



INSTITUTE FOR ADVANCED RESEARCH IN SCIENCE,
BENGALURU

COURSE ON

SATELLITE DESIGN FOR SPACE SCIENCES

TO LEARN BASIC CONCEPTS OF ASTRONOMY, INSTRUMENTATION AND
MISSION DESIGN OF THE STATE-OF-THE ART SATELLITES.
INCLUDES PRACTICAL TRAINING SESSIONS ON SATELLITE DATA
ANALYSIS.

COURSE DIRECTORS

Dr. Sankarasubramanian K.

Group Director, Space Astronomy
Group, U R Rao Satellite Centre

Dr. Kusuma G. Rao

Director, IARSc and Former
Principal Scientist, ISRO HQ

Prof. Jayant Murthy

Distinguished Faculty for
Research, IARSc, and Former
Senior Professor, Indian Institute
of Astrophysics

Dr. V. Girish

Deputy Director, Science Program
Office, ISRO HQ

START DATE: October 19, 2024



COURSE SYLLABUS

Introduction to Astronomy I <ul style="list-style-type: none">• Basic concepts of astronomy• Celestial objects and phenomena
Introduction to Astronomy II <ul style="list-style-type: none">• Observational techniques• Importance of space-based astronomy
UV Instruments and Design <ul style="list-style-type: none">• Principles of UV astronomy• UV telescope design and instrumentation
X-ray Instruments and Design <ul style="list-style-type: none">• Principles of X-ray astronomy• X-ray telescope design and instrumentation
Introduction to Space Science
Basics of Mission Design
Great Space Science Missions (International)
Recent Space Science Missions (Indian)
AstroSat Mission in Detail
Introduction to Space Science Data Analysis
Introduction to AstroSat Data Analysis
Practical training sessions on AstroSat data analysis

ELIGIBILITY

- Graduates in Engineering/ Master's Students/ Post-Graduates/ Post- Doctorates/ Young Scientists

DURATION

- No. of Lectures: 14
- Data Analysis & Practical training classes: 5
- Two classes every Saturday, and Public Holidays

TOPPERS

- COURSE TOPPERS WILL BE OFFERED IARSC YOUNG RESEARCHER FELLOWSHIP FOR PILOT PROJECTS IN SPACE SCIENCES

CERTIFICATES

- IARSC AWARDS SUCCESSFUL STUDENTS WITH CERTIFICATION OF COMPLETION OF THE COURSE



SPEAKERS OF EMINENCE

PROF. JAYANT MURTHY
DISTINGUISHED FACULTY FOR RESEARCH, IARSC, AND FORMER SENIOR PROFESSOR,
INDIAN INSTITUTE OF ASTROPHYSICS

DR. RAMADEVI M. C.
SCIENTIST- SF, URSC, BENGALURU

DR. ANUJ NANDI
SCIENTIST- SG, URSC, BENGALURU

DR. RITU KARIDHAL
SCIENTIST- G, URSC, BENGALURU

MRS. GOMATHI SARATHA C.
SCIENTIST- G, URSC, BENGALURU

DR. RADHAKRISHNA V.
SCIENTIST- SG, URSC, BENGALURU

DR. SHYAMA NARENDRANATH K. C.
SCIENTIST- SF, URSC, BENGALURU

DR. V. GIRISH
DEPUTY DIRECTOR, SCIENCE PROGRAM OFFICE, ISRO HQ, BENGALURU

CONTACT

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REGISTRATION

FEE

- STUDENTS: **INR 1,000**
- POST-DOCTORATES & YOUNG SCIENTISTS: **INR 4,000**
- OTHERS: **INR 10,000**

FORM

<https://forms.gle/8pK5yvxc51ni4Ebx6>