

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
On Track - Undergraduate Space Education (3)

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EXPLORING ALTERNATIVE FUTURES AND SPACE COLONIZATION WITH UNDERGRADUATE
DESIGN STUDENTS

Abstract

This paper describes interdisciplinary undergraduate design education where students envision future aerospace scenarios by speculating and visualizing how current disruptive technologies will change our world. These design methodologies are being conducted in the Dubai Institute of Design and Innovation, Dubai's first specialized design university.

Using methods of design fiction and speculative design, students explored emerging technologies like artificial meat, IoT, electronic tattoos, touchable holograms, and others, to critically imagine applications and implications for these technologies in future societies.

While the program is not solely focused on the aerospace industry and the future colonization of Mars, this has become a recurrent topic in many of the student's projects and future scenarios. The specific projects related to possible space colonization are described in this paper.

The paper reflects on these educational experiences and concludes with ideas around how to engage design students with innovation and new technologies, especially around future-oriented industries such as aerospace and life on other planets.