



## Do It Yourself – Wood working hands-on workshop Series –2024

### “Floating Table” Workshop

Think - Design - Build

- Organized by Venture Center -

Potential gains	<p>design concepts and optical illusions.</p> <ul style="list-style-type: none"><li>• <b>Woodworking Skills:</b> Acquire fundamental woodworking techniques, including measuring, cutting, and assembling materials safely and effectively.</li><li>• <b>Design Principles Understanding:</b> Learn the principles of design and how to create functional pieces that also serve as visual illusions.</li><li>• <b>Problem-Solving Abilities:</b> Enhance your problem-solving skills by navigating the challenges of creating an illusionary structure.</li></ul>
Organized by	Protoshop at Venture Center
For whom	DIY Enthusiasts (age 14+), suitable for beginners to intermediate makers
When	December 14, 2024   09:45 AM – 05:30PM
Where	Protoshop, Venture Center, 300 NCL Innovation Park, Dr. Homi Bhabha Road, Pashan, Pune-411008
Contact	<b>Registration queries:</b> Mr. Himanshu Kunjam   9511966979   <a href="mailto:himanshu.kunjam@venturecenter.co.in">himanshu.kunjam@venturecenter.co.in</a> Mr. Adarsh Lodhi   8956226076   <a href="mailto:adarsh.lodhi@venturecenter.co.in">adarsh.lodhi@venturecenter.co.in</a>
Cost	<p>Rs. 3,500/- per participant Only 10 seats: First come first serve Register online at: <a href="https://tinyurl.com/woodwork-1">https://tinyurl.com/woodwork-1</a> Note:-</p> <ul style="list-style-type: none"><li>• Registration closes once 10 seats are full</li><li>• Attendance only after confirmation of registration by organizers.</li><li>• Snacks and Lunch will be provided to all the participants</li><li>• Organizers reserve the right to accept or refuse or delay registrations so as to optimize the composition of the group and hence maximize learning for all participants</li></ul>

## Introduction

Welcome to the **Floating Table Workshop - Tensegrity Table!** We're excited to have you here for this unique experience that blends creativity, design, and hands-on craftsmanship. In this workshop, you'll embark on an imaginative journey to construct your very own Floating table—a piece that challenges perception and delights the senses.

Throughout the session, you'll learn the principles of optical illusion in design and how to apply them in woodworking. Taking traditional crafting to the next level, this workshop introduces you to cutting-edge techniques like **laser cutting** and **CNC routing**—essential tools for modern makers. Whether you're a complete beginner or have prior experience, this hands-on experience is designed to be engaging, accessible, and enjoyable for all.

Get ready to think outside the box, engage with fellow creators, and leave with a one-of-a-kind piece that not only serves a functional purpose but also sparks conversation and curiosity. Let's dive into the world of impossible designs and unleash your creativity!



## Event Outline

### 1. Introduction

- Welcome and introductions
- Overview of the workshop goals and schedule
- Explanation of what an "Floating-table" is and examples of optical illusions in design

### 2. Design Fundamentals

- Discussion of design principles behind creating an optical illusion
- Presentation of various impossible table designs (e.g., Penrose table)
- Overview of the materials and tools that will be used

### 3. Planning and Measuring

- Tips on measuring and marking wood accurately
- Discussing the structural integrity of the design

### 4. Cutting and Shaping

- Hands-on session where participants cut wood pieces according to their designs
- Guidance on using saws and safety measures
- Techniques for achieving precise cuts and angles

### 5. Assembly Techniques

- Step-by-step guidance on assembling the table structure
- Tips for ensuring stability while maintaining the illusion
- Participants assemble their tables with supervision

### 6. Creating the Illusion

- Guidance on how to add elements that create the optical illusion
- Participants add finishing touches to their tables

### 7. Show and Tell

- Participants showcase their completed impossible tables
- Discussion of design choices and challenges faced during the process
- Sharing ideas for future illusionary projects

### 8. Conclusion

- Recap of skills learned and experiences shared
- Q&A session

## Terms and Conditions

- No sessions will be repeated if a participant is unable to attend due to any reasons

## Event includes

- Free membership in mailing list to follow-up on program and intimation of relevant events/ funding
- opportunities from Venture Center
- Certificates will be given to only those candidates who complete the workshop assignments and have 100% attendance.



Schedule			
Time	Session	Venue	Faculty
09:30 AM-10:00 AM	Registration	Conference Room	Protoshop team
10:00 AM-10:10 AM	Welcome and background of Venture Center and Protoshop Introduction to Workshop agenda	Conference Room	Protoshop team
10:10 AM-10:30 AM	Theory session on Optical illusion and Tensigrity table design	Conference Room	Protoshop team
10:30 AM – 11:00AM	Morning snacks	Near Conference Room	
11:00 AM – 01:00AM	Session on techniques, process, equipment, and tools involved in crafting the wood	Protoshop	Protoshop team
01:00 PM-02:00 PM	Lunch	Cafeteria	
02:00 PM-05:00 PM	Hands on session for wood cutting, assembly and final finishing of the Tensigrity table	Protoshop	Protoshop team
05:00 PM-05:30 PM	Evening Tea and coffee		
05:30 PM-06:00 PM	Certificate distribution and event conclusion	Conference Room	Protoshop team

## Speakers



Himanshu is working as an Associate Protoshop in Venture Center. He has completed his integrated M.Sc. in Physics from the Center for Basics Sciences, Pt. Ravishankar Shukla University, Raipur, C.G. He is responsible for planning and execution of various services in Protoshop and providing high quality PCB layout designs to the clients.



Adarsh is working as a Senior Engineer – Product Design and Prototype. He is a Mechanical Engineer with 4 years of industry experience in product design of medical devices. Adarsh lives and breathes design and feels that through good design specialists in different fields can collaborate and create better living conditions for everyone.



Anjan is working as a Lead - Product Design & Prototyping in Venture Center. He is a Mechanical Engineer graduate from CMR Institute of Technology, Bengaluru. He is responsible for supporting the startups, innovators, budding entrepreneurs at Venture Center in Product Design and Prototype Development. He has specialization in designing of functional and non-functional prototypes, developing POC's, converting POC to Prototype and end Products, Reverse Engineering and also comes up with strong problem solving skills. He has been actively involved in the development of prototypes majorly in healthcare, automobile, renewable energy, biotech, cutlery, agro based, etc. He is also responsible for running facilities at Protoshop and also setting up technical and non-technical workshops at Protoshop.



## About the organizers



Protoshop combines Tinkering lab and Prayashala, which are the prototyping facilities at Venture Center. Protoshop is an initiative of Venture Center (a technology business incubator hosted by CSIR-NCL) with the generous support from in-house funds and the host Institution. It aims at providing services to the Inventors and Entrepreneurs to design and build their prototypes and bringing their ideas into life.

For more information about Protoshop: <http://www.protoshop.in/>



The Tinkering Lab is a facility developed and managed by Venture Center, NCL Innovation Park, Pune, India. The main aim of the Tinkering Lab is to help inventors and entrepreneurs to build prototypes of their ideas and generally “tinker” around exploring new ideas. The focus is on electronics, instrumentation and optics besides related prototyping and design.

For more information, visit <http://tinkeringlab.co.in/>



Entrepreneurship Development Center (Venture Center) – a CSIR initiative – is a Section 25 company hosted by the National Chemical Laboratory, Pune. Venture Center strives to nucleate and nurture technology and knowledge-based enterprises by leveraging the scientific and engineering competencies of the institutions in the Pune region in India. The Venture Center is a technology business incubator supported by the Department of Science & Technology’s National Science & Technology Entrepreneurship Development Board (DST-NSTEDB). Venture Center’s focuses on technology enterprises offering products and services exploiting scientific expertise in the areas of materials, chemicals and biological sciences & engineering.

For more information, visit: <http://www.venturecenter.co.in/>