

Specialization in

# Artificial Intelligence & Design Innovation

**Dive into the Future of AI-Driven Designs to Create  
Innovative, Intelligent Spaces**



# @ L.A.B.S is your Launchpad to lead the future of Design and Technology



We are an Action Oriented Lab for Advancements in Design & Technology



Ideas Powered by technology | Design meets Data | Global Mentors



Real World Projects | Industry Ready learning | Tech Driven Workflows



# COURSE DESCRIPTION



## WHAT IS THE ARTIFICIAL INTELLIGENCE PROGRAM BY @L.A.B.S. ?

### Unlock the Power of AI-Driven Design Ideation

Discover AI tools tailored to the ideation and early design stages, from generative modeling to advanced design automation

### Lead with Intelligent Conceptualization

This course empowers architects to leverage AI for enhanced creativity, precision, and efficiency, pushing design boundaries from the start

### Envision Adaptive, Innovative Designs

Integrate AI insights to refine your ideas, streamline workflows, and create groundbreaking architectural concepts with ease



# FEATURES

## DISCOVER

**20<sup>+</sup>** *AI TOOLS*

**5<sup>+</sup>** *MACHINE LEARNING  
APPLICATIONS*

## DEVELOP

**Create your Own AI Custom Models**

**Machine Learning Essentials**

**Iterative Design Refinement**

**Advanced Prompt Engineering**

**Integration of Individual Projects**

**Future Proofing AI**



# INDUSTRY

## CREATE

Diverse  
Design  
Iterations

## CURATE

Custom workflows  
for optimized  
outputs

## CULTIVATE

Data driven  
realistic  
outputs

*Transform Your Career with AI-Driven Design Skills for Tomorrow's Architectural Innovations*

**GAIN COMPETITIVE ADVANTAGE**

*With*

**ARTIFICIAL INTELLIGENCE**



# FRAMEWORK



## Learn From the Global Experts

Experts from multidisciplinary fields



## Practical Skills Development

Industry - Aligned Applications



## Career Guidance

Customized Career Development Plans

## PEDAGOGY

- **LIVE CLASSES** : All classes are conducted live
- **FREQUENCY** : 2 classes per week, Each class is 2 hrs
- **STRUCTURE** : Organized into 4 modules - Beginner to Advanced
- **SUPPORT** : Each module includes support and query sessions
- **TOTAL DURATION** : 50+ hrs over 12 Weeks



# CURRICULUM

## LEARN - Foundation

*Fundamentals of AI, generative design, and text-to-image workflows for architecture*



### Introduction to AI in Architecture

- ❑ **AI CONTEXT** : What is Generative AI, how it works, and its evolution
- ❑ **TIMELINE** : Key models, tools, and breakthroughs shaping design workflows
- ❑ **APPLICATION** : Role of AI in architectural thinking, ideation, and communication

### Design Iteration with AI (Image-to-Image)

- ❑ **ITERATION** : Convert sketches & massing models into refined outputs
- ❑ **CONSISTENCY** : Maintain materials, elements, and spatial coherence
- ❑ **REFINEMENT** : Explore variations to evolve design direction

### Concept Development and Presentation

- ❑ **EXTRACTION** : Derive spatial logic, proportions, and details from references
- ❑ **TRANSLATION** : Convert ideas into visual narratives using AI
- ❑ **PRESENTATION** : Build client-ready concepts and pitch visuals

### AI Rendering and Workflow Integration

- ❑ **PLUGINS** : Integrate AI into Rhino, SketchUp, Revit workflows
- ❑ **RENDERING** : Use AI tools for fast, high-quality visual outputs
- ❑ **VIDEO & MOTION** : Generate walkthroughs, camera paths, and spatial storytelling

MidJourney | DALL.E | Leonardo | Krea | Prompt Templates | Discord



# CURRICULUM

## APPLY - Intermediate

*Use multiple AI systems to expand workflows and generate design outputs*



### AI Assisted Design Systems

- ❑ **DESIGN AGENTS** : Understand AI-driven design assistants
- ❑ **WORKFLOWS** : Structure design processes using AI logic
- ❑ **APPLICATION** : Use AI as a collaborator in real-time design

### Prompt Engineering for Design

- ❑ **STRUCTURE** : Build effective prompts for consistent outputs
- ❑ **PRECISION** : Control style, geometry, and visual direction
- ❑ **ITERATION** : Refine outputs through prompt evolution

### Real Time Visualizations and Walkthroughs

- ❑ **LIVE WORKFLOWS** : Generate outputs in real-time
- ❑ **VISUALIZATION** : Create immersive walkthroughs using AI
- ❑ **COMMUNICATION** : Translate concepts into interactive experiences

### Tool Marathon [ Cross-Disciplinary]

- ❑ **ARCHITECTURE** : AI tools for spatial and built environments
- ❑ **CROSS INDUSTRY** : Applications in interiors, fashion, product design
- ❑ **VIDEO AI** : Real-time rendering and video generation systems

Runway ML | Pika | Luma AI | Kaiber | LookX | Rendair | Veras | Tripo 3D



# CURRICULUM

## BUILD - Advanced

*Develop systems, automate workflows, and integrate AI into design processes*



### Spatial Planning with AI

- ❑ **PLANNING** : Residential, institutional, and housing layouts
- ❑ **TOOLS** : Explore Finch 3D, Swapp AI for automated planning
- ❑ **APPLICATION** : Use AI for early-stage spatial decision-making

### Parametric and Generative Workflows

- ❑ **LOGIC** : Inputs, rules, and outputs in generative systems
- ❑ **AUTOMATION** : Use AI with parametric tools like Grasshopper
- ❑ **SYSTEMS** : Build repeatable and scalable workflows

### Automation in Design Processes

- ❑ **EFFICIENCY** : Automate repetitive design tasks
- ❑ **WORKFLOWS** : Streamline modeling and iteration pipelines
- ❑ **INTEGRATION** : Combine AI with existing computational tools

### AI in Architecture - Global Perspective

- ❑ **CASE STUDIES** : AI-driven projects from across the world
- ❑ **INSIGHTS** : How firms are integrating AI in practice
- ❑ **FUTURE** : Emerging directions in AEC and computational design

Rhino | Grasshopper | Finch 3D | Python (Basics) | Stable Diffusion | Agentic AI



# CURRICULUM

## SCALE - Expert

*Translate AI outputs into advanced systems, storytelling, and custom models*



### NeuroAI and Behaviour - Driven Design

- ❑ **DATA** : Use emotional and behavioral datasets for design
- ❑ **ANALYSIS** : Interpret human responses to spaces
- ❑ **APPLICATION** : Design environments based on behavioral insights

### Urban Intelligence and Data Systems

- ❑ **DATABASES** : Build city-scale datasets
- ❑ **DIGITAL TWINS** : Understand and simulate urban systems
- ❑ **APPLICATION** : Translate data into spatial strategies

### Precision Design with Comfy UI & ControlNet

- ❑ **INTERFACE** : Learn nodes, workflows, and pipelines
- ❑ **CONTROL** : Use depth, edge, and segmentation for accuracy
- ❑ **CONSISTENCY** : Maintain style using references and controls

### Custom Models and LoRA Workflows

- ❑ **TRAINING** : Build custom AI models based on your design language
- ❑ **DATASETS** : Prepare and structure training data
- ❑ **CUSTOMIZATION** : Apply LoRA models to real projects

Comfy UI | ControlNet | LoRA | Dream Booth | Segment Anything (SAM) | OpenCV | TensorFlow | PyTorch



# CURRICULUM

## @ LABS Personalized Learning

The @LABS Personalized Learning Track is a 2-week add-on offering 1-on-1 mentorship with a global expert to work on a project or skill of your choice

### *PERSONALIZED TRACK FLOW*



#### **Define Path**

Select your focus area  
Match with a mentor and set clear goals



#### **Build & Refine**

Attend mentor-led working sessions  
Submit final work and receive expert feedback

### *CUSTOM LEARNING, REAL IMPACT*

- **PERSONALIZED LEARNING** : Focused growth in your area of interest
- **EXPERT GUIDANCE** : Expert feedback tailored to your goals
- **STRONG PORTFOLIO** : Portfolio-quality output with mentor backing
- **REAL EXPOSURE** : Exclusive networking & publishing opportunities



# CAREER SUPPORT

## @ LABS Career Support & Networking

**Helping learners and professionals explore curated, Career paths, Access mentorship, and Build Global networks**

whether you're

**Emerging Professional | Upskilling | Shifting Domains**

### HIGHLIGHTS

#### **Career Consultations**

Personalized guidance on your goals, strengths, and roadmap

#### **Application Support**

Expert reviews for your CV, SoP, portfolio, & LinkedIn

#### **Global Connect Network**

Curated Introductions to firms, labs, and institutions worldwide

#### **Masterclasses & Panels**

Live sessions with global experts in AI, urbanism, design, and more

#### **Global Program Guidance**

Support for applying to master's, fellowships, or PhDs

Career Clarity | Global Exposure | Personal Branding

Lifelong Access | Expert Guidance | Curated Connections

*You don't need to be enrolled in a course to participate, This program is open to all*



# MENTORS



**Aishwarya Arun**

Computational Designer  
Tech Developer



**Vasudha karnani**

Architectural Technologist  
AI Optimization Specialist



**Muskan Goyal**

Design Technologist  
Computational Designer



**Preetam S. P**

Lead Computational Designer



**Fernanda R. Orviz**

UX Designer  
Architect



**Shamanth Thenkan**

Product Specialist



# MENTORS



## Disha Shetty

Environmental Analyst  
Building Performance Analyst

Zaha Hadid Architects



## Kriti Nirmal

Urban Policy Analyst  
Digital Governance Specialist

GOVERNMENT OF GUJARAT



## Maria Augusta Kroetz

Mobility Planner  
Urban AI Specialist

 Systematica



## Pushkar Runwal

Teaching Associate  
Urban Technology Consultant

 THE URBAN LAB



## Yohan Wadia

Geospatial Analyst  
Urban Planner

 Q LABS



## Parshav Sheth

Big data Analyst  
Academician

 Q LABS



# TESTIMONIALS



## Aparna Surve

**Dean** - D.Y. Patil, School of Architecture, navi Mumbai

This workshop exceeded all expectations, moving past traditional methods to equip future architects with innovative skills! It's packed with creative insights and hands-on experiences that make integrating AI into architectural design exciting and accessible. I highly recommend it to anyone looking to explore how AI can enhance their design process—get ready to unlock new possibilities!



## Anushka Shetty

**Final Year Student** - Balwant Sheth School of Architecture, Mumbai

My experience with the urban design module at @L.A.B.S. has been incredibly rewarding! Exploring innovative software for data-driven design was both enjoyable and engaging. I enhanced my design skills and learned to represent data in eye-catching ways. Mastering these tools will benefit my future projects and seamlessly integrate data analysis into my designs. Overall, this journey at @L.A.B.S. reignited my passion for creative and analytical design strategies!



## Mehar Kalra

**Project Engineer** - CEPT Research & Development Foundation

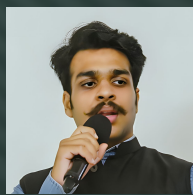
Engaging with @L.A.B.S. has been a true technological awakening. Their insights into how AI and Big Data are revolutionizing urban planning revealed the potential for smarter, data-driven decision-making. I learned about practical applications and scaling these technologies to address real-world urban challenges. This experience deepened my appreciation for the vital role technology plays in shaping adaptive, future-ready cities!



## Manmath Dhongle

**Master Student** - D.Y.Patil School, School of Architecture, Navi Mumbai

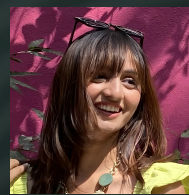
I had a fantastic time at the workshop at DY Patil School of Architecture with @L.A.B.S., where I discovered how AI can transform our understanding of urban environments! I didn't just work with AI; I lived it! We explored how AI breaks down different parts of a city into colorful sections, making analysis fun and easy. The AI-generated visuals really brought the layout to life. Overall, it was an enlightening experience, and I loved the insights shared during the session!



## Akshat Agarwal

**Final Year Student** - Balwant Sheth School of Architecture, Mumbai

I learned more in three months than in my entire four years of bachelor's! Attending the course at @L.A.B.S. was incredibly enriching. From extracting data with Google Maps and Google Earth Engine to mastering data representation, every moment was packed with knowledge. The highlight was critically examining how data is represented, allowing me to create various maps and determine which ones work best for different data types. I highly recommend this course to anyone interested in advanced urbanism!



## Dhruvi Rathod

**Master Student** - IDPT SCET School of Architecture, Surat

I want to express my heartfelt gratitude for the fantastic workshop on AI workflows for architects at @L.A.B.S.! The sessions on AI models and their practical applications were enlightening and fun. The hands-on activities sparked my creativity and provided valuable insights that will elevate my future projects. Thank you for such an amazing experience that turned complex concepts into exciting possibilities!



# PROGRAM INVESTMENT

## INDIA

Total Program Fee

₹ **69,000**

(Incl. Taxes)

## ABROAD

Total Program Fee

\$ **690**

(Incl. Taxes)

Payment Types Accepted



## EMI Options Available

If you need to Avail EMI Options Reach out to us and our support team will guide you





**LABS**

**EMPOWERING INNOVATION IN DESIGN & TECH**

**THROUGH REAL-WORLD EDUCATION**

**Start Application**



To know more about Enrollments contact us at  
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<https://www.labsonline.in/>

