



DEPARTMENT OF AUTOMOTIVE AND AERONAUTICAL ENGINEERING

Creating an Interface between PreSTo and CEASIOM

Task sheet for a project

Background

PreSTo (Preliminary Sizing Tool) is a spreadsheet (Excel), based on the lecture "Aircraft Design" at Hamburg University of Applied Sciences. PreSTo is developed in a university-funded research project (<http://PreSTo.ProfScholz.de>). CEASIOM (Computerised Environment for Aircraft Synthesis and Integrated Optimization Methods) is a Matlab-based design environment for the analysis of aerodynamics, structures and flight dynamics at an early stage during the aircraft design process (<http://www.CEASIOM.com>).

Task

The task consists of programming an interface between the most recent PreSTo and CEASIOM versions. The interface will have to transfer data from PreSTo to the AcBuilder in CEASIOM. The task consists of these sub-tasks:

- Short description of PreSTo, CEASIOM and the AcBuilder
- Description of the XML file structure used as input and output file for the AcBuilder
- Programming of a tab in PreSTo collecting all relevant data for transfer to CEASIOM and enabling the output of an appropriate XML file
- Testing of the interface with example aircraft geometries

The report has to be written in English based on German or international standards on report writing.