

Master of Science in Informatics at Grenoble

M1

M2

A master
8 tracks

INFO & MoSIG



Génie Informatique



Computer engineering classic or *apprenticeship*

CSI



Cybersecurity and computer forensics
apprenticeship

MoSIG



Master of Science in Informatics at Grenoble

- Data science and Artificial intelligence (**DSAI**)
- Distributed computing (**DC**)
- Human and digital world interactions (**HDWI**)
- Software and hardware components engineering (**SHCE**)

ORCO



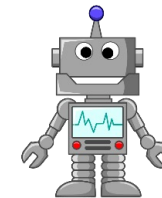
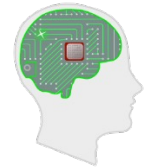
Operations Research, Combinatorics and Optimization

Cybersecurity



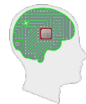








Master of Science in Informatics

- High level training in computer science
 - **Artificial Intelligence** and **data science**: machine learning technics, knowledge representation, AI architecture
 - **Distributed computing**: cloud computing, distributed systems, networking, parallel system
 - **Cybersecurity**: security, cryptography, data protection
 - **Software and hardware components**: software and hardware, quality, software engineering
 - **Human & digital world** : robotics, virtual reality, perceptions
 - **Modelisation and optimisation of complex systems**: combinatorial optimization, heuristics, problem solving Methods



Master of Science in Informatics 2nd year

Main topics of the programs

	GI	CSI	MoSIG	ORCO	Cyber security
Artificial Intelligence and data science				DSAI	
Distributed computing				DC	
Cybersecurity					
Software and hardware components				HDWI	
Human & digital world				SHCE	
Modelisation and optimisation of complex systems					

GI : Génie Informatique

CSI : Cybersecrurité et informatique légale

MOSIG : Master of Science in Informatics at Grenoble

ORCO : Operations Research, Combinatorics and Optimization

Track	M1 program	Mandatory courses in M1 S7 or S8 sufficient level required	Elective courses required in M1 S8	capacity	recommended courses for M1 in S8
Cybersecurity	Info	Introduction aux réseaux GBIN7U06	Introduction to Cryptology GBIN8U16 introduction à la cybersécurité GBIN8U19	GBIN8U16: no limit on student numbers GBIN8U19: 20	Fundamental Computer Science GBX8MO13 Introduction à l'administration de réseaux GBIN8U13
Cybersecurity	Mosig		Introduction to cryptology GBIN8U16	GBIN8U16: no limit on student numbers	Computer Network Principles GBX8MO07 Fundamental Computer Science GBX8MO13
CSI	Info	Introduction aux réseaux GBIN7U06	Introduction to Cryptology GBIN8U16 introduction à la cybersécurité GBIN8U19	GBIN8U16: no limit on student numbers GBIN8U19: 20	Fundamental Computer Science GBX8MO13 Introduction à l'administration de réseaux GBIN8U13
CSI	Mosig		Introduction to cryptology GBIN8U16	GBIN8U16: no limit on student numbers	Computer Network Principles GBX8MO07 Fundamental Computer Science GBX8MO13
ORCO	Info	Complexité algorithmique de problèmes GBIN8U02	Operations Research GBIN8U10	GBIN8U10 : no limit on student numbers	Fundamental Computer Science GBX8MO13
ORCO	Mosig	Algorithmic Problem Solving et Mathematics for computer science : niveau suffisant requis	Operations Research GBIN8U10	GBIN8U10 : no limit on student numbers	Fundamental Computer Science GBX8MO13

Track	M1 program	Mandatory courses in M1 S7 or S8 sufficient level required	Elective course required in M1 S8	capacity	recommended elective course for M1 in S8
GI	Info		DevOps : méthodes et outils GBIN8U11 Introduction to distributed systems GBIN8U03	GBIN8U11 : no limit on student numbers GBIN8U03 : no limit on student numbers	
GI	Mosig		Introduction to distributed systems GBIN8U03	GBIN8U03 : no limit on student numbers	
MOSIG-DSAI	Info	UE Introduction à l'intelligence artificielle et la science des données GBIN7U09		GBIN7U09: no limit on student numbers	
MOSIG-DSAI	Mosig	Mathematics for computer science GBX7MO05		GBX7MO05: no limit on student numbers	
MOSIG-DC MOSIG-HDWI MOSIG-SHCE	Info				
MOSIG-DC MOSIG-HDWI MOSIG-SHCE	Mosig				