College of management of technology
Facts & Figures 2017

15.5
Faculty Members

4th
in Europe in Social Science & Humanities
Leiden Ranking 2017

38%
women

1/3
personnel paid from 3rd-party funds

60
Total Master graduates

47
Number of organized seminars

ORGANIZATIONAL CHART

CDM
College of Management of Technology
CHRISTOPHER TUCCI

MTEI
Management of Technology & Entrepreneurship Institute
RALF SEIFERT

MTE
Master Program in Management, Technology & Entrepreneurship
DANIEL KUHN

ITPP
Institute of Technology & Public Policy
MATTHIAS FINGER

SFI
Swiss Finance Institute at EPFL
DAMIR FILIPOVIC

EDMT
Doctoral Program in Management of Technology
DOMINIQUE FORAY

MFE
Master Program in Financial Engineering
JULIEN HUGONNIER

EDFI
Doctoral Program in Finance
PIERRE COLLIN-DUFRESNE

FOCAL AREAS

MANAGEMENT
• Optimization
• Business analytics
• Entrepreneurial strategies
• Management of innovation
• Technology commercialization
• Operations & supply chain management

POLICY
• Energy policy
• Environmental policy
• Green economy
• IP policy
• Technology policy
• Transport policy

FINANCE
• Asset pricing
• Corporate finance
• Financial economics
• Financial engineering
• Macroeconomics
• Risk management
MARC GRUBER
Full Professor
Chair of Entrepreneurship & Technology Commercialization (ENTC)
Key words
- Entrepreneurship
- Technology commercialization
- Innovation
- Strategic management
- Public policy

THOMAS WEBER
Associate Professor
Chair of Operations, Economics & Strategy (OES)
Key words
- Credit collections
- Decision making under risk
- Economics (behavioral, environmental, theory)
- Engineering economy
- Investment criteria
- Nonlinear systems
- Optimal control
- Risk
- Sharing economy

DANIEL KUHN
Full Professor
Chair of Risk Analytics & Optimization (RAO)
Key words
- Decision-making under uncertainty
- Stochastic programming & robust optimization
- Uncertainty quantification

PHILIPPE WIESER
Adjunct Professor
Chair of Logistics, Economics & Management (LEM)
Key words
- Supply chain strategies
- Digital supply chain
- Supply chain innovation
- Flows and resources optimization
- Management of hospital systems
- Project management

RALF SEIFERT
Full Professor
Chair of Technology & Operations Management (TOM)
Key words
- Supply chain strategy
- Supply chain finance
- Technology network management and entrepreneurship

KENNETH YOUNGE
Associate Professor
Chair of Technology & Innovation Strategy (TIS)
Key words
- Strategic management
- Technology and innovation strategy
- Employee mobility
- New venture creation
- Data science

CHRISTOPHER TUCCI
Full Professor
Chair of Corporate Strategy & Innovation (CSI)
Key words
- Entrepreneurship and corporate venture capital
- Business model innovation
- Technology strategy
- Technological entry, product development, and «creative destruction»
- Technology policy
- Internet strategy of entrants and incumbents
- «Crowdsourcing» / Web2.0 and innovation
- Corporate governance and innovation

MTEI – Management of Technology & Entrepreneurship Institute
MATTHIAS FINGER
Full Professor
Swiss Post Chair in Management of Network Industries (MIR)

Key words
- De-and regulation of network industries
- Governance of large socio-technical systems
- Infrastructure policy, business-government relations

DOMINIQUE FORAY
Full Professor
Chair of Economics & Management of Innovation (CEMI)

Key words
- Economics of innovation
- Science and technology indicators
- Technology policy
- Knowledge-based economy
- Innovation & development
- Smart specialization

BRUNO OBERLE
Adjunct Professor
Chair of Green Economy & Resource Governance (GERG)

Key words
- Green economy
- Environmental governance
- Sustainability transitions

GAËTAN DE RASSENfosse
Assistant Professor (Tenure Track)
Chair of Innovation & IP Policy (IIPP)

Key words
- Economics of innovation
- Intellectual property policy
- Science of science

PIERRE COLLIN-DUFRESNE
Full Professor
Professor of Finance

Key words
- Credit & liquidity risk
- Optimal asset allocation
- Pricing & hedging

RÜDIGER FAHLENBRACH
Associate Professor
Professor of Finance

Key words
- Corporate finance & governance
- Causes & consequences of the recent financial crisis
- Banking regulation

LUISa LAMBERTINI
Full Professor
Chair of International Finance (CFI)

Key words
- Macroeconomics
- International finance
- Monetary & fiscal policy

SEMYON MALAMUD
Associate Professor
Professor of Finance

Key words
- Portfolio selection
- Non-linear filtering
- Liquidity and asset prices

ERWAN MORELLEC
Full Professor
Professor of Finance

Key words
- Real options
- Financing & capital structure decisions
- Liquidity management
- Risk management
- Economics of innovation et corporate governance
### PERSONNEL BY CATEGORY (FTE)

<table>
<thead>
<tr>
<th>Category</th>
<th>TOTAL</th>
<th>% WOMEN</th>
<th>BUDGETARY FUNDS</th>
<th>3RD PARTY FUNDS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Professors</strong></td>
<td>15.5</td>
<td>6.5%</td>
<td>13.5</td>
<td>2</td>
</tr>
<tr>
<td>Full professors</td>
<td>9.5</td>
<td>11%</td>
<td>7.5</td>
<td>2</td>
</tr>
<tr>
<td>Associate professors</td>
<td>5</td>
<td>0%</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Assistant professors (tenure track)</td>
<td>1</td>
<td>0%</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Scientific staff</strong></td>
<td>70</td>
<td>36%</td>
<td>41.25</td>
<td>28.75</td>
</tr>
<tr>
<td>Adjunct professors</td>
<td>2</td>
<td>0%</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Senior scientists / postdocs</td>
<td>22</td>
<td>23%</td>
<td>9.75</td>
<td>12.25</td>
</tr>
<tr>
<td>PhD students</td>
<td>46</td>
<td>43%</td>
<td>30.5</td>
<td>15.5</td>
</tr>
<tr>
<td><strong>Administrative &amp; technical staff</strong></td>
<td>21</td>
<td>71%</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Administrative staff</td>
<td>15</td>
<td>93%</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Technical staff</td>
<td>4</td>
<td>0%</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Apprentices</td>
<td>2</td>
<td>50%</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>106.5</td>
<td>38%</td>
<td>60.75</td>
<td>45.75</td>
</tr>
</tbody>
</table>

1. Selected indicators: impact; P, P (top 10%), PP (top 10%) and ordered by PP (top 10%)
2. Ranked by number of articles (Journals of Management, Operations and Finance only)
## Master Programs (MFE-MTE)

### Academic Year 2016/2017

<table>
<thead>
<tr>
<th></th>
<th>MTE Management, Technology &amp; Entrepreneurship</th>
<th>MFE Financial Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applications</td>
<td>195</td>
<td>208</td>
</tr>
<tr>
<td>Admissions</td>
<td>53</td>
<td>53</td>
</tr>
<tr>
<td>Enrollments</td>
<td>34</td>
<td>29</td>
</tr>
<tr>
<td>With an EPFL degree</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Minor students</td>
<td>192</td>
<td>14</td>
</tr>
<tr>
<td>Exchange students</td>
<td>27</td>
<td>3</td>
</tr>
</tbody>
</table>

### Gender

- **MTE**: Female/Total: 7/34 (21%)
- **MFE**: Female/Total: 8/29 (28%)

### Nationality

- **MTE**
  - Switzerland: 7 (21%)
  - Europe without Switzerland: 16 (47%)
  - Asia: 8 (23%)
  - Africa: 3 (9%)
- **MFE**
  - Switzerland: 4 (14%)
  - Europe without Switzerland: 14 (48%)
  - Asia: 6 (21%)
  - Africa: 5 (17%)

### Educational Background

- **MTE**
  - Others: 1 (3%)
  - Physics: 1 (3%)
  - Mechanical eng.: 2 (6%)
  - Materials science & eng.: 2 (6%)
  - Life sciences & technol. & bioeng.: 4 (12%)
  - General engineering: 6 (18%)
  - Electrical eng. & electronics: 2 (6%)
  - Computer science & com. systems: 7 (20%)
  - Civil eng. & Environmental eng.: 8 (23%)
  - Chemistry & chemical eng.: 1 (3%)
- **MFE**
  - Physics: 3 (10%)
  - Mechanical eng.: 1 (4%)
  - Mathematics: 10 (34%)
  - Materials science & eng.: 1 (4%)
  - General engineering: 3 (10%)
  - Electrical eng. & electronics: 2 (7%)
  - Economics & finance: 2 (7%)
  - Computer science & com. systems: 2 (7%)
  - Civil eng. & Environmental eng.: 5 (17%)
MTE & MFE Minor students by EPFL section

- SV - Life Science: 24 students
- SIE - Environmental Science & Engineering: 2 students
- SC - Communication Science: 19 students
- PH - Physics: 5 students
- MX - Materials Science: 16 students
- MT - Microengineering: 21 students
- MA - Mathematics: 3 students
- IN - Computer Science: 7 students
- GM - Mechanical Engineering: 42 students
- GC - Civil Engineering: 23 students
- EL - Electrical Engineering: 11 students
- CGC - Chemistry: 12 students
- AR - Architecture: 4 students
Doctoral Programs (EDFI, EDMT)

SEPTEMBER 2017

<table>
<thead>
<tr>
<th>Applications</th>
<th>EDMT</th>
<th>EDFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>148</td>
<td></td>
<td>200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enrollments</th>
<th>EDMT</th>
<th>EDFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

**EDMT**  
Management, Technology & Entrepreneurship

**EDFI**  
Financial Engineering

**Gender** (overall graduates since 2007)
- Female/Total: 29/75 (39%)
- Female/Total: 7/42 (17%)

**Nationality** (overall graduates since 2007)
- Switzerland: 14 (19%)
- Europe without Switzerland: 35 (46%)
- Asia: 14 (19%)
- Africa: 3 (4%)
- Americas: 9 (12%)
- Switzerland: 14 (34%)
- Europe without Switzerland: 23 (55%)
- Asia: 3 (7%)
- Africa: 3 (7%)
- Americas: 1 (2%)

**Career** (overall graduates since 2007)
- Academic: 51%
- Industry: 44%
- Public Organization: 5%
- Academic: 55%
- Industry: 40%
- Public Organization: 5%

**Number of Thesis awarded in 2017**
- EDMT: 11
- EDFI: 5
MOOCs

Running / Ending

<table>
<thead>
<tr>
<th>MOOC Name</th>
<th>Professor in charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management of Urban Infrastructures</td>
<td>Matthias Finger</td>
</tr>
<tr>
<td>Smart Cities – Management of Smart Urban Infrastructures</td>
<td>Matthias Finger</td>
</tr>
<tr>
<td>Launching New Ventures (English, French &amp; Chinese versions)</td>
<td>Christopher Tucci and Marc Gruber</td>
</tr>
<tr>
<td>Designing a Smart Specialisation Strategy (English &amp; French versions) (1st “pay to get in” MOOC of EPFL)</td>
<td>Dominique Foray</td>
</tr>
<tr>
<td>Interest Rate Models</td>
<td>Damir Filipovic</td>
</tr>
<tr>
<td>Find the right markets for your innovation - A tool for entrepreneurs and innovators for choosing which markets to play in.</td>
<td>Marc Gruber and Sharon Tal</td>
</tr>
</tbody>
</table>

In preparation

<table>
<thead>
<tr>
<th>MOOC Name</th>
<th>Professor in charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Arctic</td>
<td>Matthias Finger</td>
</tr>
<tr>
<td>Macroeconomics and Financial Markets</td>
<td>Luisa Lambertini</td>
</tr>
<tr>
<td>Engineering Economy</td>
<td>Thomas Weber</td>
</tr>
<tr>
<td>Social Entrepreneurship</td>
<td>Marc Gruber, Julia Binder and Nettra Pan</td>
</tr>
</tbody>
</table>

Executive Education

Executive Masters

<table>
<thead>
<tr>
<th>Program Name</th>
<th>Since</th>
<th>Average number of students per class</th>
<th>Graduates students since inception</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Supply Chain Management</td>
<td>1993</td>
<td>20-25</td>
<td>over 1200</td>
</tr>
<tr>
<td>EPFL Executive MBA (EPFL EMBA)</td>
<td>1998</td>
<td>30</td>
<td>541</td>
</tr>
<tr>
<td>Innovative Governance of Large Urban Systems (IGLUS)</td>
<td>2014</td>
<td>20</td>
<td>15</td>
</tr>
</tbody>
</table>

Certificates of Advanced Studies

Global Supply Chain Management (10 ECTS)
Healthcare Supply Chain Management (12 ECTS)
Management of Biotech, Medtech, Pharma Ventures (10 ECTS)
### Expenditures in 2017

<table>
<thead>
<tr>
<th>Source</th>
<th>Percentage</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal funds</td>
<td>68%</td>
<td>10,911,010</td>
</tr>
<tr>
<td>Executive education / MOOC's</td>
<td>8%</td>
<td>1,238,846</td>
</tr>
<tr>
<td>Sponsored chairs</td>
<td>12%</td>
<td>1,888,539</td>
</tr>
<tr>
<td>SNSF</td>
<td>7%</td>
<td>1,041,880</td>
</tr>
<tr>
<td>Industry grants</td>
<td>2%</td>
<td>342,640</td>
</tr>
<tr>
<td>European programs</td>
<td>2%</td>
<td>385,234</td>
</tr>
<tr>
<td>Innosuisse (SCCER)</td>
<td>1%</td>
<td>106,751</td>
</tr>
<tr>
<td>CEPF Energy program</td>
<td>1%</td>
<td>96,082</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>16,010,982</strong></td>
</tr>
</tbody>
</table>

### Publications

#### Journals


Books & Book Chapters


Where to play: 3 steps for discovering your most valuable market opportunities. M. Gruber and S. Tal. FT Publishing International. 2017.


PhD Theses


