

UNNATI

UNispace Nanosatellite Assembly & Training by ISRO



P Kunhikrishnan
U R Rao Satellite Centre (URSC)
Indian Space Research Organization
Government of India

PROGRAMME ANNOUNCEMENT

During the Fiftieth anniversary of first United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE +50) at Vienna on June 18 2018, India announced a training Programme for international participants on small satellite development.

- ☐ Training of 30 candidates per batch
- ☐ Consecutively for a period of 3 years starting from January 2019



Chairman, ISRO

June 18, 2018 at Vienna



Simonetta Di Pippo

Enabling platform to make Nano satellites

PROGRAMME OBJECTIVE

- ☐ To offer a simplified and increased exposure to satellite fabrication technologies, as part of the UNISPACE initiative
- ☐ To provide theoretical course on satellite technology
- ☐ To provide intensive course on nano satellite realisation, covering mission aspects, design, fabrication, assembly, integration & testing
- ☐ To provide hands-on training to assemble, integrate and test a low cost, modular nano satellite

India's contribution to Unispace+50 initiatives



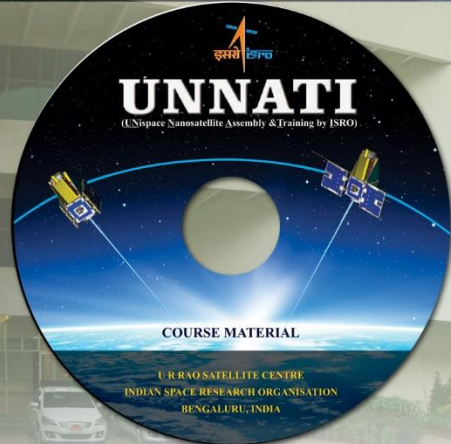
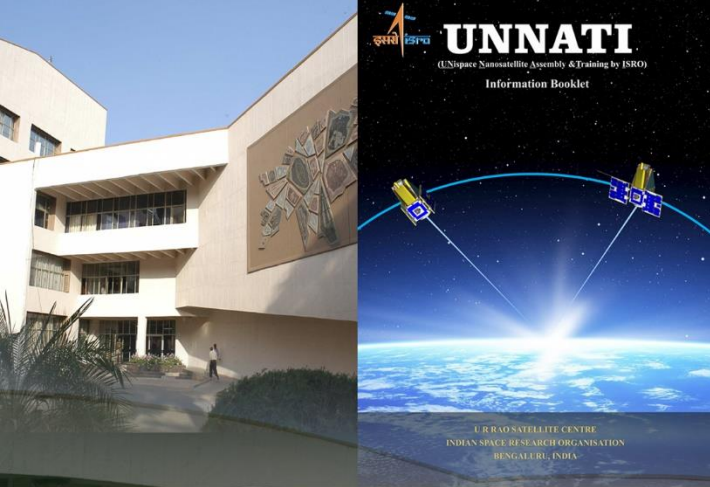
UNITED NATIONS
Office for Outer Space Affairs



INAUGURAL SESSION

Inaugurated on January 17,
2019 at
UR Rao Satellite Centre (URSC),
Bangalore, India
by
Dr. Jitendra Singh, Honorable
Minister of State (Space) in the
presence of Dr. K. Sivan,
Secretary, DOS / Chairman,
ISRO

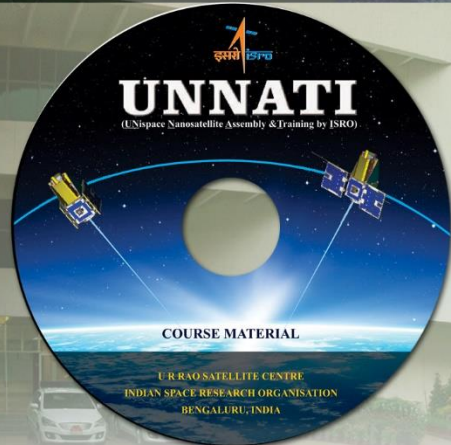
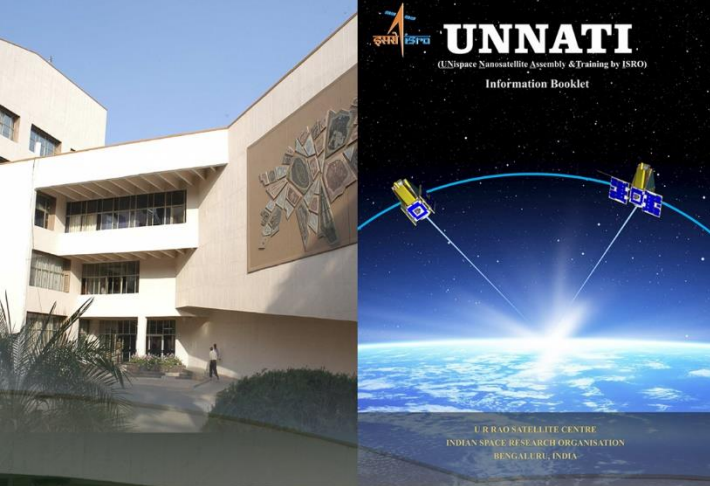




UNNATI COURSE CONTENTS

- ☐ Theoretical coursework on Basics of Satellite technology & its application followed by specific module on Nano satellite mission
- ☐ Hands-on experience on Nano satellites Assembly Integration & Testing





THEORETICAL COURSE CONTENTS

- ☐ Introduction to Satellite Technology & Applications
- ☐ Celestial Mechanics & Orbit Dynamics
- ☐ Mission Overview, analysis & Operations
- ☐ Satellite Tracking - Ground segment
- ☐ Satellite Mechanical Systems
- ☐ Satellite Electrical Systems
- ☐ Introduction to Optical Remote sensing payloads and their applications
- ☐ Overview of AIT Assembly, Integration and Testing
- ☐ Spacecraft Checkout system
- ☐ Introduction to Nanosatellite & Applications
- ☐ Space debris management and mitigation
- ☐ Parts, Process & Material Assurance
- ☐ Emotional Intelligence
- ☐ Environmental Testing of Spacecraft & Subsystems
- ☐ Space Quiz
- ☐ Guest Lectures

and Many More Interesting topics ...



UNNATI Programme Batch 1
at
URSC - INDIA

30 Participants for 17 Countries



UNNATI PROGRAMME OPPORTUNITIES 2019-2020

UNNATI Programme Batch 2

Commencement of Registration : May 15, 2019
Commencement of course : October 15, 2019
Completion of course : December 15, 2019

UNNATI Programme Batch 3

Commencement of registration : May 15, 2020
Commencement of course : October 15, 2020
Completion of course : December 15, 2020

For any additional information/query contact us : unnati@isac.gov.in

We welcome participants around the Globe

The background of the slide features a vibrant sky with soft, white and blue clouds at the top. Below the sky, a stylized world map is visible, rendered in shades of blue and green. At the bottom, there are several overlapping, wavy lines in light blue and green, creating a sense of movement and depth.

THANK YOU

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