

**Vidya Pratishthan's
Kamalnayan Bajaj Institute of
Engineering and Technology, Baramati.
(An Autonomous Institute)**



Faculty of Science and Technology

Board of Studies

Computer Engineering

Syllabus


Open Elective

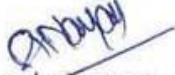
(Pattern 2023)
(w.e.f. AY: 2024-25)


Syllabus: Open Electives Computer Engineering

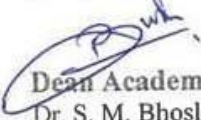
(Pattern 2023) w.e.f. AY:2024-2025


Course Code	Courses Name	Teaching Scheme			Examination Scheme and Marks							Credits			
		TH	PR	TUT	Acti vity	ISE	ESE	TW	PR	OR	Total	TH	PR	TUT	Total
OE23008	Intellectual Property Rights	2	-	-	-	-	50	-	-	-	50	2	-	-	2
OE23015	Design Thinking	2	-	-	-	-	50	-	-	-	50	2	-	-	2


Dept. Autonomy Coordinator
Mr. M. D. Shelar


Dean Autonomy
Dr. C. B. Nayak


Academic Coordinator
Dr. P. M. Paithane


Dean Academic
Dr. S. M. Bhosle


Head of Department
Dr. G. J. Chhajed


Principal
Dr. R. S. Bichkar

Principal
Vidya Pratishthan's
**Kamalayan Bajaj Institute of
Engineering & Technology, Baramati**
Vidyanagari, Baramati-413133



Open Electives (OE) Subjects			
OE2301	Digital Marketing	OE2311	Biotechnology
OE2302	Professional Leadership	OE2312	International Relations
OE2303	Organizational Behavior	OE2313	Universal Human Values
OE2304	Industrial Management	OE2314	Education Technology
OE2305	Disaster Management	OE2315	Design Thinking
OE2306	Energy Economic & Management	OE2316	Financial Literacy for Bharat#
OE2307	Operation Research	OE2317	Sustainability & Climate Change
OE2308	Intellectual Property Rights	OE2318	Agriculture Technology
OE2309	Cyber Laws	OE2319	Architectural Technology
OE2310	Bioinformatics		



OE23069 Intellectual Property Rights		
Teaching Scheme: TH: 02 Hrs/Week	Credit: 02	Examination Scheme: End-Semester: 50 Mark
Course Objective: <ol style="list-style-type: none"> 1. To encourage research, scholarship, and a spirit of inquiry 2. To encourage students at all levels to develop patentable technologies. 3. To provide environment to the students of the Institute for creation, protection, and commercialization of intellectual property and to stimulate innovation. 		
Course Outcomes: Students will be able to <ol style="list-style-type: none"> 1. Understand the fundamental legal principles related to confidential information, copyright, patents, designs, trademarks and unfair competition 2. Identify, apply and assess principles of law relating to each of these areas of intellectual property 3. Apply the appropriate ownership rules to intellectual property you have been involved in creating 		
Course Contents		
Mapping of Course Outcomes for Unit I		CO1
UNIT I	Introduction to Intellectual Property Law	06 Hours
Introduction to Intellectual Property Law – The Evolutionary Past , The IPR Tool Kit, Para Legal Tasks in Intellectual Property Law, Meaning of property, Origin, Nature, Meaning of Intellectual Property Rights, Kinds of Intellectual property rights —Copy Right, Patent, Trade Mark, Trade Secret and trade dress, Design, Layout Design, Geographical Indication, Plant Varieties and Traditional Knowledge		
Mapping of Course Outcomes for Unit II		CO1
UNIT II	Introduction to Trade mark	06 Hours
Introduction to Trade mark — Origin, Meaning & Nature of Trade Marks, Types, Registration of Trade Marks, Infringement & Remedies, Offences relating to Trade Marks, Passing Off, Penalties Trade mark Registration Process, Post registration Procedures, Trade mark maintenance, Transfer of Rights, Inter parts Proceeding , Infringement , Dilution Ownership of Trade mark		
Mapping of Course Outcomes for Unit III		CO2
UNIT III	Introduction to Copyrights	06 Hours
Introduction to Copyrights, Origin, Definition & Types of Copy Right, Registration procedure , Principles of Copyright Principles, The subjects Matter of Copy right, The Rights Afforded by Copyright Law, Copy right Ownership, Transfer and duration , Right to prepare Derivative works		
Mapping of Course Outcomes for Unit IV		CO3
UNIT IV	Introduction to Trade Secret and IT Act 2000	06 Hours
Introduction to Trade Secret, Maintaining Trade Secret, Physical Security, Employee Limitation, Employee confidentiality agreement, Basic of Information Technology Act-2000 – IT Act - Introduction E-Commerce and legal provisions E- Governance and legal provisions Digital signature and Electronic Signature. Cybercrimes,		
Books and Other Resources		
Text Books: <ol style="list-style-type: none"> 1. Debirag E. Bouchoux: “Intellectual Property” Cengage learning , New Delhi, ISBN10:1111648573 		



2. Ferrera, Reder, Bird, Darrow, "Cyber Law. Texts & Cases", South-Western's Special Topics Collections, ISBN:0-324-39972-3
3. Prabhuddha Ganguli: "Intellectual Property Rights" Tata Mc-Graw -Hill, New Delhi, ISBN10:0070077177
4. Intellectual Property Rights and the Law, Gogia Law Agency, by Dr. G.B. Reddy
5. Law relating to Intellectual Property, Universal Law Publishing Co, by Dr. B.L. Wadehra



OE23015:Design Thinking

Teaching Scheme: TH: 03 Hrs/Week	Credit: 02	Examination Scheme: End-Semester: 50 Mark
Course Objective: <ol style="list-style-type: none"> 5. To understand <ol style="list-style-type: none"> 1. To impart knowledge on design thinking process for understanding complex designs. 2. To provide design skills to analyse design thinking issues and apply the tools and techniques of design. 3. To inculcate attitude to solve societal problems using design thinking tools. 		
Course Outcomes: Students will be able to <ol style="list-style-type: none"> 1. Analyse design thinking concepts and principles to perform human centred design process for creative problem solving. 2. Create empathy maps to visualize user attitudes and behaviour for gaining insights of customers. 3. Develop innovative products or services for a customer base using ideation techniques. 4. Build prototypes for complex problems using gathered user requirements. 		
Course Contents		
Mapping of Course Outcomes for Unit I		CO1
UNIT I	Introduction to Design Thinking	06 Hours
Design Thinking Process: Types of the thinking process, Common methods to change the human thinking process, Design thinking: Definition, Origin of design thinking, Importance of design thinking, Design vs Design thinking, Problem solving, Understanding design thinking and its process model, Design thinking tools		
Mapping of Course Outcomes for Unit II		CO2
UNIT II	Empathize	06 Hours
Design thinking phases, how to empathize, Role of empathy in design thinking, purpose of empathy maps, Things to be done prior to empathy mapping, Activities during and after the session, Understanding empathy tools: Customer Journey Map, Personas.		
Mapping of Course Outcomes for Unit III		CO3
UNIT III	Ideation	06 Hours
Challenges in idea generation, need for systematic method to connect to user, Visualize, Empathize, and Ideate method, Importance of visualizing and empathizing before ideating, Applying the method, Ideation Tools: How Might We? (HMW), Story board, Brainstorming.		
Mapping of Course Outcomes for Unit IV		CO4
UNIT IV	Prototyping	06 Hours

What is a prototype? - Prototyping as a mindset, prototype examples, prototyping for products; Why we prototype? Fidelity for prototypes, Process of prototyping- Minimum Viable prototype

Books and Other Resources

Text Books:

1. S.Salivahanan, S.Suresh Kumar, D.Praveen Sam, "Introduction to Design Thinking",Tata Mc Graw Hill, First Edition,2019.
2. Kathryn McElroy, "Prototyping for Designers: Developing the best Digital and Physical Products", O'Reilly,2017
3. Michael G. Luchs, Scott Swan , Abbie Griffin,"Design Thinking – New Product Essentials from PDMA", Wiley, 2015.
4. Vijay Kumar, "101 Design Methods: A Structured Approach for Driving Innovation in Your Organization", 2012.
- 5.

ADDITIONAL LEARNING RESOURCES:

1. <https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process>
2. <https://www.ibm.com/design/thinking/page/toolkit>
3. <https://www.interaction-design.org/literature/article/define-and-frame-your-design-challenge-by-creating-your-point-of-view-and-ask-how-might-we>
4. <https://hbr.org/2018/09/design-thinking-is-fundamentally-conservative-and-preserves-the-status-quo>
5. <https://hbr.org/2018/09/why-design-thinking-works>
6. <https://hbr.org/2015/09/design-thinking-comes-of-age>
7. <https://www.culturepartnership.eu/en/article/ten-tools-for-design-thinking>
8. <https://nptel.ac.in/courses/109/104/109104109/>
9. <https://nptel.ac.in/courses/110106124/>

