

## Magellan Exchange

### GRADUATE/MASTER Course Offerings in English

Last updated: 28 September 2024

Variation may occur; please use this as a general guide only. Credits, course requirements, and eligibility vary.

More information about each institution is available at <http://www.magellanexchange.org/partners/>.

#### Vorarlberg University of Applied Sciences - Dornbirn, Austria

##### FALL 2024 SEMESTER

###### Mechatronics

Advanced Finite Element Analysis  
Applied Robotics  
Digitization of Production  
Directed Research Seminar

Embedded Systems III  
Higher Mathematics III  
Sensor Systems

###### Sustainable Energy Systems

Advanced Finite Element Analysis  
Computer Applications  
Critical Thinking  
Efficient Systems – Selected Chapters  
Electrical Power Systems  
Energy Markets & Trading  
Energy Project – Business Plan

Energy Transmission  
Financing & Economic Viability  
Internet of Energy  
Project – Efficient Systems  
Project – Smart Buildings  
Seminar Master Thesis  
Smart Buildings – Selected Topics

##### Spring 2025 SEMESTER

###### Business

Business Communication  
Data Collection & Interpretation  
Digital Business Management  
Leadership Skills Lab

Leading Change & Transformation  
Multinational Organizations & Strategy  
Research Methods  
Responsible Management

###### Computer Science

Applied Advanced Web Architectures & Software Design  
Architectures & Security in Distributed Systems  
Communication Systems  
Computer Vision

Evolutionary Algorithms & Optimization  
Parallel Computing & Concurrent Programming  
Software Processes  
Stream Processing Systems

###### Mechatronics

Creating Innovations & Solving Probs. w/Design Thinking  
Digital World: Technology, Society & Ethics  
Disruptive Technologies: Fundamentals, Applications, & Opportunities

Human Rights in the Professional Context  
Introduction to Financial Markets – Overview  
Introduction to the Social & Solidarity Economy  
Writing Lab: Creative Writing

###### Sustainable Energy Systems

Energy & Society

Sustainability Management

## Satakunta University of Applied Sciences – Rauma, Finland

### FALL 2024 SEMESTER

#### Business

Contemporary Leadership	Research Competence
Innovation & Creativity	Research Planning & Process
Leading Sustainability & Corporate Social Responsibility	Strategy Work & Corporate Governance
Managerial Finance	Sustainable Marketing Management

### SPRING 2025 SEMESTER

#### Business

Developing HR & Organizations	Research Planning & Process
Green Supply Chain Management	Strategic Management
Research Competence	

## Rennes School of Business - Rennes, France

### FALL 2024 SEMESTER

*Some courses must be taken together. Please refer to the School's course list on their Magellan profile page for requirements regarding how courses need to be grouped.*

#### Business – Level 5

Advanced Corporate Finance	Exchange Markets
Advanced Financial Modeling	Financial Theory
Advanced Production Systems & Industry 4.0	Geopolitics & International business
AI & FinTech	Global Mindedness & Intercultural Intelligence
AI & Marketing	Global SC & International Trade
Block Chain & Crypto Assets	Harnessing AI for Business
Case Studies in Business Analytics, Ethics & Risk	International Negotiation & Business Development
Coding & Data Science for Finance	Inventory Management & Warehousing
Coding & Data Science for Finance	Islamic Finance
Consumer Behavior in a Sustainable Environment	Luxury Marketing Strategy
Contemporary Brand Management	Managing Risks & International Business Law
Contemporary Trends in the Luxury Industry	Marketing of Innovation
Corporate Responsibility in the Luxury Industry	Mergers & Acquisitions: an International Perspective
Corporate Social Responsibility in Marketing	Natural Resource & Environmental Economics
CRM Systems with AI Integration	Quantitative Finance
Data Driven Demand Planning	Sales Strategy & Management
Data Science Toolbox	Strategic Sourcing & Contract Negotiation
Decision Models for Supply Chain Planning	Strategy for Net Zero
Digital Advertising & Communication	Sustainable Finance
Digital & Influencer Marketing in the Luxury Industry	Sustainable Supply Chain & Green Logistics
Digital Tools for Sales Management & Forecasting	Topics in Financial Economics with “R”
Distribution & Transportation Management	

## SPRING 2025 SEMESTER

*Some courses must be taken together. Please refer to the School's course list on their Magellan profile page for requirements regarding how courses need to be grouped.*

### **Business – Level 5**

Advanced Brand Management	Omni-Channel Distribution & Retail Management
Advanced Digital PR & Corporate Communications	Omni-Channels in the Luxury Industry
AI & FinTech	Political Behavior of the Firm
Big Data & Business Analytics	Purchasing & Sales Management
Critical Marketing	Retail Analytics
Database for Direct Marketing & e-CRM	SC Project Management
Decision Science	Services Marketing
Deep Learning in Neural Networks for Finance	Simulations in International Negotiation & Business Dev.
Empirical Methods in Finance	Social Media Advertising
Ethics & CSR in Finance	Social Media Intelligence
Ethics & Responsible Business Negotiations	Strategy for Net Zero
Financial Data Infrastructure & Text Mining	Supply Chain Analytics & Digitalization
Financial Engineering & Commodity Trading	Supply Chain Risk & Disaster Management
International Sourcing & Procurement	Sustainable Design & Brand Identity in Luxury Industry
Management of Sales in the Luxury Industry	

## Aachen University of Applied Sciences - Aachen, Germany

### FALL 2024 SEMESTER

#### **Aerospace Engineering (Aachen campus)**

Advanced Finite Element Methods	Intercultural Communication
Analysis & Sizing of Aircraft Structures	Powertrain Calibration Propulsion Systems
Climate Change Adaptation in Commercial Aviation	Propulsion System Integration
Climate Change Impact on Automotive Sector	Space Exploration Project
Critical Thinking & the Scientific Method	Space Operations & Services
Electrified Vehicles Components Modeling	Transformative Urban Mobility
Exploration Mission Design	Transonic Aerodynamics
Flight Guidance & Navigation	Turbomachinery Design & Analysis
Flight Simulation Technology	Vehicle Acoustics
Global Automotive Homologation & Attribute Mgmt	Vehicle Interior: Simulation & Evaluation

#### **Chemistry & Biotechnology (Jülich campus)**

Business Administration	Nuclear Physics
Fundamental Skills I	Nuclear Physics & Radiation Detection
Medical Physics	Nuclear Technology
Nuclear Chemistry	Scientific Skills
Nuclear Chemistry & Radiation Biology	

#### **Electrical Engineering & Information Technology**

Advanced Motion Control	Data Science II
Analog & Digital Control Technology	Electromagnetic Simulation
Cognitive Robotics	Embedded Drive Design

### **Mechanical Engineering & Mechatronics (Aachen campus)**

Advanced Engineering Mathematics  
Advanced Fabrication Technologies  
Advanced Motion Control  
Analog & Digital Control Technology  
Application of Mechatronics Systems  
Fundamentals of Electrical Engineering

Fundamentals of Mechanical Engineering  
Mechatronic Systems Simulation  
MEMS/Microtechnology  
Micromechatronic Systems  
Sensors & Actuators

## **SPRING 2024 SEMESTER**

### **Aerospace Engineering (Aachen campus)**

Aircraft Design  
Automotive User Interface Design  
Computational Spaceflight Dynamics  
Design of Electronic Powertrain Management Systems  
Dynamics of Flight  
Electronics for Autonomous Vehicle Mobile Systems  
Engineering Meets Design  
Environmental Effects of Aircraft Propulsion

Environmental Impact of Vehicle Powertrain  
General Management of Automotive & Aerospace Supplies  
Hydraulic & Electric Aircraft Systems  
Hypersonic Aerodynamics & Atmospheric Entry  
Planets & Life  
Space Systems & Payload Engineering  
Vehicle Structures: FEM & Testing

### **Business (Aachen campus)**

Business Case  
Cross-Cultural Competences  
Customer Integration  
Finance for Global Managers

Governance & Responsibility  
International Economics  
International Supply Chain Management  
Management of Sales & Services

### **Chemistry & Biotechnology (Jülich campus)**

Nuclear Applications  
Fundamentals of Engineering  
Fundamental Skills II

Management Skills  
Nuclear Chemistry & Radiation Biology  
Nuclear Physics & Radiation Detection

### **Electrical Engineering & Information Technology**

Data Science I  
Functional Safety for Road Vehicles

Robot Programming with ROS

### **Mechanical Engineering & Mechatronics (Aachen campus)**

Advanced Robotics & Autonomous Mobile Systems  
Industrial Communication  
ROS – Open Source Technologies in Robotics

Simulation of Structure, Fields & Flows  
Systems Engineering

**FALL 2024 SEMESTER**

**Business, Economics, & Business Law**

Digital Marketing  
Digital Transformation & Data Value  
Finance & Economics of Digital Markets  
Financial Instruments  
Financial Markets  
International & European Economic Law

International Monetary Economics  
Investment Appraisal  
Organizational Behavior  
Political Philosophy  
Purchasing Strategy  
Sustainable Finance

**Computer Science**

Computer Graphics  
Distributed Systems  
IT Security

Signals & System  
Web Applications

**SPRING 2024 SEMESTER**

**Business, Economics, & Business Law**

Automotive Technology Management  
Behavioral Finance & Investments  
Business Planning  
Economic Philosophy  
Economics & Finance of Risk & Uncertainty  
Labor Economics

Management Control Systems  
Philosophy of Science  
Strategic Brand Management  
Strategic & International HR Management  
Valuation & Financial Analysis

**Computer Science**

Agile Software Development  
Computational Intelligence

Mobile Systems  
Service-Oriented Networks

**FALL 2024 SEMESTER**

**Business**

Accounting Information for Decision Making	Intermediate Public Finance
Applied Macro-Finance	Investments
Applied Microeconomics	Machine Learning & Data Mining
Asset Pricing	Mathematics & Modelling for Economics & Finance
Big Data Management	Methodology of Scientific Research
Business Process Management	Microeconometrics
Corporate Financial Reporting	Organization & Management
Developing Software Solutions	Principles of Tax Law & Tax Procedure
Digital Tools	Research Seminar
Direct & Indirect Taxes	Stochastic Calculus for Finance
Economics of Taxation – Principles & Policy	Tax Accounting
Information System Management	Topics in Finance
Intermediate Econometrics	Welfare Economics

**SPRING 2025 SEMESTER**

**Business**

Advanced Digital Tools	Fixed Income Securities
Applied Macro-Finance	Growth Theory & Economic Policy
Behavioral Economics & Finance	Intermediate Labor Economics
Business Analytics & Decision Making Using Data	Intermediate Macroeconomics
Business Econometrics & Data Analysis	Intermediate Strategic Marketing
Corporate Finance	International Tax Planning
Derivatives	IT Project Management
Digitalization & Taxation	Machine Learning & Data Mining
Digital Marketing	Policy Analysis & Impact Evaluation
E-Commerce	Research Seminar
Ethical Issues in Tax Practice	Risk Modeling
EU Company Law	Taxation of Wealth & Financial Services
EU Tax Law	Topics in Economics