

INDUSTRIAL ENGINEERING (GI) "OPERATIONS AND OPTIMIZATION" (I20) TRACK - 2025 2026		
YEAR 2 (M1) OF ENPC MSc IN ENGINEERING		ECTS
INCEPTION WEEKS (mandatory)		4,5
September 2025 : 8th to 12th	Computerized mock-up with excel & access - O2MOD**	1
September 2025 : 15th to 19th	Study trip - O2MGI	1
November 2025 : 17th to 21st	Athens Week - SEP	1,5
February 2025 : 2nd to 6th	Collaborative Robotics - ROBCO	1
CORE CURRICULUM (mandatory)		13
S3	Life cycle analysis - ACV2A	1,5
S3	Numerical statistics and data analysis - STNUM (IMI)	1,5
S3	Course to be chosen in the Humanities and Social Sciences Department (SHS)	3
S3	Coaching and career guidance - AOP2	0,5
S3	Business management - O2GE2 (MOOC + in person day on September 15th)	0,5
S4	Introduction to law - DROA/DROE	3
S4	Applications of machine learning - PRAMA (IMI)	1,5
S4	Foresight and uncertainty - PR1CE	1,5
DEPARTMENT MANDATORY COURSES		23
S3	Planning and modelling of production and logistics systems - PLMOD	3
S3	Smart systems - SYSIN	3
S3	Operational research - REOP	3
S3	Software development techniques - TDLOG (IMI)	3
S3	Industrial Engineering Melusine project - GIP1	4
S3	Industry professions - GISD	1
S4	Industrial decarbonation - DECRB	3
S4	Supply chain management - LOGIC	3
I20 TRACK MANDATORY COURSES		6
S4	Scientific project - PJSCI	3
S4	Vagary and real time in the supply chain - ATRSC	3
ELECTIVE COURSES TO BE CHOSEN IN A LIST Please choose 1 course in S3 and 2 courses (6 ECTS as a minimum) in S4		9
S3	Environmental and industrial risks - RENIN (VET) OR Protection of innovation - VALIN	3
S4	Procurement buying - ACHAT	3
S4	Data science for business - DATBI	3
S4	Data and Energy - M1EDE	4
S4	Corporate financial strategy - STRA2 (SEGF)	3
S4	Optimization - OPTIM (IMI)	3
S4	Other courses to be chosen among the school catalogue	
S3 & S4	SPORT (mandatory)	1
S3 & S4	LANGUAGES (mandatory)	4
	ENGINEER INTERNSHIP *	2,5
TOTAL YEAR 2 (M1)		63

* The ects of engineer internship will be acquired at the beginning of year 3 (M2)

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

Letters in brackets stand for the department (other than GCC) which delivers the course :

GMM : Génie Mécanique et Matériaux - Mechanical Engineering and Materials Science
GCC : Génie Civil et Construction - Civil and Structural Engineering
IMI : Ingénierie Mathématique et Informatiques - Applied Mathematics and Computer science
SEGF : Sciences économiques, Gestion, Finance - Economics, Management, Finance
VET : Ville Environnement Transport - City, Environment, Transportation
SHS - Sciences Humaines et Sociales - Humanities and Social Sciences