

## Computing Science: Admission with a HBO-diploma (Pre-master)

FSE offers Pre-Master's programmes of 60 EC, 45 EC or 30 EC, for access to the MSc Computing Science and individually determined Pre-Master's programmes. The overview below shows:

- which NVAO-accredited HBO diploma grants access to the MSc Computing Science;
- The content and student workload for these fixed programmes.

Below are listed the standard Pre-Master's programmes for HBO Bachelor ICT graduates per Computing Science master track offered at the University of Groningen. Students are able to apply for these pre-master programmes based on a bachelor degree in HBO ICT with **croho 30020**.

### *Track MSc Computing Science: Software Engineering and Distributed Systems*

Course Unit	Course Code	ECTS
Introduction to Logic	WBCS030-05	5
Advanced Algorithms	WBCS052-05	5
Computer Architecture	WBCS010-05	5
Statistics and Probability	WBCS049-05	5
Languages and Machines	WBCS027-05	5
Operating Systems	WBCS023-05	5
<b>Total</b>		30

### *Track MSc Machine Learning and Visual Computing*

Course Unit	Course Code	ECTS
Advanced Algorithms	WBCS052-05	5
Advanced Programming	WBCS053-05	5
Calculus 2	WBCS054-05	5
Statistics and Probability	WBCS049-05	5
Introduction to Machine Learning	WBCS032-05	5
Introduction to Computer Graphics and Visualization	WBCS056-05	5
<b>Total</b>		30

### *Track MSc Computing Science: AI Engineering*

Course Unit	Course Code	ECTS
Advanced Algorithms	WBCS052-05	5
Advanced Programming	WBCS053-05	5
Calculus 2	WBCS054-05	5
Statistics and Probability	WBCS049-05	5
Introduction to Machine Learning	WBCS032-05	5
Fundamentals of Distributed Systems	WBCS057-05	5
<b>Total</b>		30

Starting date(s) 1 September

*Please note that the above-mentioned Pre-Master programmes are tailored to one of the MSc Computing Science tracks and that successful completion of any of the three Pre-Master packages grants access to the Master Computing Science (regardless of which track).*

For HBO programmes not listed above, the Board of Admissions decides:

- The content and the student workload of a tailor-made Pre-Master's programme.
- Or**
- Admission is not accepted.