

B.E. MECHANICAL ENGINEERING
Choice Based Credit System (CBCS)
SEMESTER – VI

Intellectual Property Rights (3:0:0)3
(Effective from the academic year 2021 -22)

Course Code	21ME651	CIE Marks	50
Teaching Hours/Week (L:T:P)	3:0:0	SEE Marks	50
Total Number of Contact Hours	40	Exam Hours	03

Course Objectives:

This course will enable students to:

1. Understand the patentability of the invention and creation of IP.
2. Demonstrate Industrial Design and Prior art search.
3. Prepare patent specification and claim drafting for new invention.
4. Explain patent filing process for the invention.
5. Develop patent strategy for patent transfer and infringements.

Preamble: Importance of intellectual property (IP): patents and industrial design. Need for patents, objectives of patent law and benefits of patents.

Module – 1

Introduction: History of intellectual property, basic principle of trading system under World Trade Organization (WTO), classification of properties and intellectual property. The changing R&D process and IPR, Evolving research modes and IPR. Approaches for industrial innovators. Incorporating IPR in Project Management, check posts on the innovation highway, IPR as part of project management.

Invention: Patentability of invention, what is invention, requirements of patentability of invention: Novelty, non obviousness and industrial applicability. what are not patentable inventions,

Innovation: Types of innovation, appropriation of IP, creativity and innovation, (08 Hours)

Self-study component: Characteristics of innovating organizations.

Module – 2

Industrial Design Registration: Process for registration of Industrial design, Conditions for registration of Industrial Designs, Procedure for registration of Industrial Designs, Term of Industrial Designs, Register of Design, Infringement of Industrial Designs.

Prior art searches: The need for a search, objective of search, Searching method. Novelty search, Boolean search, manual search, patent number search, validity search, clearance search., where and how to search prior art, field search. Data bases for prior arts.

(08 Hours)

Self-study component: Remedies against infringement of industrial designs.

Module – 3

International Treaties: WTO: Structure WTO, The major provisions of TRIPS with regard to the patent and its implications on Indian Patent Law.

Patent application: Provisional and complete specification. Content of the specification: title, field, background of the invention. Objectives of invention, statement and summary of invention. drawing, detailed description of the invention, claim and abstract. Procedure for grant of patent.

Patent Claim Drafting: Introduction to patent claim, basic structure of claims: preamble, transitional phrase and body of the claims. independent and dependent claims, product claim, process claim.

(08 Hours)

Self-study component: Pre grant opposition

Module -4

Filing process: Ordinary application, Patent of addition, patent of division, Procedure for grant of patents, Publication of Application, Examination, right of patentee. Term of patents and maintenance fees.

International Filing: Conventional countries, Convention application, PCT application. Indian International search authority, International search report, Indian International preliminary examination authority, International preliminary examination report.

IP protection: Inventions and protections under patent law, process patent and product patent.

CRI (computer related invention): Protecting Software and computer related innovation. IPR protection for CRI, Copyright and computer software, Guidelines for CRI in India.

(08Hours)

Self-study component: Parallel imports, ever greening of patents

Module -5

Transfer of rights: Transfer of patent rights, Assignment, license, cross licensing.

Infringement. Patent infringement, infringer, what constitutes infringement of a patent. Literal infringement, doctrine of equivalence, improvement infringement, willful infringement, remedies.

Different Schemes for IP: Schemes for Start-ups, small entities, other industries and organizations with respect to IP.

(08 Hours)

Self-study component: Patent strategy for company and organizations

Course Outcomes:

The students will be able to:

CO 1: Describe the patentability of the invention and CIP.

CO 2: Discuss Industrial design and Prior art search.

CO 3: Prepare patent specification and claim drafting.

CO 4: Summarize patent filing process.

CO 5: Describe IP management and infringement.

Textbooks:

1. Neeraj Pandey, Khushdeep Dharani, “Intellectual Property Rights”, PHI Learning, 2014.
2. Dr. S R Myneni, “Patent Drafting & Specification Writing”, New Era Law Publication, 2020.

References:

1. Prabhuddha Ganguli, "Intellectual Property Rights", Tata Mc-Graw –Hill, 2017.
2. M. Ashok Kumar, Mohd. Iqbal Ali, "Intellectual Property Rights", Serials Publications, 2008.
3. Deborah E. Bouchoux, "Intellectual Property Rights", Cengage Learning, 2011.