



# Sample Project: ASIC Design engineer for the CMS GEM front-end electronics.

Code	PH2462
Programme	FCT
Department	PH
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## Title

ASIC Design engineer for the CMS GEM front-end electronics.

## Description

Working within a team of engineers, and under the guidance of senior CERN engineer, the student will work on the design of VFAT (a CMOS front-end readout chip for modern micro pattern gas detectors). Micro pattern gas detectors (MPGD), in particular gaseous electron multipliers (GEM), which are a recent innovation and front-end readout chips for such detectors are in their infancy. The project is part of the CMS Muon upgrade program.

## Skills

Design of analog and/or digital circuits, VLSI design techniques, use of CAD design tools such as Cadence

## Disciplines

Electronic Engineering

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