

## Industrial Day – Project Submission Form

Please complete this form to provide information about the projects your company will present during Industrial Day. This information will help us organize and communicate available Master's Thesis (TFM) opportunities to students.

<b>Company Name</b>
Eurecat – Technology Centre of Catalonia

<b>Project Title</b>
Development of a G-code Generation Script for 5-Axis 3D Printing

<b>Project Description</b>
<p>This project aims to develop and optimize a Grasshopper-based script for generating G-code for a 5-axis 3D printer, leveraging the open-source Open5x project. The goal is to ensure smooth toolpaths and reliable execution for complex geometries.</p> <p>The work will involve reviewing the existing script, refining its logic, and validating toolpaths through experimental trials on Eurecat's operational 5-axis printer.</p> <p>Additionally, the project will analyze hardware and software limitations and propose improvements for future developments. The expected outcome is a robust and validated G-code generation workflow that enhances precision and efficiency in multi-axis additive manufacturing.</p>

<b>Responsible Person</b>
Miquel Domingo

<b>Contact email</b>
<a href="mailto:miquel.domingo@eurecat.org">miquel.domingo@eurecat.org</a>

**Is there financial support available? (Yes/No)**

Yes

No

<b>Number of available positions</b>
1

Thank you for your collaboration and participation in Industrial Day.