

AMBALA COLLEGE OF ENGINEERING AND APPLIED RESEARCH, AMBALA

Department of Applied sciences and Humanities

Subject: Idea workshop

Semester: 2nd

Subject Code: B24-VAC-102

Practical: 03

Internal Examination marks: 100

Lesson Plan

Name of Faculty: Er. Karuna

Subject: Idea workshop,

Subject Code: B24-VAC-102

Lesson Plan Duration: 15 Weeks (Jan 2026 to may 2026)

Workload (Lecture/week (in hours): P-3)

Syllabus

B24-VAC-102	Idea workshop						
Lecture	Tutorial	Practical	Credit	End Semester Exam	Internal Assesment	Total	Exam Hour
0	0	3	1	0	100	100	-
Course Outcomes							
CO1	Students will be able to earn skill of PCB designing						
CO2	Students will be able to earn skill of 3-D Modeling and printing						
CO3	Students will be able to earn skill of Artificial Intelligence						

List of Experiments

1. To design and fabricate PCB for electronic circuits as micro project (any one)
 - A) power supply
 - B) 555 Timer based circuits
 - C) Op- amp based circuits
 - D) Amplifiers
 - E) any other circuit of similar nature
2. To design and fabricate 3-D models for 3- D printing as micro project (any one)
 - A) cube
 - B) cone
 - C) sphere
 - D) cuboid

E) any other shape of similar nature

3. To deploy and generate AI models to implement various tasks (any two)

A) Image classification

B) Voice swap

C) Image generation

D) Neutral style transfer

E) video to text conversion

F) Graphical design generation

G) Music generation

H) any other application of similar nature

Practical	
Practical Day week	Topic
1 st	Introduction to Electronic Components and Circuit
2 nd	Introduction and Explanation to Easy EDA Software
3 rd	To Design the electronic circuits on Easy EDA Software
4 th	To Fabricate electronic circuit on PCB
5 th	Viva Voce-1
6 th	Introduction to MATLAB
7 th	To deploy and generate AI models to implement image generation and classification
8 th	To deploy and generate AI models to implement music generation
9 th	Viva Voce-2

10 th	Introduction to solid work.
11 th	To design of 3-D model using solid work
12 th	Fabrication of 3-D model by 3-D printing
13 th	Viva voce - 3
14 th	Doubts/ Revision
15 th	Internal viva voce

Er. Karuna
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