



# INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

## COMPUTER SCIENCE AND ENGINEERING

### COURSE DESCRIPTION FORM

<b>Course Title</b>	<b>INTELLECTUAL PROPERTY RIGHTS</b>			
<b>Course Code</b>	<b>A50017</b>			
<b>Regulation</b>	<b>R15- JNTUH</b>			
<b>Course Structure</b>	Lectures	Tutorials	Practical	Credits
	4	-	-	4
<b>Course Coordinator</b>	Ms. P Bindu Madhavi, Assistant Professor, MBA			
<b>Team of Instructors</b>	Ms. K Mamatha, Assistant Professor, MBA			

#### I. COURSE OVERVIEW:

This course introduces the importance of intellectual property and the protection of creation or innovation or ideas which are to be used to make a product or service or design layout or process which is economical called patents, utilities etc. The course emphasizes on intellectual property protection and its importance of estimating the intelligence of an individual correlates with financial advantages. It also deals with fundamentals of laws to protect and encourage the inventions and creations. The main objective of this course is to examine the laws and the procedures to protect the intellectual property rights of an intellectual or expert and make it like another property which is non tangible.

#### II. PREREQUISITE(S):

Level	Credits	Periods/ Week	Prerequisites
UG	4	4	-----

#### III. MARKS DISTRIBUTION:

Sessional Marks	University End Exam marks	Total marks
<b>Midterm Test</b> There shall be two midterm examinations. Each midterm examination consists of essay paper, objective paper and assignment. The essay paper is for 10 marks of 60 minutes duration and shall contain 4 questions. The student has to answer 2 questions, each carrying 5 marks. The objective paper is for 10 marks of 20 minutes duration. It consists of 10 multiple choice and 10 fill-in-the blank questions, the student has to answer all the questions and each carries half mark. First midterm examination shall be conducted for the first two and half units of syllabus and second midterm examination shall be conducted for the remaining portion. Five marks are earmarked for assignments. There shall be two assignments in	75	100

Sessional Marks	University End Exam marks	Total marks
every theory course. Assignments are usually issued at the time of commencement of the semester. These are of problem solving in nature with critical thinking. Marks shall be awarded considering the average of two midterm tests in each course.		

#### IV. EVALUATION SCHEME:

S. No	Component	Duration	Marks
1.	I Mid Examination	80 minutes	20
2.	I Assignment	-	5
3.	II Mid Examination	80 minutes	20
4.	II Assignment	-	5
5.	External Examination	3 hours	75

#### V. COURSE OBJECTIVES:

**At the end of the course, the students will be able to:**

- I. Build knowledge and also importance in fundamental of Intellectual Property (IP), International organizations, associations and different treaties.
- II. Familiarize with the rights of owners.
- III. Understand with the procedures of evaluation, registration, protection and acquisition of trademarks.
- IV. Educate student about the new developments in the law of intellectual property rights.
- V. Create awareness in audit programs and audit

#### VI. COURSE OUTCOMES:

**After completing this course the student must demonstrate the knowledge and ability to:**

1. **Understand** the importance, federal registration and types of intellectual property rights.
2. **Understand** and explain about different international organization and their duties.
3. **Analyze** the function(s) of international organization and agencies.
4. **Identify** the purpose in category of marks under which the trademark registration is made internationally.
5. **Explain** the trademark evaluation and registration process.
6. **Describe** the fundamentals of copyright law.
7. **Explain** the originality of material and rights of reproduction.
8. **Illustrate** international copyright law with respect to ownership and registration of copyright.
9. **Identify** searching process and transfer of ownership in patents.
10. **Understand** the trade secrets determination, misappropriation, protection for submission and litigation.
11. **Explain** the new international developments in trademarks law, copyright law and patent law.
12. **Analyze** the functions of intellectual property audits.
13. **Learning** the significant role played by the IP audits and decision making
14. **Understanding** the importance of the IP audits and its duties.
15. **Analyze** the programs conduct by audit cell

## VII. HOW PROGRAM OUTCOMES ARE ASSESSED:

Program		Level	Proficiency assessed by
PO1	<b>Engineering knowledge:</b> Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.	N	--
PO2	<b>Problem analysis:</b> Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.	N	--
PO3	<b>Design/development of solutions:</b> Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.	N	--
PO4	<b>Conduct investigations of complex problems:</b> Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.	H	Lectures, Assignments, Exams
PO5	<b>Modern tool usage:</b> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.	N	--
PO6	<b>The engineer and society:</b> Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.	S	Lectures, Assignments, Exams
PO7	<b>Environment and sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.	S	Lectures, Assignments, Exams
PO8	<b>Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.	H	
PO9	<b>Individual and team work:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.	N	--
PO10	<b>Communication:</b> Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.	N	--
PO11	<b>Project management and finance:</b> Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.	N	--
PO12	<b>Life-long learning:</b> Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.	H	Lectures, Assignments, Exams

N - None

S - Supportive

H - Highly Related

## VIII. HOW PROGRAM SPECIFIC OUTCOMES ARE ASSESSED:

Program Specific Outcomes		Level	Proficiency assessed by
PSO1	<b>Professional Skills:</b> The ability to research, understand and implement computer programs in the areas related to algorithms, system software, multimedia, web design, big data analytics, and networking for efficient analysis and design of computer-based systems of varying complexity.	N	--
PSO2	<b>Problem-Solving Skills:</b> The ability to apply standard practices and strategies in software project development using open-ended programming environments to deliver a quality product for business success.	N	--
PSO3	<b>Successful Career and Entrepreneurship:</b> The ability to employ modern computer languages, environments, and platforms in creating innovative career paths, to be an entrepreneur, and a zest for higher studies.	H	Lectures

N - None

S - Supportive

H - Highly Related

## IX. SYLLABUS:

### UNIT-I

#### Introduction to Intellectual Property:

Introduction, Types of Intellectual Property (IP), International Organizations, Agencies and treaties, Importance of Intellectual Property Rights..

### UNIT-II

#### Trademarks:

Purpose and Function of Trademarks, Acquisition of Trademarks Rights, Protectable Matter, Selecting and Evaluating Trademark, Trademark Registration Processes.

### UNIT-III

#### Law of Copyrights:

Fundamentals of Copyrights Law, Originality of Material, Rights to Reproduction, Rights to Perform the Work Publicly, Copyright Ownership issues, Copyright Registration, Notice of Copyright, International Copyright law.

#### Law of Patents:

Foundation of Patent Law, Patent searching Process, Ownership Rights and transfer

### UNIT-IV

#### Trade secrets:

Trade Secrets Law, Determination of trade Secrets Status, Liability for misappropriations of Trade Secrets, Protection for submission, Trade Secrets Litigation

#### Unfair competition:

Misappropriation of Right of Publicly, False Advertising

### UNIT-V

#### NEW DEVELOPMENTS OF INTELLECTUAL PROPERTY:

New Developments in Trade Law, Copyright Law, Patent Law, Intellectual Property Audits  
International overview of Intellectual Property, International-Trademark Law, Copyright Law, International Patent Law, International Development in Trade Secrets Law

**Text Books:**

1. Deborah.E.Bouchoux, "Intellectual Property Right", Cengage Learning
2. Prabuddha Ganguli, "Intellectual Property Right", Unleashing the knowledge economy", Tata Mc.Graw Hill Publishing Company Ltd

**X. COURSE PLAN:**

**At the end of the course, the students are able to achieve the following course learning outcomes:**

Lecture No.	Topics to be covered	Course Learning Outcomes	Reference
1	Introduction of Intellectual Property (IP)	<b>Describe</b> different types of Intellectual Property	T1:1.1,1:1.2
2	Types of IP , International Organizations	<b>Describe</b> the different organizations and association	T1:1.4
3	Agencies and Treaties, Importance of Intellectual Property Rights	<b>List</b> of Agencies and treaties related to Intellectual Property and its significance	T1:1.4, 1:1:5
4-8	Purpose and function of Trademarks	<b>Understand</b> the purpose and function of trademarks	T1:2.2
9	Acquisition of Trademarks Rights and Protectable Matter	<b>Describe</b> acquisition of trademark rights and protectable matter	T1:2.4, 2.9
10-19	Selecting and Evaluating Trade Mark and Trademark Registration Processes	<b>Discuss</b> the evaluation of trademark, selection and its registration process	T1:3.1, 1:4.5
20-21	Fundamentals of Copyright Law	<b>Understand</b> fundamentals of Copyright Law	T1:10.2
22-24	Originality of material and rights of Reproduction	<b>Understand</b> Originality of material and rights of reproduction	T1:11.2
25 - 27	Trade Secrets Law, Determination of Trade Secrets status	<b>Describe</b> Trade Secret Law and determine trade secret status	T1:2.1, T1:2.3, T1:22.2
28-30	Liability for misappropriations of Trade Secrets	<b>Identify</b> liability for misappropriation of trade secrets	T1:22.2
31-34	Protection for submission, trade secrets Litigation	<b>Identify</b> trade secrets litigation	T1:22.5, 1:22.8
35-36	Unfair Competition: Misappropriation of right of publicly	<b>Describe</b> misappropriation right of publicity	T1:23
37-40	False advertising	Identify False advertising	T1:23.3
41-43	New developments in Trade Law	<b>Describe</b> new developments in Trade Law	T1:7
44-46	New developments in Copyright Law	<b>Describe</b> new developments in Copyright law	T1:8
47-49	New developments in Patent Law	<b>Describe</b> new developments in patent law	T1:15.7
50-54	Intellectual Property Audits and International Overview of IP	<b>Understand</b> IP audits and international trademark law	T1:16, 1:21.1,2
55-58	International Trademark Law, Copyright Law, patent Law and Trade Secrets Law	<b>Understand</b> International Trademark Law, copyright law, Patent Law and Trade Secrets Law	T1:21.1, 1:24.2, 1:24.2 & 1:24.2

**XI. MAPPING COURSE OBJECTIVES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:**

Course Objectives	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	--	--	--	--	--	--	S	--	--	--	--		--	--	--
II	--	--	--	--	--	--	--	H	--	--	--	--	--	--	--
III	--	--	--	--	--	--	--	--	--	--	--	S	--	--	--
IV	--	--		--	--	--	--	--	--	--	--	H	--	--	H
V	--	--	--	--	--	--	--	S	--	--	--	--	--	--	--

S – Supportive

H - Highly Related

**XII. MAPPING COURSE OUTCOMES LEADING TO THE ACHIEVEMENT OF PROGRAM OUTCOMES AND PROGRAM SPECIFIC OUTCOMES:**

Course Outcomes	Program Outcomes												Program Specific Outcomes		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	--	--	--	S	--	--	--	--	--	--	--	--	--	--	--
2	--	--	--	--	--	--	--	H	--	--	--	--	--	--	--
3	--	--	--	--	--	--	--	--	--	--	--	H	--	--	--
4	--	--	--	H	--	--	--	--	--	--	--	--	--	--	--
5	--	--	--	S	--	--	--	--	--	--	--	--	--	--	--
6	--	--	--	--	--	S	--	--	--	--	--	--	--	--	--
7	--	--	--	--	--	--	S	--	--	--	--	--	--	--	--
8	--	--	--	--	--	--	--	H	--	--	--	--	--	--	--
9	--	--	--	--	--	--	--	--	--	--	--	H	--	--	H
10	--	--	--	--	--	--	--	H	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--	--	--	--	H	--	--	--
12	--	--	--	H	--	--	--	--	--	--	--	--	--	--	--
13	--	--	--	H	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	H	--	--	--	--	--	--	--	--	--	--	--
15	--	--	--	H	--	--	--	--	--	--	--	--	--	--	--

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Prepared by: Ms. P.Bindu Madhavi, Assistant Professor, MBA

HOD, COMPUTER SCIENCE AND ENGINEERING



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