

GUJARAT TECHNOLOGICAL UNIVERSITY
BIOMEDICAL ENGINEERING (03)
INTELLECTUAL PROPERTY RIGHTS
SUBJECT CODE: 2180309
B.E. 8th Semester

Type of course: Department Elective

Requisite: Basic Engineering Principles, Standards and safety, Ethics.

Rationale: This subject is designed 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. Subject introduces different aspects of the IPR Acts. It also includes case studies to demonstrate the application of the legal concepts in Science, Engineering, Technology and Creative Design.

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks						Total Marks
L	T	P		C	Theory Marks			Practical Marks		
			ESE (E)		PA (M)		PA (V)		PA (I)	
					PA	ALA	ESE	OEP		
4	0	2	6	70	20	10	20	10	20	150

Content:

Sr. No.	Content	Total Hrs	% Weightage
1	Overview of Intellectual Property Introduction of IPR, Need for intellectual property right (IPR), IPR in India – Genesis and Development IPR in abroad, Case Study	6	10
2	Patents Need for patent, Macro-economic impact of the patent system, Classification of patents in India, Classification of patents by WIPO, Categories of Patent, Special Patents, Patenting Biological products, Patent document, Granting of patent, Rights of a patent, Patent Searching, Patent Drafting, filing of a patent, different layers of the international patent system, Utility models, Case Study	12	20
3	Copyright Overview of Copyright, Importance of Copyrights, Process for copyright, Related rights, case study.	8	15
4	Trademarks & Trade Secret Overview of Trademarks & Trade Secret, Importance of Trademarks & Trade-secret, Rights of Trademark & Trade Secret, Types of Trademarks, Registration process for Trademark & Trade Secret, Duration of Trademark and trade secret, Case Study	10	20
5	Geographical Indications Overview of Geographical Indications, Importance of Geographical Indication Protection, Case study	10	20
6	Intellectual Property For Bioengineering Overview of Bioengineering and Intellectual Property, Biomedical Research and Intellectual Property Rights, Licensing and Enforcing Intellectual Property Case studies of Bioengineering	8	15

		Total -	54	100
--	--	---------	----	-----

ReferenceBooks:

No.	Title of Books	Author	Publication
1	Intellectual Property Rights In The WTO And Developing Contries	Watal,Jayashree	Oxford University Press
2	Intellectual Property Rights- A Primer	R. Anita Rao &Bhanoji Rao	Eastern BookCo.
3	Lectures on Intellectual Property Law		Eastern Book Co.
4	The Law Of Intellectual Property Rights	Shiv Sahai Singh	Eastern BookCo.
5	Cases and Materials on Intellectual Property	William Cornish	Eastern BookCo.
6	IPR, Biosafety and Bioethics	Deepa GoelandShomini Parashar	Pearson publisher
7	Handbook of Indian Patent Law and Practice	Subbaram N.R.	S. Viswanathan, Printers andPublishers Pvt. Ltd.,1998
8	The Enforcement of IntellectualProperty Rights:A Case Book WIPO		

Suggested Specification table with Marks (Theory):

Distribution of Theory Marks				
R Level	U Level	A Level	N Level	E Level
25%	25%	30%	10%	10%

Legends: R: Remembrance; U: Understanding; A: Application, N: Analyze and E: Evaluate and above Levels (Revised Bloom's Taxonomy)

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

CourseOutcome:

After completion of the course the student will be able to:

1. Student will be able to define need and importance of intellectual property rights.
2. Rules and process for IPR registration.
3. Patent Searching, Patent Drafting, filing, Protection and duration of a patent in India and abroad.
4. Legal concepts in Science, Engineering, Technology and Creative Design.

List of Experiments: as per topics of syllabus

Design based Problems (DP)/Open Ended Problem:as per topics of syllabus.

Active Learning Assignments: Preparation of power-point slides, which include videos, animations, pictures, graphics for better understanding of theory and practical work. The faculty will assign topics from which students can grasp knowledge about current scenario of the virtual biomedical Instrumentation. The power-point slides should be put up on the web-site of the College/ Institute, along with the names of the students of the group, the name of the faculty, Department and College on the first slide. The best three works should submit to GTU.