### Prices 2024



### Global prices

https://www.csuc.cat/ca/tarifes

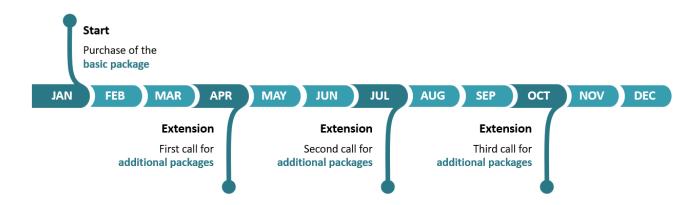
# **High Performance Computing**

The High Performance Computing Service (HPC) can be hired by both academic institutions and industrial entities (how to request a new academic project).

### How does it work?

Initially, it is necessary to choose the basic time package that will depend on the computational time estimation that will be used during the whole year. This package can be purchased at any time of the year, at the beginning of the project.

In case that more time is required, in the months of April, July and October, three additional calls are opened in which additional resources can be requested. In these calls, CSUC will assign resources to interested researchers taking into account different factors, such as the availability of service resources, the time consumed by the projects and the number of packages requested.



Timeline for contracting and acquisition of packages.

## Pricing for the year 2024

The prices for the service and for the different packages are as follows:

	2023		2024	
	Package	UC	Package	UC
Academic Projects: 1				
Basic package:				
Group I: 1,000,000 UC pack	11,690.00 €	0.0117 €	12,041.00 €	0.0120 €
Group II: 500,000 UC pack	8,750.00 €	0.0175 €	9,013.00 €	0.0180 €
Group III: 250,000 UC pack	5,833.00 €	0.0233 €	6,008.00 €	0.0240 €
Group IV: 100,000 UC pack	3,500.00 €	0.0350 €	3,605.00 €	0.0361 €
Group V: 50,000 UC pack	1,750.00 €	0.0350 €	1,803.00 €	0.0361 €
Additional package of 50,000 UC:				
Once 1,000,000 UC acquired	147.00 €	0.0029 €	151.00 €	0.0030 €
Once 500,000 UC acquired	294.00 €	0.0059 €	303.00 €	0.0061 €
Once 250,000 UC acquired	698.00 €	0.0140 €	719.00 €	0.0144 €
Once 100,000 UC acquired	992.00 €	0.0198 €	1,022.00 €	0.0204 €
Once 50,000 UC acquired	1,927.00 €	0.0385 €	1,985.00 €	0.0397 €
Industrial Projects: <sup>1</sup>				
50,000 UC package:	2,363.00 €		2,434.00 €	

<sup>&</sup>lt;sup>1</sup> Assigned order as a mandate for action. Will be VAT charged.

# **Job Accounting**

Jobs are charged using Computational Units (UC), which are determined by the number of cores reserved, its wall-time and the equivalence factor applied depending on the used architecture. Note that this means that all of the following elements are not taken into account when charging a job:

- Memory reservation and real usage.
- GPGPU reservation and real usage.
- Disk usage.

- Communication, data transfer or other network use.
- CPU real usage (CPU time).

This year equivalence factors are:

	Factor
Pirineus II - Standard Nodes	1
Pirineus II - FAT Standard Nodes	1
Pirineus II - GPGPU Nodes	1
Pirineus II - KNL Nodes	1
Canigó - Mem Nodes	1

## **Exemples**

	# Cores	Time	нс	UC
Pirineus II - Standard Nodes	8	1,5 h	12	12
Pirineus II - FAT Standard Nodes	8	1,5 h	12	12
Pirineus II - GPGPU Nodes	24	1,5 h	36	36
Pirineus II - KNL Nodes	68	1,5 h	102	102
Canigó - Mem Nodes	8	1,5 h	12	12

#### Where:

- # Cores: Number of requested cores.
  - For standard nodes, between 1 and 48 per node.
  - For GPGPU Nodes, equal to 24 or 48 depending on whether 1 or 2 GPGPUs are requested, respectively.
  - For KNL nodes, fixed value of 68.
  - For Canigó, between 1 and 192 per node.
- **Time:** Elapsed time.
- HC: Computational Hours. Calculated using the formula:  $HC = cores \cdot time(h)$
- UC: Computational Units. Calculated using the formula:  $UC = HC \cdot factor$

# **Drug Design**

The prices for the Drug Design Service (SDF), for academic groups, are as indicated in the following table:

	2023	2024
Academic start up fee	297.00 €	306.00 €
Monthly quota for academic use <sup>2</sup>	204.00 €	210.00 €

<sup>&</sup>lt;sup>2</sup> Assigned order as a mandate for action. Will be VAT charged.

