

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Enabling the Future - Developing the Space Workforce (5)

Author: Prof. Ilias Fernini

Sharjah Academy for Astronomy, Space Sciences and Technology (SAASST), United Arab Emirates,
ifernini@sharjah.ac.ae

Prof. Hamid Al Naimiy

Sharjah Academy for Astronomy, Space Sciences, and Technology (SAASST), United Arab Emirates,
alnaimiy@sharjah.ac.ae

THE ROLE OF THE UAE NEW SPACE SCIENCE CENTERS IN PROMOTING STEM EDUCATION

Abstract

Space education is considered the first step to be taken by any country seeking to establish space application capabilities through a basic space science program. For this reason, many developing countries have started running small space science facilities for research and education programs. The United Arab Emirates has seen the creation of several space science research centers. Among them, we can mention: (1) Sharjah Academy for Astronomy, Space Sciences, and Technology (SAASST) at the University of Sharjah, (2) National Space Sciences and Technology Center (NSSTC) at the United Arab Emirates University, (3) Center for Space Science (CSS) at NYU Abu Dhabi, and (4) Khalifa University Space Technology Innovation Center (KUSTIC).

All of these centers are now promoting space sciences and technology on all fronts through STEM education. STEM education (Science, Technology, Engineering, and Mathematics) is becoming a primary concern for education and university curriculum policymakers to improve science and technology development. This has a significant impact on the workforce, countries' national security, and immigration policy worldwide. The interest in STEM education at all educational levels (primary, middle, high school, and university) is becoming an essential aspect of ensuring that students are well-versed in the necessary STEM knowledge to succeed in their workplace. Students must be inspired to take on more challenging STEM subjects. This paper discusses the new UAE Space Sciences Centers' contribution and their programs to promoting STEM education. We focus on the Sharjah Academy for Astronomy, Space Sciences, and Technology through real-life space applications programs using ground-based and space research programs.