College of Management of Technology
Annual Report 2020
2020 is a truly exceptional year to review – the year of the health crisis that affected us all in both our professional and private lives. At EPFL another academic life had to be invented – one meant to replace as far as possible our campus, our classrooms and seminar rooms, cafeterias, etc. At the CDM – as elsewhere I’m sure – everyone did their best to stay in contact, to pursue at all costs our aims and activities – teach and interact with our students, work together with our PhD students, collaborate as effectively as possible with our administrative teams. From another point of view, this crisis has of course presented us – as academic scholars – with great challenges. We innovation or financial economists and researchers at CDM have significantly contributed to the public debate on these topical issues.

2020 saw the rise of the Enterprise for Society initiative (E4S), directed by Prof. J.-P. Danthine, with its EPFL branch now based at the CDM, like the administration of its Master. This development shows how the theme of durability is becoming an essential part of the CDM’s research and teaching agenda – in all its disciplines.

2020 saw the birth of our BA program in management and finance. Thanks to this program, increasing numbers of EPFL students are exposed to our disciplines — management, innovation, entrepreneurship, business analytics and finance — and will be, thereby, better prepared for their future careers.

2020 also saw the first fruits of the new executive education structure. Headed by Eugène de Groot and under the academic supervision of Pr. M. Gruber, ExEd activity at the CDM has undergone a profound transformation, becoming more efficient and diversified and thus enabling the CDM to offer the EPFL campus an increasingly unique asset.

2020 was the year that our interdisciplinary research program was launched, enabling the CDM to form new links with IC, STI and ENAC.

2020 was also the year that three senior faculty members, Prof. M. Finger, Prof. C. Tucci and Prof. P. Wieser, left the CDM, entailing the closure of three large research chairs, MIR, CSI and LEM. 2020 also gave us the chance to recruit a new finance Professor – Andreas Fuster – who will take up his post in July 2021. A Harvard graduate, Prof Fuster’s empirical research, on the effects of new technologies on financial economics, for example, is in perfect coherence with SFI’s evolution within the framework of EPFL. In addition, CDM has two more faculty position search campaigns currently ongoing.

2020 was also a tragic year, during which the CDM lost three of its precious members: Onat Tekin (FE Master student), Kilian Schindler (EDMT PhD student) and Sylvie Happe, who worked for the executive education program for many years. We will not forget them.

I extend my appreciation for the work effort and dedication of all CDM members — teachers, students and collaborators — during this challenging year that demanded everyone’s adaptability, commitment and patience. The 2020 achievements presented in this report are all yours.

I hope you all enjoy reading this report.

Prof Dominique Foray, Director
Key Numbers
2020

- 18 Faculty members
- 41 Organized seminars
- 70 Master's graduates
- 41 Executive Master's graduates
- 14 PhD graduates
- 32% female researchers
- 1/4 employees paid from third party funds
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Highlights 2020

Education

February—September | First successful edition of a graduate course linking engineering and management
The first joint Master’s course between the School of Engineering (STI) and the College ended successfully at the start of 2020. The course exposes students to entrepreneurial challenges by designing a product to be marketed. The second edition, which had students prepare prototypes under the theme “sustainable technology” started in September 2020.

April | Creation of the Executive Education unit within the College
The College created in Spring 2020 a unit dedicated to centrally manage most of the College’s Executive Education programs. This new platform will offer a unique and coherent identity to all the College’s Executive program. Prof. Marc Gruber has been named the Academic Director of this unit and Eugène de Groot the Head of Executive Education at the College.

May—November | Launch of new Bachelor courses in management and finance
Starting in September 2020, EPFL Bachelor students had the option to choose new classes in management and finance within the Social and Human Sciences program (SNS). Eight courses are offered by the College for the academic year 2020–2021 in the fields of management, economics and finance.

December | Creation of the new E4S Master of Science in sustainable management & technology
The Enterprise for Society Center (E4S) has launched a new Master of Science which aims at equipping the entrepreneurs and intrapreneurs of the future with the knowledge and skills enabling them to contribute to the transition toward a more resilient, environmentally responsible and inclusive economy while harnessing the power of technology. The Master is offered on behalf of its three partner institutions: The University of Lausanne (UNIL) through its Faculty of Business and Economics (HEC), IMD, and EPFL under the stewardship of its College of Management of Technology. The first cohort will start in September 2021.

Outreach Covid-19 Crisis

During the outbreak of the Covid-19 crisis, faculty members of the College of Management of Technology published several articles from various perspectives (economic, financial, innovation economics, a network industries) which received coverage in the specialized and general media.

April | Covid-19: Insights from innovation economists
Innovation economists at the College — Prof. Dominique Foray and Prof. Gaëtan de Rassenfosse and their respective teams — have published a report on the Covid-19 crisis. It covered topics such as "Why is society investing so little in vaccine research?" "What roles do patents play in this crisis?" "How can we assess the short-term policy (over)reaction in re-allocating so much funding to this field?" and finally, "What are the lessons for the future?"

April | The Covid-19 pandemic: An economic perspective
Prof. Jean-Pierre Danthine, E4S Center (EPFL-UNIL IMD) explored in this study the tension that policymakers face between public-health measures and the economic costs of those measures. The findings were aimed at helping policymakers be better prepared in the event of new pandemic outbreaks.
April | The effects of lockdown on network industries
Prof. Matthias Finger expressed himself as an EPFL expert in the management of network industries. He didn't foresee any water and power supply problems in Switzerland, even with the country in lockdown. As some networks are more crisis-resilient than others, internet access could prove to be more challenging.

May | Financial science and Covid-19
Prof. Erwan Morellec, in collaboration with Professors Jean-Pierre Danthine and Ruediger Fahlenbrach, have published several articles on the bridge loans granted by the Confederation to SMEs that face liquidity needs during the Covid-19 crisis. The authors offer alternatives to SMEs for which these debts are sometimes insurmountable.

November | The impact of the Covid-19 shock on the Swiss labor market
Prof. Luisa Lambertini and her colleague researchers have launched a study determining how the Covid-19 crisis affected working men and women in Switzerland. The research team is interested in the effect of the pandemic on gender inequality in the Swiss labor market. Comparing the impact of the health crisis on the labor market in Switzerland and the United states, they want to assess to what extent the differences in policies can explain differences in unemployment between the two countries.

October | Advances in financial technology
For the first time in eleven years, due to Covid-19, Swissquote's annual conference was held entirely online. Entitled "Swissquote Conference 2020 on Finance and Technology", it brought together approximately sixty auditors. The program included two distinct themes: digital central bank currency and differential machine learning.

October | CDM interdisciplinary call
In Fall 2020, the College launched an interdisciplinary call to foster projects that use an interdisciplinary approach and to seed new collaborative research ties between the key research areas of the College of Management of Technology and other research domains present at EPFL. The grant was awarded to three projects, creating new ties with other faculties at EPFL: STI, ENAC & IC.

October | Inauguration of the Kilian Schindler Excellence Award
EPFL and the family of Kilian Schindler have created an award to honor the life and memory of Kilian Schindler, a doctoral student in Management of Technology. It will be attributed once a year to the author of an outstanding doctoral thesis in the Doctoral Program of Management of Technology (EDMT) at the College of Management of Technology.

November 2019 | Finance and tech program
The program inaugurated at the end of 2019 has as its main industry partner Swissquote and is associated with the EPFL Center for Digital Trust. Since the program's inception, its team members have carried out various research projects that have resulted in a sizable list of high-quality publications and working papers. Notably, this research ranges from initial coin offerings, machine learning in asset pricing and portfolio selection, the study of market structure and systemic risk of decentralized, over-the-counter markets, to efficient quantitative methods for option pricing.

Research Outreach
June | Intellectual property protection and innovation in Switzerland
Prof. de Rassenfosse published a report in the “SERI dossiers” collection, on IP protection and innovation in Switzerland. The State Secretariat for Education, Research and Innovation publishes prospective studies, research results and reports on topical issues affecting education, research and innovation. These SERI publications are available to a large audience, and therefore contribute to the debate surrounding these issues.
Faculty
News

Promotions

March 2020
Rüdiger Fahlenbrach was named Full Professor of Finance in the College of Management of Technology (CDM)

March 2020
Thomas Weber was named Full Professor of Operations, Economics and Strategy in the College of Management of Technology (CDM)

Appointments

March 2020
Prof. Rüdiger Fahlenbrach was appointed Program Director for the Master in Financial Engineering (MFE)

November 2020
Prof. Luisa Lambertini was appointed Associate Vice President for Postgraduate Education, under the new Vice Presidency for Academic Affairs (mandate starting in January 2021)

Invited Professor

January–March 2020
Prof. Linda Louise Tesar, Professor of Economics, University of Michigan

Retirements & Departures

January 2020
Prof. Philippe Wieser, Chair of Logistics, Economics and Management

July 2020
Prof. Matthias Finger, Chair of Management of Network Industries

May 2020
Prof. Christopher Tucci, Chair of Corporate Strategy & Innovation
Members and Expertise

Management of Technology & Entrepreneurship Institute

Focal Areas
- Optimization
- Business analytics
- Economic analysis
- Technology & IP policy
- Entrepreneurial strategies
- Management of innovation
- Technology commercialization
- Operations & supply chain management

Gaétan de Rassenfosse
Assistant Professor (Tenure Track) | Chair of Innovation and IP Policy (IIPP)
Key words: Economics of innovation | Intellectual property rights | Science of science

Ralf Seifert
Full Professor | Chair of Technology and Operations Management (TOM)
Key words: Supply chain strategy and modeling | Digital supply chain initiatives | Inventory optimization

Christopher Tucci (January-May)
Full Professor | Chair of Corporate Strategy and Innovation (CSI)
Key words: Business model innovation | Crowdsourcing, IoT, digitalization and innovation | Innovation management, technology strategy | Technology policy | Regulation of the future (IT, fintech, etc.) | Internet strategy of entrants and incumbents | Technological entry, product development, “creative destruction” | Design thinking

Thomas Weber
Full Professor | Chair of Operations, Economics and 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

Philippe Wieser (January)
Adjunct Professor | Chair of Logistics, Economics and Management (LEM)
Key words: Supply chain strategies | Digital supply chain | Supply chain innovation | Flows and resources optimization | Management of hospital systems | Project management

Kenneth Younge
Associate Professor | Chair of Technology and Innovation Strategy (TIS)
Key words: Data science | Data-driven strategy | Economics of AI
Swiss Finance Institute

Focal Areas
- Asset pricing
- Corporate finance
- Financial economics
- Financial engineering
- Macroeconomics
- Risk management

Pierre Collin-Dufresne
Full Professor | Professor of finance
Key words: Credit & liquidity risk | Optimal asset allocation | Pricing & hedging

Rüdiger Fahlenbrach
Full Professor | Professor of finance
Key words: Corporate finance & governance | Venture capital | Causes and consequences of financial crises | Banking regulation

Damir Filipovic
Full Professor | Swissquote Chair in Quantitative Finance
Key words: Quantitative finance | Risk & insurance | Quantitative risk management

Julien Hugonnier
Full Professor | Professor of finance
Key words: Asset pricing theory | Dynamic corporate finance | Decision making under uncertainty

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 and capital structure decisions | Liquidity management | Risk management | Economics of innovation and corporate governance

College of Management of Technology

Jean-Pierre Danthine
Adjunct Professor | Professor of finance and economics & Managing Director, E4Society
Key words: Macroeconomics | Financial economics | Monetary policy

“The evolution of EPFL as an institution continues to be astounding on its path to truly global leadership. I am curious to see EPFL evolve further and hope that the deep humanity and generosity of the place encouraging diversity in academic work stays very much intact over the coming years.”

Prof. Thomas Weber
Research
Publications

Journal Articles


Mortgage supply and capital regulation in a low interest rate environment. L. Lamberti, Y. Wu. 2020.


**Books & Book Chapters**


**Conference Proceedings**


**PhD Theses**


The organisation of science: Topics, incentives and funding. O. Ballester Gonzalez, G. de Rassenfosse (Dir.). EPFL Lausanne. 2020.


### New Grants, Ranking & Awards

#### Grants

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<tr>
<th>Funding agency or company</th>
<th>Principal investigator</th>
<th>Project</th>
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<tr>
<td>Swiss Confederation</td>
<td>Negar Kiyavash</td>
<td>Experiment design for causal structural learning</td>
</tr>
<tr>
<td>SNSF – Swiss National Science Foundation</td>
<td>Ralf Seifert</td>
<td>Quantitative methods for omnichannel decision making</td>
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<tr>
<td>SNSF – Swiss National Science Foundation</td>
<td>Pierre Collin-Dufresne</td>
<td>Demand based asset pricing and ESG preferences</td>
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<tr>
<td>Norwegian Finance Initiative (NFI)</td>
<td>Rüdiger Fahlenbrach</td>
<td>Evolution and determinants of institutional investor preferences and their impact on portfolio companies</td>
</tr>
<tr>
<td>SNSF – Swiss National Science Foundation</td>
<td>Semyon Malamud</td>
<td>International macroeconomics with financial frictions</td>
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#### Ranking

**UTD Top 100 Business School Research Rankings** in the field of Management, Operations & Finances, established the UTD Dallas’ Naveen Jindal School of Management (period 2009—2020)

- Per Capita analysis (University publications in 24 leading business journals over University Business School Faculty size): 1st in Switzerland.

**Forschungsmonitoring rankings** in the field of Business Administration and Economics, established by the Swiss Economic Institute (KOF) at ETH Zurich

- Based on all publications from 2016—2020, it lists 14 professors from the College of Management of Technology in the top 10% of all the scientist & economists distributed over different categories (current ranking, young scholar, lifetime ranking), in the German speaking countries Germany, Austria, and Switzerland.

- Based on the publications in the top journals only in the field of Business Administration, the EPFL ranks 4th in comparison to the best universities in the German speaking countries Germany, Austria, and Switzerland.
Awards

June 2020 | Prof. R. Seifert wins the EFMD Case Writing Award
The case "Workshop: Building an industry 4.0 transformation roadmap", written by Prof. Ralf Seifert and Dr Richard Markoff, won the 2019 EFMD Case Writing Competition in the Supply Chain Management category.

October 2020 | C. Kocyigit wins the Kilian Schindler Excellence Award
EPFL and the family of Kilian Schindler have created an award to honor the life and memory of Kilian Schindler, a doctoral student in Management of Technology. Dr Cagil Kocyigit — a former PhD student at the Risk Analytics and Optimization Chair — was the laureate of its first edition for her PhD thesis entitled “Distributional robustness in mechanism design”.

About the Kilian Schindler Excellence Award:
“I am extremely honored to receive the Kilian Schindler Excellence Award, named after my dear friend and colleague. Kilian was an outstanding researcher and has greatly inspired me and everyone else around him, both scientifically and personally. It is therefore very special and also emotional for me to be the first recipient of this award.”
Cagil Kocyigit, 2020 laureate

November 2020 | M. Mark wins INFORMS Best Student Paper
With the presentation of his paper “A reinforcement-learning approach to credit collections”, Michael Mark — a PhD student at the Chair of Operations, Economics and Strategy — won the Best Student Paper Award in Finance at the 2020 INFORMS Annual Meeting.

November 2020 | Dr S. Shafieezadeh Abadeh wins the Thesis Distinction for EDMT
Dr Soroosh Shafieezadeh Abadeh — former PhD student with Prof. Daniel Kuhn — was awarded the 2020 Doctoral Program Thesis Distinction for the Doctoral Program in Management of Technology (EDMT).

December 2020 | Prof. D. Kuhn wins the Frederick W. Lanchester Prize
The 2020 Frederick W. Lanchester Prize was awarded to Prof. Peyman Mohajerin Esfahani and Prof. Daniel Kuhn for their paper “Data-driven distributionally robust optimization using the Wasserstein metric: Performance guarantees and tractable reformulations” (Mathematical Programming 2018). This prize recognizes the best contribution to operations research and the management sciences published in English in the past five years.

December 2020 | L. Zhou wins the 1st Prize in the 4iP Council Research Competition
With her paper “Patents and supra-competitive prices: Evidence from consumer products”, coauthored with Prof. de Rassenfosse, PhD student Ling Zhou won the 1st Prize of the 2020 4iP Council, a European research council dedicated to developing high quality academic insight and empirical evidence on topics related to intellectual property and innovation.
Management of Technology & Entrepreneurship Institute

Due to the pandemic, seven additional seminars were cancelled.

24.01 Prof. Guido Palazzo, HEC Lausanne
Sustainability lecture for supply chain leaders.

20.02 Prof. Elie J. Sung, HEC Paris
Non-market strategy performance in the court: The role of information and legitimacy.

28.02 Siddharth Suri, Microsoft Research
Computational Social Science and Economics Seminar Series.
Ghost work: The labor that powers AI.

11.05 Prof. Henry Sauermann, ESMT Berlin
What's the problem? Crowdsourcing research questions in science.

02.11 Dr Lisa Hehenberger, ESADE
Internalizing social impact through calculative devices: The case of impact investing.

EPFL Virtual Innovation Seminar
EVIS 2020

Due to the pandemic and the impossibility to organize on-site seminars, the College put into place a new virtual bi-weekly seminar series focusing on science, technology and innovation topics, studied through the lens of economics, entrepreneurship, and strategy, and targeted at graduate students and early-career researchers.

21.12 Mike Andrews, University of Maryland, Baltimore County
Bar talk: Informal social interactions, alcohol prohibition, and invention

07.12 Wolf-Hendrik Uhlbach, Copenhagen Business School
Exploring-by-hiring: High-skilled migration as a source of exploration?

23.11 Astrid Marinoni, University of Toronto, Rotman School of Management
Immigration and entrepreneurship: The role of enclaves

09.11 Muly San, New York University, Department of Economics
Labor supply and directed technical change: Evidence from the abrogation of the Bracero program in 1964*

26.10 Keith Pennington, University of Minnesota
Varying serendipity between inventors.

12.10 Ryan Hill, MIT, Northwestern Kellogg
Scooped! Estimating rewards for priority in science.

28.09 Chungeun Yoon, University of Notre Dame
Inventors and firm innovation: Evidence from the U.S. World War I draft*.

14.09 Chiara Spina, Bocconi University / INSEAD
Small changes with big impact: Experimental evidence of a scientific approach to the decision-making of entrepreneurial firms.

31.08 Maria Roche, Georgia Tech / HBS
Entrepreneurs (co-)working in close proximity: Impacts on technology adoption and startup performance outcomes.

17.08 Tristan Fitzgerald, Texas A&M University
Shared culture and technological innovation: Evidence from corporate R&D teams.

03.08 Dennis Byrski, Max Planck Institute for Innovation and Competition
Fire and mice: The effect of supply shocks on basic science.

20.07 Maria Kurakina, Berkeley Haas / University of Utah, David Eccles School of Business
The dark side of patents: Effects of strategic patenting on firms and their peers.

06.07 Andreas Diemer, LSE
The geography of social connectedness and knowledge flows in the United States: New evidence from patent citations.
22.06 **Sara Signorelli**, Paris School of Economics
Too constrained to grow. Analysis of firms’ response to the alleviation of skill shortages.

08.06 **Enrico Berkes & Peter Nencka**, Ohio State University
Knowledge access: The effects of carnegie libraries on innovation.

25.05 **Caroline Fry**, MIT Sloan
Viral privilege: Evidence from the ebola epidemic.

**Swiss Finance Institute**

Due to the pandemic, thirteen additional seminars were canceled.

14.02 **Victor Duarte**, UIUC, Gies College of Business
Viral privilege: Evidence from the ebola epidemic.

28.02 **Mike Burkart**, LSE
The social value of debt in the market for corporate control.

12.03 **Alexis Marchal**, PhD candidate, SFI@EPFL
Deep learning for asset bubbles detection.

15.05 **Victoria Vanasco**, CREI, UPF & Barcelona GSE
The good, the bad and the complex: Product design with imperfect information.

29.05 **Robin Lumsdaine**, American University Washington DC
The coincidences of sectoral slowdowns in the UK: Comparing transmission probabilities and economic linkages.

12.06 **Matthieu Bouvard**, Toulouse School of Economics
Labor leverage, coordination failures, and systematics risk.

04.09 **Jesus Fernandez-Villaverde**, University of Pennsylvania
Financial frictions and the wealth distribution.

11.09 **Bryan Kelly**, Yale
Textual analysis in asset pricing.

18.09 **Uday Rajan**, University of Michigan
Strategic intermediation in liquidity markets.

01.10 **Pierre Collin-Dufresne**, SFI@EPFL
Job market workshop.

02.10 **Hanno Lustig**, Stanford
Manufacturing risk-free government debt.

14.10 **Ramil Zelyatdinov**, Litasco SA
MFE practitioner seminar.

30.10 **Morten Linnemann Bech**, BIS Innovation Hub, **Antoine Savine & Brian Huge**, Superfly Analytics at Danske Bank
Swissquote conference 2020 on finance and technology.

04.11 **Viktor Vatinas**, Partner Group AG
MFE practitioner seminar.

11.11 **Alain Forclaz & François Chareyron**, Lombard Odier
MFE practitioner seminar.

17.11 **Goutham Gopalakrishna**, PhD candidate, SFI@EPFL
Asset pricing with realistic crises dynamics.

18.11 **Guillermo Garcia**, Procter & Gamble
MFE practitioner seminar.

20.11 **Winston Dou**, University of Pennsylvania
Feedback and contagion through distressed competition.

25.11 **Anton Merlushkin**, Credit Suisse
MFE practitioner seminar.

04.12 **Estefania Santacreu-Vasut**, ESSEC Business School
Is gender in the pocket of investors? Identifying gender bias towards CEOs with a lab experiment.

11.12 **Laurence Lescourret**, ESSEC Business School
Feedback and contagion through distressed competition.
Education
Master Programs

- MTE Master in Management, Technology and Entrepreneurship
- MFE Master in Financial Engineering
- Minors MTE and MFE

Doctoral Programs

- EDMT Doctoral program in Management of Technology
- EDFI Doctoral program in Finance

Executive Master Programs

- EPFL EMBA
- Executive Master in Global Supply Chain Management

Certificate of Advanced Studies

- Management of Biotech, MedTech and Pharma Ventures
- Healthcare Supply Chain Management (HSCA)
- Global Supply Chain Management
- Supply Chain Analytics and Greenbelt
- Supply Chain 4.0 Innovation and Digitization
- Supply Chain 4.0 Leading Sustainable Change

Short Executive Programs

- Data Science for Managers
- Transform Tech – joint program IMD and EPFL

Other

- Bachelor SHS-MGT courses
- MOOCs
Minors

MTE • Minor

Academic year 2019–2020

239 students enrolled

7 MA Mathematics
4 PH Physics
2 GC Civil engineering
4 GM Mechanical engineering
3 MT Microengineering
8 SC Communication systems
1 MTE Management of technology

MFE • Minor

Academic year 2019–2020

29 students enrolled

7 MA Mathematics
4 PH Physics
36 MT Microengineering
15 MX Materials science
8 SC Communication systems
13 SV Life sciences & technology

MTE • Exchange students

Academic year 2019–2020

12

MFE • Exchange students

Academic year 2019–2020

9
Doctoral programs

EDMT • Doctoral program in Management of Technology

11 theses awarded in 2020

EDFI • Doctoral program in Finance

3 theses awarded in 2020

Overall graduates since 2005: 101
Overall graduates since 2011: 29

gender

- 45 (45%) Female
- 56 (55%) Male

EDMT
- 45 (45%) Female
- 56 (55%) Male

EDFI
- 4 (14%) Female
- 25 (86%) Male

nationality

- 17 (17%) Switzerland
- 46 (45%) Europe
- 19 (19%) Asia
- 3 (3%) Africa
- 12 (12%) Americas
- 4 (4%) n/a

EDMT
- 17 (17%) Switzerland
- 46 (45%) Europe
- 19 (19%) Asia
- 3 (3%) Africa
- 12 (12%) Americas
- 4 (4%) n/a

EDFI
- 10 (35%) Switzerland
- 15 (52%) Europe
- 3 (10%) Asia
- 1 (3%) Americas

career

- 42 (42%) Academic
- 45 (45%) Industry
- 6 (6%) Public organization
- 8 (8%) n/a

EDMT
- 16 (55%) Academic
- 13 (45%) Industry

EDFI
- 16 (55%) Academic
- 13 (45%) Industry
About the short Executive program "Data Science for Manager":

“This very intensive course gave me a comprehensive overview of a vast and fast-moving domain. The engaging teaching by Prof. Younge and his team—with lectures and many hands-on exercises—helps you to understand the complicated concepts.”

Hessel Brouwer, Head of Financial Control, Dätwyler

About the CAS in Management of Biotech, Medtech & Pharma Ventures:

“The CAS allowed me to deepen my knowledge of regulated industries and gain multiple valuable industry connections. It is an excellent program with a remarkable selection of speakers”

Ksenia Tugay, Aston Life Sciences

About the MTE Master program:

“The MTE program provided me with a well-rounded experience and perspective into many industries and aspects within a business. It gave me much greater breadth into the technical and entrepreneurial domains than anything I could’ve have expected to receive from a traditional management or MBA program.”

Andres Engels (graduate 2020)

About the Doctoral program in finance:

“I am lucky that my supervisors always took the time to discuss with me whenever I needed guidance and always supported the research directions I was interested in. Having freedom in your research process helps you select the most interesting problems for you and keeps you motivated. This is important given that a PhD is a long and bumpy journey. I could also count on the other PhD students to create engaging conversations whenever I needed someone else’s opinion. Overall I was fortunate to find a very collaborative environment here at EPFL.”

Alexis Marchall, EDFI

About the EPFL EMBA:

“The program provides an excellent overview of technology innovation and general business education and allowed me to get a holistic overview of different business processes in a company. The program helped me to think differently and gave me the right foundation for future business and related technology challenges.”

Fabio Ponzio, Vice President Building Solutions at Hexagon Geosystems (graduate 2019)

About the SHS-MGT Bachelor course:

“The course is what I expected and I really appreciated the fact that business leaders attended our pitch. Their feedback and advice were very useful to me. I could use them in the future in my career, particularly for job interviews.”

Neethu Kizhakkedom, a second-year bachelor student in Life Sciences
Executive Education

Executive Master Programs

**EPFL EMBA**
Director: Dr Tilo Peters
Academic Director: Prof. Christopher Tucci / Prof. Marc Gruber (since September 2020)

Program given since 1998, with an average of 30 students per class:
- 85 ECTS credits
- 16 months (40 weekdays) duration
- 612 graduated students since inception

**Global Supply Chain Management**
Director: Elaine Moran
Academic Director: Prof. Philippe Wieser / vacant (since February 2020)

Program given since 1993, with an average of 20 students per class:
- 90 ECTS credits
- 15 months (35 weekdays) duration
- 872 graduated students since inception

### 2020 cohort
- **Applications**: 78
- **Admissions**: 47
- **Enrollments**: 30

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<th>Applications</th>
<th>Admissions</th>
<th>Enrollments</th>
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<td>Female</td>
<td>14 (47%)</td>
<td>13</td>
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<tr>
<td>Male</td>
<td>15 (50%)</td>
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<tr>
<td>Other</td>
<td>1 (3%)</td>
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<tr>
<th>Nationality</th>
<th>Applications</th>
<th>Admissions</th>
<th>Enrollments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland</td>
<td>12 (40%)</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Europe</td>
<td>14 (47%)</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>Asia</td>
<td>2 (7%)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Africa</td>
<td>1 (3%)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Oceania</td>
<td>1 (3%)</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

### 2020 cohort
- **Applications**: 46
- **Admissions**: 13
- **Enrollments**: 11

<table>
<thead>
<tr>
<th>Gender</th>
<th>Applications</th>
<th>Admissions</th>
<th>Enrollments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>4 (36%)</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Male</td>
<td>7 (64%)</td>
<td>6</td>
<td>11</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Applications</th>
<th>Admissions</th>
<th>Enrollments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland</td>
<td>1 (9%)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Europe</td>
<td>4 (37%)</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Asia</td>
<td>2 (18%)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Africa</td>
<td>3 (27%)</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Americas</td>
<td>1 (9%)</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
Certificate of Advanced Studies (CAS)

<table>
<thead>
<tr>
<th>Program name</th>
<th>Credits</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management of Biotech, MedTech and Pharma Ventures</td>
<td>10 ECTS</td>
<td>31</td>
</tr>
<tr>
<td>Healthcare Supply Chain Management (HSCA)</td>
<td>12 ECTS</td>
<td>7</td>
</tr>
<tr>
<td>Global Supply Chain Management</td>
<td>14 ECTS</td>
<td>5</td>
</tr>
<tr>
<td>Supply Chain Analytics and Greenbelt</td>
<td>14 ECTS</td>
<td>2</td>
</tr>
<tr>
<td>Supply Chain 4.0 Innovation and Digitization</td>
<td>14 ECTS</td>
<td>2</td>
</tr>
<tr>
<td>Supply Chain 4.0 Leading Sustainable Change</td>
<td>14 ECTS</td>
<td>2</td>
</tr>
</tbody>
</table>

Short Executive Programs

Data Science for Managers
- 5-day technical Boot Camp, two times a year
- 2-day executive Fast Track, two times a year
- 4 workshops: Python quick start, Text as data, Model evaluation, Fraud analysis

Transform Tech Joint Executive Education program IMD and EPFL
- 5-day course, two times a year

131 Applications
131 Enrollments

34 (26%) Female
97 (74%) Male

60 Applications
60 Enrollments

34 (26%) Female
97 (74%) Male

100 (76%) Switzerland
26 (20%) Europe
5 (4%) Asia

13 (22%) Switzerland
34 (57%) Europe
2 (3%) Asia
6 (10%) Americas
1 (1%) Oceania
4 (7%) n/a
Bachelor SHS-MGT Courses

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Course Name</th>
<th>EPFL Section</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA 3 course</td>
<td>Economic Thinking</td>
<td>19 MA, 20 PH, 6 CGC, 1 AR, 5 GC, 59 GM, 1 SIE, 49 IN, 21 SV, 79 students</td>
<td></td>
</tr>
<tr>
<td>BA 3 course</td>
<td>Introduction to Entrepreneurship</td>
<td>79 students</td>
<td></td>
</tr>
<tr>
<td>BA 5 course</td>
<td>Game Theory and Strategic Decisions</td>
<td>78 students</td>
<td></td>
</tr>
<tr>
<td>BA 5 course</td>
<td>Foundations in Financial Economics</td>
<td>78 students</td>
<td></td>
</tr>
</tbody>
</table>

MOOCs

<table>
<thead>
<tr>
<th>MOOC Name</th>
<th>Professor in Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Specialization (English &amp; French versions)</td>
<td>Dominique Foray</td>
</tr>
<tr>
<td>Interest Rate Models</td>
<td>Damir Filipovic</td>
</tr>
<tr>
<td>Innovative Governance of Large Urban Systems</td>
<td>Matthias Finger</td>
</tr>
<tr>
<td>Smart Cities – Management of Smart Urban Infrastructures</td>
<td>Matthias Finger</td>
</tr>
<tr>
<td>Management of Urban Infrastructures – part 1</td>
<td>Matthias Finger</td>
</tr>
<tr>
<td>Global Arctic</td>
<td>Matthias Finger</td>
</tr>
<tr>
<td>Find the right markets for your innovation – A tool for entrepreneurs and innovators</td>
<td>Marc Gruber</td>
</tr>
<tr>
<td>Launching New Ventures</td>
<td>Christopher Tucci &amp; Marc Gruber</td>
</tr>
</tbody>
</table>
06.04 **Ralf Seifert**
Forbes India ▶️ Bezos’ Big Bet: Going for Market Share over Profits

14.04 **Jean-Pierre Danthine**
nzz.ch ▶️ Corona-Krise: So wollen Schweizer Ökonomen das Land vom Lockdown befreien

15.04 **Jean-Pierre Danthine**
Le Temps ▶️ Même agile, l’économie suisse est mal prise par la crise du coronavirus

17.04 **Matthias Finger**
Le Temps ▶️ Le long combat de PostFinance pour devenir une vraie banque

27.04 **Jean-Pierre Danthine**
Heidi.news ▶️ En Suisse comme ailleurs, la reprise économique prendra la forme d’un « L »

28.04 **Erwan Morellec**
Le Temps ▶️ Remboursement des crédits-relais: quédit la science nancière?

04.05 **Erwan Morellec**
La Liberté ▶️ Menace sur les banques

05.05 **Jean-Pierre Danthine, Erwan Morellec**
Le Temps ▶️ Crédits-relais: une nouvelle forme de titres éviterait le risque de faillite des PME

06.05 **Dominique Foray, Gaétan de Rassenfosse**
VOXEU ▶️ The take of innovation economists on the Covid-19 crisis

07.05 **Jean-Pierre Danthine, Erwan Morellec**
L’Agefi ▶️ Une proposition « gagnant-gagnant » pour améliorer le soutien financier fédéral aux PME

08.05 **Dominique Foray, Gaétan de Rassenfosse**
Le Temps ▶️ Les raisons du sous-financement de la recherche sur les vaccins

12.05 **Dominique Foray, Gaétan de Rassenfosse**
RTS La lère - Alter Eco ▶️ Brevets et sous-investissements, obstacles au vaccin ?

15.05 **Jean-Pierre Danthine**
RTS Un - Infrarouge ▶️ Coronavirus : l’épidémie de pauvreté ?

20.05 **Jean-Pierre Danthine, Erwan Morellec, Rüdiger Fahlenbrach**
Finanz & Wirtschaft ▶️ Unterstützung für Schweizer KMU

25.05 **Jean-Pierre Danthine**
La Liberté ▶️ Le trésor de la BNS est très convoité
26.05 Jean-Pierre Danthine
Le Nouvelliste ☝ BNS, un trésor très convoité

27.05 Dominique Foray
Le Temps ☝ La réponse des sciences de la vie

27.05 Gaëtan de Rassenfosse
RTS La 1ère - La Matinale ☝ L’invité

15.06 Jean-Pierre Danthine, Erwan Morellec, Rüdiger Fahlenbrach
Neue Zürcher Zeitung ☝ Und was kommt nach dem Überbrückungskredit?

15.06 Matthias Finger
AES ☝ Stratégies pour la smart energy: villes intelligentes

29.06 Jean-Pierre Danthine
Heidi.news ☝ Ma rencontre avec Jean-Pierre Danthine, moniteur de crises

03.08 Matthias Finger
Le Matin Dimanche ☝ La tournée quotidienne des facteurs est remise en question

31.08 Rüdiger Fahlenbrach
NZZ, am Sonntag ☝ Die Gipfelstürmer aus Baar: von null auf 24 Milliarden

14.09 Dominique Foray, Gabriele Cristelli
Le Temps ☝ La contribution des inventeurs immigrés à l’innovation en Suisse

15.09 Dominique Foray, Gabriele Cristelli
Le Courrier International ☝ Innovation. En Suisse, immigrés et expatriés boostent l’économie

07.10 Marc Gruber
Bilan ☝ Innover en période d’incertitudes grâce à une approche méthodologique

28.10 Rüdiger Fahlenbrach
Finanz & Wirtschaft ☝ Wenn der Chef kaum Aktien hält

17.11 Gaëtan de Rassenfosse
La Vie économique ☝ Le système de brevets est-il toujours d’actualité?

25.11 Matthias Finger
Radio SRF1 ☝ Der Subventionsbetrug der BLS

25.11 Matthias Finger
Radio SRF1 ☝ Subventionsaffäre: Das Bundesamt für Verkehr hat eine Anzeige gegen die BLS-Führung eingereicht

14.12 Jean-Pierre Danthine
Le Matin Dimanche ☝ La neutralité carbone en 2025? Ce serait possible

22.12 Jean-Pierre Danthine
La Liberté ☝ Mesurer une croissance décarbonnée

22.12 Jean-Pierre Danthine
Le Nouvelliste ☝ Une croissance décarbonnée à mesurer
### Facts

#### Personnel

<table>
<thead>
<tr>
<th></th>
<th>Budgetary funds</th>
<th>Third party funds</th>
<th>Total</th>
<th>% women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total staff</strong></td>
<td>67.54</td>
<td>23.01</td>
<td>92.55</td>
<td>42%</td>
</tr>
<tr>
<td>Professors</td>
<td>13.9</td>
<td>0.00</td>
<td>15.9</td>
<td>13%</td>
</tr>
<tr>
<td>Full professors</td>
<td>10.00</td>
<td>0.00</td>
<td>12.00</td>
<td>8%</td>
</tr>
<tr>
<td>Associate professors</td>
<td>2.90</td>
<td>0.00</td>
<td>2.90</td>
<td>34%</td>
</tr>
<tr>
<td>Assistant professors</td>
<td>1.00</td>
<td>0.00</td>
<td>1.00</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Scientific staff</strong></td>
<td>38.84</td>
<td>18.61</td>
<td>57.95</td>
<td>37%</td>
</tr>
<tr>
<td>Adjunct professors</td>
<td>0.00</td>
<td>0.00</td>
<td>0.5</td>
<td>0%</td>
</tr>
<tr>
<td>Senior scientists / postdocs</td>
<td>9.35</td>
<td>5.05</td>
<td>14.4</td>
<td>38%</td>
</tr>
<tr>
<td>PhD students</td>
<td>29.49</td>
<td>13.56</td>
<td>43.05</td>
<td>37%</td>
</tr>
<tr>
<td><strong>Administrative &amp; technical staff</strong></td>
<td>14.80</td>
<td>4.40</td>
<td>18.70</td>
<td>81%</td>
</tr>
<tr>
<td>Administrative staff</td>
<td>12.20</td>
<td>4.40</td>
<td>16.5</td>
<td>91%</td>
</tr>
<tr>
<td>Technical staff</td>
<td>2.60</td>
<td>0.00</td>
<td>2.6</td>
<td>0%</td>
</tr>
<tr>
<td>Apprentices</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0%</td>
</tr>
</tbody>
</table>

### Expenditures

- **Federal fund (dotation)**: CHF 9,868,714 (74.2%)
- **Other pluriannual federal funds**: CHF 147,024 (1.1%)
- **Education programs and seminars**: CHF 1,072,448 (8.1%)
- **SNSF**: CHF 969,435 (7.3%)
- **Sponsored Chairs**: CHF 652,664 (4.9%)
- **Industry grants**: CHF 243,406 (1.8%)
- **Other confederation grants**: CHF 144,411 (1.1%)
- **EPFL Innovation grants**: CHF 88,311 (0.7%)
- **European programs**: CHF 76,205 (0.6%)
- **Innosuisse (SCCER)**: CHF 29,317 (0.2%)
- **Donation**: CHF 3,845 (<0.1%)

**Total**: CHF 13,295,780 (100%)
Organizational Chart

CDM
College of Management of Technology
Dominique Foray

Direction Committee
- College director
- 2 institute directors
- 2 section directors

SFI
Swiss Finance Institute
Damir Filipovic

EDFI
Doctoral program in Finance
Erwan Morellec

IF Section
Rüdiger Fahlenbrach

MFE
Master program in Financial Engineering
Rüdiger Fahlenbrach

MTEI
Management of Technology & Entrepreneurship Institute
Ralf Seifert

EDMT
Doctoral program in Management, Technology & Entrepreneurship
Thomas Weber
Contact

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cdm@epfl.ch

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Project: CDM

Layout: Anne-Sylvie Borter / EPFL Print Center