Innovation   Cross-Fertilisation   Research

Ceramics & ICT
Graduate School

Track 1
High frequency
electronics & photonics

Track 2
Material science
& engineering

Track 3
Smart IoT

Track 4
Information security

Track 5
Applied maths
& optimisation

Track 6
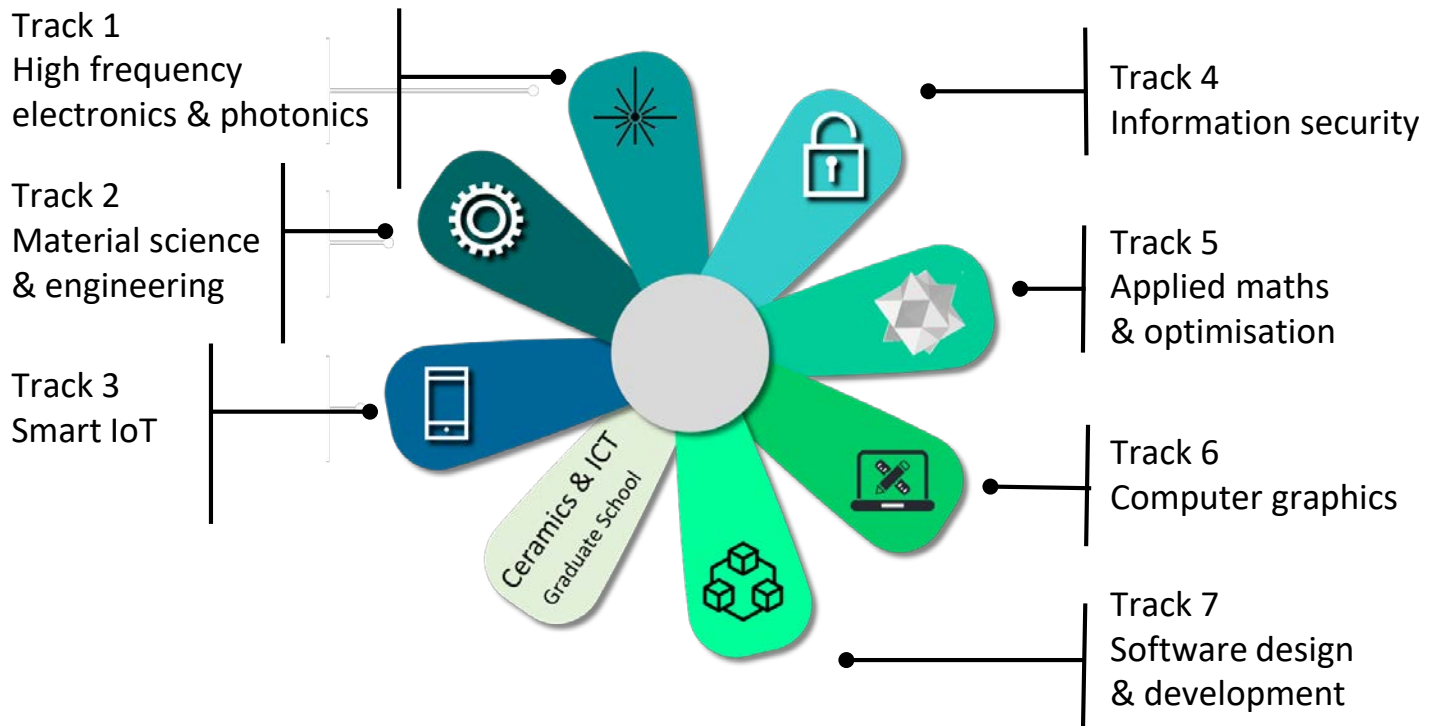Computer graphics

Track 7
Software design
& development

Ceramics & ICT
Graduate School

➢ Disciplinary courses giving strong skills and a high level of **specialization** in one of the 7 disciplinary domains

➢ **Interdisciplinary** teachings comprising theoretical and practical courses at the interface between the 7 tracks (cybersecurity, photonics for health, additive manufacturing for 5G, ….)

➢ Long research/industry working group projects: to get **transverse** skills and interdisciplinary vision through thinking and working approach: **innovation**, creativity processes, co-design…

Contact and registration
celine.parvy@unilim.fr

INVESTIR L'AVENIR

irCer
institut de recherche
sur les céramiques

xlim

cnrs

Université
de Limoges

Université
de Poitiers

Information security

Information security - Presentation

The Information Security Master degree of the Graduate School has the objective to train specialists in the study and development of cryptographic solutions and coding information.

Graduates are intended to integrate engineering teams in industry, services and the public sector.

The particularity of this training is to allow to acquire a double competence:

- a mastery of the mathematical foundations of cryptology and coding of information: theory numbers, elliptic curves, security proofs, Boolean functions, formal calculus, theory some information...

- operational know-how: software development, smart cards, formal methods, programming secure, computer networks, standards and technological standards.

MAJOR COURSES – 63 ECTS*

Core courses - 57 ECTS Core teachings	In-depth Disciplinary courses - 6 ECTS 2 elective courses among
- Information security - Cryptography - Network security	- Techniques of Provable Security - 5G - Security of Embedded systems for IoT

MINOR COURSES – 11 ECTS*

Interdisciplnary Courses Bridging courses	Interdisciplnary Courses 2 elective courses among	Interdisciplinary scientific project
- Software development tools	- Modelization, Simulation, Optimization - Scientific computation and parallelisation - Database security - Watermarking	With a Graduate School's multidisciplinary team, interdisciplinary workshop of one day/year

INTENSIVE SUPPORT FOR PROFESSIONAL PROJECT – 46 ECTS*

Soft skills 12 ECTS	International mobility 5 ECTS	Research labworks 5 ECTS	Research Internship 24 ECTS
Innovation economy, Creativity processes, Foreign languages (English or French)	Full time internship in a foreign lab or compagny	Research Climbing Ropes programme	Master thesis in a R&D company or in a lab

*1 ECTS = ~10 hours of classes