ENROLMENT REQUIREMENTS MASTER OF APPLIED COMPUTER SCIENCE

In order to be eligible to take a course, you usually have to meet certain enrolment requirements. These requirements can be both pre- and corequisites. The requirement may be blocking or advisory in nature. At the VUB, there are 4 types of enrolment requirements:

1. Binding prerequisite
2. Advisory prerequisite
3. Binding corequisite
4. Advisory corequisite

Below you will find the definition of the different types of enrolment requirements. Check out the specific enrolment requirements for your programme on the next page.

BINDING PREREQUISITE

Due to certain risks and safety issues, you can only enrol in course X if you have passed, been exempted from or deliberated for course Y. It is not possible to register for courses if you do not meet the binding prerequisite.

ADVISORY PREREQUISITE

The curriculum council strongly recommends that you only enrol in course X if you have taken course Y. Although this prerequisite is not binding and it is possible to register for course X without having taken course Y, it is your own responsibility not to follow the programme's advice. This means that you do not have the required competencies.

BINDING COREQUISITE

You can only enrol in course X if you are also simultaneously registered for (or have already passed/been exempted from) course Y. In order to achieve the learning results of course X in a safe/good way, a registration for course Y is necessary. It is not possible to register for courses if you do not meet the binding corequisite.

ADVISORY COREQUISITE

The curriculum council strongly recommends that you only enrol in course X if you are simultaneously registered for (or have already passed/been exempted from) course Y. Although this corequisite is not binding and it is possible to register for course X without simultaneously taking course Y, it is your own responsibility not to follow the programme's advice. This means that you do not have the required competencies.

HAVE A LOOK AT THE ENROLMENT REQUIREMENTS FOR YOUR PROGRAMME

VRIJE UNIVERSITEIT BRUSSEL

Enrolment requirements Master of Applied Computer Science (120 ECTS-credits)

YEAR 1 (60 ECTS)

Course title	Sem	ECTS	Binding prerequisite	Advisory prerequisite	Binding corequisite	Advisory corequisite	Additional requirements
Compulsory courses (42 ECTS)							
Programming in Java	1	3					
Operating systems and security	1	4					
Scripting languages	1	3					
Algorithm and data structures	1	5					
Advanced IT networks	1	6					
Computer systems	1	4					
Web technologies	1	3					
Advanced programming concepts	2	4		Scripting languages			
Databases	2	5					
Techniques of AI	2	6					
Machine Learning and Big Data Processing	2	5					
Module Smart Cities (18 ECTS)							
Navigation and intelligent vehicles	1	3					
Software and engineering for embedded systems	2	6					
Management and Performance Analysis of Sensor Networks	2	6					
Module Digital Health (18 ECTS)							
Biomedical signals and images	1	3					
Hospital project	2	3					
Data analytics in heath care and connected care	2	6					
Module Digital Earth (18 ECTS)							
Land-Climate dynamics	1	5					
GIS for enviromental applications	2	3					
Digital image processing for remote sensing	2	4					

YEAR 2 (60 ECTS)

Course title	Sem	ECTS	Binding prerequisite	Advisory prerequisite	Binding corequisite	Advisory corequisite	Additional requirements
Compulsory courses (43 ECTS)							
Deep learning	1	6					
Distributed computing and storage architectures	1	4					
Computer vision	1	4					
Soft skills for applied computer scientists	1	3					
Master thesis	1+2	24					Only for students who are able to graduate

Module Smart Cities (3 ECTS)							
Module Digital Health (3 ECTS)							
Clinical decision support systems	2	3					
Module Digital Earth (3 ECTS)							
Remote sensing of the enviroment	2	3		Digital image processing for remote sensing			
Elective courses (16 ECTS)							
General Electives (min 3 ECTS)							
Image and video technology	1	3					
Voice, image, coding, media and systems	1	6					
Software architectures	1	6					
Advances databases	1	5					
Practical parallel programming	1	3					
Scalable data management systems	1	6					
Capita selecta multimadia	2	3					
Capita selecta telecom	2	3					
Next generation user interfaces	2	6					
GPU computing	2	3					
Compilers	2	6					
Projects on Sustainable Electronics and ICT	1+2	4					
Cryptography	2	3					
Statistical foundations of machine learning	2	6					
Technology and applications of micro-electronics and photonics	2	6					
Multiprocessors and reconfigurable architectures	1+2	3					
Option Entrepeneurschip (max 12 ECTS)							
Business aspects of technology: future of computing	1	3					
Business aspects of technology: biotechnology	1	3					
Entrepreneurship	1	3					
Business aspects of technology: micro-electronics and photonics	2	3					
Technological business development project - EUTOPIA learning unit	1+2	6					
Option Internship							
Internship Applied Computer Science	1+2	6					