

Quantum thematic program of the graduate school of University Grenoble-Alpes

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[University Grenoble Alpes](#) (UGA) has been selected to set-up a graduate school at Master level in order to strengthen the impact and international attractiveness of their training through research. The graduate school brings together [six academic components of UGA](#) and its partners. UGA has identified 15 thematic programs within the graduate school, among which a thematic program dedicated to quantum matter, quantum information, quantum engineering and technologies.

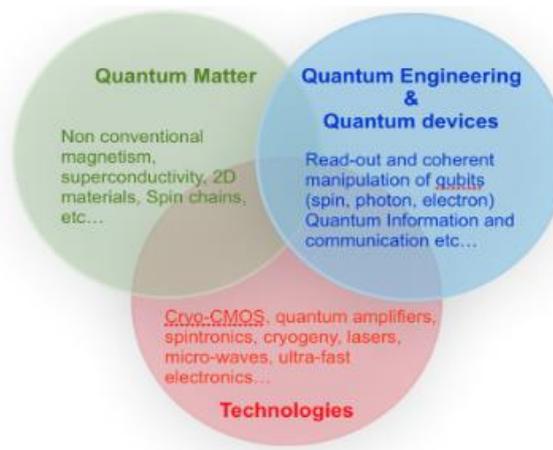


Figure 1: Scientific topics covered by the [Quantum thematic program](#) of the graduate school of UGA

The QUANTUM thematic program will offer specific high-level training on quantum properties of matter and light shared by several Master programs. It will offer also mobility grants and internship scholarships open to international students. Research topics range from quantum materials (bulk, nanostructures and 2D systems), quantum information devices, quantum calculation and metrology (semiconductors, superconducting, molecular or optical Qubits) to quantum sensors or more complex systems and hardware developments for quantum information processing. It will include also multidisciplinary aspects in computer science and mathematics.

For the academic year 2021/2022 [1], Master programs affiliated to the [thematic program consist of joint Master/Engineer tracks](#) ([Nanophysics-quantum physics Master 1](#), [“Quantum Information-Quantum Engineering” Master 2](#), [“Nanophysics” Master 2](#), [“Photonics and semiconductors” Master 2](#)) fully affiliated to the thematic program, and an outer circle with which pluridisciplinary actions will be also developed. The Engineer/Master students affiliated to the Quantum program will be invited to start a PhD in a research laboratory or in a high-tech company via industrial PhDs contract. The affiliated doctoral schools are: Physics and EEA.

The objective of the QUANTUM thematic program is to attract top level French and foreign undergraduate students willing to be part of the quantum technologies developments, and to promote their integration within the leading research laboratories in Grenoble and in France. Through different Master programs, it will offer to the students the proper academic background to start a PhD in a fundamental of R&D research laboratories and prepare them to a professional career in academic research or in a top-level technology R&D company.

REFERENCES

- [1] <https://master-nanosciences.univ-grenoble-alpes.fr/graduate-school-and-research/graduate-school-program-quantum/graduate-school-program-quantum-801863.kjsp?RH=3972980646879902>