isep

École d'ingénieurs du numérique

Prépa Intégrée (CII)

Computer Science and Digital Technologies Program 100% in English

Programme Informatique et Technologies Numériques 100 % en Anglais

Subjects taught in the first year
Computer Science and Digital Technologies Program

	Lessons	ECTS	Hours
S1	**Electronics and Robotics Project Lab*** Electronics Professional Identity Project 1 (BE IP 1) Professional Identity Project 2 (BE IP 2) Robotics Project	4	64 h
	Information Systems Management Tools	2	20 h
	Electromagnetism	5	62 h
	Mathematics	5	60 h
	Mathematics and Computer Science Linear Algebra Applications to Computer Science	5	52 h
	Humanities Society, Environment and Business Written and Oral Communication in French	4	48 h
	Modern Languages English Second Language: French Foreign Language, Spanish, German, Chinese, Japanese	5	48 h
	Total semester 1	**30**	**354 h**

***Bureau d'étude :** projet en équipe de 6 de la conception à la réalisation dans les technologies du numérique

Subjects taught in the first year
Computer Science and Digital Technologies Program

	Lessons	ECTS	Hours
S2	**Electronics and Data Project Lab** Mathematical Optimization Analog Electronics Project Digital Electronics Project	3	32 h
	Mathematics and Computer Science Arithmetic, Applications to Computer Science and Cryptography	4	49 h
	Electromagnetism	5	62 h
	Mathematical modeling Differential equations, partial derivatives Probability Applications to physics	5	60 h
	Signals and Systems	5	56 h
	Humanities Business Economics Humanism and Digital Technology Written and Oral Communication	4	44 h
	Modern Languages English Second Language: French Foreign Language, Spanish, German, Chinese, Japanese	4	48 h
	Total semester 2	30	351 h

Subjects taught in the second year
Computer Science and Digital Technologies Program

	Lessons	ECTS	Hours
S3	**Vibrations and Waves**	5	60 h
	Engineering Mathematics Linear Algebra Numerical Methods	5	68 h
	Quantum Mechanics and Applications	2	20 h
	Signals and Systems	5	40 h
	Specialized Technical Project Advanced Project (specialization track)	4	16 h
	Humanities Business Functions Introduction to Responsible Digital Technology French and Communication	5	42 h
	Modern Languages English Second Language: French Foreign Language, Spanish, German, Chinese, Japanese	4	50 h
	Total semester 3	**30**	**296 h**

Subjects taught in the second year
Computer Science and Digital Technologies Program

	Lessons taught in French	ECTS	Hours
S4	**Electronics Project (Integrated)**	5	36 h
	Computer Science Project	5	36 h
	Robotics Project	2	30 h
	Digital Communications Project	3	22 h
	Languages and Communication English Written and Oral Communication Second Language: French Foreign Language, Spanish, German, Chinese, Japanese	5	52 h
	Internship and Personal Engagement Project	10	2 mois
	Total semester 4	**30**	**176 h + stage**
	OR International Semester - 4 to 5 months		

Partner institutions include:

- University of Wales Trinity Saint David – Swansea (Wales)
- HELHa – Mons (Belgium)
- Université Laval – Québec (Canada)
- CVUT – Prague (Czech Republic)
- Huazhong University of Science and Technology (China)
- Inha University – Incheon (South Korea)
- ESPRIT – Tunis (Tunisia)
- Tampere University (Finland)
- Oulu University (Finland)
- Université de Zagreb - FER - Zagreb (Croatia)
- Politechnika Krakowska (Poland)
- HAW – Université d'Hambourg (Germany)
- Høgskolen i Østfold (Norway)
- TSI – Riga (Latvia)

Destinations subject to change depending on partnerships.