

## Eligibility

**Graduates & Postgraduates** in Medicine, Dentistry, Genetics, Biotechnology, Biochemistry, Zoology, Microbiology/Pharmacy and Nursing with 50% marks from a recognized University.

No. of seats: **20**

## Selection Criteria

- Applications will be screened and suitable candidates will be called to appear for an interview.
- Selection of candidates will be on the basis of academic record and performance in the interview.

## Fee Structure

The fee for this self-financed course is Rs.30,000/- (Rupees Thirty Thousand only) payable at the time of admission through DD in favor of “The Director, Institute of Genetics” OU, Begumpet, Hyderabad.

Application processing fee of Rs. 500/- (Rupees Five Hundred only) payable at the time of submission of application through DD in favor of “The Director, Institute of Genetics” OU, Begumpet, Hyderabad.

## Important Dates

Applications along with prospectus can be downloaded from the following websites:

[www.instituteofgenetics.org](http://www.instituteofgenetics.org)  
[www.osmania.ac.in](http://www.osmania.ac.in)

Last date for submission of application : 25.08.2022

List of selected candidates on website : 27.08.2022

Commencement of Course : 01.09.2022

## Address for Correspondence

**Dr. B. Vijaya Lakshmi**

**Director (I/C)**

**Institute of Genetics & Hospital for Genetic Diseases, O.U., Begumpet, Hyderabad – 16**

**Ph: 8331997340**

**[Email : ighgd.hyd@gmail.com](mailto:ighgd.hyd@gmail.com)**

**Course Co-ordinators**

**Dr. A. Venkateshwari**

**Associate Professor**

**E-mail: [venkateshwari@yahoo.com](mailto:venkateshwari@yahoo.com)**

**&**

**Dr. G. Deepika**

**Assistant Professor**

**E-mail: [deepika2104@gmail.com](mailto:deepika2104@gmail.com)**



## Certificate Course Clinical Genetics: Diagnostics and Management

## Prospectus



**Institute of Genetics & Hospital for Genetic Diseases  
Osmania University, Begumpet, Hyderabad –500016**

**Ph: 8331997340**

**Email: [ighgd.hyd@gmail.com](mailto:ighgd.hyd@gmail.com)**

**[www.instituteofgenetics.org](http://www.instituteofgenetics.org)**

## About the Institute

Institute of Genetics and Hospital for Genetic Diseases, Osmania University is a premier institute in the country which conducts multi-disciplinary research in the field of Human Genetics. It was established in the year 1978 with generous funding from DST, UGC and Govt. of Andhra Pradesh.

Our aim is to prevent morbidity and mortality due to genetic disorders. We provide diagnostic services for these disorders at chromosomal, biochemical and molecular levels. Counseling is also offered to the affected individuals and their family members.

The Institute offers doctoral, postdoctoral research and training programs in genetic diagnosis. It also offers M.Sc Molecular & Human Genetics Course Sponsored by DBT.

Our purpose of introducing this Certificate Course in “Clinical Genetics: Diagnostics and Management” is to bridge the gap between scientific and medical fraternity in understanding the recent advances made in the field of clinical genetics and also to meet the increasing demand of genetic investigators and skilled personnel to serve the patient community better and to work towards the prevention of human afflictions.

## Objective

To impart knowledge and practical skills of cutting edge technologies in Clinical Genetics, Cytogenetics, Biochemical and Molecular Genetics for precise diagnosis, proper management and genetic counseling

## Course Details

The course is designed to reflect the increased impact of genomics in understanding human diseases

The course duration is of **six months** comprising of theory, practical training and project work.

### Theory includes

- Advanced Techniques in Medical Genetics
- Biochemical & Molecular basis of Genetic Diseases
- Prenatal Diagnosis & Genetic Counseling

### Practicals include

Hands on training in various techniques involved in Prenatal and Post natal diagnosis of Genetic Disorders:

- 3D/4D Ultrasonography (TIFFA, Fetal 2D Echo)
- Intervention Procedures (Amniocentesis, CVS)
- Lymphocyte Culture
- Karyotyping
- Fluorescent In situ Hybridization (FISH)

- Chromosomal Microarray
- Clinical Exome Analysis (NGS)
- Clinical Proteome Analysis (Lc-MS/MS)
- Restriction Fragment Length Polymorphism (RFLP)
- High Performance Liquid Chromatography (HPLC)
- Comet assay
- Enzyme Linked Immunosorbent Assay (ELISA)
- Newborn screening
- Case studies (Clinical evaluation Pedigree analysis, Risk assessment)
- Psychological assessment
- Genetic Counseling
- PCR, ARMS-PCR, Multiplex PCR

## Evaluation

### Project work: Desired discipline

Theory & Practicals	-	300 marks
Project Work	-	100 marks

Minimum pass marks - 50%

Successful candidates will be awarded certificates by Institute of Genetics, Osmania University, Hyderabad

## Prospects of the Course

Candidates will develop the potential to get placements in National / International Research Organizations, Hospitals, Speciality Clinics, Diagnostic Centers etc



**Institute of Genetics and Hospital for Genetic Diseases  
(IGHGD), Osmania University, Begumpet,  
Hyderabad – 500 016, Telangana**

**APPLICATION FORM**

**Note:**

1. Particulars in the form should be filled in by the candidate in his/her own hand writing in ENGLISH only.
2. Application form has to be downloaded from websites and must be accompanied with DD of Rs. 500/- towards processing fee.

Bank DD No. \_\_\_\_\_ Dt. \_\_\_\_\_ for Rs. \_\_\_\_\_  
drawn in favour of "The Director, Institute of Genetics, OU, Begumpet,  
Hyderabad.

**Name and Address of Bank issuing DD:**

Affix passport size  
photo and sign across

1. **Full Name :**  
(In BLOCK letters)
2. **Father's Name :**
3. **Mother's Name :**
4. **Date of Birth :**  
(DD / MM / YYYY)
5. **Place and State of Birth:**
6. **Address for Communication :**  
a) Telephone No.(with STD Code): \_\_\_\_\_  
b) Mobile: \_\_\_\_\_ c) Email: \_\_\_\_\_
7. **Sex:**
8. **Nationality:** \_\_\_\_\_
9. **Whether SC / ST / OBC / GENERAL :**  
(If SC/ST/OBC- attach copy of the Caste certificate.)

**10. Educational Qualifications:**

<b>Graduation &amp; Post Graduation</b>	<b>College/ Institution &amp; University</b>	<b>Subjects</b>	<b>Marks /grade obtained</b>	<b>Year of passing</b>

(Self-attested copies of the certificates & marks sheets to be attached)

11. **Specify the name of the course for which applying :**

**12. ENCLOSURES TO THE APPLICATION FORM**

The following documents must be attached with the Application form. Any lapse in this connection may result in delay in finalization of the Admission and / or rejection of the application.

- a. Demand Draft in favour of “**The Director, Institute of Genetics, O.U, Begumpet, Hyderabad**” for a sum as shown in the Fee Structure and payable at Hyderabad. All the demand drafts should be taken from **any Nationalized Banks** only.
- b. Attested Photostat copy of the Marks Memo of Qualifying examination
- c. In case of SC / ST / OBC enclose a Photostat copy of Caste Certificate.
- d. One self-addressed stamped envelope.

**Place :**

**Date :**

**(Signature of the applicant)**

**U N D E R T A K I N G**

I \_\_\_\_\_ S/o / D/o. \_\_\_\_\_

here by undertake to abide by the rules, regulations and stipulations of IGHGD, OU and I am aware that the legal jurisdiction in respect of all legal matters arising out of my admission for the course examination, such as admission / issue of course material / hall ticket / declaration for result and issue of marks memorandum / provisional certificate / original, degree certificate etc. or any other issues, is restricted to the twin cities of Hyderabad and Secunderabad only. I further agree that the courts / consumer forums outside of Hyderabad will have no jurisdiction.

I further, state that I shall abide by the regulations of the Centre / University incorporated in the Prospectus and also those issued from time to time during the course of my study.

I also declare and state that all the particulars furnished in the admission form are true and correct to the best of my knowledge and if any information is found to be contrary to the rules, my admission shall stand cancelled and I am liable for penal action as the IGHGD, OU deems fit. As such I will not have any claims for refund of fees.

**Place:**

**Date:**

**(Signature of the applicant)**

Mailing Address:

**The Director,  
Institute of Genetics and Hospital for Genetic Diseases  
Osmania University, Begumpet, Hyderabad - 500016, Telangana  
Phone: 040-23403681**

**Last Date for submission of filled in Application: 25-08-2022**  
The application can be downloaded from: [www.instituteofgenetics.org](http://www.instituteofgenetics.org) / [www.osmania.ac.in](http://www.osmania.ac.in)