

APPLIED MATHEMATICS AND COMPUTER SCIENCE (IMI) OPTIMIZATION (OPTIM) TRACK 2026-2027

YEAR 2 (M1) OF ENPC MSc IN ENGINEERING

ECTS

S7 (Fall)	DEPARTMENT INCEPTION WEEKS (mandatory)		2,5	30
	Inception Week S3	O2S03 ⁽¹⁾	0	
	IMI Department week (Hackaton)	O2IMI	1	
	ATHENS week	SEP	1,5	
	SCHOOL CORE CURRICULUM (mandatory)		11,5	
	Languages (3 modules for international students)		2	
	Sport		0,5	
	Professional support and guidance	AOP2	0,5	
	1 course to be chosen in our SHS department - SHS ⁽²⁾		3	
	Life cycle analysis (S3)	ACV2A	1,5	
	Statistics and data analysis	STAT	4	
	OPTIM TRACK MANDATORY COURSES		12	
	Stochastic processes and applications	SPA	4	
	Operations research - GI	REOP	3	
	Game theory - SEGF	THEOJ	3	
	Advanced C++	CPPB	2	
	MANDATORY COURSES TO BE CHOSEN ON A LIST (1 course at least)		4	
	Software design and development	TDLOG	4	
Machine learning, Deep learning	MLDL	4		
Control of dynamic systems/Functional analysis	MOPS2	4		
ELECTIVE COURSES				
Courses to be chosen in the whole School catalogue so as to reach 30 ECTS				
Diploma supplement				
Courses to be chosen in the whole School course catalog but for IMI department				

S8 (Spring)	DEPARTMENT INCEPTION WEEKS (mandatory)		0	30
	Inception week S4	O2SO4	0	
	SCHOOL CORE CURRICULUM (mandatory)		12	
	Languages (3 modules for international students)		2	
	Sport		0,5	
	Psychosocial risks	RPS	0,5	
	Introduction to law	DROA / DROE	3	
	Foresight and uncertainty	PRICE	1,5	
	Applications of machine learning or Advanced Machine Learning	PRAMA or MLA ⁽³⁾	1,5	
	Engineer Internship		3	
	OPTIM TRACK MANDATORY COURSES		12	
	IMI department senior project	IMIP2	4	
	Optimization	OPTIM	4	
	Vagary and real time in the supply chain - GI	ATRSC	4	
	MANDATORY COURSES TO BE CHOSEN ON A LIST (1 course at least)		4	
	Large dimension statistics	HISTA	4	
	Stochastic calculus and finance	METMF	4	
	ELECTIVE COURSES			
Courses to be chosen in the whole School catalogue so as to reach 30 ECTS				
Diploma supplement				
Courses to be chosen in the whole School course catalog but for IMI department				

⁽¹⁾ This code is the course's code in our online catalogue (<https://gede.enpc.fr/Programme/Default.aspx?Langue=en>)

⁽²⁾ These letters stand for the department (other than IMI) which delivers the course :

- GCC : Génie Civil et Construction - Civil and Structural Engineering
- GMM : Génie Mécanique et Matériaux - Mechanical Engineering and Materials Science
- GI : Génie Industriel - Industrial engineering
- SEGF : Sciences économiques, Gestion, Finance - Economics, Management, Finance
- VET : Ville Environnement Transport - City, Environment, Transportation
- SHS - Sciences Humaines et Sociales - Humanities and Social Sciences

⁽³⁾ MLA must be chosen if MLDL was taken in S7; otherwise PRAMA must be chosen