



**SHARDA**  
UNIVERSITY  
*Beyond Boundaries*



**SHARDA SCHOOL OF  
ENGINEERING &  
SCIENCES**

Department of Chemistry and Biochemistry



COURSE

**Intellectual  
Property Rights and  
Entrepreneurship**  
(NV33115)

**VALUE ADDED  
COURSE BROCHURE  
2025-26**

## **SHARDA UNIVERSITY**

Sharda University envisions to serve the society by being a global University of higher learning in pursuit of academic excellence, innovation and nurturing entrepreneurship. It has 13,000+ students from 95+ countries, 29 states, and Union Territories, providing cultural diversity and global exposure to students. It has 26000+ alumni who are today leaders in their realms. Sharda University is NA AC A+ University with Overall NIRF Rank of 87. Teaching Learning Center at Sharda University is to equip the faculty members with the expertise, skills and knowledge they need for capacity building of students. Teaching as a profession requires highly specialized skills and knowledge to impact significantly on student learning and therefore teachers must refine their conceptual and pedagogical skills.

### **ABOUT THE SCHOOL**

Sharda School of Engineering & Sciences (SSES) boasts of the strengths of engineering and basic sciences to foster innovation and technical excellence. The school provides exposure to different disciplines in science including Chemistry, Biochemistry, Physics, Mathematics, Mechanical Engineering, Civil Engineering, Electronics/Electrical Engineering and Environmental Sciences. The school is unique from other institutions of higher learning as it is committed to imparting knowledge in pure and applied sciences, which not only forms the foundation for further academic pursuits in science and technology but also acts as the foundation for students to pursue a career in multi facet directions. The academic programs are designed to meet the requirement of the latest technological developments and envisages to become a state-of-the-art department that cater the students at Graduate, Post- Graduate and Research level along with providing high- quality education and cutting-edge interdisciplinary research in engineering & sciences.

### **DEPARTMENT OF CHEMISTRY & BIOCHEMISTRY**

The Department of Chemistry & Biochemistry endeavors to be nationally recognized model for nurturing students who can contribute to the ever changing technology of 21st century. The Department is committed to provide an excellent teaching & learning atmosphere for Undergraduate as well as post graduate students.

## RESOURCE PERSON

**Dr.Preeti Jain** - Dr.Preeti Jain has obtained her Ph.D in Coordination Chemistry from Gautam Buddha University and M.Tech in Chemical Analysis from IIT Delhi. She has also qualified CSIR-UGC JRF and GATE examinations. Her research interest involves the “Development of novel Chemotherapeutics and their theoretical and experimental investigations” and she is involved in publishing the research paper in the journal of international repute. She is associated with Sharda University since 2017 as an Assistant Professor.

## Schedule

Week 1	16 July - 20 July	2 lectures
Week 2	21 July - 27 July	2 lectures
Week 3	28 July - 03 August	2 lectures
Week 4	04 August - 10 August	2 lectures
Week 5	11 August - 17 August	2 lectures
Week 6	18 August - 24 August	2 lectures
Week 7	25 August - 02 September	2 lectures
Week 8	03 September - 07 September	2 lectures
Week 9	08 September - 14 September	2 lectures
Week 10	15 September - 21 September	2 lectures
Week 11	22 September - 28 September	2 lectures
Week 12	29 September - 5 October	2 lectures
Week 13	6 October - 12 October	2 lectures
Week 14	13 October - 19 October	2 lectures
Week 15	20 October - 26 October	2 lectures
Week 16	27 October - 2 November	2 lectures
Week 17	3 November - 9 November	2 lectures
Week 18	10 November - 16 November	2 lectures
Week 19	12 November - 18 November	2 lectures

# MODULE

<b>School: SSES</b>		<b>Batch : 2024-26</b>
<b>Program: Master of Science(PG)</b>		<b>Current Academic Year: 2025-26</b>
<b>Branch: Chemistry/Biochemistry</b>		<b>Term : Odd(2501), Semester : III</b>
1. Course Code	<b>NV33115</b>	
2. Course Title	<b>Intellectual Property Rights and Entrepreneurship</b>	
3. Credits	0	
4. LTPC	<b>2-0-0-0</b>	
5. Course Type	<b>Value added course</b>	
6. Course Objective	<p>This course will make students employable in the IPR associated Consultants and companies, and startups for jobs associated with IPR</p> <p>Student will have the knowledge of:</p> <ol style="list-style-type: none"> <li>1. To introduce fundamental aspects of Intellectual property Rights to students who are going to play a major role in development and management of innovative projects in industries.</li> <li>2. To disseminate knowledge on patents, patent regime in India and abroad and registration aspects, patent drafting and searching.</li> <li>3. To disseminate knowledge on copyrights and its related rights and registration aspects.</li> <li>4. To disseminate knowledge on Design, Geographical Indication (GI), Plant Variety and Layout Design Protection and their registration aspects.</li> <li>5. To aware about current trends in IPR and Govt. steps in fostering IPR.</li> </ol>	
7. Course Outcomes	<p>CO1: The student will be able to understand about IPR and it's application</p> <p>CO2: The student will be able to gain adequate knowledge on patent for their innovative research works. CO3: The student will be able to have sound knowledge about copyright for their pioneering research works. CO4: The student will be able to provide useful insights on the novelty of their idea from a state-of-the-art</p> <p>Patent search for further developing trademarks for products/innovations.</p> <p>CO5: The student will be able pick up the basics of Entrepreneurship Development.</p> <p>CO6: The student will be able to catch up Intellectual Property(IP) as a career option such as-R&amp;D IP Counsel, Government Jobs - Patent Examiner, Private Jobs in Pharmaceutical sector related to patent search, patent drafting and patent filing, Patent agent and Trademark agent, Entrepreneur.</p>	
8. Course Description	<p>This course will introduce basic understanding of Intellectual Properties, Patents, Trademarks, Copyrights and designs. It will demonstrate in depth understanding concepts of IPR and its importance, relevance and execution in the Pharmaceutical / Life science industries. It will also demonstrate knowledge about the use of suitable analytical tools for the high-quality, reliable, and statistically sound data from IPR.</p>	
9. Outline syllabus		CO Mapping
<b>Unit 1</b>	<b>Introduction and the need for intellectual property right (IPR)</b>	
A	Types of Intellectual Property Rights: Patent, Copyright, Trade Mark, Design, Geographical Indication, Plant Varieties and Layout Design	CO1/CO6
B	Trade Secrets IPR in India : Genesis and development IPR in abroad	CO1/CO6
C	The WIPO Convention, 1967, The Patent Co-operation Treaty, 1970, The TRIPS Agreement, 1994	CO1/CO6
<b>Unit 2</b>	<b>Patents</b>	
A	Elements of Patentability Registration Procedure, Rights and Duties of Patentee, Assignment & license	CO2/CO6
B	Patent Infringement, Remedies & Penalties - Patent Office and Appellate Board.	CO2/CO6
C	Patent/Prior art search, Patent drafting	CO2/CO6
<b>Unit 3</b>	<b>Copyrights</b>	
A	Nature of Copyright - Subject matter of copyright: original literary, dramatic, musical, artistic works; cinematograph films and sound recordings	CO3/CO6
B	Registration Procedure, Term of protection, Ownership of copyright, Assignment and license of copyright	CO3/CO6
C	Copyright Infringement, Remedies & Penalties	CO3/CO6
<b>Unit 4</b>	<b>Trademarks &amp; Design</b>	
A	Concept of Trademarks - Different kinds of marks (brand names, logos, signatures, symbols, certification marks and service marks)	CO4/CO6
B	Non Registrable Trademarks Registration of Trademarks	CO4/CO6
C	Concept of novel and original - Procedure for registration, Geographical indication	CO4/CO6
<b>Unit 5</b>	<b>Entrepreneurship</b>	
A	Selection of a product, line design and development processes	CO5/CO6
B	Economics on material and energy requirement	CO5/CO6
C	Stock the product and release the same for making	CO5/CO6
<b>Mode of examination</b>	Assignments, Quizzes & Viva	