use
- up to 200,000 core hours (within available capacity)
- no repeat within 12 months

A small amount of the capacity of the system will be made available for proof of concept and related work. It is important that users ensure their work is leading on to credible deliverables such as research papers or bids for external funding.

Users will not receive future allocations under this heading unless their previous allocation has produced such deliverables. Also, there must be at least 12 months since the user's previous allocation.

Seed time
- free at point of use
- up to 20,000 core hours

A small amount of the capacity of the system will be made available to enable researchers to assess whether the HPC services are applicable to their work and to develop an understanding of the size of allocation which would be needed for a project.