



OPJU



SCHOOL OF SCIENCE

Information Brochure 2025

B.Sc.(Hons.) in Physics, Chemistry, Mathematics, Biotechnology, Data Science & Analytics

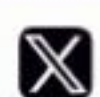
M.Sc. in Physics, Chemistry, Mathematics and Computing & Industrial Biotechnology

Ph.D. in Physics, Chemistry, Mathematics

O. P. JINDAL UNIVERSITY, RAIGARH

(Recognized by UGC and Approved by AICTE)

OP Jindal Industrial Park, Punjipathra, Raigarh- 496109



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About OPJU

O. P. Jindal University (OPJU), Raigarh, established in 2014, is a multidisciplinary university dedicated to excellence in education, research, and innovation. It offers a unique blend of academic rigor and industry integration, making it a preferred destination for students seeking holistic development.

The university provides undergraduate, postgraduate, and doctoral programs across disciplines such as Engineering, Management, Science, and Humanities. Its state-of-the-art infrastructure, modern laboratories, and well-equipped libraries create a conducive environment for learning and research. The faculty comprises highly experienced academicians and industry professionals, ensuring students gain practical insights along with theoretical knowledge.

OPJU places a strong emphasis on industry collaborations, leveraging its close ties with Jindal Steel & Power and other leading organizations to provide students with hands-on training, internships, and real-world exposure. The university also organizes events, conferences, and guest lectures by industry leaders and academic experts to keep students updated with the latest trends and innovations.

The university's vibrant campus life, coupled with a focus on innovation, entrepreneurship, and community engagement, prepares students to become leaders in their chosen fields.

Accredited and recognized for its quality education, OPJU is committed to shaping future-ready professionals who are equipped to meet global challenges and contribute meaningfully to society.



Vision

To be a role model among higher education institutions globally, aims to empower young minds to drive sustainable societal transformation through excellence in value-based education, research, innovation, and entrepreneurship.

Mission

- **Develop Industry-Ready Talent:**
Create programs aligned with new-age technologies to build a skilled workforce that drives societal growth.
- **Enhance Employability:**
Implement outcome-based education using emerging technologies and experiential learning, equipping students to solve real-world problems and improve their employability.
- **Cultivate Global Collaborations:**
Foster local and global partnerships to enrich teaching, research, and institution building.
- **Promote Holistic Leadership:**
Incorporate liberal education to nurture well-rounded, globally competent leaders capable of multifaceted responsibilities.
- **Encourage Innovation and Entrepreneurship:**
Establish an industry-focused environment that supports innovation and entrepreneurship, contributing to sustainable development.

Core Values

- **Student-Centric Success:** Measure success through student outcomes.
- **Academic Freedom and Trust:** Foster an environment of academic freedom and trust.
- **Ethical Integrity:** Maintain the highest standards of ethics and integrity in all operations.
- **Social Responsibility:** Develop sustainable practices and concern for the environment & Society.
- **Inclusive Accessibility and Compassion:** Remain accessible to all facets of society without consideration of economic status.



Five Pillars of Academic Delivery

Industry-Linked Programs

- Future-oriented industry-based programs and practices
- Curriculum development with the help of industry experts
- Frequent industry visits and longterm internships
- Emphasis on live industrial problems and case studies
- Regular lectures and mentoring by industry practitioners

Contemporary Pedagogy

- Experiential learning through Learning by Doing
- The problem-, project- and case-based learning
- Extensive use of technology for teaching, learning, and assessment
- Industry visits, live projects, and internships
- Peer learning and mentor-mentee support for enhanced learning
- Extensive use of digital learning (MOOCs, SWAYAM, NPTEL, ICT, etc.)

Research Excellence

- Masters and Ph. D. programs in all streams
- Industry based research in emerging domains
- Research publications in reputed journals
- Projects and consultancy, conferences, workshops, seminars, symposiums, etc
- Innovation and capability building

Collaborations & Partnerships

- Collaborations at (inter)national level for student exchange programs
- Joint research and resource sharing with partners
- Partnerships with industries for project consultancies
- Professional society chapters for events and activities
- Sharing and adoption for best practices

Career Support

- Emphasis on soft skills and personality development
- Career guidance and mentoring
- Competency building for competitive exams and placements
- Innovation, startup, and entrepreneurs support
- Providing opportunities for career development

Five Foundation of Academic Excellence



School of Science

Programs Offered

B. Sc. (Physics, Chemistry, Mathematics, Biotechnology & Data Science and Analytics)

M. Sc. (Physics, Chemistry, Mathematics and Computing & Industrial Biotechnology)

Ph. D. (Physics, Chemistry & Mathematics)



The School of Science encourages a culture of curiosity, research, innovation, and discovery. With a long tradition of outstanding education and research, we enthusiastically welcome you to discover the countless opportunities that our school offers.

The school's numerous programs are guided by a number of fundamental concepts including diversity and inclusiveness, interdisciplinary collaboration, cutting-edge research, quality in teaching and learning, and community development. Together with the aforementioned benefits, industry & research oriented curriculum, top-notch labs, exceptional faculty members, supportive staff, and welcoming environment all serve as a constant source of motivation to help the students of School of Science to become science technocrats and well-rounded future citizens. Their significant contributions on a variety of platforms will undoubtedly help our nation to become a Knowledge Super-Power in the future. The teaching-learning, research, and extra-curricular activities are constantly updated to reflect the latest advancements in science and technology.

Highlights

- The Best Emerging School in Science Education in Central India
- Research and Industry oriented curriculum, Ground-breaking placement track record for UG and PG students in the Jindal Group Companies, Vedanta and other reputed organizations
- Interdisciplinary and Collaborative Learning Environment, Special focus on Soft Skills, Personality Development and Community Services
- Implemented the National Education Policy-2020 to foster competency-based learning
- Use of innovative and experiential methods in the classroom
- Problem-solving and Creative-thinking based pedagogy
- Offering Value-based education and Value added courses

Salient Features of the School

Research, Innovation & Entrepreneurship



Innovation,
Incubation
Support



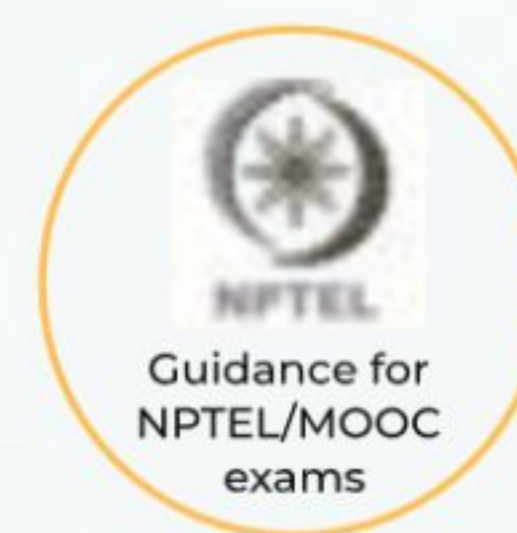
Participation in
Hackathon/
Ideathon



Idea Pitching
opportunity in
Bootcamps



Participation in
Conference/
Seminar



NPTEL
Guidance for
NPTEL/MOOC
exams

Holistic Development & Great Career Support



Department of Mathematics

The Undergraduate programs in Mathematics & Data Science and Analytics and Postgraduate in Mathematics and Computing programs are tailor made for students with a deep passion for mathematics and a desire to explore its profound applications in science, technology, and beyond. Join us in a journey of problem-solving and intellectual exploration.

Courses Offered

B. Sc. in Mathematics

B. Sc. in Data Science and Analytics

M. Sc. in Mathematics and Computing

Ph. D. in Mathematics



Department of Chemistry

Unlock the world of molecules, reactions, and scientific exploration through our Undergraduate Chemistry and Postgraduate programs. If you are passionate about the chemical sciences and aspire to delve deeper into this fascinating field, our programs are designed to empower you with the knowledge and skills needed for a successful career in chemistry.

Courses Offered

B. Sc. in Chemistry

M. Sc. in Chemistry

Ph. D. in Chemistry



Department of Physics

Undergraduate Physics and Postgraduate programs offer a challenging and enriching experience for students who are dedicated to explore the fundamental principles that govern our world. Dive into the world of physics and embark on a journey of discovery.

Courses Offered

B. Sc. in Physics

M. Sc. in Physics

Ph. D. in Physics



Department of Biotechnology

The Undergraduate Biotechnology & postgraduate programs are dynamic and comprehensive academic experience for the aspirants. It is tailored for students who seek a deep understanding of Biotechnology and its applications in the fields such as Biopharmaceuticals, Industrial Microbiology, Enzyme Engineering, Environmental Biotechnology and more.

Courses Offered

B. Sc. in Biotechnology

M. Sc. in Industrial Biotechnology



Newly Launched Courses: Demand of the Hour

B. Sc. in Data Science and Analytics

Career Opportunities

Data Scientist, Data Analyst, Machine Learning Engineer, Business Intelligence (BI) Analyst, Data Engineer, Quantitative Analyst (Quant), Data Architect, AI/Deep Learning Engineer, Statistician, Big Data Analyst, Product Analyst.

Trending areas related to Data Science and Analytics

Finance and Banking, Healthcare, Retail & E-commerce, Public Sectors, Media and Entertainment, Fraud Detection, Natural Language Processing (NLP), Cybersecurity Analytics.



M. Sc. in Industrial Biotechnology


Career Opportunities

Bioprocess Engineer, Research Scientist, Quality Control/Assurance Manager, Bioinformatics Specialist, Project Manager, Sales and Technical Support, Regulatory Affairs Specialist, Entrepreneur.

Trending areas related to Industrial Biotechnology

Bioplastics and Biodegradable Materials, Synthetic Biology, Biofuels and Renewable Energy, Agricultural Biotechnology, Metabolic Engineering.

Infrastructure

	
50 Acre Land Area	5,00,000 Sqft. Build up Area
	
1000 Capacity Hall of Residence 1 & 2	350 Capacity Hall of Residence 3
	
1000 Mbps (1:1) Connectivity Fully Wi-fi Campus	1000 Networked Computer Systems
	
45 Well Equipped Laboratories	Central Library










Research & Publication

	
90 Referred International Journals	38 Referred National Journals

Library

	
30,000+ Books	5000 Titles
	
15,000 E-journals	2,50,000 E-books

Students




		
2200+ Students	60% Boys	80% UG
		
	40% Girls	20% PG
	Student from 20+ Different states	
		3500+ Alumni
	1 : 15 Faculty-Student Ratio	
		35 Average age of the Faculty Members

Faculty and Staff

		
110 Faculty	80% PhD	70% Male
		
	20% PG	30% female
	80% Faculty Qualification from IIT, IIIT, NIT & IIM	
		100+ Non-teaching Staff
	20% Faculty with global experience	

Placement Statistics

Year 2023-24

		
100+ Campus Drives	84% Students Placed	6.7 Lacs Average Package

Collaboration & MoUs

	70+ National	
		10+ International

