



# STEM Centre<sup>EG</sup>

All students deserve to have access  
and opportunity to Science, Technology,  
Engineering and Mathematics education

IMPACT REPORT  
2016-2020

<sup>EG</sup> Ecolint

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## STEM Centre<sup>⚙</sup>

STEM – “Science, Technology, Engineering and Mathematics” – is an integrated and project-based approach to these disciplines whereby sciences and mathematics are learnt through transdisciplinary projects that use technology and the principles of engineering.

The STEM Centre provides particularly useful opportunities for meaningful, innovative practice that reflects the increasingly integrated nature of real-world scientific research

## THINK, CREATE, INNOVATE!

As a not-for-profit foundation, the total income earned by Ecolint is invested directly into its daily operations. This therefore means that any major development projects, such as this one, requires external funding and support for its completion.

*“The STEM Centre was built in collaboration with EPFL, one of the world's leading technical universities. From the architecture to the project-based learning design running through student work, the centre symbolises the interconnectivity, transdisciplinarity and spirit of innovation that characterise our Universal Learning Programme and what it means to be a learner in the 21<sup>st</sup> Century. Thank you to our donors for having the vision to support this magnificent centre”.*

**Dr Conrad Hughes**, Campus & Secondary School Principal

*“The STEM Centre is a place where students of all ages can blossom through curiosity, inquiry, problem-solving and collaboration. The space and its resources allow students to live authentic hands-on learning experiences that are divergent, non-traditional and transforming. As the STEM Director, I feel that it is crucial to foster, in an extra-ordinary space, every student's learning journey while developing competences for an ever-changing future”.*

**Marie-France Labelle**, STEM Director

## A HEARTFELT THANKS TO OUR SUPPORTERS!

Thanks to the generous philanthropic support of our donors, we have been able to walk the extra-mile and reach the below four objectives set at the project design phase :



### COLLABORATION

Facilitate cross-disciplinary communication and productive collaboration



### CRITICAL THINKING

Encourage divergence in thinking and experimenting through hands-on authentic learning and teaching opportunities



### CREATIVITY

Emphasize non-formal, non-traditional teaching and learning (inverted classroom)



### COMMUNICATION

Develop competences such as collaboration, creativity, critical thinking and communication

## YOUR IMPACT SINCE SEPTEMBER 2016

The support of our community was fundamental in realizing this exciting project. Many of you were very enthusiastic and convinced by the potential benefits of developing a conceptual and holistic educational approach in a first-class environment.

As a result, almost the entire investment need was financed through philanthropic gifts. Your support has helped us in realizing our dream to convert an unused space into a state-of-the-art 21<sup>st</sup> century education facility.

**Before....**



**After....**



**But not only....**



## YOUR IMPACT ON THE COMMUNITY WE SERVE

Since its inauguration and thanks to the support of our community, the STEM Centre is promoting STEM disciplines to many students and teachers.

Since its opening:

**439**

weekly  
registered  
students

**600+**

other  
students  
per year

**150+**

in-house  
teachers

have attended inquiry-based classes, extra-curricular activities, student-led clubs or events in the STEM Centre, allowing them to gather STEM knowledge, skills and experiences.



Every academic year, a robust and diversified programme as well as exciting events are proposed to our students, our community and beyond.

More info on <https://www.ecolint.ch/beyond-classroom/stem-centre>



**This impact has been created through many events, projects and trips organised by the STEM Centre and its students.**

**60** events per year

- Swiss Computer Science Education Week
- e-sports
- Safer Internet Day
- World Pi Day
- Designathon
- Fashion Show etc.

**54** educational STEM projects

- Lac Léman cleanup project
- Engaging for action
- Hydroponic garden
- Humanoid project
- Prosthetics for children in need
- Various Curricular Enhancement Projects etc.

**16** pedagogical trips per year

- S'cool Lab CERN
- Stellarium Gornergrat
- The Blue Brain Project
- Ecole à la ferme
- Euro Space Center
- Planetarium etc.

**Many extra-curricular activities, clubs and competitions have been organized and delivered in various ways:**

#### EXPERT TO STUDENT

**61** extra-curricular activities and workshops

- Programming & Robotics
- 3D Design & Printing
- Product Design
- DJing & Digital Music
- DIY Drones
- Prosthetics Club
- Fashion Design etc.

#### STUDENT-TO-STUDENT

**90** enrichment ULP clubs

- Scratch Programming
- LGB Tech Crew
- Maxwell's Demon Physics Club
- Medical Society
- Engineering Club etc.

#### STUDENTS TO THE OUTSIDE WORLD

**17** promoted competitions

- First Lego League Tournaments
- Swiss Young Physicists Tournament
- Maths ISMTF Competitions
- Physics Brawl etc.

## YOUR IMPACT OUTSIDE OF ECOLINT

Our donors have helped us create a collaboration platform between Ecolint and external organizations to share our knowledge as public good.

Thanks to the support of our donors, we have also been able to create a collaboration platform between Ecolint and external organizations to share our knowledge and experience as a public good. Partnerships with prominent companies involved in technology education have been setup and series of trainings are being given to external teachers and students:

**18**

partnerships  
with external  
organizations

- EPFL
- CERN
- Université de Genève
- FLL Hands on Technology
- Swiss Government
- TechLabs
- etc.

**128**

external teachers  
& assistants  
empowered to  
teach STEM

- South Asia Science Education Program
- Guest Speakers
- Workshop Leaders
- etc.

**160**

external  
students  
attended  
courses

- 90 Indian students through international cooperation programme
- 70 Swiss students through cooperation with Geneva's Department of Education (DIP)







## FEEDBACK FROM OUR COMMUNITY

"We need the STEM Centre because of all the creativity that happens there and also tons of teamwork"

**P. S., Year 7 student**

"In the STEM Centre, there is always something to do, something to improve and something to create"

**M. S., Year 8 student.**

"The STEM Centre provides me opportunities to run experiments, projects and clubs. The environment is more free than a classroom and the whiteboard wall really helps us organise our thoughts in the physics club"

**Q. Z., Year 12 student**

"Through the facilities and the help provided by the STEM Centre, I was able to explore and engage with topics such as drone racing which I would not otherwise be able to do"

**J. P., Year 13 student**

"My son seems to live in the STEM Centre. Since entering high school, he has been very involved organizing a rocketry club that makes heavy use of the STEM Centre's 3-D printers. His interest in CAD-CAM led to another project working with a student with a disability who needs a customized hand to overcome an impairment. His physics internal assessment involved an experiment that required more than a dozen rocket bodies with different nose cone shapes to test drag equations. The equipment in the STEM Centre helps, but my son also sees the staff as important mentors as he figures out what he wants to study in university, probably engineering"

**S. P., father of a student**

"The STEM Centre is such an inspiring place for the students! They create, they challenge themselves and they try to get ready to face the challenging world"

**I. V., mother of two students**

"As a parent of secondary school students active in the STEM Centre and as the PTA Liaison to the STEM Centre, I have seen numerous benefits of the STEM Centre for our students. The technology available leads students to stretch their imaginations, explore and create new mediums. Additionally, the centre has become a place of collaboration and sharing interest and ideas in the STEM fields with the added encouragement of creating. This is invaluable in the education of our students outside of the classroom"

**K. P., mother of 3 students and member  
of the Parents-Teachers Association**

## OUR PLAN FOR THE NEAR FUTURE

**On top of all STEM activities, we are developing initiatives and programmes to further enhance our students' experience, notably through:**

- STEM exchange programme with Collège Charles-Lemoyne in Canada
- STEM Creativity Activity Service (CAS) trip to Naisula School in Kenya for sustainability projects
- Partnership with the Office fédéral de l'environnement (OFEV) on transdisciplinary projects
- Professional Development for teachers at the Ecole Polytechnique Fédérale de Lausanne (EPFL)
- Students to take part in Monada Art & Fashion Show
- Integrate an International Baccalaureate Diploma Programme Computer Science course

**Thanks to the help of many members of the Ecolint community, we have built a first-class STEM Centre, where our students are exposed to a whole set of experiences, problem solving and transdisciplinary projects.**



**Based on this success and an increasing demand from students and their families, we are willing to leverage community support even more. Thus, we are actively seeking donations to enable the following opportunities:**

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• <b>STEM as a national training center for educators</b> on site trainings, exchange with other schools, conferences &amp; webinars</li> </ul>  | <ul style="list-style-type: none"> <li>&gt; CHF 10'000 to CHF 200'000</li> </ul> |
| <ul style="list-style-type: none"> <li>• <b>STEM as a beacon for innovation</b> expand our teaching body, invest in new faculty, activate foundation-wide sustainability initiative, complement specialized tools and equipment, expand extra-curricular opportunities</li> </ul> | <ul style="list-style-type: none"> <li>&gt; CHF 5'000 to CHF 500'000</li> </ul>  |
| <ul style="list-style-type: none"> <li>• <b>Extend STEM experiences</b> create online classes for access anytime anywhere, conferences with qualified experts</li> </ul>  | <ul style="list-style-type: none"> <li>&gt; CHF 5'000 to CHF 100'000</li> </ul>  |

# STEM SUPPORTERS AND PARTNERS










This dream has become a reality thanks to the generosity of some corporations and parents.

## Donors

 <b>PICTET</b> Fondation de bienfaisance du groupe Pictet		
<b>RICHEMONT</b>	 <b>UBS</b>	<b>loyco</b>

- The Ecolint-American Foundation
- Mr. Pereyma et Mrs. Kuleshova
- Mr. and Mrs. Marwan Shakarchi
- Mr. and Mrs. Lajos Varga
- The McCall McBain Foundation
- Anonymous donors

## Partners

<b>EPFL</b>	 <b>UNIVERSITÉ DE GENÈVE</b>	 MONADA	 Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra <small>Office fédéral de l'éducation OFEV</small>	 <b>TechLabs</b>
 HANDS ON TECHNOLOGY	 <b>EPFL ROCKET TEAM</b>	 <b>FIRST LEGO LEAGUE</b>	 <b>HPE LAB</b>	 <b>makeblock education</b>

# To sustain and develop this programme, we rely on the generosity of our school community and the support of our partners.

Join the many donors who built the Ecolint we know today and care for. It is also thanks to the philanthropists who preceded us that we can now benefit from many exceptional educational projects.

## How to make a difference?



Become an advocate, offering your voice and network.



Make a philanthropic gift to make the programme sustainable.



In case you have teaching skills, become a volunteer.

## How to make a gift?



Leave a gift in your will

Our planned giving officer is ready to support you, contact us: [legacy@ecolint.ch](mailto:legacy@ecolint.ch)



Make a one off cash donation



Make a recurrent monthly gift

## By banking transfer

Fondation de l'Ecole Internationale de Genève  
Account nb: 240-289946.22Z  
IBAN: CH22 0024 0240 2899 4622 Z  
SWIFT/BIC: UBSWCHZH80A  
Ref: 3996

## By credit card

On our website:  
[ecolint.ch/supporting-ecolint](https://ecolint.ch/supporting-ecolint)

**Tax-deductible donations of any size are making the difference. Building up to the total needs and showing best participation across the entire community. For benefactors domiciled in the USA or the UK, please contact us for additional information on tax incentives.**

## Contact

Our Development Office remains at your disposal for any question or conversation around this programme.

Website: [ecolint.ch/supporting-ecolint](https://ecolint.ch/supporting-ecolint)  
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