## **Guidelines for Student Reports**

## MODELING AND ANALYSIS OF DIFFERENT APPROACHES TO THE BACKING OF AN UWB SLOT ANTENNA

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## **Abstract**

Ultrawideband (UWB) antenna design presents several challenges, such as conflicting requirement on size and bandwidth and the constraint of using low-cost technology and printed planar structures. In several cases, directive patterns are necessary in order to cover a local area and reduce multipath effects, but a low profile is also needed to facilitate antenna integration. The objective of the proposed activity is the modelling and simulation of a directive UWB antenna using a commercial EM simulator. More in detail, this project will deal with the implementation of the reflector-backed and cavity-backed slot antennas proposed.

**Reference Bibliography:** Evolutionary Optimization and Ultrawideband Antennas [1]-[9]; Evolutionary Optimization [10]-[11].

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