STUDY OFFER FOR EXCHANGE STUDENTS

Polytech Nice Sophia

NOTA BENE: Please, consider the study program may suffer changes

ELECTRONICS

Keywords - Autonomous systems / Automation / Robotics / Communication systems / Embedded systems / Electronic engineering

AUTUMN SEMESTER

CODE	COURSE	ECTS	SEMESTER
EIEL931G	Robotics (Module: Robotics)	2	Autumn
EIELE741	Robotics project (Module: Robotics)	2	Autumn
EIELE72	Embedded Systems and Simulation for Autonomous systems	2	Autumn
EIELE71	Communication 5G	3	Autumn
EIEL934T	Mobile Communication: Technologies for connected objects	1	Autumn
A	Advanced Control and Estimation for Autonomous systems	1	Autumn
A	Architecture IoT	1	Autumn
EIEL923G	Embedded Linux	2	Autumn
EIEL933	Mobile Communications: 2G, 3G and 4G Technologies	2	Autumn
EIINE73	Refresher in Maths and Stats	3	Autumn
EIEL954	Wireless sensor networks	2	Autumn
A	Embedded Artificial Intelligence	2	Autumn
EIEL972G	Embedded System Engineering (GSE) Project	6	Autumn
	Module Innovation & Entrepreneurship		
EIINE711	Basics in Innovation & Entrepreneurship	3	Autumn
EIINE713	Business intelligence 1	3	Autumn
EIINE712	Business Development Lab (Part 1)	3	Autumn
	Module Project & Languages		
EIEL76	Project	3	Autumn
EILV2AN	Foreign Language: English	2	Autumn
EILV2FLE	Foreign Language: French	2	Autumn

ELECTRONICS

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SPRING SEMESTER

CODE	COURSE	ECTS	SEMESTER
EIELE812	System Modelling (Module: Automatics - Modelling & Control)	1	Spring
EIELE811	Digital Control (Module: Automatics - Modelling & Control)	2	Spring
EIELE83	Artificial Intelligence: Optimization and Machine Learning	3	Spring
EIELE821	3D Machine Vision	2	Spring
EIELE851	ROS and Gazebo, Application to robotic manipulators	1	Spring
EIEL824	Applied-estimation to Autonomous systems	1	Spring
EIEL861	Embedded Java	2	Spring
EIEL863	C++ for embedded systems	2	Spring
A	Refresher in Control Systems	2	Spring
EIEL859	Sensors and actuators	3	Spring
	Module Innovation & Entrepreneurship		
EIINE813	Innovation & Entrepreneurship complementary course 1	3	Spring
EIINE814	Innovation & Entrepreneurship complementary course 2	3	Spring
EIINE811	Business Development Lab and Summer school	9	Spring
EIINE812	Business Intelligence 2	3	Spring
	Module Project & Languages		
EIELE84	Project	3	Spring
EILV2AN	Foreign Language: English	2	Spring
EILV2FLE	Foreign Language: French	2	Spring

COMPUTER SCIENCE/APPLIED MATHEMATICS & MODELLING

Keywords - Data science / Artificial intelligence / Computer science / Software engineering / Big Data / Applied mathematics / Machine learning

AUTUMN SEMESTER

CODE	COURSE	ECTS	SEMESTER
EIIN953	Applied Artificial Intelligence*	3	Autumn
EIINC902	Cybersecurity	3	Autumn
EIIN904	Evolving Internet*	3	Autumn
EIIN907	Graphs algorithms and combinatorial optimization*	3	Autumn
EIIN926B	Introduction to Security	3	Autumn
EIIN960	Machine Learning for Image Analysis*	3	Autumn
EIIN954	Machine Learning: Theory and Algorithms*	3	Autumn
EIIN924	Peer to Peer	3	Autumn
EIIN949	Web of Data	3	Autumn
EIIN932	Algorithmic approach to distributed system	3	Autumn
EIIN955	Big data technologies	3	Autumn
EIIN902	Full Stack Software Engineering for IoT	3	Autumn
EIIN935	Data Science	3	Autumn
EIINH902	Design of Interactive Systems	3	Autumn
EIINH905	Multimodality and Interaction Techniques	3	Autumn
EIIN727	Software security	3	Autumn
	Module Applied Mathematics & Data Science		
EIMA713	Modelisation & optimisation in machine learning - Data Science	3	Autumn
EMEFE105	Refresher in Maths and Stats - Data Science	3	Autumn

*Advanced-level courses

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SPRING SEMESTER

CODE	COURSE	ECTS	SEMESTER
EIIN957	Advanced Topics in Deep Learning*	3	Spring
EIIN902	Algorithms for Telecommunication Networks	3	Spring
EIIN906B	Blockchain and Privacy*	3	Spring
EIIN937	Data Mining	3	Spring
EIIN908B	Data Mining for Networks	3	Spring
EIIN956	Distributed Data Management*	3	Spring
EIIN933	From Shallow to Deep Learning for Multimedia Data	3	Spring
EIIN909	Internet Measurement and New Architectures (only available when taking EIIN904)*	3	Spring
EIIN943	Large Scale Distributed Systems	3	Spring
EIIN905B	Model-based Design for Cyber-Physical Systems and the Internet of Things	3	Spring
EIIN925	Performance Evaluation of Networks*	3	Spring
EIIN945	Security and Privacy 3.0	3	Spring
EIIN951	Semantic Web (only available when taking EIIN949)	3	Spring
EIIN927	Programable Web - client side (only available when taking EIIN928)	3	Spring
EIIN928	Programable Web - server side (only available when taking EIIN927)	3	Spring
EIIN931	Virtualized infrastructure in cloud computing	3	Spring
EIINH900	UX and Usability Evaluation methods	3	Spring
EIIN825	Artificial Intelligence	3	Spring
EIEL859	Sensors and actuators - embedded A.I	3	Spring
EIIN835	Parallel programming	3	Spring
EIIIN837B	Advanced networks and middleware	3	Spring
EIIN836	Augmented reality	3	Spring

*Advanced-level courses

SMART BUILDING

Keywords - Civil engineering / Energy / Environmental science / Building management / Construction methods

SPRING SEMESTER

CODE	COURSE	ECTS	SEMESTER
	Module I: Advanced structure	10	
A	Structures and geotechnics		Spring
A	Steel and mixed construction		Spring
A	Structures in reinforced and prestressed concrete		Spring
A	Structures: Project		Spring
	Module II: Energy and comfort management	10	
A	Advanced energy modelisation		Spring
A	Energy systems for Smart buildings/grids/cities		Spring
A	Energy management in construction		Spring
A	Energy and comfort Management: Project		Spring
	Module III: Smart building	10	
A	Digital and analogue electronics		Spring
A	Sensors for Smart building		Spring
A	Information processing for Smart building		Spring
A	IOT and technologies for Smart building		Spring
A	Smart building: Project		Spring
	Module IV: Human and social sciences	10	
A	Team management (Human Resources Management)		Spring
A	Professional project (Human Resources Management)		Spring
A	Health and safety at work (Human Resources Management)		Spring
EIBA86	Project		Spring
EILV2AN	Foreign Language: English		Spring
EILV2FLE	Foreign Language: French		Spring

WATER ENGINEERING

Keywords - Water Engineering / Hydraulic / Environmental Science

AUTUMN SEMESTER

CODE	COURSE	ECTS	SEMESTER
EMEMP101	Mathematics	3	Autumn
EMEMP102	Physics	3	Autumn
EMEHH101	Hydrology	3	Autumn
EMEHH102	Hydraulics	3	Autumn
EMEWE101	Water & Health	3	Autumn
EMEWE102	Hydrogeology	3	Autumn
EMESW101	GIS	3	Autumn
EMESW102	Programming	3	Autumn
EMEWB101	Project Collaborative Engineering	4	Autumn
EMEPM101	Communication in English for projects	1	Autumn
EMEPM102	Foreign Language	1	Autumn
EMEIR201	Definition & concepts	3	Autumn
EMEIR202	River basin management application	3	Autumn
EMEHS201	Programming	3	Autumn
EMEHS202	Modelling methods	3	Autumn
EMECH201	Numerical methods	3	Autumn
EMECH202	Computational hydraulics	3	Autumn
EMEMF201	Modelling environments	3	Autumn
EMEMF202	Project	3	Autumn
EMECC201	Climate change	2	Autumn
EMECC202	Impact assessment	2	Autumn
EMEWD201	Methodology	1	Autumn
EMEWD202	Thesis writing	1	Autumn
	Module Project & Languages		
EIGE86	Disciplinary or interdisciplinary project	3	Autumn
EILV2AN	Foreign Language: English	2	Autumn
EILV2FLE	Foreign Language: French	2	Autumn

BIOLOGICAL ENGINEERING

Keywords - Molecular and Cellular Pharmacology / Cancer and Aging / Developmental Biology and Pathogenesis / Marine Ecology and Ecotoxicology / Community Ecology and Agronomy / Bioinformatics

We welcome students in biological engineering to carry out projects or internships. Applications will be studied on an individual basis.