

ideaspedia Young Tinker ACADEMY 2024-25 Cohort

Ideaspedia's Engineering Program

Learn problem-solving by actually doing it

24 students
Selection per batch in each cohort

6 months
Program duration

1000+ hours
Access to all high-tech machines/ tools

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Introduction

About the program

Introducing the Ideaspedia's Engineering Program (IEP), specifically designed to empower students to engineer solutions to real-life problems. IEP equips students from grades 6 to 12 with essential engineering skills and a problem-solving mindset. Divided into Junior Division (grades 6-8) and Senior Division (grades 9-12), this program offers a unique blend of technical training and innovative thinking.

Our goal is to nurture problem solvers who can tackle challenges creatively and effectively. Many of our graduates have gone on to attend prestigious international universities and have launched startups addressing real-world issues. Join us to prepare for a future of limitless possibilities.

Best suited for:

Admission to international university

Aspiring Entrepreneurs

About us

Young Tinker is a community of learners driven by purpose. The name “Young Tinker” signifies a student-centric approach to learning by doing. Our students discover their purpose through the cultivation of critical thinking, creative imagination, problem-solving abilities, effective communication, and hands-on STEAM skills.

ideaspedia is a state-of-the-art facility by Young Tinker, fully equipped with 3D printers, laser engraving machines, electronics, mechatronics, and everything you need to create prototypes that solve real-world problems.

Program Details

Our 6-month program is entirely hands-on, guiding students from basic tinkering to advanced product development. Designed to be engaging and practical, each student begins with foundational skills and progresses to sophisticated engineering projects. Through this journey, students learn to identify problems and cultivate a problem-solving mindset using design thinking principles. This approach not only equips them with technical expertise but also fosters creativity and innovation.

1st Month	Self Discovery	Design Thinking
2nd Month	Intro to Hand tools	3D Printing & Design
3rd Month	Electronics	Hardware Coding
4th Month	Wood Working	Advance Prototyping
5th Month	Problem Identification	Problem Solving
6th Month	Product Development	Shark Tank Type Pitch

2 session per week (3 hours each) • **6** days a week- open access to our facility* • **6** months of offline program

*All students will have access to our facility with a prior appointment scheduled at least one week in advance.

Soft Skills gained

Design Thinking

Team Work

Solver mindset

Presentation Skills

Out of the box thinking

Leadership

FATAC

Design Thinking For Life.

Young Tinker, a specialized pedagogy designed for school students, crafted to make learning intuitive and accessible. Our unique approach is centered around the FATAC framework—Feel, Align, Think, Act, and Check. This method simplifies complex concepts: Feel encourages empathy, Align defines problem scopes, Think fosters ideation, Act drives prototyping, and Check ensures thorough testing.

Anil Pradhan
Chief Education Officer

Vaishali Sharma
Chief Operating Officer

Former Member, National Innovation Start-up Policy for Schools,
Ministry of Education, Govt of India

Top 130 women transforming India
NITI Aayog, Govt of India

Highest award for youths in India
National Youth Award, Govt. of India

Breakthrough of the Year
Berlin Science Week, Germany

At Young Tinker, we prioritize ICE for each student: Intent, Content, and Environment. By nurturing students with clear intent, relevant content, and conducive learning environments, we empower them to excel. Our belief in these foundational principles ensures that every learner thrives, achieving their fullest potential through hands-on exploration and innovative thinking.

Intent

Content

Environment

Our Facility

Out of the box learning facility

Our state-of-the-art prototyping facility, "Ideaspedia," offers extensive fabrication capabilities including woodworking, 3D printing, electronics, and laser engraving. Ideaspedia provides students with an exceptional, out-of-the-box learning environment, enabling them to transform their innovative ideas into tangible creations. This facility empowers students to explore, experiment, and excel in hands-on learning, fostering creativity and technical skills.

- Workbenches
- 3D Designing
- Marking Tools
- Wood Working Tools
- Hand Tools
- Measuring Tools
- Laser Machine
- CNC Router
- 3D Printing
- Hardware Coding
- Material Engineering
- Mechatronics

Admission Criteria

Who can join?

Young Tinker's Ideaspedia is seeking students with the potential to lead tomorrow's innovative world. Our goal is to nurture and groom the next generation of innovators who will drive global change. We are committed to evaluating all applicants based on the following criteria to identify those with the passion and drive to make a significant impact.

Age
Students from age 10 to 18 are eligible to apply.

Pre-Tinkering Assessment
Performance in Pre-Tinkering Assessment.

Extra Curricular Activities and Projects
Applications would be evaluated for extracurricular achievements and projects.

Communication, Creativity & Teamwork
We will assess these qualities through your application essays, in-person business simulation and personal interviews.

How to join?

Submit the Online Application
If you're eligible, complete and submit the online application form by submitting a fee of INR 500.

Assessment and In-Person Interview
Based on an assessment, selected applicants will be invited for an interview with our mentors.

Admission Decision
Successful students will receive an offer to join the program.

Program Fee

The program fee is **INR 1,45,000** for the entire duration. This includes the cost of the kit, mentorship, equipment usage, and a 6-month membership for access to all facilities.

Our Alumnus

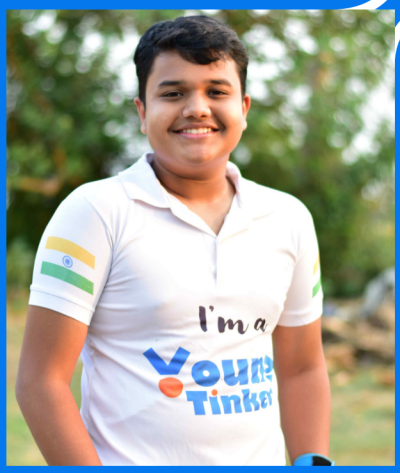
Our success is reflected in our alumni. Our students have gained admission to some of the best international universities and have become successful entrepreneurs. This program has not only aided them in their college applications but has also instilled a mindset change that empowers them to solve real-life problems effectively.

Siddhanth Ghosh, YT Batch 23
Sophomore, Purdue University

He was a student from The Bombay International School, Mumbai. He was part of the Young Tinker team for NASA Rover Challenge 2023 where he won a category award. Currently pursuing a Bachelor of Science in Engineering in Aerospace Engineering at Purdue University College of Engineering, specializing in C++, Java, and simulation engineering. Engaged with the Purdue Space Program, he builds tools in MATLAB and Python, validates rocket trajectory models, and serves as Project Manager for the EPICS Global Air Quality Trekkers.

Shreyansh Vikas Mishra, YT Batch 21
National INSPIRE Awardee, Govt of India

Shreyansh is an accomplished young innovator recognized for his groundbreaking work in posture monitoring technology, securing multiple patents by GoI. He has been honored with the Govt of Japan's Sakura Science Exchange Program membership and excelled in international competitions such as the Singapore Maths Global Finals and AMO. His achievements also include prestigious awards like the INSPIRE MANAK and Young Achiever Edugraph awards. Shreyansh has undertaken an AI internship at the University of Oxford, further enhancing his expertise in technology and innovation.



Sai Akshara Vemuri, YT Batch 23
Sophomore, Georgia Tech University

Sai Akshara Vemuri is a former student of Delhi Public School, Vijaywada where she received the Best Outgoing Student Award and a Gold Medal. She also spoke at TEDx Naperville, USA. She is a Hatrick World Record Holder for reciting the highest number of decimal places of root 2 value in the fastest time and have received appreciation letter from the Vice President of India. She is a national archer. She has started various clubs like "The Astro Club", President of Rotary Interact club. She received the NASA HERC 2023 Social Media Award as the Student Safety Officer of her team.

Rishikesh Amit Nayak, YT Batch 21
Founder, Daira

Rishikesh Amit Nayak, a passionate innovator and social entrepreneur, is the co-founder of Daira-Edtech. Recognized for his pioneering work in technology and education, Rishikesh has represented India at prestigious events like the NASA Human Exploration Rover Challenge and Intel Vision, USA. His innovative spirit and commitment to social change have earned him accolades such as the Ashoka Young Changemaker Award and the Indian Representative title at Intel AI Everywhere. Rishikesh continues to inspire and empower through his initiatives, leveraging technology for sustainable impact.

Student Teams

Each year, Young Tinker Academy selects 10 exceptional students from across India to participate in NASA's Rover Challenge. In this prestigious competition, students work in teams to design, ideate, and prototype a rover, culminating in testing their creation at NASA's Marshall Space Flight Center in Alabama, USA.

Our teams participated in 2021 and 2023, earning three awards, including a global rank of 3. The images below capture the memorable award ceremony of 2023.

Gallery




WRENCHES
YOUNG TINKER SPACE
MECHANICAL TOOLS
PLANES
CLAMPS



SELECTIVE LASER SINTERING
5 AXIS CNC MACHINING
VACUUM CASTING




What will

Our Awards

Sony Heroes Behind The Heroes

3M-CII Social Impact Award

The Science Breakthrough of the Year

World Rank 3, NASA HERC 2021

National Youth Award

TEDx Speaker Recognition

STPI Award of Excellence

Contact Us

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