

## Job title

TFM: Design and fabrication of semiconductor spin qubits for quantum computing

## Job description

Recent advances in nanofabrication has allowed to fabricate semiconductor spin qubits with outstanding properties and compatible with the fabrication of integrated circuits. In the future, these devices will be the building blocks of practical quantum computers. The objective of this job is to develop specific methods for improving their fabrication technology.

## Main tasks and responsibilities

- Design of the micro/nano fabrication process.
- Fabrication in collaboration with the clean room engineers.
- Electrical measurements of the fabricated devices.

## Requirements

Undergraduate and post-graduate studies on physics, materials science and engineering, electronic engineering, chemical engineering and nanoscience and nanotechnology.

## Description of Group/Project

Nanofabricacion and Nanomechanical Systems Group ([NANONEMS](#))

## Summary of conditions

- This position is thought for a Master Thesis.
- Possibilities to be later on enrolled for a PhD thesis

## How to apply

- All applications must be sent to [francesc.perez@csic.es](mailto:francesc.perez@csic.es).
- Include a letter of motivation

## Deadline for applications

Position will be open until a suitable candidate is found.

**Institute of Microelectronics of Barcelona IMB-CNM (CSIC)**  
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**Expected start date** To be agreed with the candidate.

- This offer can be found on: <https://www.imb-cnm.csic.es/en/about-center/careers/open-positions>
- More information on IMB-CNM: <https://www.imb-cnm.csic.es/en/>

