SERVICE DE METROLOGIE NUCLEAIRE
RELIABILITY AND SAFETY

MASTER THESES

Academic year **2020-2021**

*The topics listed below correspond more to **themes** in which master theses can be realized, than to a detailed description of topics. Depending on the interest of the students, more theoretical or instead industry-related topics will be developed. Some of the proposed themes are more convenient for an internship, to be made before the master thesis.*
*The themes proposed are preferably **accessible mainly to students in engineering physics and in electromechanical engineering**.*

Design and process integration of a software tool for asset performance monitoring and optimization (in collaboration with Infrabel)

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To improve the operational performance of its asset fleet and support its engineering and decision-making processes, Infrabel seeks to create a data-driven tool to monitor and optimize asset safety, availability and costs.

Exploratory research has resulted in a proof-of-concept algorithm and preliminary set of requirements on data collection policies.

The next step is to fully operationalize this proof-of-concept by eliminating simplifying assumptions, tuning the generic algorithm to specific asset classes, and integrating the developed methods into Infrabel processes.