

**CERTIFICATE PROGRAMME**  
**IN**  
**CELL CULTURE & MOLECULAR VIROLOGY**  
**TECHNIQUES**

Course duration	: 330 hours
Course start date	: 1 <sup>st</sup> August 2024
Course end date	: 7 <sup>th</sup> October 2024
Mode of training	: Offline
Link to apply	: <a href="https://forms.gle/NRbszrPFsivBS56u6">https://forms.gle/NRbszrPFsivBS56u6</a>
Course fees	: Rs.53,100/-
Last date for submission of application	: 30 <sup>th</sup> July 2024 by 17:00 hrs
Course intake	: 5

## **CONTENTS**

About the programme

Programme outcomes

Eligibility criteria

Duration of the programme

Course syllabus

Certificate

**About the programme:**

The certificate programme in Cell Culture & Molecular Virology Techniques is a 330 hours hands-on training programme with a focus to develop a pool of highly skilled manpower to meet the requirements of pharma companies, diagnostic laboratories, R&D organisations and to equip the post-graduate students for higher studies in life sciences. Currently, the opportunity for such a training programme is very limited and Institute of Advanced Virology (IAV) aims to plug this gap by providing intensive lab oriented hands-on training programme in dedicated research laboratory.

**Programme outcomes:**

Through this training programme, institute aims at creating a pool of skilled scientific and technical personnel in virology by introducing them to the cell culture techniques with special focus on Virology and to equip them to meet the local, national and global needs.

**Eligibility criteria:**

M.Sc/ B.Sc in Life Sciences

B.Tech/M.Tech in Biotechnology and allied subject areas

MBBS/MD

**Duration of the programme:**

The course spans are of 330 hours, 270 hours of practical training and 60 hours of theory sessions. The course emphasizes more on hands-on training with approximately 80% of the course duration dedicated for practical sessions.

**Training duration:**

- Practical: 270 hours
- Theory: 60 hours
- Total: 330 hours

**Course syllabus:**

- Laboratory induction
- Overview of cell culture
- Media preparation
- Cell revival
- Sub culturing
- Cell counting
- Transfection and lysate preparation
- Cryopreservation & transportation basics
- MTT ASSAY
- Viruses & Infections
- Protein estimation assays
- SDS PAGE
- Western Blot
- IFA and imaging
- Nucleic acid Isolation
- cDNA synthesis
- Primer design basics and Real Time PCR
- IPR & Entrepreneurship

**Certification:**

Certification will be done by IAV after successful completion of training and evaluation process.

**Procedure for application:**

- i) Application has to be submitted through online link provided
- ii) The course fee has to be remitted through SBI-SB Collect option.

Login in to:	<a href="https://www.onlinesbi.sbi/sbicollect/icollecthome.htm">https://www.onlinesbi.sbi/sbicollect/icollecthome.htm</a>
Select	Educational Institutions
Select	Institute of Advanced Virology
Select	Fees – Training Programme
Make payment for	Rs.53,100/-

- i) The selection for the course will be on first come first serve basis. Course fees of selected candidates will not be refunded.
- ii) The DU number generated after completion of the payment has to be entered in the relevant column in the application. Application without remittance of course fees will not be considered.
- iii) This institute does not have any hostel facility hence the applicants shortlisted to undergo training programme have to make their own arrangement for commute and accommodation.