

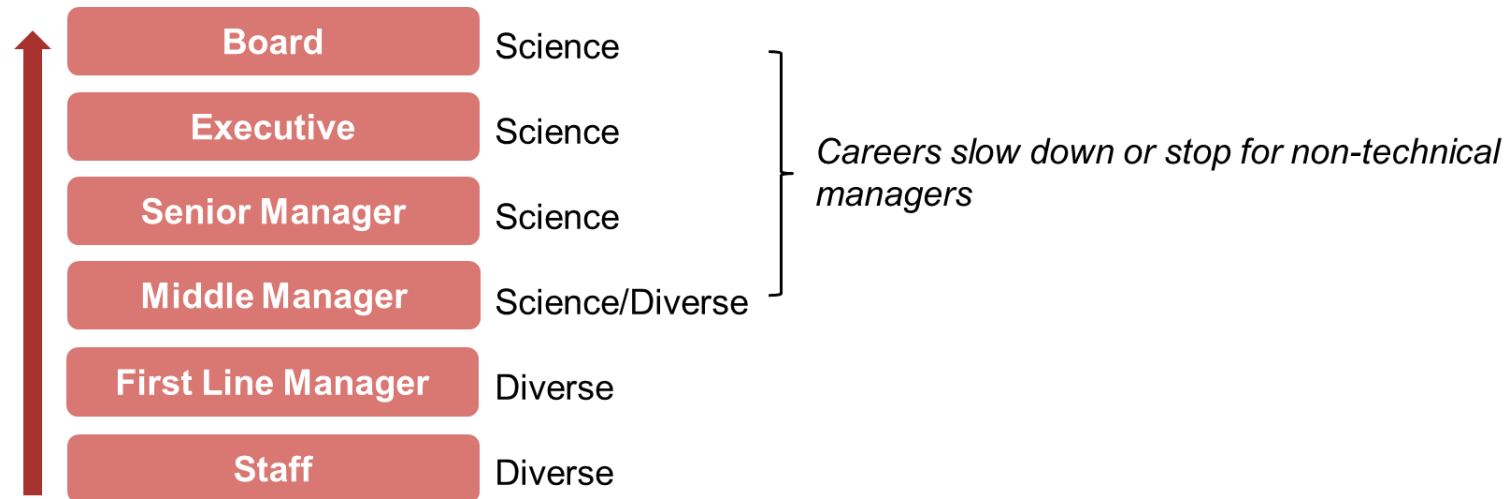
# MAS ETH in Applied Technology Concept and Programme

Ulrike Grossner and Maria Polito  
Online Information Event 17 March 2021, 18:00-19:30



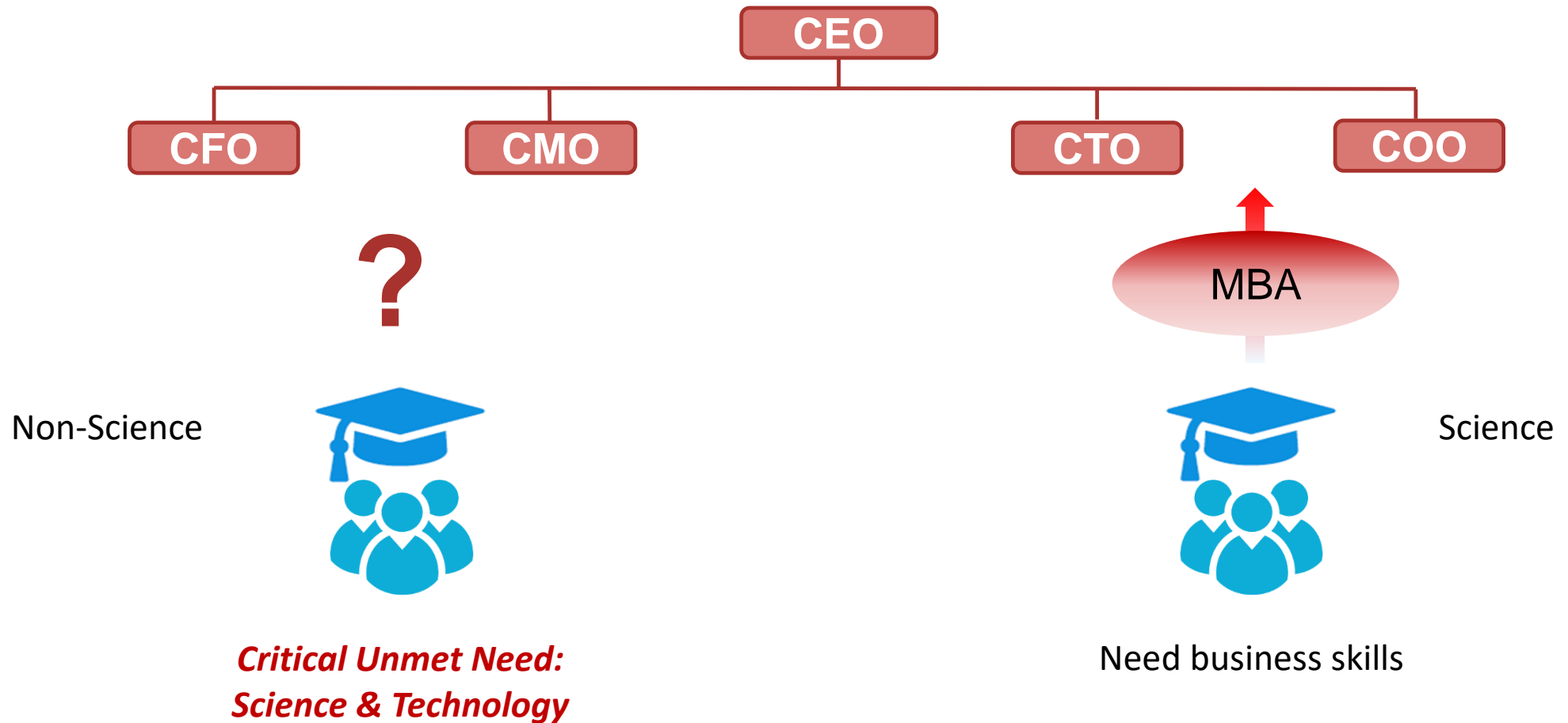
# Developed in Response to Industry Request

- Career advancement in technology companies

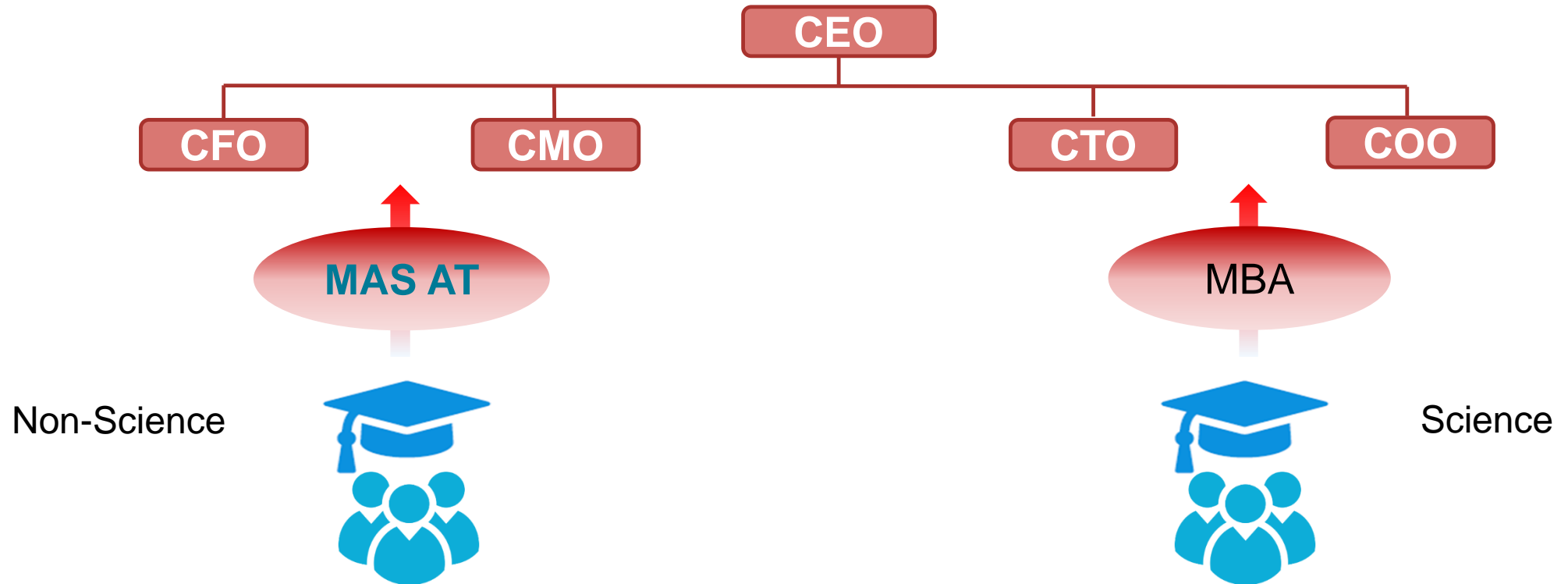


- Problem: Lack of qualified candidates for senior management in technology companies
  - Science and technology qualifications are missing
  - Existing education and training options are inadequate

# Gap in Continuing Education Market



# Created based on Industry Request: The MAS Applied Technology



Provides science & technology knowledge and innovation skills

# Programme Concept – Goals

- Continuing education degree enabling graduates to
  - Understand the scientific aspects behind the most important technologies in their industry
  - Collaborate more effectively with technical experts and managers in order to provide interdisciplinary, technology-based solutions to industry problems
  - Better lead technical staff and technology-based companies

# Target Participants

- Experienced managers
- In technology companies or industries
- Non-science or single science Master's degree
- Promotion Potential

# Example Participant – Marketing Manager



12 years – Manufacturing

Manages groups in 3 EU countries

Masters in Marketing & Communication

## Supervisor & HR Feedback

- Next level will require more interdepartmental collaboration
- Should improve understanding of operations and engineering

## Personal Goals

- Improve product design
- Understand opportunities created by technology

# Example Participant – Finance Manager



6 years – Electronics Industry  
First Line Manager, Finance Dept.  
Masters in Finance

## Supervisor & HR feedback

- Excellent with numbers
- Look beyond the numbers and help the company be more innovative, especially in its use of technology

## Personal Goals

- Stronger relationships with technical managers in the business unit
- Not feel lost in technical conversations



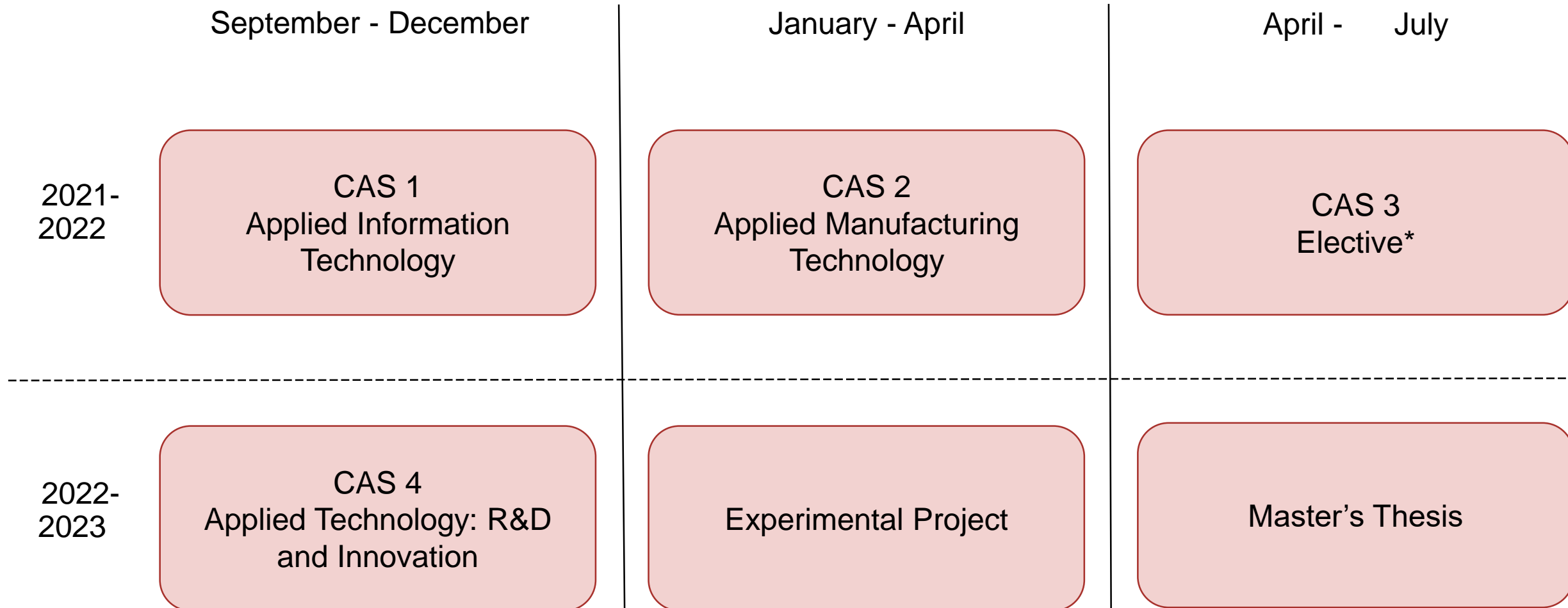
# MAS AT Program Structure

<b>MAS</b>	<b>Applied Technology</b>	<b>66 ECTS</b>
CAS 1	Applied Information Technology	12 ECTS
CAS 2	Applied Manufacturing Technology	12 ECTS
CAS 3	Applied Technology Elective*	12 ECTS
CAS 4	Applied Technology: R&D and Innovation	10 ECTS
Experimental Project		10 ECTS
Master's Thesis		10 ECTS

Available CAS 3 Electives for 2022:

- CAS Applied Technology in Energy
- CAS Applied Electronics and Digitalization

# MAS AT Study Plan



\* Participants select from available options

# CAS 1 – Applied Information Technology

E-tutorials (14 weeks)

Foundations of Programming  
(3 ECTS)

Block Format (4 weeks each)

Data Science  
(3 ECTS)

Humans and Machines  
(3 ECTS)

Applied Information Technologies  
(3 ECTS)

# New CAS 3 Elective: Applied Electronics and Digitalization

E-tutorials (14 weeks)

Electronics Fundamentals  
(3 ECTS)

Block Format (4 weeks each)

Semiconductors  
(3 ECTS)

Digitalization  
(3 ECTS)

Digital/Analog Systems  
(3 ECTS)

*Note: this CAS is still under development and content is subject to change.*

# Experimental Project

- Goal
  - Explore and improve understanding of a specific subject or technology
  - Better appreciation of typical problems during technology development
- Project Options
  - ETH supervised project (ETH Lab)
  - Participant designed (with prior written approval of MAS AT)
- ETH Advisor
  - Assigned based on project selection
  - Meet during CAS 4 for advance planning

# Master's Thesis

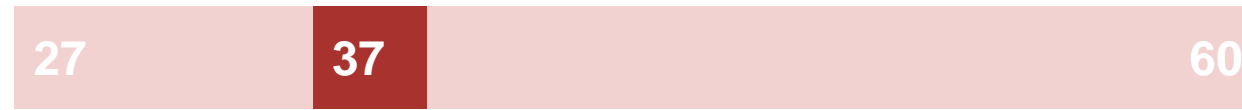
- Subject
  - Evaluate a technology application to solve a real industry problem
  - Problem and technology freely selectable (with Advisor approval)
- Key Points
  - Integrative of material and skills learned in programme
  - Must be sufficiently rigorous from science and technology perspective
  - Other information (policy, market, etc.) should be context only, not the focus
  - Start early!
- ETH Advisor
  - Ideally, same advisor as experimental project
  - Meet during CAS 4 for advance planning

# MAS in Applied Technology - Key Facts

- Program Duration 2 Years, Part-Time
- Format In presence & online  
2-day block, every other week
- Language 100% English
- Next Start September 2021
- Time Commitment ~250-300 hours/CAS  
~20 hours/week

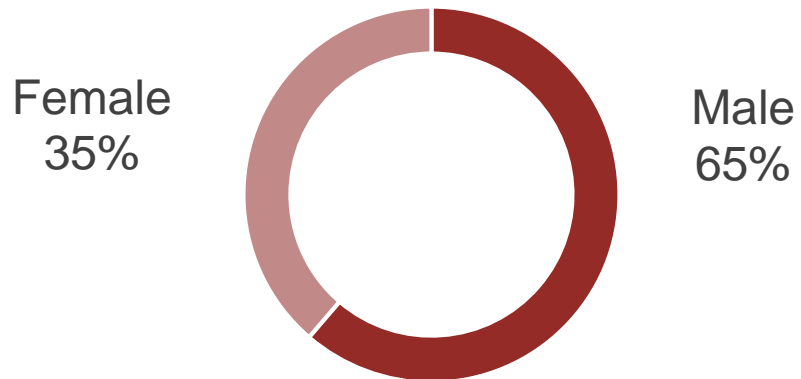
# 2020-21 Participant Profile\* – Personal Background

## AGE

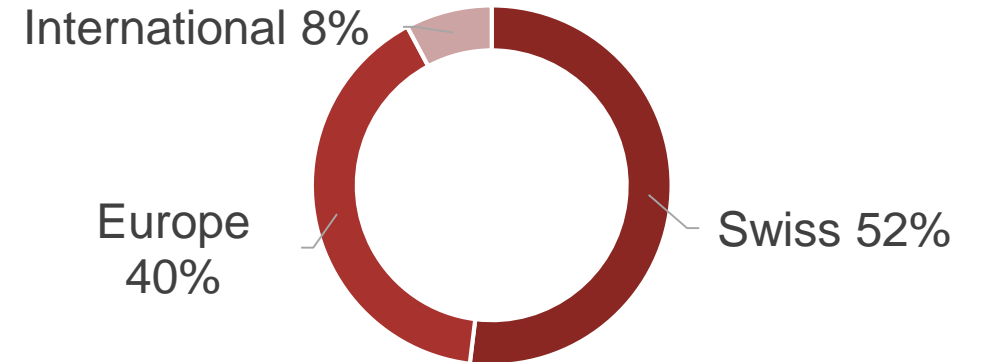


Average

## Gender



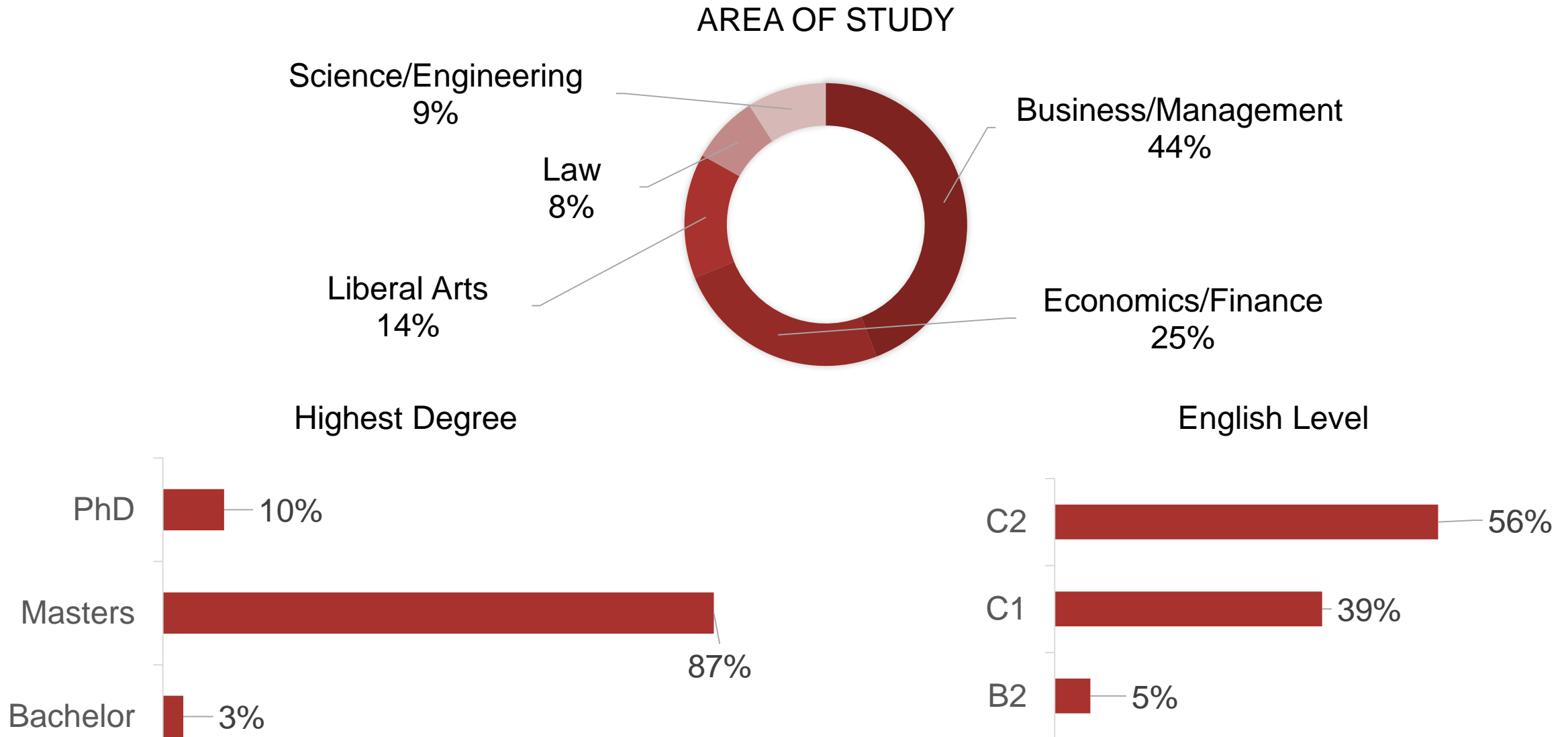
## Nationality



*\*Includes all MAS and CAS Participants*

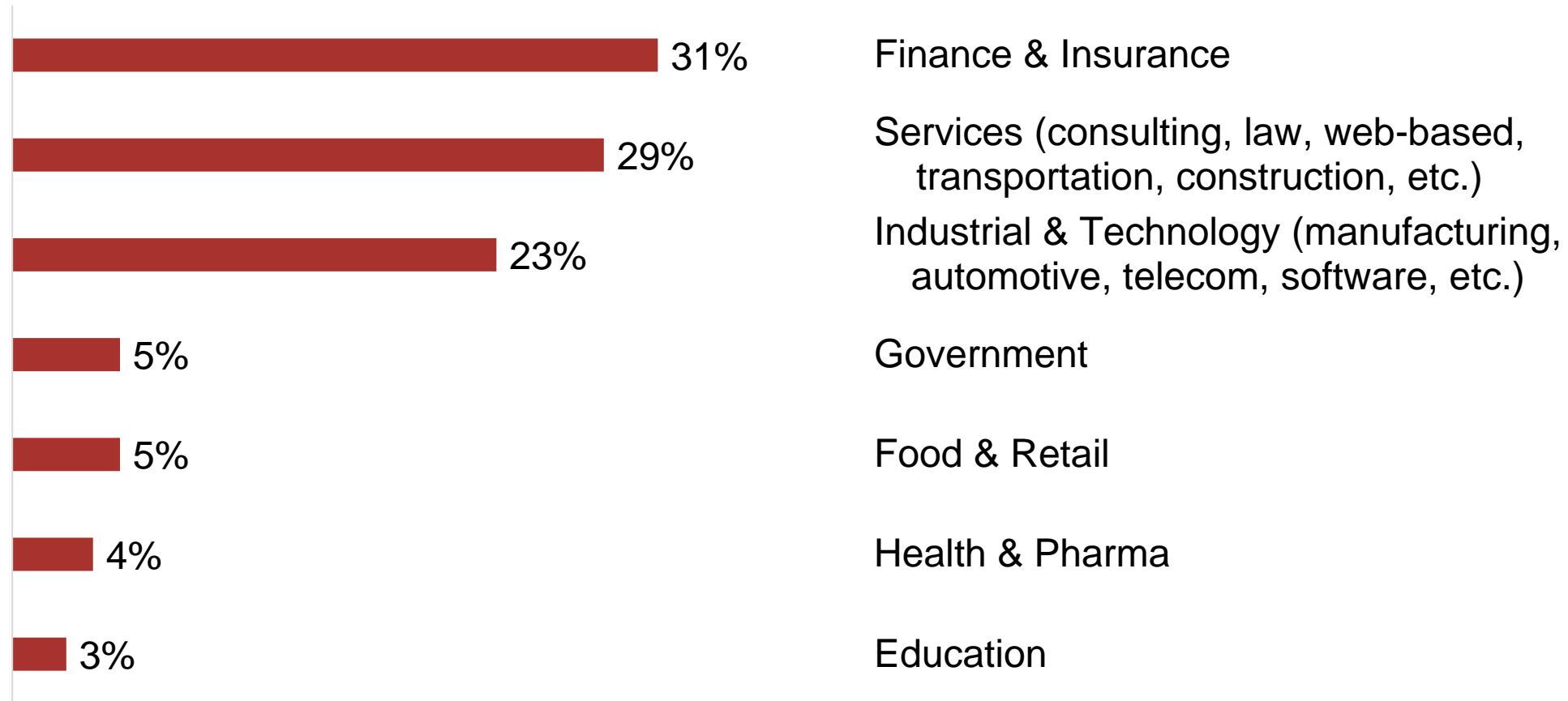


# 2020-21 Participant Profile – Academic Background

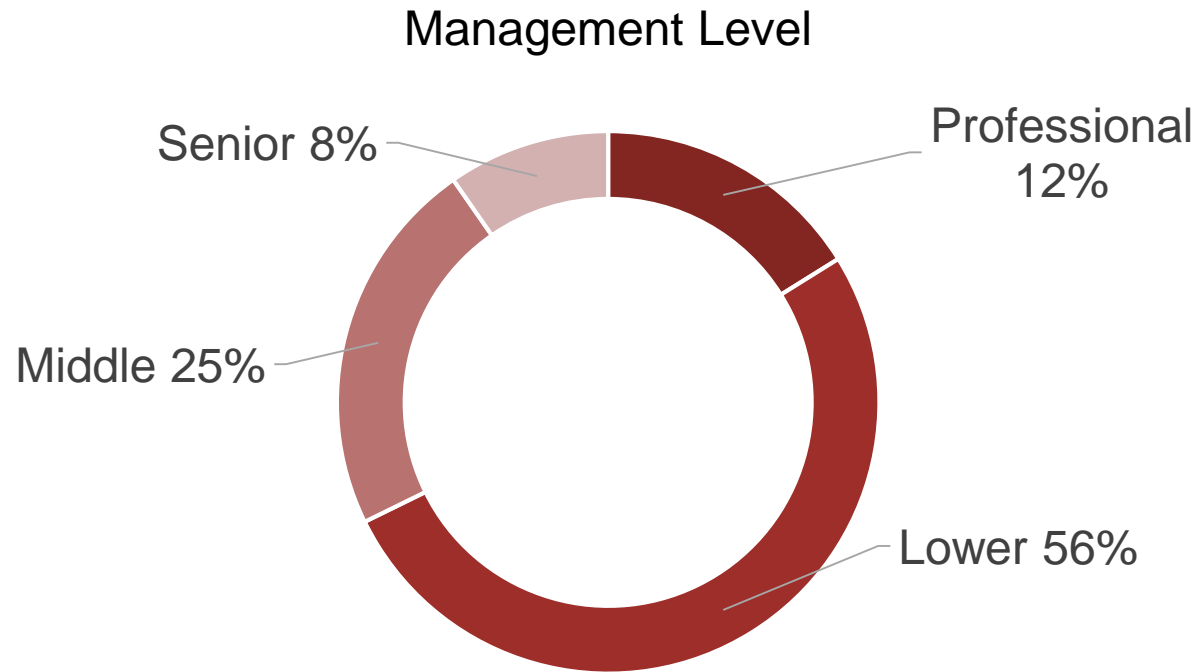


# 2020-21 Participant Profile – Industry

## Industry Sector



# 2020-21 Participant Profile – Experience



Work Experience

Average 11 years  
Range 5 – 35 years

- Example Titles
- Director
  - Vice President
  - Head
  - Program Manager
  - Product Manager
  - Sales Manager
  - Project Manager
  - Lead
  - Controller
  - Consultant
  - Analyst

# Application Deadlines 2021-2022

- **MAS AT**      **May 31**
- CAS AIT      May 31
- CAS AMT      November 15
- CAS ATE      February 28

## Important Notes:

- Class sizes are limited
- MAS AT participants have priority for admission to CAS
- CAS AIT applicants will be notified of admission decisions only after MAS AT admissions are finalized, most likely in July

# Submitting Your Application

1. Online Application
  - (ETH eApply)



**ETH zürich**  
eApply

ETH Zürich →

## Application for a study programme at the ETH Zurich

The application for [Bachelor's degree Programmes](#) → starting in the Autumn Semester is possible from 1 November to 30 April CET.

- More about [admission to Bachelors Degree Programmes](#) →.

For the ETH Bachelor programme in Human Medicine you need to apply at [swissuniversities](#) → by the latest 15 February.  
Persons admitted to this programme need to register at ETH Zurich via eApply.

The application period for [Master's Degree Programmes](#) → lasts from 1 March 2019 to 31 March 2019 CET.

- Applications which are handed in after the deadline will not be considered.

2. Print, Sign & Mail the application (+ supporting documents) to SCE



# Supporting Documents

- Degree certificate and final academic record (transcript from your university)
- References of your working experience
- Identity documentation
- CV or work history (in application form)
- Employer recommendation letter – Suggested

# MAS AT Application Review

1. Initial Screening – School for Continuing Education
2. Review and Selections – Programme Management
3. Final Decision and Notification – School for Continuing Education

# Initial Screening of Applications

- Application is complete
- Satisfy minimum criteria
  - Education
    - Special case: Bachelor's degree
  - Work experience
  - Knowledge of English language



# Programme Review & Selection of Applications

- Good Fit: Participant – Programme
  - Match target profile or equivalent fit
  - Relevant experience and motivation
- Likely to successfully complete the programme
  - Look at complete dossier: education, experience, training, etc
- Career potential
  - Career to date & employer recommendation
- General balance
  - Goal – rich peer learning experience, network opportunities

# Admission Decision

- Notified by letter from SCE
- Typically ~1-2 months prior to start of the program
- No need to confirm your participation
- Withdrawal: written notification by date in SCE letter
- Late withdrawal is subject to a fee

# Fees

- Application
  - 50 CHF (applicants with a Swiss degree)
  - 150 CHF (applicants from other universities)
- Tuition
  - MAS: 39'000 CHF
  - CAS: 8'500 CHF
- Books & materials not included

# Further Information

## Website

[www.mas-at.ethz.ch](http://www.mas-at.ethz.ch)

## Contact

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