



POLITECNICO
DI TORINO



Concurrent Engineering Challenge 2017

Politecnico di Torino has been selected to take part in the first Concurrent Engineering Challenge organised by the European Space Agency. Four student teams will participate in this activity: one student team will use the Concurrent Design Facility (CDF) of the ESA Academy Training and Learning Centre at ESEC (Redu, Belgium), while the other groups will participate from CDF's located at three European universities: Politecnico di Torino (Italy), University of Strathclyde (United Kingdom), and Technical University of Madrid (Spain). The challenge will take place from 12 to 15 September 2017.

Each group will feature 15 to 25 students and will be supervised by two systems engineers. The challenge consists in a four-day intensive CDF session aimed at designing a given space mission. The four groups will not compete against each other. Instead, they will use video conferencing to share each day's progress, raise any particular difficulties they are facing, and receive helpful input from the other participants. At the end of the week, each group will present their final design.

For more information, please visit the ESA Academy webpage:

http://www.esa.int/Education/ESA_Academy/Concurrent_Engineering_Challenge_Call_for_student_applications



The group of Politecnico di Torino (PoliTO team) is constituted by 25 students from the PhD and Master courses, divided into small teams of two or three to cover the following disciplines: mission analysis, instruments, configuration, attitude and orbit control, power, communications, commands and data handling, thermal control, propulsion, structures, and mechanisms.

Each small team will contribute to the whole mission design using the Concurrent Engineering approach. The students of the PoliTO team will be guided through the process by two experienced Space Systems Engineering Professors, Sabrina Corpino and Nicole Viola.