



DOW UNIVERSITY OF HEALTH SCIENCES

SCHOOL OF POSTGRADUATE STUDIES

PROGRAM SPECIFICATION - SESSION 2026-27

Ph.D. PHARMACEUTICAL CHEMISTRY

Introduction of Institute & Program	Dow College of Pharmacy was established in 2007 and is now one of the top-ranked faculties of the Sindh province. Dow College of Pharmacy was upgraded to the Faculty of Pharmaceutical Sciences in the year 2012. Faculty of Pharmaceutical Sciences is a distinguished and well-renowned entity working under the portal of Dow University of Health Sciences and recognized by the Pharmacy Council of Pakistan and the Higher Education Commission of Pakistan. The PhD program in Pharmaceutical Chemistry is designed for aspiring researchers dedicated to advancing drug development and chemical innovations. With a comprehensive curriculum and research opportunities, students will specialize in Computer aided drug designing (CADD), drug design and synthesis, Co-ordination Chemistry, Nano drug designing and Delivery system, In-vivo and In-vitro interaction studies, Stability and Degradation studies of xenobiotic, Method development and Validation studies. Guided by esteemed faculty and utilizing state-of-the-art labs, students will engage in cutting-edge research in drug discovery, computational chemistry, and pharmaceutical analysis.
Course Title (As approved by PCP, HEC & SHEC, Pakistan)	Doctor of Philosophy (Ph.D) in Pharmaceutical Chemistry
Course Duration	3 -8 years.
Type of Study	Full Time
Study System	Semester System
Total Credit Hours	Total Credit hours: 56 hours
Credit Hours Distribution – Semester Wise	26 Credit Hours for 2 Semester of Course work, 30 Credit Hours for Thesis.



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Study Hours Distribution	Study Per Semester = 16 weeks Examination = 2 weeks Semester Break = 2 weeks Working Days = 8:30am - 3:00pm (except Friday)
Teaching Hours Distribution	Timetable will be provided for candidates at the start of the session. The details will include activities such as Lectures, Journal clubs, Self-Studies, Lab Training, Research etc.
Module / Course Scheme Detail with Credit Hours	See Course Scheme
Assessment of Student	Internal Evaluation (Assignments, presentations, Quiz/Test) =30 Marks • Terminal Exam= 70 Marks • Comprehensive Exam (No grading, only pass or Fail) • Viva examination after thesis submission and evaluation
Teaching Institution	DCOP, Faculty of Pharmacy, Ojha Campus.
Degree Awarding Institution	Dow University of Health Sciences, Karachi
Eligibility /Admission Criteria	Qualification: - o PharmD/BPharm with MS/MPharm/MPhil or equivalent degree from a HEC recognized higher education institution CGPA: - o Minimum CGPA of 3.0 (out of 4.0) or 60% (in the annual system) in the MS/MPhil/equivalent degree from HEC-recognized higher education institution GAT/HAT General Test: GRE/HAT General/Equivalent test, with a passing score of a minimum of 60% o Subject-specific Test: ☐ Conducted by Dow University of Health Sciences ☐ A passing score of a minimum of 60% Doctoral Admission Committee Interview: - o Short-listed applicants only - o Submission of a short research proposal in the area of the applicants' interest
Fee Structure	See Relevant Section of DUHS Website



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ANNEXURE I

**DEPARTMENT OF PHARMACEUTICAL CHEMISTRY
DOW COLLEGE OF PHARMACY
FACULTY OF PHARMACEUTICAL SCIENCES
DOW UNIVERSITY OF HEALTH SCIENCES**

PhD Course Scheme

Course Title	Credit Hours
SEMESTER 1	
PCH 801: Applied Research methodology and Statistics in Pharmacy (PSC-I)	3
PCH 803: Ethics in Pharmaceutical Research (PSC-II)	3
PCH 805: Drug Development-I (Elective-I)	3
PCH 807: Instrumental Analysis (Elective-II)	3
PCH 809: Teaching Assignment/ Lab Training	3
PCH 811: Fahm e Quran - I /Ethics - I	1
Total	13
SEMESTER 2	
PCH 802: Recent Approaches in <i>in-silico</i> studies	3
PCH 804: Nano-chemistry	3
PCH 806: Drug Development-II (Elective-III)	3
PCH 808: Medicinal chemistry: Autoimmune and topical Drugs (Elective IV)	3
PCH-810: Generative AI in Pharmaceutical Research (PSC-III)	3
PCH 812 Fahm e Quran- II /Ethics - II	1
Total	13
SEMESTER 3-6	
Thesis	30
Total	56

Ethics I* & Ethics II* for non-Muslims

NOTE: Comprehensive Exam for PhD candidates on completion of course work & pass status according to HEC& DUHS postgraduate policies.