

## **SCHOOL OF SCIENCES**

### **Eligibility Criteria**

- Graduates with B.Sc. (Major/Honours) Degree in Chemistry from a recognized University.
- Graduates with a B.Sc. Degree (or equivalent) from a recognized university with Chemistry as one of three science subjects with equal weightage
- Graduates with a B.Sc. Degree from an Open University with a minimum of 20 Credits of Chemistry courses.

**Total Credits:80**  
**Semester-based programme**

**Programme code:**  
**MSCANCHEM**

**Age: No bar**  
**Medium: English**  
**Fees: Rs. 23,300/- per annum**

**M.Sc.**  
**(Analytical Chemistry)**  
**on offer from**  
**January 2024**

**Duration:**  
**Minimum 2 years & Maximum 4 years**  
**Examination Mode:**  
**Annual**

- Provides higher education opportunities to the learners in the area of Chemistry / Analytical Chemistry
- Provides an opportunity to the learners to find suitable jobs in analytical / industrial laboratories
- Provides an opportunity to the learners to upgrade their qualifications
- Provides the opportunities to the learners in building their careers in research and teaching in Chemistry / Analytical Chemistry

**How to Apply: Visit <https://ignouadmission.samarth.edu.in>**

**For further information**

**IGNOU's website:**  
**[www.ignou.ac.in](http://www.ignou.ac.in)**

**The Director**  
**School of Sciences**  
**Ph.: 011-29532167/29572832**  
**Fax: 011-29532167**  
**E-mail: [sos@ignou.ac.in](mailto:sos@ignou.ac.in)**

**Programme Coordinators**  
**Prof. Sunita Malhotra & Prof. Lalita S. Kumar**  
**Ph:011-29572835 011-29572808**  
**Email: [smalhotra@ignou.ac.in](mailto:smalhotra@ignou.ac.in) [lalitaskumar@ignou.ac.in](mailto:lalitaskumar@ignou.ac.in)**



# **BACHELOR OF SCIENCE (MATHEMATICS) BSCFMT**

## **About the Programme:**

The Programme aims to

- foster deep interest in learning mathematics and mathematical thinking.
- develop broad and balanced knowledge and understanding of definitions, concepts, principles and theorems and their proofs.
- familiarize you with suitable tools of mathematical analysis to handle issues and problems in mathematics and related areas.
- develop a range of generic skills helpful in employment, internships and social activities.

## **Programme Package:**

- Based on UGC-FYUP Curriculum and Credit Framework for Undergraduate Programmes in accordance with NEP, 2020.
- Multiple Exits (UG Certificates, UG Diploma, UG Major and UG Honours).
- Variety of Courses such as Mathematics Discipline Specific Courses, Interdisciplinary Courses, Ability Enhancement Courses, Value-added Courses, Vocational Courses, Skill Enhancement Courses, Minor Electives.
- Print Material, Econtent, Tele-Conferencing, Interactive radio Counselling, Web-Enabled Academic Support.

**Eligibility:** 10+2 or Equivalent with Mathematics

**Medium:** English and Hindi

**Mode:** ODL

**Fee:** Rs. 6000 per annum (excludes Registration and Examination fee)

**Age:** No Bar

**Admission:** July and January Cycle



Scan here for  
Admission

## **Programme Coordinators:**

Prof. Deepika and Dr. S. Venkataraman

**Contact Details:** [bscmaths@ignou.ac.in](mailto:bscmaths@ignou.ac.in), 01129572850/60

For more details: [www.ignou.ac.in](http://www.ignou.ac.in)

To Enrol visit IGNOU admission Portal:

<https://ignouadmission.samarth.edu.in>



Scan here for  
Programme Details

# Certificate Programme in Teaching of Primary School Mathematics (CTPM)

Age : No Bar  
Duration: 6 Months  
to 2 Years  
Medium : English &  
Hindi  
Fee : Rs. 2100/-  
Total  
Credits : 16 Credits  
Eligibility: 10<sup>th</sup> Pass

## Why should I take this Programme?

- To learn about what Mathematics is.
- To discover how children learn.
- To help children enjoy and appreciate Mathematics.
- To become a better Mathematics Teacher.

## Programme Objectives

- To help primary school teachers to critically look at their mathematics teaching strategies and alter them to suit their students backgrounds.
- To increase the teachers' awareness about the nature of mathematics and the need to learn it.
- To refresh the teachers about the acquisition and learning process in the context of mathematics learning.
- To create awareness amongst teachers about various interactive teaching strategies and techniques that make learning mathematics an interesting and enjoyable experience.
- To make the discourse of mathematics teaching available to a wider section of society by exposing them to the need for giving a meaning and context while learning or teaching mathematical concepts processes or skills.



<b>Teaching of Primary School Mathematics (AMT-01) 8 Credits</b>	Block 1	Aspects of Teaching Mathematics
	Block 2	Numbers (I)
	Block 3	Numbers (II)
	Block 4	Fractions
	Block 5	Measurement
	<b>2 Credits worth of Project Work is Compulsory</b>	
<b>Learning Mathematics (LMT-01) 8 Credits</b>	Block 1	Approaches to Learning
	Block 2	Encouraging Learning in the Classroom
	Block 3	Data and Chance
	Block 4	On Spatial Learning
	Block 5	Exploring Numbers
	Block 6	Thinking Mathematically

## Admission Procedure

- Twice a year in June and July
- Admission is online through the portal <https://ignouadmission.samarth.edu.in/>

Contact: Dr. Pawan Kumar,  
Email:  
pawankumar@ignou.ac.in  
Ph.No.: 011-29572806



## INDIRA GANDHI NATIONAL OPEN UNIVERSITY

# M.SC. IN GEOGRAPHY

(School of Sciences)

### PROGRAMME OBJECTIVES

- to enable the learners with a better understanding of earth and its processes;
- to orient the learners towards geographical research and to prepare them for the current and emerging job opportunities.

**Programme Code:** MSCGG

**Eligibility:** Graduate in any Stream

**Medium of Instruction:** English

**Duration:** Minimum 2 years & Maximum 4 years

**Total Credits:** 80

**Examination Mode:** Annual

**FEE**  
**Rs.**  
**14000/-**  
**PER ANNUM**

### JOB OPPORTUNITIES

Teaching and Research, Cartography and Mapping, Urban and Regional Planning, Population and Demographic Studies, Natural Resource Management, Environmental Management and Sustainability, Geospatial Analysis, Tourism and Recreation Industries, Administration and Marketing, Disaster Management, Transportation and Logistics Industries

**HOW TO APPLY:** Visit <https://ignou.samarth.edu.in/index.php/site/login>

For more details, visit IGNOU website on [www.ignou.ac.in](http://www.ignou.ac.in)

### PROGRAMME COORDINATORS

**Dr. Satya Raj** [satyaraj@ignou.ac.in](mailto:satyaraj@ignou.ac.in), Ph. 011-29571672

**Dr. K.Nageswara Rao** [knrao@ignou.ac.in](mailto:knrao@ignou.ac.in), Ph. 011-29571680

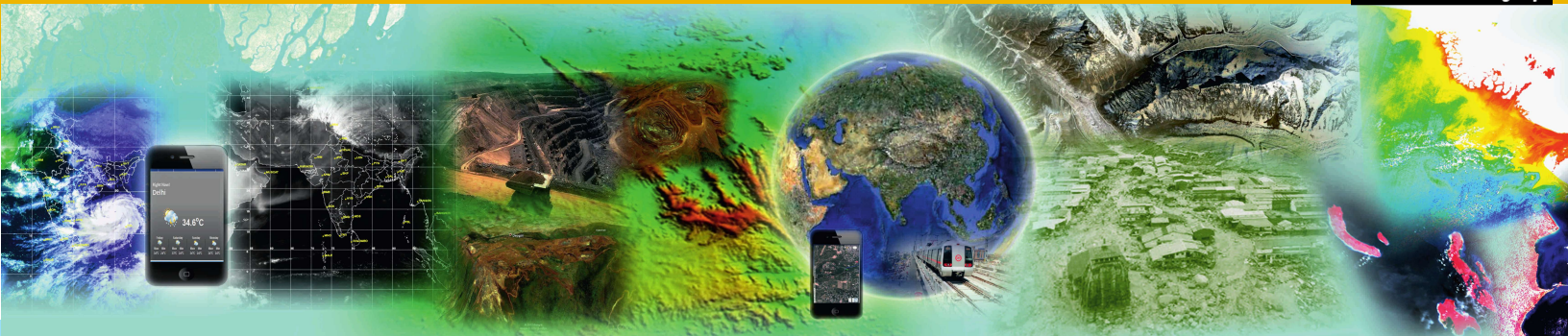
**Dr. Vishal Warpa** [vishalwarpa@ignou.ac.in](mailto:vishalwarpa@ignou.ac.in), Ph. 011-29571674



**Join**

**M.Sc.**

# **GEOINFORMATICS (MSCGI)**



- **Duration** : Minimum 2 years and maximum 4 years
- **Eligibility** : "Graduation in Science/ Engineering/ Technology/ Architecture/ Planning/ Computer Application/ Information Technology / Medical & Allied fields/ Commerce/ Business Administration/ Management" Or "Graduation with Geography/ Mathematics/ Statistics/ Economics/ Anthropology/ Archaeology as one of the subjects" from a recognised University



**Admission open for both January and July cycles**

## **TARGET GROUPS**

**Teaching through  
open & distance  
learning mode**

- Defence and law enforcement personnel
- School teachers and Faculty members from higher education institutes interested in teaching relevant courses
- Working professionals with little or no prior experience
- Graduates interested in developing skills in this field

## **Salient Features**

- Designed and developed with the help of experts from C-DAC, DRDO, DST, IITs, ISRO, IITM, DUK, several institutes/universities & industries.
- Covers aspects of Basics & advances in Remote Sensing & GIS, Techniques in DIP, Spatial Analysis & Modelling, Emerging Applications, Geospatial programming, Artificial Intelligence & Machine Learning, Research Methodology & Professional Skills.

## **Employment Prospect**

- Government Organisations
- Private Industries
- R & D Institutions

### **In the field of:**

- Natural Resources Management
- Natural Hazards and Disaster Management
- Environmental Monitoring & Management
- Urban and Rural Planning
- Geospatial Education



**How to Apply** : Visit <https://ignouadmission.samarth.edu.in> or scan the code



Indira Gandhi National Open University  
Maidan Garhi, New Delhi  
Website: [www.ignou.ac.in](http://www.ignou.ac.in)

## **For Further Information, Please Contact:**

The Director  
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Ph.: 011-29532167/29572832  
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E-mail: [sos@ignou.ac.in](mailto:sos@ignou.ac.in)

Prof. Benidhar Deshmukh &  
Prof. Meenal Mishra  
Programme Coordinators - MSCGI  
School of Sciences  
Ph.: 011-29571677/76/75/78/79  
E-mail: [pgcgi@ignou.ac.in](mailto:pgcgi@ignou.ac.in)

# MSC IN MATHEMATICS

## WITH APPLICATIONS IN COMPUTER SCIENCE

### OBJECTIVES

To emphasis the relevance and usefulness of mathematics from an application point of view

To equip the learners with the core mathematical knowledge and training necessary for use in many application areas

To develop a work force that is equipped with the mathematical skills that are necessary in the changing industrial and economic scenario of the country

To develop human resource in emerging disciplines such as Mathematical Biology, Computational Mathematics, Mathematical Economics, etc

To promote collaborative research with industry and other user agencies

### ELIGIBILITY

A graduate with  
a  
Major/Honours  
in Mathematics .

OR

A B.A./B.Sc.  
degree with  
Mathematics as  
one of the three  
main subjects  
with equal  
weightage.



**Minimum Duration** Two Years  
(Four Semesters)



**Maximum Duration** Four Years



**Total Credits** 64



**Medium of Instruction** English



#### Core Courses

The core courses are designed to provide mathematical knowledge and techniques, necessary for use in many application areas.



#### Elective courses

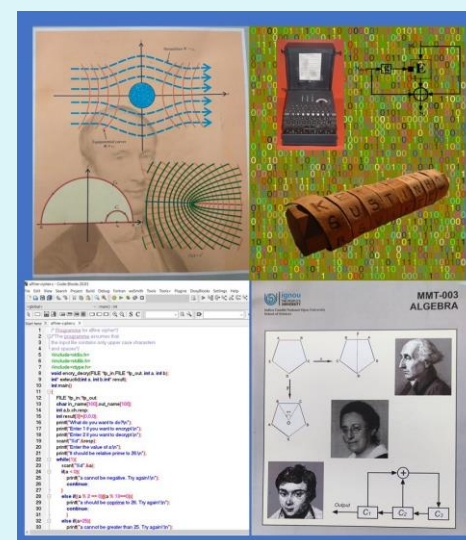
The elective courses will expose learner to applications of mathematics in the area of computer sciences.



#### Project

Project work is compulsory . It aims to provide hands on work experience in some area.

Scan the QR code for  
the online admission



More details about the programme

<http://www.ignou.ac.in/ignou/aboutignou/school/sos/programmes/detail/165/2>

Contact details

 School of Sciences, IGNOU, New Delhi 110068, Email: [mscmacs@ignou.ac.in](mailto:mscmacs@ignou.ac.in)

☎ 29572850, 29572860



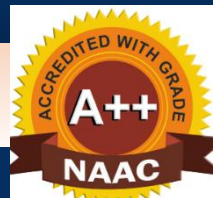
# Admission Open for January 2024 Session

## Master of Science (Zoology)(MSZOO)



Admission Link:

<https://ignouadmission.samarth.edu.in/>



The post-graduate programme aims to offer quality education in Zoology as well as to encourage students to pursue their career in teaching and research.

### Programme details:

- Duration: Minimum 02 Years, Maximum 04 Years
- Total Credits: 80
- Fee Structure: Rs. 20,000/- per annum (Pro rata fee for lateral entrants into Second Year)
- Medium of Instruction: English
- Examination Mode: Semester-wise
- Admission cycle: July and January
- Registration : Annual
- Study Materials: Print and Digital

### Eligibility:

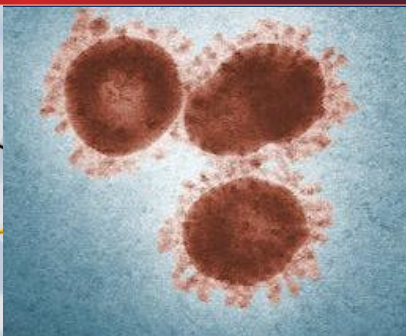
- ❖ The candidate should have passed the B.Sc. (Hons.)/B.Sc. (Major) in Zoology.  
or
- ❖ B.Sc. (General/CBCS) with Zoology as one of the subjects.
- ❖ The reservation policy of GOI will be applicable.

### Objectives:

- To impart higher education in the area of Zoology.
- To provide an opportunity to the learners to upgrade their qualifications.
- To provide opportunities to the learners in building their careers in research and teaching in Zoology.
- To inculcate the spirit of resource conservation and love for nature.
- To distinguish between the structure, function, behavior and evolution of different animals.
- To provide knowledge and skills in applied areas of Zoology.

### Special Features of MSCZOO Program

- ❖ **MSCZOO is being offered with specialization in Entomology.**
- ❖ **Students have to do Project/Dissertation work in the IV semester of the programme.**



For Further Information, Contact:  
The Director  
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Programme Coordinators:  
Prof. Neera Kapoor,  
Dr. Siya ram  
Email : [msczo@ignou.ac.in](mailto:msczo@ignou.ac.in)  
Ph. No.: 011-29572810/2842

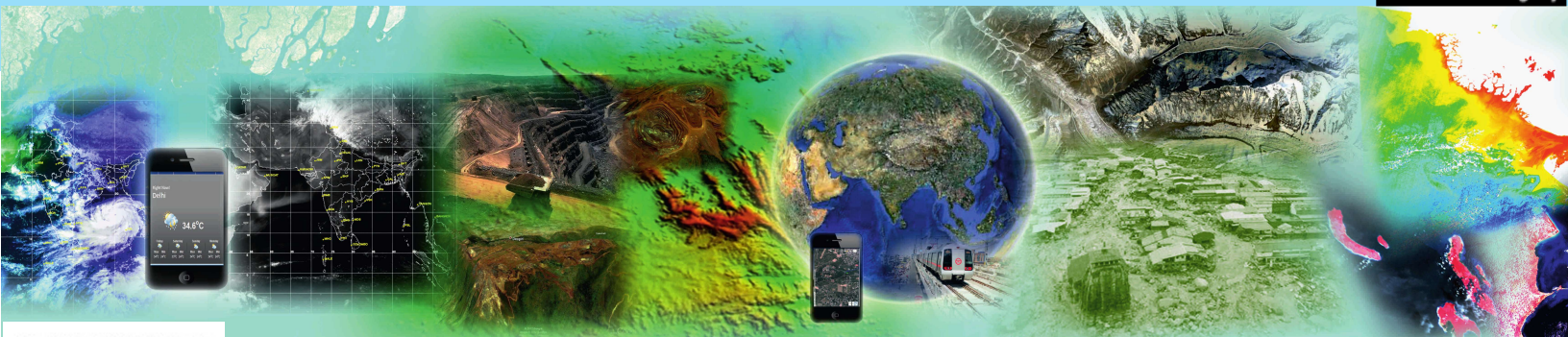
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# Post Graduate Certificate in GE<sub>o</sub>INFORMATICS (PGCGI)



- **Duration** : Minimum 6 months and maximum 2 years
- **Eligibility** : Graduation from a recognised University

**Admission open for both January and July cycles**

## TARGET GROUPS

Teaching  
through open &  
distance learning  
mode

- Defence and law enforcement personnel
- Faculty members from higher education institutes and School teachers interested to teach related courses
- Working professionals with little or no prior experience
- Graduates interested to develop skills to work with geospatial data

## Salient Features

- Designed and developed with the help of experts from C-DAC, DRDO, DST, IITs, ISRO, IITM, several institutes/universities and industries.
- Covers aspects of Geospatial data, Mapping, GIS, GNSS, Remote Sensing, Visual Image Interpretation, Digital Image Processing, Spatial Analysis and Applications.

## Employment Prospect

- Government Organisations
- Private Industries
- R & D Institutions

### In the field of:

- Natural Resources Management
- Natural Hazards and Disaster Management
- Environmental Management
- Urban and Rural Planning
- Geospatial Education



**How to Apply** : Visit <https://ignouadmission.samarth.edu.in> or scan the code



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Maidan Garhi, New Delhi  
Website: [www.ignou.ac.in](http://www.ignou.ac.in)

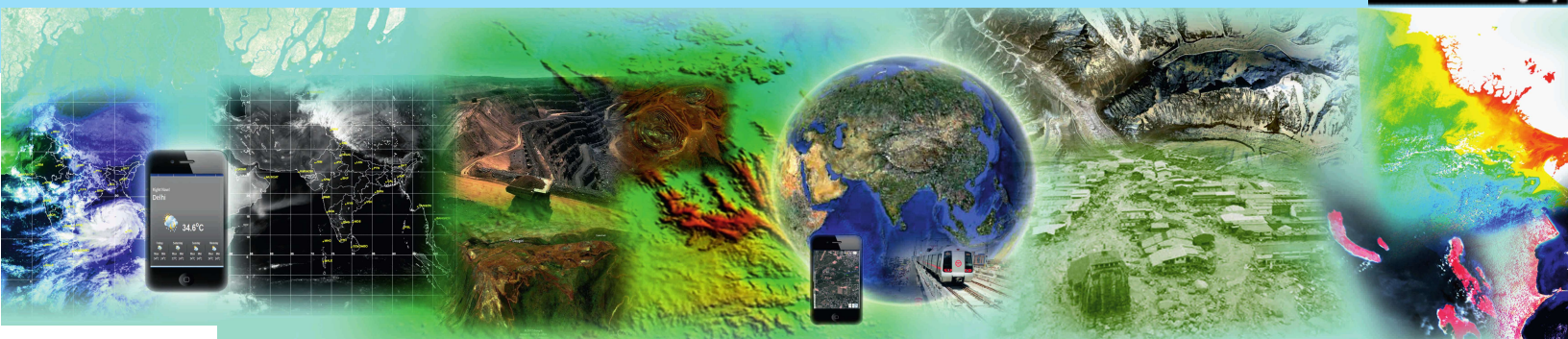
## For Further Information, Please Contact:

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E-mail: [sos@ignou.ac.in](mailto:sos@ignou.ac.in)

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Programme Coordinator - PGCGI  
School of Sciences  
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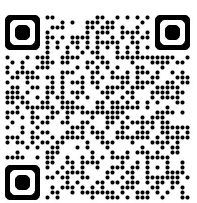


# Post Graduate Diploma in **GE<sup>o</sup>INFORMATICS (PGDGI)**



- **Duration** : Minimum 1 year and maximum 3 years
- **Eligibility** : Graduation from a recognised University

**Admission open for both January and July cycles**



**Teaching through  
open & distance  
learning mode**

## **TARGET GROUPS**

- Defence and law enforcement personnel
- Faculty members from higher education institutes and School teachers interested to teach related courses
- Working professionals with little or no prior experience
- Graduates interested to develop skills in this field

## **Salient Features**

- Designed and developed with the help of experts from C-DAC, DRDO, DST, IITs, ISRO, IITM, several institutes/universities and industries.
- Covers aspects of Geospatial data, Mapping, GIS, GNSS, Remote Sensing, Image Interpretation, Digital Image Processing, Spatial Analysis & Modelling, Applications and Introduction to R programming

## **Employment Prospect**

- Government Organisations
- Private Industries
- R & D Institutions

### **In the field of:**

- Natural Resources Management
- Natural Hazards and Disaster Management
- Environmental Management
- Urban and Rural Planning
- Geospatial Education



**How to Apply** : Visit <https://ignouadmission.samarth.edu.in> or scan the code



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## **For Further Information, Please Contact:**

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Dr. Kakoli Gogoi  
Programme Coordinator - PGDGI  
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Ph.: 011-29571678  
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# Admission Open for July 2023 Session

## Master of Science (Physics)(MSCPH)



Admission Link:

<https://ignouadmission.samarth.edu.in/>



The programme aims to offer quality higher education at the post-graduate level in physics to address the requirements of learners aspiring for a career in physics like teaching, and research in frontier areas.

Duration : Min. 2 years; Max. 4 years

Fee : Rs. 14,000/- per Annum

Total Credits : 72 Credits

Medium : English

Mode : ODL (Semester system)

Age : No bar.

Admission: January/July Cycle

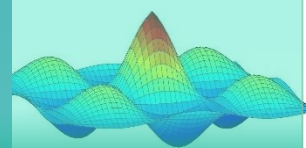
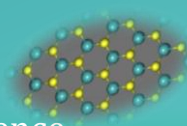
Examination Mode: Annual

### Eligibility:

- Graduates with Major/Honours in Physics
- Graduates with a B.Sc. Degree (including IGNOU B.Sc. Programme under CBCS) with Physics and Mathematics
- Graduates with a B.Sc. Degree of IGNOU or any recognized Open University with a minimum of 32 Credits of Physics, and Mathematics as one of the subjects

### Objectives:

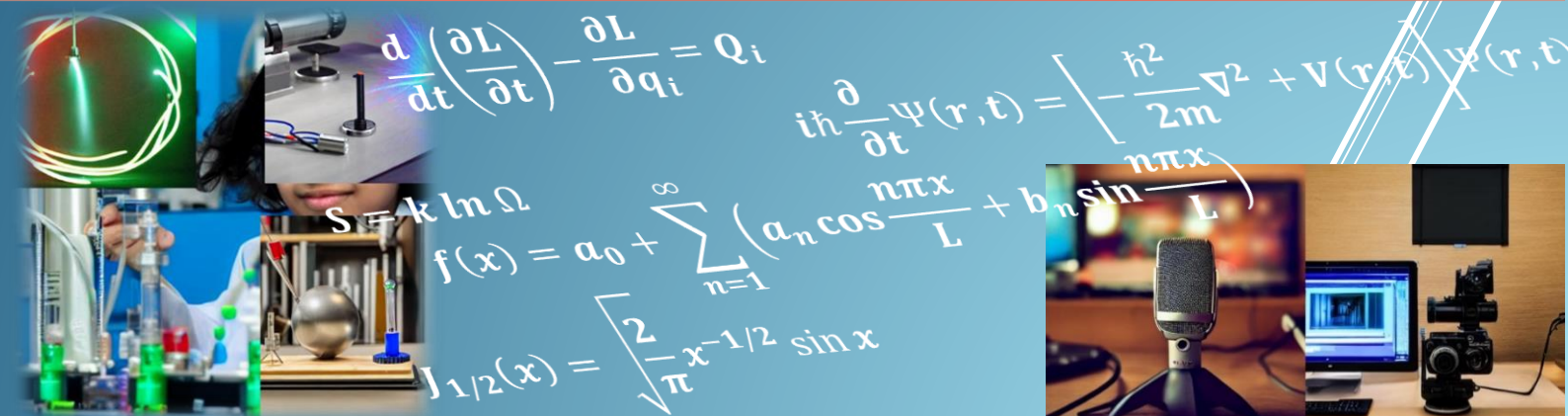
- Build a strong foundation in core areas of Physics
- Provide exposure to interdisciplinary nature of modern day science
- Impart adequate training in practical skills and hands-on laboratory experience
- Equip learners with skills to carry out computer-aided investigations in the physical sciences



### Major highlights of the programme:

- The programme is designed and developed by renowned physicists and leading experts from all across the country
- Easy online access to Self-Learning Material through eGyankosh
- Ready on-line support on WEAS portal.

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For Further Information, Contact:  
The Director  
School of Sciences, IGNOU  
Ph. No.: 011-29572832  
Email: [sos@ignou.ac.in](mailto:sos@ignou.ac.in)

Programme Coordinators:  
Dr. Subhalakshmi Lamba  
Dr. M Boazbou Newmai  
Email : [mscph@ignou.ac.in](mailto:mscph@ignou.ac.in)  
Ph. No.: 011-29572814/2839

Scan QR code

