

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
In Orbit - Postgraduate Space Education (4)

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INCORPORATING HUMAN SPACE EXPLORATION IN TO INDUSTRIAL DESIGN SCHOOL
CURRICULUM

Abstract

Industrial Design is a constantly growing field with more and more influence on everyday life. Despite its impact on the global consumer market, its potential can be explored in much broader spectrum and reach far beyond its commercial aspect. One of the important areas to explore by designers is Space. Looking in to our future, we will have to design from scratch our extra-terrestrial environments that we shall eventually occupy. We will have to change our perspective on nearly everything we are familiar with.

In 2014 Faculty of Industrial Design at the Academy of Fine Arts in Cracow introduced a unique opportunity for the Industrial Design Students. A new area of research and education has been incorporated in to a School's curriculum. It is an original study program based on the authors experience working at the MIT Aero Astro and collaboration with NASA.

Design for Extreme Environments – is available to the master level students in a project based studio class. It is the first and only ID school in Poland that teaches about Space.

Students are introduced to all aspects of Human space exploration. Along with the knowledge part, students are undertaking different design projects. All topics are consulted with specialists from NASA and MIT to provide real life issues and try to respond with viable ideas. Although the Human Space exploration is the main area of interest the program includes subjects related to the terrestrial extreme conditions and environments.

Examples of student's work will be presented, pointing out crucial elements of the program.

The impact is measured by the constantly growing number of students interested in taking the studio. Constant improvements to the program are introduced based on the astute observations and evaluations after each term, as well as through consultations with collaborators i.e from RISD.

The essence of design construed in this way is its purposefulness. A design must be related to a real need which is its foundation. To be successful and improve the situation, one must thoroughly understand the needs of the user and the environment for which we are designing. In case of extreme situations the consequences of a design fault may be dire – thus it stress to learn responsibility. The experience of an extreme reality and the ability to look at it from a perspective other than once own, may become invaluable to designers of the future worlds.