STUDENT PROJECT HOUSE 2025

THE MAKER-INNOVATOR'S JOURNEY

The bioprinter project Octaris is active in the Life Science Lab and Makerspace. Explore this and many more learning journeys from the Student Project House.

ETH STUDENT PROJECT HOUSE

SPH.ETHZ.CH

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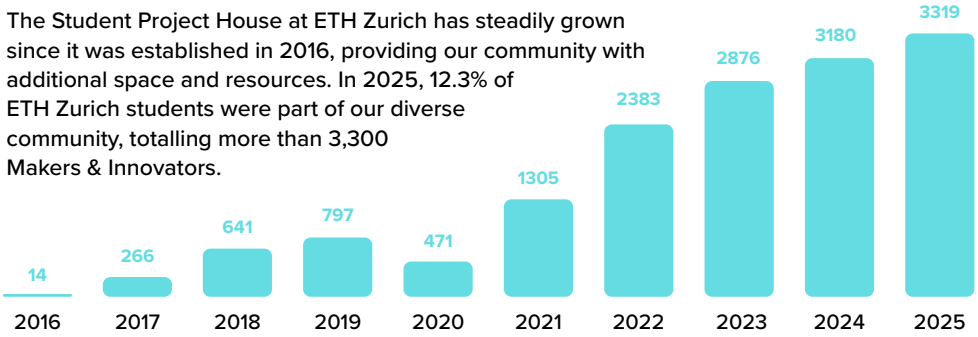
A MODEL FOR PROJECT-BASED LEARNING

The Student Project House at ETH Zurich has steadily grown since it was established in 2016, providing our community with additional space and resources. In 2025, 12.3% of ETH Zurich students were part of our diverse community, totalling more than 3,300 Makers & Innovators.



3300+ MAKERS & INNOVATORS

The Student Project House is a lighthouse that enhances traditional education and serves as a model for collaborative and project-based learning at ETH and beyond.

Prof. Dr. Günther Dissertori
Rector of ETH Zurich

OUR FUTURE GOALS

- Relocate the **Life Science Lab** to a larger lab of our own with upgraded equipment
- Establish an ETH-wide **Makerspace** where students can work on curricular projects
- Launch a cutting-edge **Food Lab** to drive innovation in sustainable food solutions
- Bring the **Center for Students & Entrepreneurs** to life by **2029 groundbreaking**, shaping the future of hands-on innovation

OUR JOURNEY BEGAN

... by supporting students and their ideas, providing a space to explore and develop projects.

We soon realised we could engage even more students by nurturing their natural curiosity and helping them develop the Maker-Innovator Mindset – even if they didn't have a concrete project idea. This insight sparked a natural evolution of our vision and approach.

OUR VISION

Students shape a better world by creating and innovating sustainably.

Our goal is to empower every student to become a maker and innovator with the mindset and skills to craft sustainable projects with positive global impact.

JOIN US ON OUR MISSION

Building on students' curiosity, we inspire and empower students to develop a Maker-Innovator Mindset.

At the Student Project House, we believe all students are naturally curious. We help nurture this spark with opportunities that ignite their inspiration and creativity, whether they have an existing project idea in mind or not.

THE LEARNING JOURNEY

Students develop the Maker-Innovator Mindset that allows them to solve problems, adapt, and find creative solutions.

The hallmarks of the Maker-Innovator Mindset

You can do it
Students gain confidence to innovate boldly.

Fail forward
Students learn that failure is an opportunity to grow.

Better together
Students engage with a supportive, active, peer-to-peer community.

Seek diverse views
Students become curious about people, projects and perspectives.

Enjoy creating
Students explore, prototype early, and enjoy experimenting.

Test and adapt
Students rethink assumptions and adapt to real-world needs.

"Working as a team allowed us to divide responsibilities efficiently, combining our skills in tech, business, and design. The feedback and guidance from SPH helped us grow both as individuals and as co-founders working toward a shared vision."

"When faced with controversial opinions, I've learned to give myself the time to digest the information and see things from different perspectives. Similarly, if I encounter a blockage, I now know to work on another issue and return to the original one later with a fresh perspective."

"I learned that you lose fear of perfectionism, it doesn't need to be perfect, and you can also always ask others without feeling bad."

The Student Project House provides students with a unique environment where they gain meaningful experience and develop the competencies to drive positive change.

Dr. Judith Zimmermann
Head of Unit for Teaching and Learning

PROJECT SUPPORT

From curiosity to creation

We meet students where they're at. We guide them through self-driven learning experiences that inspire them to follow their curiosity, discover their passion, and take the first steps in their innovation journey. All through a unique, student-led approach which fosters career and personal development.

Thanks to our workshops, peer support and coaching sessions, students learn by doing, at their own pace. No clear project idea? No problem. This isn't about the destination: it's about building confidence, resilience, and a curious Maker-Innovator Mindset.

Without academic pressure, students can lean into their innate motivation to innovate and take full ownership of their projects. With access to SPH's co-working spaces, events, toolkits, and funding opportunities, students benefit from a collaborative environment that pairs structure with flexibility. This empowers them to turn their ideas into reality while expanding their skills and experience.

MAKERSPACE & LAB

Where students chart their own path

The Makerspace & Lab are dedicated spaces for hands-on exploration. Access to tools, machines and workshops allows students to build skills, increase confidence and develop prototypes.

Across the **Makerspace**, students can test, build, and refine their ideas in a real-world environment using tools for prototyping, 3D printing, laser cutting, textiles, and fabrication.

The new **Wood Studio** provides students with access to professional woodworking tools and support from the SPH carpenter.

In the **Metal Studio**, opening in Spring 2026, students can experiment with metalworking and advanced manufacturing techniques to deepen their fabrication skills.

In the **Digital Makerspace**, students work with digital and interactive technologies such as coding, electronics, AI applications, and immersive experiences using AR and VR.

The **Life Science Lab** allows students to explore life sciences and conduct experiments in a biosafety level 1 environment.

149

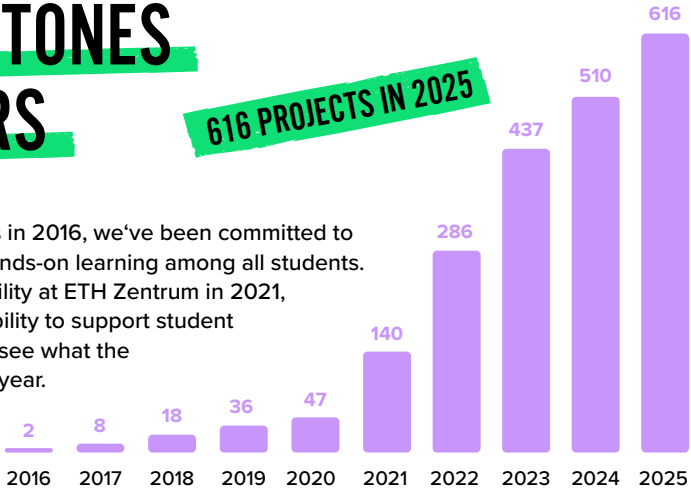
Machines and devices are available for exploring & prototyping.

Turn the page to find out how a student started to recycle Makerspace 3D printer waste.

OUR MILESTONES IN NUMBERS

616 PROJECTS IN 2025

Since we opened our doors in 2016, we've been committed to fostering innovation and hands-on learning among all students. With the opening of our facility at ETH Zentrum in 2021, we greatly increased our ability to support student projects. We are curious to see what the numbers show for our 10th year.



729

Participants joined the **81 workshops** across all units of SPH.

36

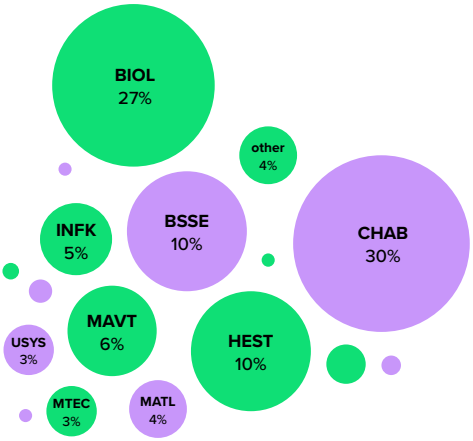
Students volunteered to support our makers in the Makerspace.

207

Users received support from the **Life Science Lab.**

73%

The percentage of projects focused on **environmental and/ or social impact.**



A new wave of makers

The Life Science Lab became a fully established part of the Student Project House in 2025, unlocking a new segment of the ETH community. While life science disciplines naturally lead the way, **over 23%** of our lab users joined from non life science departments. This broad participation proves that the lab successfully drives interdisciplinary collaboration.

OUR IMPACT

Beyond the curriculum: what students learnt at SPH in 2025

At the Student Project House, students enhance the skills acquired through their studies by developing additional transferable competencies. This added value is reflected in the 2025 survey data*: 70% of students rated their learning at SPH **as very or extremely** relevant to their future careers, and 80% cited it as essential to personal development.

1. Professional Execution

A majority of students agreed that their time at SPH had helped them move from abstract theory to concrete delivery, mastering the decision-making and management skills required in industry.

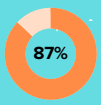
Decision-making
Improved decision-making skills

Project Management
Enhanced project management skills

*Based on 2025 Survey Data (N=398)

2. Collaborative Environment

Learning to lead and co-create in an interdisciplinary environment is another major benefit cited by students involved in projects at SPH.



Cooperation & Teamwork
Improved ability to build relationships with others to pursue common goals

Communication
Enhanced their ability to communicate with others in different contexts and forms

3. Navigating Uncertainty

Building the resilience to innovate without a clear syllabus or fixed answers is a huge part of the extracurricular focus at SPH.
A majority of students said their time at SPH helped them deal well with changes.

Creative Thinking
Improved ability to build relationships with others to pursue common goals

LIFE SCIENCE LAB

217 days of discovery

In 2025, the Life Science Lab transitioned from the pilot phase into full operation. The lab was active for 217 out of 245 working days – an occupancy rate of 89% – and supported 40 projects.

But we offered far more than just a bench. Our active support in experimental design and logistics helped students resolve key project hurdles, leading to high satisfaction ratings. We welcomed visits from our generous donor, the Georg H. Endress Stiftung, and the Rector of ETH Prof. Dr. Günther Dissertori, who recognised the lab as a globally unique resource for student-led work. Big wins included a one-time SARSTEDT AG product donation and their funding of a yearly consumables grant.

After receiving the LEAF Green Lab Certification in 2025, the lab hosted 17 workshops that introduced 111 participants to the wet-lab environment, from testing cortisol levels in saliva to creating scarves dyed with bacteria. Accessible formats significantly broadened our demographic reach, achieving 63% female participation.

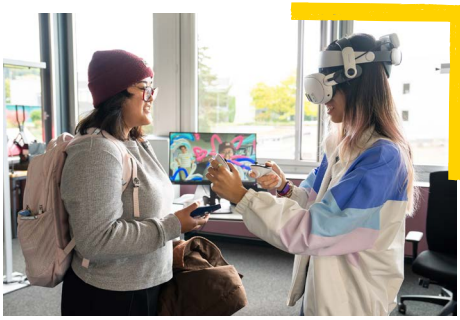
"Lab work in the SPH Life Science Lab is a completely different experience to pursuing a lab project independently. We learned so many basic skills we were lacking – like preparing media and how to plan an experiment properly – simply through collaborating and learning from others. We feel much more competent now thanks to SPH."

Vincent Peuker – Project PACE

DIGITAL MAKERSPACE

Learning experiences for digital skills and workshops to build students' familiarity with new technology is how the Digital Makerspace began. We used spatial design as a way for students to master professional workflows within VR headsets, and launched successful initiatives for building AI web apps. This, plus our focus on students' curiosity, effectively lowered technical barriers and made high-tech tools approachable for everyone. The strategy worked: 40% of our participants were female, and 80% of all students joined us from non-IT related departments.

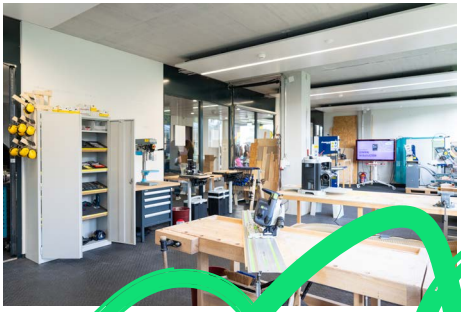
After the pilot phase and successful testing with students, the Digital Makerspace is ready to scale. This transition is only possible thanks to the support of the ZKB Philanthropie Stiftung, who have pledged funds to the Digital Makerspace for the next three years. This partnership will allow us to build a dedicated Digital Makerspace Studio and hire a Digital Catalyst.



MAKERSPACE WOOD STUDIO

Making woodworking accessible

The Wood Studio is a hands-on space for students to explore woodworking with access to high-quality tools and a professional carpenter. Since its reopening and consolidation at Hönggerberg in autumn 2025, over 130 students have participated in 33 studio introductions. In the 2.5 months to the end of the year, an additional 110 independent usage sessions had already been completed.



OCTARIS

AN OPEN-SOURCE 3D BIOPRINTER

Collaboration & experimentation in the Life Science Lab

Driven by a desire to make bioprinting more accessible, four ETH Zurich students built a 3D bioprinter to connect the Life Science Lab and Makerspace. Bioprinting creates tissue-like structures by layering "bio-inks" composed of living cells and supportive hydrogel scaffolds. The group fabricated the device using an open-source protocol and validated it with initial test prints on fabric using bacteria. The team hope to establish a reliable printing workflow and eventually design and build an accessible bioprinter for students.

Learn more about Octaris

STARTUP

THE GAME THAT SIMULATES GROWING A COMPANY

Wiona Glänzer, D-BSSE PhD Student, wanted to create a game specifically designed for the thinkers and innovators who define SPH. The board game allows players to negotiate the highs and lows of building a company from scratch, from seed funding to expansion to the eventual exit stage. SPH offered Wiona a wide pool of potential players, offering invaluable lessons about tailoring a project to its ideal users. Presenting the prototype game at the Open Days helped Wiona to make design decisions based on user feedback, as well as providing the ideal testing environment.

SYNATURE

MONITORING ANIMALS THROUGH SOUND

synature.ch

Pairing bioacoustics with AI analytics

Master's graduate Noah Schmid (ETH) and Olivier Stähli (EPFL) were drawn together by a desire to monitor biodiversity – and the realisation AI could help. Not long ago decoding animal sounds required complicated field work. Noah and Olivier set about automating this work by combining bioacoustic monitoring tools with AI to provide a stream of continuous intelligence from animal sounds. They already had a strong technical foundation, but the platform provided by the Student Project House offered them visibility and fast-tracked their momentum, derisking the venture and accelerating their growth without compromising substance. Their team grew from two to seven, and client partnerships are now driving real-time decisions across conservation, agriculture and aquaculture.

RECYCLING 3D PRINTER

TURNING WASTE INTO 3D PRINTER FILAMENT

A move to make SPH more circular

When he discovered SPH was not yet able to recycle the waste plastic produced by its 3D printers, Felix Ludwig's idea was set in motion. Aiming to improve circular resource usage, he began producing filament for SPH's 3D printers recycled from the leftover plastic they generate. Using residual material from failed prints, past design iterations and support material, the plastic waste is separated, shredded and extruded into 3D printer filament again.

After learning that printer waste at the Makerspace was just accumulating, I gave it a go to see if recycling it was feasible.

Felix Ludwig, D-MATH MSc Student

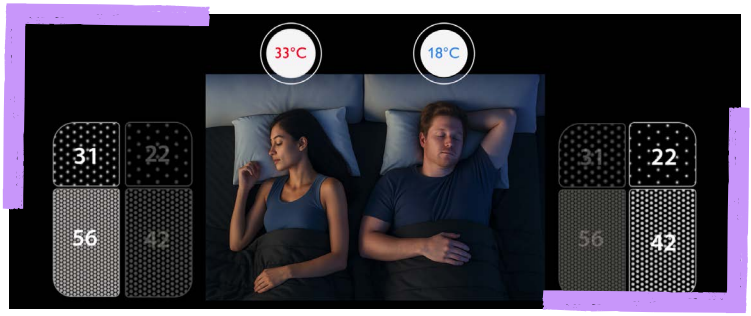
NOXBLANC

THE WORLD'S MOST INTELLIGENT MATTRESS

A testament to connections made at SPH

An enthusiasm for sport, healthy living and science led the team behind NoxBlanc – a collaboration between ETH Zurich students and other Swiss institutions - to develop their innovative mattress. Based on the latest research, the mattress uses AI to adjust firmness and temperature, and can incorporate sleep tracking technology on request.

Support from SPH proved invaluable in getting the project off the ground, helping the founders connect with their first employees, essential partners and a community that understood both the pleasure and challenges of building something from scratch together.



Learn more about NoxBlanc

We benefited greatly from talking to the other projects working at SPH, and proactively seeking advice from others.

NoxBlanc Team

BROWSER USE

TRANSFORMING WEBSITES INTO AI-FRIENDLY FORMATS

From SPH to $17 million in seed funding

Magnus Müller and Gregor Žunič were working on separate SPH projects when they realised they could combine their skills to create an AI browser tool. The pair's library converts websites into machine-readable formats that are easily interpreted by AI. The pair built Browser Use at SPH in weeks before making it open source. Their SPH beginnings allowed them to follow the seed of an idea just because it interested them, even though they were unsure of its initial application.

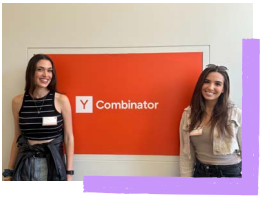
And this paid off: the decision to go open source drove rapid adoption and Browser Use now has a community of over 10,000 daily users with 3 million downloads a month. Four months in, the company raised $17 million in a seed funding round.

> **SPH helped us to realise building something was much more possible than we initially imagined.**
>
> Magnus Müller

VIBEFLOW

TRANSFORMING IDEAS INTO FULL-STACK WEB APPS

From SPH to Y Combinator



A conversation over lunch at SPH marked the beginnings of the idea that eventually became VibeFlow. The visual backend builder allows users to transform ideas into functional apps with one elegant solution - negating the need for complex code by combining UI, backend and database into a single platform. Female cofounders Alessia Paccagnella and Elia Saquand benefited from the collaborative environment at SPH, where being surrounded by likeminded creators fostered a unique sense of momentum and focus on building. In 2025 the startup raised $500,000 in preseed funding from Y Combinator as part of the accelerator's summer cohort.

Having a community of like-minded individuals really helps when it comes to brain-storming and problem solving. What SPH offered us is a good environment where we can openly discuss the issues that we are tackling and receive constructive feedback.

Project FachHR

OUR IMPACT: PEOPLE & PLANET

Nurturing a sustainability mindset

From sustainable making in the Makerspace to encouraging conscious design choices, this year we've committed to making sustainability part of our practice. We focused on 20 small, hands-on initiatives driven by students and staff – from smarter lab processes to rethinking waste. The result is not just measurable impact, but a growing sustainability mindset among future makers and innovators.

Read the full article here

Encouraging everyone to innovate

This year's aim was to lower the barrier for the first step – especially for those who had hesitated in the past. No big idea? No worries. Interactive elements such as jewellery workshops, textile work, and laser cutting at the Open Day invited visitors to try things out, without any pressure, letting their curiosity lead the way.

Clearer communications

We updated the SPH website to make our communications clearer and more user-friendly. Part of this involved making our language more inclusive, removing some of the barriers to female innovator involvement at SPH.

Launching our AI chatbot

We also introduced Andy Pawsibility, our playful panda chatbot. Rather than confronting students with forms and tabs, Andy offers an informal chat and then suggests three next steps – making guidance feel low-pressure and personal.

Learn more about Andy

THANK YOU FOR BEING THE WIND IN OUR SAILS

Student Project House is only possible thanks to the support of donors, sponsors, and volunteers who generously share their resources, time, and materials.

Thank you to each and every one of our supporters who made it possible for us to foster the Maker-Innovator Mindset among more than 3,300 students in 2025.

Reach out to Dr. Lucie Rejman, Head of the Student Project House, to find out how you can help us continue to chart our course.

lucie.rejman@sph.ethz.ch

"The ETH Student Project House offers students a unique opportunity: to experiment, learn from failure without the pressure of grades, and turn small ideas into significant ventures. Even when projects don't succeed, the insights gained are often more valuable than immediate success. This freedom, combined with exceptional coaching, outstanding facilities, and an inspiring culture, creates a powerful launchpad for young talent. That is why the Georg H. Endress Foundation is committed to providing ongoing support to the Life Science Lab."
Dr. Mirko Lehmann, President of the Georg H. Endress Foundation's Board of Trustees

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