

Attendance & Examination:

- ◆ 80 % attendance required during the course.
- ◆ The participants shall be evaluated from total marks 100 out of which External (GTU level) 60 marks and Internal (Institute level) 40 marks.
- ◆ Minimum passing marks are 40% in both External and Internal individually.

Sessions & Course Duration

- ◆ Course Duration: 45h
- ◆ Sessions will be taken on online & offline mode.
- ◆ Sessions on Saturday & Sunday

Course Fee

Student/Faculty/Pharma professional: INR 1000/- &

Overseas Professional : 50 USD

Bank Details for Payment

Name of Account Holder: Anand Pharmacy College
Bank Name: Union Bank of India
Branch: Anand Main
Account Number: 356702010017281
IFSC Code: UBIN0535672

Registration Link

<https://forms.gle/pvisAC5aa8GHStoL6>

Last Date of Registration: 15/06/2024

Starting Date of Course: 06/07/2024

Patron

Smt. Jyotsanaben Patel
Hon. Seceretary, SRKSM

Convener

Dr. Tejal R. Gandhi
Principal
Anand Pharmacy College

Course Co-ordinators

Dr. Hardik Rana
Associate Professor
Department of Pharmaceutics

Course Co-coordinators

Dr. Dipika Chavda
Associate Professor
Department of Pharmaceutics

For any Query Contact:

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Course Co-ordinator
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GUJARAT TECHNOLOGICAL UNIVERSITY CENTRE FOR CONTINUING ED- UCATION (GTU-CCE)

CERTIFIED

**SHORT TERM CERTIFICATE
COURSE ON**

**BIostatistics IN
Pharmaceutical Science**

*After the successful completion of
Batch 1, Now coming with Batch 2*

Organized By



ANAND PHARMACY COLLEGE

Managed By

Shri Ramkrishna Seva Mandal

Opp- Towan Hall, Anand- 388 001

About Trust

Shri Ramkrishna Seva Mandal (SRKSM) is a registered body under the Societies Act and was established as a public trust in the year 1954. The trust was setup under the leadership of Late Shri Gordhanbhai Patel, popularly and respectfully known as “Vakil Saheb”. And with whole hearted cooperation of the prominent citizens and leading industrialist of the area, as multi- dimensional experiment, advertising various socio- economic problems and its implications. At present, Shri Ramkrishna Seva Mandal is managing about 27 academic institutes from K G School to Post Graduate Schools of excellence by effectively and efficiently maintaining pace with the ever- changing needs of modern educational environment. The Hon. Secretary, Smt. Jyotsnaben K Patel is a source of inspiration by itself and her ever readiness to help by providing dynamic leadership acts as a stimulating force of growth & development.

About Institute

Anand Pharmacy College is one of the leading institute of Gujarat, established in 1998 under the aegis of Shri RamKrishna Seva Mandal. The institute is conducting All India Council for Technical Education (AICTE), New Delhi, approved courses since 1998. The institute is accredited by NAAC Third cycle with ‘A⁺’ grade (CGPA 3.38). Anand Pharmacy College offers B. Pharm, Pharm. D, M. Pharm in Pharmaceutics, Pharmacology, Regulatory Affairs, Pharmaceutical Quality Assurance & Pharmaceutical Technology and Ph.D. programs. Anand Pharmacy College has Adverse Drug Reactions Monitoring Centre approved by Indian Pharmacopoeia Commission (IPC), National Coordination Centre (NCC) - Pharmacovigilance Programme of India (PvPI), Ghaziabad.

About Gujarat Technological University

Gujarat Technological University is a premier academic & research institution which has driven new ways of thinking since its 2007 founding, established by the Government of Gujarat vide Gujarat Act NO. 20 of 2007. Today, GTU is an intellectual destination that draws inspired scholars to its campus, keeping GTU at the nexus of ideas that challenge and change the world. GTU is a State University with 486 affiliated colleges in its fold operating across the state of Gujarat through its Five zones at Ahmedabad, Gandhinagar, Vallabh Vidyanagar, Rajkot and Surat. The University caters to the fields of Engineering, Architecture, Management, Pharmacy and Computer Science. The University has about 4,00,000, students enrolled in a large number of Diploma, Under Graduate, Post Graduate programs along with the robust Doctoral program.

Course Objective

- ◆ The course aims to enable students, academicians and industry professionals to enhance their knowledge related to fundamental concepts of pharmaceutical statistics and quality by design implementing in pharmaceutical process and product development.
- ◆ This certificate course offers the combined knowledge of theoretical and practical in relevant areas of quality concept in product development and data analysis.
- ◆ This certificate program emphasizes participatory learning which encompasses assignments, group discussions and hands-on training using Microsoft excel, Design of expert, SPSS, Minitab, PROSIM Graph pad software and other important tools.

Course Outcomes

The scholar will learn the following things as a result of completion this certificate course

- ◆ Describe the roles biostatistics serves in the discipline of public health.
- ◆ Apply basic statistical concepts commonly used in Pharmaceutical Science
- ◆ Interpretation of results of the statistical study used in Pharmacy/Science
- ◆ Correlate the results with the affecting factors properly and give the statistical justification for the same
- ◆ Perform different statistical software to conduct research studies
- ◆ Apply descriptive techniques commonly used to summarize public health data

Topics at a Glance

- ◆ Introduction to basic statistics
- ◆ Two-way ANOVA, MLRA, interactions and multiple comparisons
- ◆ History, Current approach and its limitations of QbD
- ◆ Details of QbD
- ◆ Identification method to find CQA, CMAs and CPPs
- ◆ Screening Designs
- ◆ Optimization Designs
- ◆ Response surface methodology
- ◆ Mixture Designs
- ◆ Different software like SPSS, Minitab etc
- ◆ IVIVC correlation

Eligibility of Participant

- ◆ B. Pharm/M. Pharm/Pharm D/Ph. D pursuing or completed
- ◆ Graduate degree in Bachelor of Science or Master of Science
- ◆ Working person in Pharmaceutical industry, IT Industry and CRO.