



## Concurrent Design and Engineering for the Civil Engineering, Mining, Offshore and Oil&Gas Industries

RHEA is a leading provider of Concurrent Design and Engineering software and methodology to the space industry, universities and other non-space engineering industry sectors. Concurrent Design is a method used to manage the definition, design and implementation of complex systems and projects. It is a multidisciplinary approach that integrates all key aspects of a system in a structured way, and is applicable to different types of projects.

RHEA's Concurrent Design Platform (CDP™) software supports the Concurrent Design and Engineering process by allowing the definition and exchange of parameterised models of the designed system. These models are used in a series of concurrent design sessions to perform trade-off analyses and to rapidly converge on system requirements and early design options at the start of the project.

RHEA has been providing Concurrent Design tools and processes to the space industry for more than 10 years. As part of a technology transfer initiative, we intend to extend the Concurrent Design approach to non-space sectors, primarily the Civil Engineering, Mining, Offshore and Oil&Gas Industry.

In support of this initiative, the objective of the internship is to define and build a library of system equipment, Concurrent Design ready, models. The intern will create a parametric description of equipment and systems describing the different domains relevant to the non-space industry on which he/she will be focusing (Civil Engineering, Mining or Oil&Gas). He/she will define the relevant design domains, and then identify the subsystems, set of equipment per subsystem, and the source of the data for the equipment. For each of the identified equipment, a parametric representation will be made in the RHEA Concurrent Design Platform (CDP™). The intern will also support the definition and tailoring of the Concurrent Design methodology to the non-space industry on which he/she will be focusing.

It is expected that, upon successful completion of the work, the intern will have acquired a good understanding of the Concurrent Design methodology and of the CDP™ software. RHEA awards Concurrent Design certificates to proficient users of the Concurrent Design approach.

The intern will work under the supervision of his/her tutor in the RHEA Leiden office, with interactions and close collaboration with RHEA's Concurrent Design experts in Europe and Canada. The intern shall have good engineering knowledge of at least one of the following domains: Civil Engineering, Mining and Oil&Gas. He/she will have engineering knowledge of the disciplines relevant to the domain, and a systems engineering mindset. Software skills related to Microsoft Office Excel, VBA, C#, .Net are a plus. Inter in first or second year of master (MA).

Location : Schuttersveld 2, 2316 ZA Leiden, The Netherlands : Easy access by public transport.

Training period: About 4 months

Salary: to be discussed

Starting date : Beginning of may 2015

Hours per week : 20 to 35 hours

Person in charge : Sam Gerené, recruiting coordinator : [s.gerene@rheagroup.com](mailto:s.gerene@rheagroup.com) : +31 (0)71 745 00 00