

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

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PROJECT BASED AEROSPACE ENGINEERING GRADUATION AT UNDERGRADUATE LEVEL
FOR SUCCESS IN ASTRONAUTICS

Abstract

This paper discusses the merits of a project and research based Aerospace Engineering Graduation at Undergraduate Level for Success in Astronautics. There are real life case studies presented in this paper of students who have gone through such a program and the success at their careers which has followed. Three students who were part of this program were part of Team Indus who won the 1 Million Dollar Milestone Prize of Google LunarX. Another student was able to land a seat as a team member of the Mars Orbiter Mission of ISRO. In all of the cases above, the students were evaluated on the merits of their final year project in their 4th year of their Aerospace Engineering Undergraduate studies. While regular courses took place, the students were advised to take challenging projects for their final year and they were told that they would receive extra credit for their courses as well. The students were also motivated to enter international competitions as part of this new ambitious program and the students were also able to land the prestigious NASA System Engineering Award in a competition that they entered in USA. Overall the graduates from that batch reached success after graduation and several of them opened highly innovative Aerospace companies as well. The paper discusses these cases and explains how a 4th year undergraduate Aerospace Engineering program that focuses in research, doing projects, publishing conference papers and attending competitions can help to create better Aerospace engineers for the future.