IIHMR UNIVERSITY

Online Certificate Programme

Applied Data Analysis *for* Healthcare



Background

Healthcare organizations generate vast amounts of data through Electronic Health Records (EHRs), Hospital Information Systems (HIS), laboratory systems, insurance claims, disease surveillance programmes, and public health databases. Transforming these data into meaningful insights is essential for improving healthcare quality, operational efficiency, and evidence-based decision-making.

The Online Certificate Programme in Applied Data Analysis for Healthcare equips healthcare professionals with practical skills in healthcare data management, statistical analysis, data visualization, and interpretation. Through hands-on exercises, healthcare datasets, case studies, and analytical tools, participants will learn to generate actionable insights for clinical, operational, and public health decision-making.

Objectives

The programme aims to:

- Develop a strong foundation in healthcare data management, statistical concepts, and analytical methods for evidence-based decision-making.
- Build practical competencies in data cleaning, visualization, descriptive and inferential analysis using widely used analytical tools
- Apply healthcare analytics techniques to monitor quality indicators, evaluate performance, identify trends, and improve operational efficiency.
- Interpret analytical findings to support clinical research, healthcare management, public health programmes, and policy decisions.
- Enhance participants' ability to communicate data-driven insights through dashboards, reports, and applied healthcare analytics projects.

Pedagogy

The programme adopts an experiential and application-oriented learning approach that combines theoretical concepts with hands-on data analysis. Participants will gain practical experience in healthcare data management, statistical analysis, data visualization, and interpretation using real-world healthcare datasets and analytical software tools to support evidence-based clinical, operational, and public health decision-making.

Course Contents

- Introduction to Healthcare Data and Data Management
- Data Collection, Cleaning, Preparation & Quality Assessment
- Descriptive and Inferential Statistical Analysis
- Healthcare Data Visualization and Dashboard Development
- Predictive Analytics for Healthcare Decision-Making
- Healthcare Performance, Quality & Outcome Analytics
- Hands-on Practice with Applied Statistical Applications
- Capstone Project on Applied Healthcare Data Analysis

Programme Duration

Duration: 3 Months (12 Weeks)

Learning Hours: 48 Hours

Credits: 3 Credits

Mode: Live Online (Faculty-led sessions with hands-on practical learning)

Programme Highlights

- Comprehensive coverage of healthcare data analysis from data preparation to interpretation.
- Hands-on learning using Microsoft Excel, SPSS, and introductory Python/R applications.
- Real-world healthcare datasets and case-based learning for practical exposure.
- Data visualization, dashboard development, and analytical reporting techniques.
- Healthcare quality, performance, and predictive analytics for evidence-based decision-making.
- Interactive live online sessions delivered by experienced faculty and industry experts.

Who Should Attend?

- Healthcare administrators, hospital managers, and quality improvement professionals.
- Medical practitioners, nurses, allied health professionals, and public health experts.
- Health informatics, digital health, healthcare IT, and data analytics professionals.
- Faculty members, researchers, and students pursuing
- Hospital Administration, MHA, MPH, Health Informatics, or related programmes.
- Healthcare consultants, policymakers, programme managers,

Eligibility

Graduate in any discipline.
Healthcare, hospital management, public health, IT, or management experience is desirable. No prior programming knowledge is required.

Registration

For programme schedule, fee details, and registration, please contact:

Office of Online Certificate Programmes (OCP)
IIHMR University
1, Prabhu Dayal Marg, Sanganer Airport
Jaipur – 302029, Rajasthan, India
Mobile: +91 9116006536 | Tel: +91-141-3924700
Email: Onlinecertificate@iihmr.edu.in

Assessment

Participants will be evaluated through module quizzes, practical assignments, case study analyses, software-based exercises, and a capstone project. Successful participants meeting the attendance and assessment requirements will receive a Certificate of Completion from IIHMR University, Jaipur.

Programme fee

The programme fee for Indian participants is Rs. 30,000 plus GST (18% as applicable), and for international participants it is USD 315 plus GST (18% as applicable). The programme fee covers tuition, background reading material, lodging, and boarding.

Discounts on Fee

- **Early Bird Discount:** Nominations received with payment before four weeks of the commencement of the programme will be entitled to a 10% early bird discount.
- **Group Discount: Any organization sponsoring four** or more participants to the programme will be entitled to a 20% discount on the total fee payable, provided that at least four participants attend the programme.
- **Maximum Discount:** Organizations can avail themselves of both discounts, subject to a maximum discount of 20%.

Certificate

Participants successfully completing the programme and fulfilling the attendance and assessment requirements will receive a Certificate of Completion from IIHMR University, Jaipur.

Programme Coordinator



Dr. Kumar Parimal Shrestha
Assistant Professor
IIHMR University, Jaipur

The programme will be offered by a team of national and international subject experts.



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