

Executive Master of Business Administration (EMBA)

Digital Technology and Operations

Further education master's degree programme
for management personnel



Executive MBA in Digital Technology and Operations

In order to use the opportunities offered by digitalisation, companies need to successfully implement their digital strategies and solutions. Here the management of the digital transformation represents a major challenge for companies. The mastering of digital manufacturing technologies, the secure use of big data and the employment of agile organisational concepts are essential requirements for managing digitalisation. Management personnel require specific technological and methodological knowledge, especially with respect to the targeted use of key digital technologies, the designing of a digitally integrated process environment and the successful management of teams in Working World 4.0.

The EMBA in Digital Technology and Operations provides you with an overview of the technologies of digitalisation and the current technological trends. You learn how to assess, select and use key digital technologies. You address the topics of data infrastructure, data integration and digitally networked systems and learn how to plan networked process and manufacturing environments. You acquire methodological knowledge of new organisational approaches, agile management concepts and agile culture, allowing you to optimally manage your team in a changed working environment. Company visits to best-practice pioneers that have already successfully deployed key digitalisation solutions provide you with valuable insights and impetus. You thus possess the current skills required to sustainably improve efficiency for your organisation and successfully market innovative products and services.

Target group

The Executive MBA (EMBA) in Digital Technology and Operations is geared towards management personnel from the fields of operations, engineering, technology and innovation management, IT, research and development and product or project management who are responsible for the implementation of digitalisation. It is especially aimed at management personnel who work in one of the following functions or areas:

- As an executive board member
- Operations management (production/manufacturing, engineering, supply chain / logistics, quality management)
- Technology/innovation management, R&D
- IT management
- Service management
- Product and project management
- As a consultant in the area of digitalisation

The EMBA in Digital Technology and Operations is a job-concurrent study programme. The organisational structure takes into account that you will be employed on a full-time basis during the study programme.

Study contents

The Executive MBA in Digital Technology and Operations comprises six modules and the master's thesis. The 'Learning from best-practice pioneers' module takes place as part of company visits to selected firms.

Strategic management 6 days / 4 ECTS credits	New value-creation models and agile innovation 6 days / 4 ECTS credits
<ul style="list-style-type: none">– Corporate strategy and business area strategy– Strategic analysis and strategic position– Strategy formulation and strategic options– Strategy implementation and control– New strategic approaches, e.g. blue ocean strategy– Case studies and examples from the world of practice	<ul style="list-style-type: none">– Innovative business models in the area of digitalisation, value proposition design– Agile innovation: design thinking, lean start-up– Digitalisation and dual transformation– Improve or redevelop customer value creation– Service-dominant logic and service innovations– Smart service pricing and revenue mechanism– E-governance, compliance and risk management of digital offerings
Key digital technologies 8 days / 5 ECTS credits	Operations and process integration 6 days / 4 ECTS credits
<ul style="list-style-type: none">– Technology trends in the area of digitalisation– Key Industry 4.0 technologies: IoT, ICT– Sensor technology: photonics, mobile robotics– Data management and data infrastructure: 5G, data storage/cloud, data security, blockchain– Big data analytics: data mining and analytics, M2M, artificial intelligence, machine learning, AR/VR– Control environment: data simulation, digital twins– Agile IT project management (scrum, sprints)	<ul style="list-style-type: none">– IT integration and IT architecture– System and data integration– Networked cyber-physical systems (CPS)– Smart factory management, process automation, control and planning (BPMN; RPA)– Management of smart service platforms and ecosystems– Management of smart services B2B, B2C and in the service sector
Agile organisation, digital leadership 6 days / 4 ECTS credits	Learning from best-practice pioneers 5 days / 3 ECTS credits
<ul style="list-style-type: none">– Digitalisation requirements placed on process and structural organisation, management and culture– Agile organisations and digital leadership– Agile management concepts: digital teams, self-responsibility– Network structures, hybrid/dual organisations, project organisations– Lean start-up and corporate venturing– Change management and innovation culture– HR management of Working World 4.0: job design, talent management, change at the workplace	<p>Visits to best-practice companies to observe the implementation of key technologies and process integration, including in the following areas:</p> <ul style="list-style-type: none">– Smart production: M2M, IT controllability, digital twins, predictive maintenance– Smart factory: process automation, system integration, development of cyber-technical systems– Working World 4.0: digital organisation, agile management concepts and agile innovation culture
Master's thesis 12 ECTS credits	

Learning from best-practice pioneers
Company visits and guest lectures from selected firms that are leaders in the implementation of key digital technologies, process integration and automation or the introduction of agile organisational concepts are a fixed component of the EMBA in Digital Technology and Operations. The company visits take place in Switzerland and southern Germany.

Silicon Valley study trip (optional)
Students completing the EMBA in Digital Technology and Operations can also participate in a one-week study trip to Silicon Valley, the centre of digital transformation and digitalisation. During this study trip, company visits are made to start-ups, incubators and accelerators as well as established firms in the digital economy. The costs for the study trip come to around CHF 5,000.

Organisational issues

Admission requirements

The admission requirements are a university degree or federal higher education qualification as well as five years of professional experience, including at least two years with leadership experience. Admission by dossier is possible where appropriate. Decisions on admissions are made by the Director of Studies on the basis of the admission dossier and a personal admission interview.

The EMBA is aimed at students who already have in-depth management knowledge and who have either completed the second level (MAS) in advance or possess an appropriate level of knowledge and expertise thanks to their educational background and/or the business experience they have gained. Direct access to EMBA level is thus possible. The Executive MBA in New Business Development is concluded with a master's thesis.

Definitive admission is confirmed in writing by the University of Applied Sciences of the Grisons. The admission deadline is 10 August in the year in which the study programme is to be commenced. It is recommended to apply in good time.

Tuition fees

- Executive MBA in New Business Development: CHF 17,500
- Master's thesis supervision: CHF 3,000

We grant a discount of CHF 3,000 to students who attend the MAS and EMBA levels in direct succession. The tuition fees cover the teaching and books. Documents from lecturers are made available in electronic form. The tuition fees do not include travel costs, accommodation and catering as part of the intensive week in Berlin (approx. CHF 1,500) and the costs for the optional study trip to Silicon Valley (approx. CHF 5,000).

Place of study

The modules of the EMBA in Digital Technology and Operations are taught at the Zurich site of the University of Applied Sciences of the Grisons. In the 'Learning from best-practice pioneers' module, lectures and visits are held at companies in Switzerland and southern Germany. The Zurich site of the University of Applied Sciences of the Grisons is located at Limmatstrasse 21, in the direct vicinity of Zurich main station.

Duration of study programme

The Executive MBA in Digital Technology and Operations comprises 15 teaching blocks (Friday and Saturday) as well as an intensive week.

The exact teaching blocks are defined as part of the timetable. The study programme begins in September, with the classroom teaching ending in July of the following year. The submission deadline for the master's thesis is 31 October. The timetables can be ordered via e-mail from the student administration or can alternatively be accessed on the website. The organisational structure of the management further training programme takes into account that you will be employed on a full-time basis during the study programme.

Teaching language

In most modules, both teaching and the relevant documents are provided in German. Individual teaching blocks or lectures may be held in English. In some cases, the literature and documents provided by lecturers may also be in English. Those wishing to participate in the study trip to Silicon Valley require a solid knowledge of English.

ECTS credits

At least 60 ECTS credits are required to gain the title of Executive MBA in Digital Technology and Operations. Students acquire these credits by attending the MAS (24 ECTS credits) and EMBA (24 ECTS credits) levels and by passing the master's thesis (12 ECTS credits). Those admitted directly are credited the ECTS credits from the MAS level.

Course assessments

Course assessments are carried out in each of the modules. These generally comprise written examinations, presentations on case studies and example cases or follow-up orders. You will develop case studies as part of student teams. The examinations are in some cases carried out as online examinations.

Qualification

Those who successfully pass the study programme are awarded the title of Executive Master of Business Administration FHGR in New Business Development.

Registration

Please send the completed placement form together with your CV and diplomas to: management-weiterbildung@fhgr.ch

Your documents will be examined by the Director of Studies who will then contact you in order to arrange a personal meeting. Following the admission interview, the Director of Studies will confirm the admission decision in writing and the application process can be completed using the application form.

Partnerships

In order to ensure that the study programme contents are as close to the cutting edge of developments as possible, the University of Applied Sciences of the Grisons works together closely with associations, institutions and companies.



'The real challenge faced by companies in the context of digitalisation lies in its practical implementation: the mastering of key digital technologies, the structuring of an integrated process environment and the success-ful management of teams in Working World 4.0.'

Martina Rauch, Director of Studies

Advisory service

Do you have any questions regarding content or administrative matters? Would you like course guidance? We will be happy to help you.



Director of Studies
Martina Rauch, MBA



Administration
Anne-Françoise Veith

Fachhochschule Graubünden

Comercialstrasse 24
7000 Chur
Switzerland
T +41 81 286 24 32
management-weiterbildung@fhgr.ch



fhgr.ch/embadto

Fachhochschule Graubünden
Scola auta spezializada dal Grischun
Scuola universitaria professionale dei Grigioni
University of Applied Sciences of the Grisons

