### STI

<table>
<thead>
<tr>
<th></th>
<th>IBI Bio</th>
<th>IEL EE</th>
<th>IGM ME</th>
<th>IMT Micro</th>
<th>IMX MAT</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>UG (3+2)</td>
<td>157</td>
<td>692</td>
<td>666</td>
<td>141</td>
<td></td>
<td>1656</td>
</tr>
<tr>
<td>MS (3+2)</td>
<td>167</td>
<td>271</td>
<td>231</td>
<td>118</td>
<td></td>
<td>787</td>
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<tr>
<td>PhD</td>
<td>165</td>
<td>256</td>
<td>109</td>
<td>195</td>
<td>146</td>
<td>871</td>
</tr>
<tr>
<td>Post-docs</td>
<td>91</td>
<td>49</td>
<td>39</td>
<td>73</td>
<td>84</td>
<td>336</td>
</tr>
</tbody>
</table>

150 PATT, PA, PO, PT, MER; 1700 UG students; 2000 graduate students and postdocs; plus 100+ staff; plus satellites (Neuchatel, Geneva, Sion, …).
Create a larger sense of belonging, ownership, participation, sharing of information, open discussions, strategic brainstorming, ...
Broad Goal for STI

Strengthen the standing of EPFL as a powerhouse in engineering education, research, and innovation.

STRATEGY:
- Establish a clear organizational structure.
- Instill a culture of institution building.
- Implement a vision for the School.
- Have clear standards and expectations.
- Promote teamwork and participation.
## School Structure

### SCHOOL BOARD

<table>
<thead>
<tr>
<th>Human Resources</th>
<th>Associate Dean for Research</th>
<th>Associate Dean for Education</th>
<th>Associate Dean for Industry &amp; Innovation</th>
<th>Chair, Committee on Academic Affairs</th>
<th>Institute Directors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget &amp; Finance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Space &amp; Infrastructure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information &amp; Educational Technology</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Media &amp; External Affairs</td>
<td></td>
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</table>
Engineering in the 21st Century

- Nontrivial transformations in the engineering field: large complex problems involving multiple disciplines.

- Successful engineering schools will be ones that not only encourage, but also expect, their faculty and students to step across boundaries.
We can create a lasting impact for EPFL by contributing to disruptive trends in engineering:

(1) **Convergence of life sciences & engineering**;
(2) Blending of the **virtual/physical worlds; autonomous systems**;
(3) **Smart & renewable resources/materials/energy**;
(4) **Data & network sciences**, computing, security, and privacy.
Consequential Transformations

These trends:

- Create possibilities for **interactions** with other schools;
- Drive the creation of **new jobs** for our students.

As such,

(5) The **curricular activities** of our programs need to evolve in step with these developments.
Leadership in Engineering Education: including revamping the educational experience by exploiting the power of the online medium and data analytics, virtual experimentation, animation, virtual immersion, online tools, new assessment models, management and design opportunities, teamwork.

Training of engineering students needs to be enriched: exposure to nano, bio, complex systems, cybersecurity, robotics, data & network sciences, energy, design and the arts, teamwork, entrepreneurship.
Strengthen ties to:

**Computer Science:** Computing paradigms, foundational data science, autonomous systems, personalized health, etc.

**Life Sciences:** Bioengineering, Neuroengineering, etc.

**The arts, sports, and design:** Engineering in the Arts & Sports.
Where do we Stand?

- Ranked in top 5 in Engineering in Europe (TIMES Higher Education, QS University Ranking).
- Ranked #16 worldwide (2017 US News)

Brand recognition and by academics:
- #71 in the World by academics (QS; ETHZ #19)
- #60 by employers (QS; ETHZ #28)
- #41 in brand recognition (by TIMES)

EPFL Engineering Anytime Anywhere

<table>
<thead>
<tr>
<th>Ranking</th>
<th>University</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Stanford</td>
<td>85.9</td>
</tr>
<tr>
<td>12</td>
<td>Imperial</td>
<td>84.4</td>
</tr>
<tr>
<td>16</td>
<td>EPFL</td>
<td>82.8</td>
</tr>
<tr>
<td>17</td>
<td>ETH Zurich</td>
<td>82.2</td>
</tr>
<tr>
<td>22</td>
<td>Delft</td>
<td>80.3</td>
</tr>
<tr>
<td>31</td>
<td>KTH</td>
<td>77.8</td>
</tr>
<tr>
<td>42</td>
<td>Cambridge</td>
<td>74.6</td>
</tr>
</tbody>
</table>

2017 US News Ranking of Best Engineering Universities Worldwide
Other Schools at EPFL

IC

Computer & Commun. Sciences

EDIC

section

SB (Basic Sciences)

Physics

EDPY

section

Chemistry & Chemical Engineering

EDCH

section

Mathematics

EDMA

section

dothorical program
Existing STI Structure

**Bio Engineering**
- **EDBB**: biotechnology and bioengineering

**Material Science & Engineering**
- **EDMMX**: materials sciences & engineering

**Micro Engineering**
- **EDAM**: advanced manufacturing
- **EDMI**: microsystems and microelectronics

**Mechanical Engineering**
- **EDAM**: advanced manufacturing
- **EDRS**: robotics, control, & intelligent systems
- **EDPO**: photonics

**Electrical Engineering**
- **EDEE**: electrical engineering
- **ENEE**: energy

**EDME**: mechanics

**EDPO**: photonics
Admissions: Current Situation

- 6 different dates.
- Multiple admission cycles.

<table>
<thead>
<tr>
<th>Doctoral program</th>
<th>Deadline(s)</th>
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<tbody>
<tr>
<td><strong>EDAM</strong>: advanced manufacturing</td>
<td>Jan 15, Apr 30, Sep 15</td>
</tr>
<tr>
<td><strong>EDBB</strong>: biotechnology and bioengineering</td>
<td>Apr 15, Nov 1</td>
</tr>
<tr>
<td><strong>EDEE</strong>: electrical engineering</td>
<td>Jan 15, Apr 30, Sep 15</td>
</tr>
<tr>
<td><strong>EDMI</strong>: microsystems and microelectronics</td>
<td>Jan 15, Apr 30, Sep 15</td>
</tr>
<tr>
<td><strong>EDRS</strong>: robotics, control, intelligent systems</td>
<td>Jan 15, Apr 30, Sep 15</td>
</tr>
<tr>
<td><strong>EDMX</strong>: materials science &amp; engineering</td>
<td>Jan 15, Jul 31</td>
</tr>
<tr>
<td><strong>EDME</strong>: mechanics</td>
<td>Jan 15, Apr 30, Sep 15</td>
</tr>
<tr>
<td><strong>EDEY</strong>: energy</td>
<td>Jan 15, Apr 30, Sep 15</td>
</tr>
<tr>
<td><strong>EDPO</strong>: Photonics</td>
<td>Jan 15, Apr 30, Sep 15</td>
</tr>
</tbody>
</table>