

Study regulations of the Bachelor's course

Facility & Real Estate Management

To obtain the academic degree

Bachelor of Arts in Business,
abbreviated BA

as an appendix to the statutes of the
HOK | University of Applied Sciences Kufstein Tirol

Organizational form: full-time & part-time

Duration: 6 semesters

Scope: 180 ECTS

Places for beginners per academic year: 30 full-time
25 part-time

Version 1

Adopted by the Faculty on May 6, 2026
Program starts WS 2027/28

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1 OCCUPATIONAL PROFILES

1.1 Career opportunities

The fields of application and professional activities for graduates of the bachelor's program are wide-ranging within operational facility and real estate management. The diverse range of tasks requires the integration of methods from various disciplines—such as real estate management, facility management, engineering, law, and economics, as well as IT, communication, foreign languages, and interpersonal skills. The scope of responsibilities encompasses all preparatory and executive tasks related to the planning, implementation, organization, control, monitoring, procurement, management, and utilization of property-specific infrastructure. The interdisciplinary skill set enables students to operate successfully in these fields.

Potential areas of employment are aligned with the life cycle of a property:

- **New construction, renovation, and restoration planning:** Graduates are entrusted with subject-specific decision-making and implementation, particularly in consulting firms, architecture and engineering firms, general planning and construction companies, as well as in the public sector and for building owners. The focus is more on the user's perspective than on traditional project development.
- **Space management:** Graduates contribute to the analysis and optimization of processes through spatial and usage concepts, including ergonomics and workplace design. They primarily work in companies with office and commercial real estate. They are involved in the implementation and monitoring of these concepts.
- **Real Estate Management and Building Operations:** Property-specific management—including contract management and performance measurement—as well as the operational implementation of building operations concepts in accordance with economic, functional, and safety-related requirements, including the identification of potential cost savings, is part of the graduates' scope of responsibilities, which plays an important role in demanding settings (such as hospitals, long-term care facilities, and museums).
- **Maintenance:** By integrating economic and technical training content, graduates are able to plan and coordinate inspections, maintenance, and repairs based on a combination of technical and economic expertise. As a result, they play an important role both at service companies in this field and at companies where maintenance concepts are implemented.
- **Facility Services:** Graduates implement decisions regarding facility services within companies—both in internal roles and at external service providers. They analyze the existing scope of services and needs, develop optimization proposals, and support the organization and adaptation of services.
- **Sustainability Management:** Sustainability in real estate is gaining significant importance due to its high potential for savings and optimization. Using a life-cycle-oriented approach, graduates identify relevant opportunities and make them actionable for organizations—in consulting firms as well as in real estate and facility management companies.
- **Real Estate Project Development and Property Development:** Graduates contribute to concepts that increase revenue and value for developed and undeveloped properties. Their responsibilities include basic operational tasks such as market and location analyses, as well as feasibility studies for individual construction projects. Opportunities can be found in consulting firms, planning and construction companies, the public sector, on the client side, and particularly with property developers **and project developers.**
- **Real Estate Valuation:** They can appraise properties of common use types (excluding specialty properties), primarily for marketing purposes, and prepare baseline data for more extensive valuation projects.

- **Marketing, Disposal, and Leasing:** In real estate marketing, graduates assist with brokerage and disposal at the individual property level. They support the profitable sale or disposal of non-operational real estate, the sale of real estate development projects, and sales processes in real estate brokerage firms, and also take on operational tasks related to leasing.

Employment Opportunities for Graduates by Industry Sector:

- **Industrial and service companies**
 - Corporate Real Estate and Facility Management for manufacturing, logistics, retail, tourism, media, and office locations
 - Entry-level roles, e.g., Junior Facility Manager, Junior CREM Manager, Space and Workplace Manager, Project Coordinator for Construction/Existing Properties
- **Finance and investment sector**
 - Real estate financing, valuation, and investment; portfolio and risk management
 - Entry-level roles, e.g., Junior Real Estate Analyst, Valuation Analyst, Junior Asset/Portfolio Manager, CREM Specialist for retail and office portfolios.
- **Public Sector and Non-Profit**
 - Real estate, building, and infrastructure management in local government, municipalities, state governments, the federal government, as well as in nonprofit organizations and foundations
 - Entry-level roles, e.g., Junior Building Manager, Real Estate Coordinator, Project Assistant for Building Construction, ESG/Energy Coordinator
- **Real Estate Industry and Construction and Planning Sector**
 - Property and asset management, project development, real estate development, brokerage and sales services, architecture, engineering, and construction firms
 - Entry-level roles, e.g., Junior Property/Asset Manager, Project Development Assistant, Junior Project Manager (Planning/Construction), Technical Due Diligence Assistant.
- **Facility Services and operators of complex portfolios**
 - FM outsourcing, technical and infrastructure services, CAFM and process management; specialized real estate such as educational, healthcare, transportation, leisure, and media properties
 - Entry-level roles, e.g., Junior Facility Services Manager, Assistant Property Manager, Campus/Special-Purpose Real Estate Facility Manager, Operations and Sustainability Coordinator.

1.2 Qualification profile

The qualification objectives and learning outcomes of the bachelor's degree program [Subject] align with both academic and professional requirements and correspond to ISCED level 0788 (International Standard Classification of Education). The curriculum prepares graduates for the professional fields described in previous chapter.

Professional Field	Responsibilities	Description of Competencies	Competency Mapping	Curriculum Modules
Planning for New Construction, Renovation, and Restoration	Planning, coordination, and management of new construction, remodeling, and renovation projects, including needs	Ability to systematically analyze construction and building structures, develop planning alternatives, integrate technical requirements, take legal	Technical and Academic Competence	e.g., Structural Engineering; Building Science; Building Services Engineering; Computer-Aided Design & Architectural Drafting; Project Management. e.g., Building Materials, Physics & Construction; Real Estate Development &

	analysis, conceptual design, permitting, construction planning, and project execution	frameworks into account, and manage projects throughout the entire planning cycle in accordance with quality, cost, and schedule requirements.		Building Design; Building Services Engineering; Computer-Aided Design & Modeling; Project Management
Space Management	Strategic and operational management of space and work environments, space requirements planning, occupancy and usage concepts, monitoring of space efficiency	Ability to collect and interpret space metrics, develop workplace and usage concepts, apply digital planning and analysis tools, and ensure a stakeholder-oriented approach to space organization.	Technical and Academic Competence, Personal Competence	e.g., Digital Tools & Data Skills; Computer-Aided Design & Architectural Drafting. bbB: Workplace & Space Management; Corporate Real Estate Management; Data Analytics; Digital Tools & Data Skills; Computer-Aided Design & Modeling. Interpersonal Modules: vzB: Collaboration & Interpersonal Skills. bbB: Collaboration & Interpersonal Skills
Real Estate Management and Building Operations	Operation and management of real estate throughout its lifecycle, budgeting, operator responsibility, quality assurance, user management	Ability to plan operational processes, manage key performance indicators, optimize costs and quality, implement operator obligations in compliance with legal requirements, and develop service-oriented operational strategies.	Technical and academic competence, personal competence	e.g.: Introduction to Real Estate & Facility Management; Real Estate Management; Law for Facility Management & Real Estate; Fundamentals of Economics. bbB: Introduction to Facility & Real Estate Management; Corporate Real Estate Management; Lifecycle & Maintenance Management; European & International Law; Fundamentals of Economics. Interpersonal Modules: vzB: Collaboration & Interpersonal Skills. bbB: Social Skills & Communication; Collaboration & Interpersonal Skills
Maintenance	Planning and implementing maintenance strategies (preventive, condition-based, corrective), prioritizing measures, managing external service providers	Ability to assess the condition of buildings and facilities, develop data-driven maintenance plans, allocate resources efficiently, and minimize technical risks.	Technical and Scientific Competence	e.g., Building Services Engineering; Digital Tools & Data Skills; Project Management. e.g., Lifecycle & Maintenance Management; Building Services Engineering; Energy Efficiency & Circular Systems; Data Analytics; Project Management
Facility Services	Management and optimization of infrastructural and commercial facility services such as cleaning, security, logistics, catering, reception, and user services	Ability to design service portfolios based on needs, define quality standards and SLAs, oversee the bidding process, and manage service processes in a cost-effective and user-oriented manner.	Technical and Academic Competence, Interpersonal Competence	e.g., Facility Services; Introduction to Real Estate & Facility Management Education. e.g., Global Facility Management; Corporate Real Estate Management; Real Estate Marketing & Communication. Personal Development Modules: e.g., Collaboration & Interpersonal Skills. e.g., Social Skills & Communication; Collaboration & Interpersonal Skills
Sustainability Management	Integration of sustainability into the planning, operation, and further development of real estate (energy efficiency, circular economy, ESG, reporting)	Ability to assess the environmental and economic impacts of buildings, define measurable sustainability goals, identify improvement measures, and implement regulatory requirements.	Technical and Academic Competence	e.g., Digital Tools & Data Skills; Building Science; Fundamentals of Economics. e.g., Energy Efficiency & Circular Systems; Building Materials, Physics & Construction; Data Analytics; Fundamentals of Economics; Lifecycle & Maintenance Management
Real Estate Project Development and Property Development	Development of real estate projects from concept to completion, including site analysis, feasibility, economic viability, stakeholder management, and risk management	Ability to translate project ideas into viable development concepts, analyze market, location, and user needs, develop financing and implementation models, and manage projects on an international and interdisciplinary basis.	Technical and academic expertise, interpersonal skills	vzB: International Urban & Community Development Project; Fundamentals of Economics; Real Estate Investment & Financing; Project Management; Innovation, Business & Research Transfer. bbB: Real Estate Development & Building Design; Global Real Estate Investment & Capital Markets; Corporate Real Estate Management; Business Project; Project Management; Innovation, Business & Research Transfer. Personal Development Modules: vzB: Collaboration & Interpersonal Skills; Business English; Study Trip &

				International Experience. bbB: Collaboration & Interpersonal Skills; Study Abroad; Foreign Language
Real Estate Valuation	Valuation for purchase and sale, accounting, financing, and portfolio management; application of standardized methods	Ability to distinguish between different valuation scenarios, apply methods confidently, derive valuation parameters, and document results in a transparent manner.	Technical and Academic Competence	e.g.: Real Estate Valuation; Fundamentals of Economics; Scientific & Empirical Methods. bbB: Real Estate Valuation; Global Real Estate Investment & Capital Markets; Fundamentals of Economics; Scientific & Empirical Methods
Marketing, Disposal, and Leasing	Marketing strategies, target audience analysis, sales and communication measures, contract management for leasing or disposition	Ability to conduct market and target audience analyses, develop marketing and communication concepts, manage leasing processes from both a legal and economic perspective, and prepare property utilization decisions based on data.	Technical and academic competence, interpersonal competence	vzB: Real Estate Marketing & Corporate Planning; Fundamentals of Economics; Law for Facility Management & Real Estate Economics. bbB: Real Estate Marketing & Communication; Corporate Real Estate Management; European & International Law; Global Real Estate Investment & Capital Markets. Elective Modules: vzB: Collaboration & Interpersonal Skills; Business English. bbB: Collaboration & Interpersonal Skills; Social Skills & Communication; Foreign Language

2 CURRICULUM

2.1 Curriculum data

	FT	PT
First Year of Study (YYYY/MM ₊₁)	2027/28	2027/28
Standard Duration of Study (Number of semesters)	6	6
SWS (Total for all semesters)	75.5	86
ASWS (Total for all semesters)	79.9	95
ECTS (Total for all semesters)	180	180
Winter Semester Start (Date, Note: possibly calendar week)	Calendar Week 40	Calendar Week 40
Winter Semester End (Date, Note: possibly calendar week)	Calendar Week 5	Week 5
Start of summer semester (Date, Note: possibly calendar week)	Week 11	Week 11
Summer semester end (Date, Note: possibly calendar week)	Calendar Week 28	Week 28
Winter Semester Weeks	15	15
SS Weeks	15	15
Mandatory semester abroad (Semester Specification)	3rd semester	No
Language of Instruction (Specify)	English	German
Professional internship (Semester, duration in hours)	6th semester, 500 hours	6th semester, 500 hours

2.2 Curriculum matrix

The curriculum matrix for the Bachelor's program in Facility Management & Real Estate Management is presented below. The time required for supervising Bachelor's theses is not included in the following overview of courses. For each thesis supervised, 0.2 SWS is allocated; that is, for 25 accredited study places in the part-time program, this results in an additional ASWS workload of 5 ASWS, and for the full-time program with 30 accredited study places, an additional ASWS workload of 6 ASWS. In total, this results in an ASWS total of 100 ASWS for the part-time program and 81.5 ASWS for the full-time program over all 6 semesters, including Bachelor's thesis supervision.

The "Fundamentals of Economics" module in the first semester is offered jointly with the bachelor's degree programs in Code & Digital Design, Drone Engineering, Energy & Sustainability Management, Facility Management & Real Estate Management (full-time), and Industrial Engineering. The total number of accredited study places for these programs requires a total of three parallel groups. This results in a group division factor of 0.6 for each participating program. With a course load of 4 SWS for this module, this corresponds to 2.4 ASWS.

2.2.1 Curriculum matrix full-time

1. Semester

Course no.	Course title	LV-Typ	T	E	WSH	No. of groups	ASWS	ALVS	MODUL	ECTS
BMC	Building Materials, Physics & Construction	ILV	X	X	3	1	3	45	BMC	5
CIS	Collaboration & Interpersonal Skills	ILV		X	1	1	1	15	CIS	1
ECN	Fundamentals of Economics	ILV		X	4	0.6	2.4	36.0	ECN	6
FRM	Introduction to Facility & Real Estate Management	ILV	X	X	3	1	3	45	FRM	5
LAB.1	Applied Lab 1	ILV	X	X	1	1	1	15	LAB	2
LAN.1	Foreign Language 1	ILV		X	4	1	4	60	LAN	6
SCI.1	Scientific & Empirical Methods	ILV		X	3	1	3	45	SCI	5
Total line:					19		17.4	261.0		30
Course hours = Total WSH x course weeks					285					

2. Semester

Course no.	Course title	LV-Typ	T	E	WSH	No. of groups	ASWS	ALVS	MODUL	ECTS
BSE.1	Building Services Engineering - Water & Access Systems	ILV	X	X	3	1	3	45	BSE	5
CAD	Computer-Aided Design & Modeling	ILV	X	X	2	1	2	30	CAD	3
DIG	Digital Tools & Data Skills	ILV	X	X	2	1	2	30	DIG	3
GIC	Global Real Estate Investment & Capital Markets	ILV		X	2.5	1	2.5	37.5	GIC	5
LAB.2	Applied Lab 2	ILV	X	X	1	1	1	15	LAB	2
LAN.2	Foreign Language 2	ILV		X	4	1	4	60	LAN	6
LCM	Life Cycle & Maintenance Management	ILV	X	X	2.5	1	2.5	37.5	LCM	4
REM	Real Estate Marketing & Communication	ILV		X	1.5	1	1.5	22.5	REM	2
Total line:					18.5		18.5	277.5		30
Course hours = Total WSH x course weeks					277.5					

3. Semester

Course no.	Course title	LV-Typ	T	E	WSH	No. of groups	ASWS	ALVS	MODUL	ECTS
SAB.1	Selected Topics in Business Management	ILV		X	0	1	0	0	SAB	10
SAB.1	Selected Topics in Innovation & Technology	ILV	X	X	0	1	0	0	SAB	10
SAB.2	Selected Topics in Social Skills & Communication	ILV		X	0	1	0	0	SAB	10
Total line:					0		0	0		30
Course hours = Total WSH x course weeks					0					

4. Semester

Course no.	Course title	LV-Typ	T	E	WSH	No. of groups	ASWS	ALVS	MODUL	ECTS
BPR.1	Business Project 1	PT	X	X	2	2	4	60	BPR	4
BSE.2	Building Services Engineering - Electrical & Safety Systems	ILV	X	X	3	1	3	45	BSE	5
DEV	Real Estate Development & Building Design	ILV	X	X	3	1	3	45	DEV	5
LAW	European & International Law	ILV		X	3	1	3	45	LAW	4
PRM	Project Management	ILV	X	X	1.5	1	1.5	22.5	PRM	2
VAL	Real Estate Valuation	ILV		X	3	1	3	45	VAL	5
WSM	Workplace & Space Management	ILV	X	X	3	1	3	45	WSM	5
Total line:					18.5		20.5	307.5		30
Course hours = Total WSH x course weeks					277.5					

5. Semester

Course no.	Course title	LV-Typ	T	E	WSH	No. of groups	ASWS	ALVS	MODUL	ECTS
BPR.1	Business Project 2	PT		X	2	2	4	60	BPR	4
BSE.2	Building Services Engineering - HVAC & Refrigeration	ILV	X	X	3	1	3	45	BSE	5
CRM	Corporate Real Estate Management	ILV		X	3	1	3	45	CRM	5
DAT	Data Analytics	ILV	X	X	3	1	3	45	DAT	5
ECS	Energy Efficiency & Circular Systems	ILV	X	X	3	1	3	45	ECS	5
GFM	Global Facility Management	ILV		X	1.5	1	1.5	22.5	GFM	2
IBP	Innovation, Business & Research Transfer	ILV		X	1.5	1	1.5	22.5	IBP	2
INW	International Urban & Community Development Project	ILV	X	X	2	2	4	60	INW	2
Total line:					19.0		23.0	345.0		30
Course hours = Total WSH x course weeks					285.0					

6. Semester

Course no.	Course title	LV-Typ	T	E	WSH	No. of groups	ASWS	ALVS	MODUL	ECTS
IBP	Integrated Internship	BPR		X	0	1	0	0	IBP	20
SCI.2	Bachelor's Thesis & Research Seminar	SE		X	0.5	1	0.5	7.5	SCI	4
SCI.2	Bachelor's Thesis	SE	X	X	0	1	0	0	SCI	6
Total line:					0.5		0.5	7.5		30
Course hours = Total WSH x course weeks					7.5					

Abbreviations	
E	Lecture in English language
ECTS	ECTS – Credit points
LV	Course
LVS	Course hour(s)
WSH	Weekly semester hour(s)
T	Lecture with technical background
WP	Elective subject

Summary curriculum data

Description	WSH	ASWS	ALVS	ECTS
Total number of courses over all semesters	75.5	79.9	1198.5	180
Total number of courses in 1st year of study	37.5	35.9	538.5	60
Total number of courses in 2nd year of study	18.5	20.5	307.5	60
Total number of courses in 3rd year of study	19.5	23.5	352.5	60
Total number of technical events over all semesters	41			83
Percentage of technical courses over all semesters based on WSH / ECTS	54.3 %			46.11 %
Total number of specialized courses in English over all semesters	75.5			180
Proportion of specialized courses in English over all semesters (Calculation excluding language courses)	100 %			100 %

2.2.2 Curriculum matrix part-time

1. Semester

Course no.	Course title	LV-Typ	T	E	WSH	No. of groups	ASWS	ALVS	MODUL	ECTS
BTK	Building Technology	ILV	X		3	1	3	45	BTK	6
CIS	Collaboration & Interpersonal Skills (E)	ILV		X	3	1	3	45	CIS	6
ECN	Fundamentals of Economics (E)	ILV		X	4	1	4	60	ECN	6
GEB	Building Studies	ILV	X		3	1	3	45	GEB	6
IIF	Real Estate Investment & Finance	ILV			3	1	3	45	IIF	6
Total line:					16		16	240		30
Course hours = Total WSH x course weeks					240					

2. Semester

Course no.	Course title	LV-Typ	T	E	WSH	No. of groups	ASWS	ALVS	MODUL	ECTS
DAT	Digital Tools & Data Skills (E)	ILV	X	X	4	1	4	60	DAT	6
FMI	Introduction to Real Estate & Facility Management	ILV			3	1	3	45	FMI	6
INW	International Urban & Community Development Project (E)	PT	X	X	2	2	4	60	INW	2
PRM	Project Management	ILV	X		3	1	3	45	PRM	6
PRX.1	Practical Project I	PT			2	2	4	60	PRX	4
REC	Law for Facility Management & Real Estate	ILV			3	2	6	90	REC	6
Total line:					17		24	360		30
Course hours = Total WSH x course weeks					255					

3. Semester

Course no.	Course title	LV-Typ	T	E	WSH	No. of groups	ASWS	ALVS	MODUL	ECTS
CAD	Computer-Aided Design & Technical Drawing	ILV	X		4	1	4	60	CAD	7
IMU	Real Estate Marketing & Business Planning	ILV			3	1	3	45	IMU	6
SCI	Scientific & Empirical Methods (E)	ILV		X	3	1	3	45	SCI	5
SPR.1	Business English 1	ILV			4	1	4	60	SPR	6
VAL.1	Real Estate Valuation - Fundamentals	ILV			3	1	3	45	VAL	6
Total line:					17		17	255		30
Course hours = Total WSH x course weeks					255					

4. Semester

Course no.	Course title	LV-Typ	T	E	WSH	No. of groups	ASWS	ALVS	MODUL	ECTS
DEV.1	Real Estate Development - Location, Market, Concept	ILV	X		3	1	3	45	DEV	6
FAS	Infrastructural Facility & Service Management	ILV			2	1	2	30	FAS	3
SPR.2	Business English 2	ILV			4	1	4	60	SPR	6
STP	Study Trip & International Experience (E)	ILV		X	2	1	2	30	STP	3
TGA.1	Building Services Engineering - Heating, Ventilation, Air Conditioning & Plumbing	ILV	X		4	1	4	60	TGA	6
VAL.2	Real Estate Valuation - Advanced	ILV			3.5	1	3.5	52.5	VAL	6
Total line:					18.5		18.5	277.5		30
Course hours = Total WSH x course weeks					277.5					

5. Semester

Course no.	Course title	LV-Typ	T	E	WSH	No. of groups	ASWS	ALVS	MODUL	ECTS
BEW	Real Estate Property Management	ILV			2	1	2	30	BEW	4
DEV.2	Real Estate Development - Feasibility, ESG, Risk	ILV	X		4	1	4	60	DEV	6
FAS.2	Maintenance Management	ILV	X		2	1	2	30	FAS	4
IBF	Innovation, Business & Research Transfer	ILV			1	1	1	15	IBF	2
PRX.2	Practical Project 2	PT			2	2	4	60	PRX	4
SER.3	Workplace Management	ILV	X		2	1	2	30	SER	4
TGA.2	Building Services Engineering - Electrical & Vertical Transportation Systems	ILV	X		4	1	4	60	TGA	6
Total line:					17		19	285		30
Course hours = Total WSH x course weeks					255					

6. Semester

Course no.	Course title	LV-Typ	T	E	WSH	No. of groups	ASWS	ALVS	MODUL	ECTS
BPR	Work placement	BPR			0	1	0	0	BPR	20
SCI.2	Bachelor's Thesis Seminar	SE			0.5	1	0.5	7.5	SCI	4
SCI.2	Bachelor's thesis	SE	X		0	1	0	0	SCI	6
Total line:					0.5		0.5	7.5		30
Course hours = Total WSH x course weeks					7.5					

Abbreviations

E	Lecture in English language
ECTS	ECTS – Credit points
LV	Course
LVS	Course hour(s)
WSH	Weekly semester hour(s)
T	Lecture with technical background
WP	Elective subject

Summary curriculum data

Description	WSH	ASWS	ALVS	ECTS
Total number of courses over all semesters	86	95	1425	180
Total number of courses in 1st year of study	33	40	600	60
Total number of courses in 2nd year of study	35.5	35.5	532.5	60
Total number of courses in 3rd year of study	17.5	19.5	292.5	60
Total number of technical events over all semesters	38			71
Percentage of technical courses over all semesters based on WSH / ECTS	44.19 %			39.44 %
Total number of specialized courses in English over all semesters	18			28
Proportion of specialized courses in English over all semesters (Calculation excluding language courses)	20.93 %			15.56 %

2.3 Modularization

2.3.1 Module descriptions full-time

Module number:	Building Materials, Physics & Construction	Scope:	
BMC		5	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	1. Semester		
Level	1. Semester: Introduction		
Previous knowledge	1. Semester: none		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Building Materials, Physics & Construction /ILV / LV-Nr: BMC / 1.Semester / ECTS: 5</u> - Allen, E., & Iano, J. (2019). Fundamentals of building construction: Materials and methods (Seventh edition). Wiley. - Ching, F. D. K. (2019). Building construction illustrated (Sixth edition). Wiley. - Hens, H. (2024). Building physics - heat, air and moisture: Fundamentals, engineering methods, material properties and exercises (Fourth, revised edition). Ernst & Sohn. https://doi.org/10.1002/9783433611821 - Hens, H. S. L. C. (2011). Applied building physics: Boundary conditions, building performance and material properties. Ernst & Sohn. - Lloyd Thomas, K. (2022). Building materials: Material theory and the architectural specification. Bloomsbury Visual Arts. - McSorley, S. M., Tyler, R. J., Krejci, E. E., & American Bar Association (Eds). (2021). Construction defects: Assessment, analysis, and resolution (Second edition). American Bar Association. - Mehta, M., Scarborough, W., & Armpriest, D. (2018). Building construction: Principles, materials, and systems (Third edition). Pearson.		
Acquisition of skills	<u>Building Materials, Physics & Construction /ILV / LV-Nr: BMC / 1.Semester / ECTS: 5</u> The participants: • identify and describe fundamental properties, fields of application and environmental impacts of common building materials. • explain building-physics principles such as thermal, moisture, sound and fire protection in the context of building performance. • apply simple calculation and analysis methods to assess building physics requirements. • evaluate the suitability of construction and material solutions from technical, economic and sustainability perspectives. • document and visualize building-technology relationships in an audience-appropriate way in plans, sketches or short reports.		
Course contents	<u>Building Materials, Physics & Construction /ILV / LV-Nr: BMC / 1.Semester / ECTS: 5</u> - Building materials science: mineral, metallic, organic and hybrid building materials - Fundamental building physics processes: heat conduction, moisture diffusion, sound propagation, fire-protection principles - Fundamentals of building construction: load-bearing principles, component assemblies, interfaces between materials - Sustainability and life cycle aspects of building materials - Introduction to simple calculation and verification methods (U-value, moisture, sound level) - Material testing and evaluation - Documentation and interpretation of technical data (tables, diagrams, drawings)		
Teaching and learning methods	<u>Building Materials, Physics & Construction /ILV / LV-Nr: BMC / 1.Semester / ECTS: 5</u> Lectures, discussions, case studies, group work		
Evaluation Methods Criteria	<u>Building Materials, Physics & Construction /ILV / LV-Nr: BMC / 1.Semester / ECTS: 5</u> Portfolio assessment		

Module number:	Collaboration & Interpersonal Skills	Scope:	
CIS		1	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	1. Semester		
Level	1. Semester: In-depth study		
Previous knowledge	1. Semester: none		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Collaboration & Interpersonal Skills /ILV / LV-Nr: CIS / 1.Semester / ECTS: 1</u> - Bender, F. (2022). A Roadmap to Intercultural Proficiency: Navigating Through Cultural Diversity and Inclusion. Springer International Publishing. https://doi.org/10.1007/978-3-031-04899-9 - Moussa, M., Doumani, T., McMurray, A., Muenjohn, N., & Deng, L. (2022). Cross-Cultural Performance Management: Transcending Theory to a Practical Framework. Springer International Publishing. https://doi.org/10.1007/978-3-030-91268-0 - Schauer, G. A. (2024). Intercultural Competence and Pragmatics. Springer International Publishing. https://doi.org/10.1007/978-3-031-44472-2 - Stolz, I., & Oldenziel Scherrer, S. (Eds). (2022). International Leadership: Effecting Success Across Borders in a Boundaryless World. Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-37306-1		
Acquisition of skills	<u>Collaboration & Interpersonal Skills /ILV / LV-Nr: CIS / 1.Semester / ECTS: 1</u> The participants: • actively shape the formation of well-functioning student teams and take responsibility for shared tasks. • apply basic communication and feedback techniques in order to interact respectfully and in a solution-oriented manner. • recognize and reflect on group processes, roles and dynamics in newly formed teams. • develop and test strategies for constructive conflict resolution and for dealing with different personality and working styles within their student cohort in semester-long academic project settings. • foster a positive, learning-conducive team culture through cooperative behavior, openness and empathy. • analyze individual and organizational factors influencing the work-life balance of students within everyday study life and derive situation-specific measures for regulating their own workload that can be integrated into the course of the semester. • evaluate gender-related inequalities in work and learning contexts and develop measures to promote non-discriminatory, gender-inclusive collaboration.		
Course contents	<u>Collaboration & Interpersonal Skills /ILV / LV-Nr: CIS / 1.Semester / ECTS: 1</u> - Fundamentals of intercultural communication - Communication styles, value orientations and dealing with misunderstandings - Team roles and decision-making processes in culturally diverse groups - Intercultural conflict patterns and resolution strategies - Building trust, empathy and perspective-taking in international contexts - Diversity, inclusion and ethical dimensions of collaboration - Reflecting on one's own cultural background and communication preferences - Models and methods of workload and resource analysis (work-life balance) - Mechanisms of gender roles, bias and structural disadvantage, as well as practical approaches to gender-inclusive design of work and learning environments - Practical exercises on team building and collaboration in international settings		
Teaching and learning methods	<u>Collaboration & Interpersonal Skills /ILV / LV-Nr: CIS / 1.Semester / ECTS: 1</u> Lectures, exercises, presentations		
Evaluation Methods Criteria	<u>Collaboration & Interpersonal Skills /ILV / LV-Nr: CIS / 1.Semester / ECTS: 1</u> Portfolio assessment		

Module number:	Fundamentals of Economics	Scope:	
ECN		6	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	1. Semester		
Level	1. Semester: Introduction		
Previous knowledge	1. Semester: none		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Fundamentals of Economics /ILV / LV-Nr: ECN / 1.Semester / ECTS: 6</u> - Atrill, P., & McLaney, E. J. (2022). Accounting and finance for non-specialists (Twelfth edition). Pearson. - Keller, K. L., Keller, K. L., Alexande, & Kotler, P. (2021). Marketing Management (16th edn). - Sloman, J., Garratt, D., Guest, J., & Jones, E. (2023). Economics for Business (9th edn). Pearson.		
Acquisition of skills	<u>Fundamentals of Economics /ILV / LV-Nr: ECN / 1.Semester / ECTS: 6</u> The participants: • define central terms and basic concepts of business administration, economics and accounting. • explain fundamental structures, mechanisms and interactions of companies and markets. • describe the essential principles of cost accounting, financial reporting and budgeting. • apply basic economic models – e.g. supply and demand, market equilibrium – to practice-oriented problems. • analyze business case examples using management, marketing and financial models. • prepare and interpret simple financial reports, balance sheets and income statements. • evaluate investment and financing alternatives using common key figures (e.g. net present value, internal rate of return). • assess the efficiency of business processes and organizational structures. • integrate business, economic and accounting knowledge in order to support well-founded decisions in an engineering context.		
Course contents	<u>Fundamentals of Economics /ILV / LV-Nr: ECN / 1.Semester / ECTS: 6</u> Introduction to business administration: - Definition and objectives of business administration - Legal and organizational forms of companies - Management functions: planning, organizing, leading, controlling - Fundamentals of corporate governance and business ethics Marketing & sales: - Fundamentals of marketing and market segmentation - Marketing mix: product, price, distribution, communication - Market research and consumer behavior Human resource management: - Workforce planning, recruitment and staff development - Motivation and leadership theories - Performance appraisal and compensation Procurement, production, logistics: - Fundamentals of supply chain management - Procurement and sourcing strategies - Production systems and inventory management Fundamentals of economics: - Microeconomics: supply, demand and market equilibrium - Elasticities, cost and production theory - Macroeconomics: GDP, inflation, unemployment, fiscal and monetary policy - Economic systems and world trade Accounting and financial management: - Introduction to double-entry bookkeeping - Balance sheet, income statement and cash flow statement - Cost and management accounting (cost types, cost centers, cost units) - Investment appraisal (static and dynamic methods) - Financing: equity and debt financing, capital structure		
Teaching and learning methods	<u>Fundamentals of Economics /ILV / LV-Nr: ECN / 1.Semester / ECTS: 6</u> Lectures, discussions, case studies, group work		
Evaluation Methods Criteria	<u>Fundamentals of Economics /ILV / LV-Nr: ECN / 1.Semester / ECTS: 6</u> Portfolio assessment		

Module number:	Introduction to Facility & Real Estate Management	Scope:	
FRM		5	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	1. Semester		
Level	1. Semester: Introduction		
Previous knowledge	1. Semester: none		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Introduction to Facility & Real Estate Management /ILV / LV-Nr: FRM / 1.Semester / ECTS: 5</u> - Alexander, K., Atkin, B., Bröchner, J., & Haugen, T. I. (Eds). (2016). Facilities management: Innovation and performance ([New edition]). Routledge. - Glatte, T. (2021). Corporate Real Estate Management. Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-32222-9 - Reichardt, A. (2016). Sustainability in Commercial Real Estate Markets (Softcover reprint of the original 1st edition 2016). Springer Fachmedien Wiesbaden GmbH Springer Gabler. - Rondeau, E., & Hellerforth, M. (Eds). (2024). Facilities management, concept - realization - vision: A global perspective. John Wiley & Sons, Inc. https://doi.org/10.1002/9781394213313 - Roper, K., & Payant, R. (2022). The Facility Management Handbook. Amacom. - Whitman, K. & Institute of Real Estate Management (Eds). (2023). Principles of real estate management (Eighth edition). Institute of Real Estate Management.		
Acquisition of skills	<u>Introduction to Facility & Real Estate Management /ILV / LV-Nr: FRM / 1.Semester / ECTS: 5</u> The participants: • describe the central tasks, objectives and sub-areas of facility and real estate management. • explain the life cycle of buildings and facilities as well as the interrelationships between planning, operation and disposal. • distinguish and explain the roles of relevant stakeholders (owners, operators, users, service providers) and their interests. • analyze simple practical examples from economic, technical and sustainability-related perspectives. • reflect on the significance of facility & real estate management for society, the environment and the economy in an international context.		
Course contents	<u>Introduction to Facility & Real Estate Management /ILV / LV-Nr: FRM / 1.Semester / ECTS: 5</u> - Fundamentals, terminology and objectives of facility and real estate management - Life cycle of buildings and facilities: planning, construction, operation, disposal - Main areas of activity: technical, infrastructural and commercial facility management - Stakeholders, roles and responsibilities in real estate operations - Basic key figures for space, cost, energy and sustainability - Case studies on assessing efficiency and performance - Sustainability & ESG in building management		
Teaching and learning methods	<u>Introduction to Facility & Real Estate Management /ILV / LV-Nr: FRM / 1.Semester / ECTS: 5</u> Lectures, discussions, case studies, group work		
Evaluation Methods Criteria	<u>Introduction to Facility & Real Estate Management /ILV / LV-Nr: FRM / 1.Semester / ECTS: 5</u> Portfolio assessment		

Module number:	Applied Lab	Scope:	
LAB		4	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	1. Semester		
	2. Semester		
Level	1. Semester: Introduction & in-depth study / 2. Semester: In-depth study		
Previous knowledge	1. Semester: none / 2. Semester: Applied Lab 1		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Applied Lab 1 / ILV / LV-Nr: LAB.1 / 1.Semester / ECTS: 2</u> - Kara, H., Gergen, K. J., & Gergen, M. M. (2020). Creative research methods: A practical guide (Second edition). Policy Press. - Publication manual of the American Psychological Association: The official guide to APA style (Seventh edition). (2020). American Psychological Association.		
	<u>Applied Lab 2 / ILV / LV-Nr: LAB.2 / 2.Semester / ECTS: 2</u> - Kara, H., Gergen, K. J., & Gergen, M. M. (2020). Creative research methods: A practical guide (Second edition). Policy Press. - Publication manual of the American Psychological Association: The official guide to APA style (Seventh edition). (2020). American Psychological Association.		
Acquisition of skills	<u>Applied Lab 1 / ILV / LV-Nr: LAB.1 / 1.Semester / ECTS: 2</u> The participants: • analyze practice-oriented tasks from facility and real estate management and structure them into actionable work steps. • apply basic methods and tools of project and teamwork to work on simple problems in a laboratory or project context. • develop initial technical, economic or organizational solution approaches and implement them in prototype or model form. • document and present their work results in an audience-appropriate manner, in visual as well as written or digital form. • reflect on their approach, accept feedback constructively and derive improvements for future projects from it.		
	<u>Applied Lab 2 / ILV / LV-Nr: LAB.2 / 2.Semester / ECTS: 2</u> The participants: • analyze practice-oriented tasks from facility and real estate management and structure them into actionable work steps. • apply basic methods and tools of project and teamwork to work on tasks in an interdisciplinary environment. • develop simple technical, economic or organizational solution approaches and implement them in prototype or model form. • document and present work results in an audience-appropriate manner, visually, in writing or digitally. • reflect on their approach, accept feedback constructively and derive improvements for future projects from it.		
Course contents	<u>Applied Lab 1 / ILV / LV-Nr: LAB.1 / 1.Semester / ECTS: 2</u> - Introduction & in-depth study of project- and lab-based work - Fundamentals of methodical problem solving and creativity techniques - Use of digital tools - Introduction to documentation and presentation techniques - Teamwork and communication in a project context - Implementation of small practical tasks or micro-projects - Reflection on work processes and self-organization - Feedback and review rounds to improve results		
	<u>Applied Lab 2 / ILV / LV-Nr: LAB.2 / 2.Semester / ECTS: 2</u> - In-depth study of project- and lab-based work - In-depth study of methodical problem solving and creativity techniques - Use of digital tools - In-depth study of documentation and presentation techniques - Teamwork and communication in a project context - Implementation of small practical tasks or micro-projects - Reflection on work processes and self-organization - Feedback and review rounds to improve results		

Teaching and learning methods	<u>Applied Lab 1 /ILV / LV-Nr: LAB.1 / 1.Semester / ECTS: 2</u> Problem-based & experiential learning, presentations
	<u>Applied Lab 2 /ILV / LV-Nr: LAB.2 / 2.Semester / ECTS: 2</u> Problem-based & experiential learning, presentations
Evaluation Methods Criteria	<u>Applied Lab 1 /ILV / LV-Nr: LAB.1 / 1.Semester / ECTS: 2</u> Portfolio assessment
	<u>Applied Lab 2 /ILV / LV-Nr: LAB.2 / 2.Semester / ECTS: 2</u> Portfolio assessment

Module number:	Foreign Language	Scope:	
LAN		12	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	1. Semester		
	2. Semester		
Level	1. Semester: A1 to C2 (CEFR) / 2. Semester: A1 to C2 (CEFR)		
Previous knowledge	1. Semester: Beginner modules: - Chinese, German, Spanish at level A1/A2 with target A2: no prior knowledge permitted Advanced beginner modules: - German at level A2/B1 with target B1.1: solid prior knowledge at A1 level Advanced modules: - Business German, Business French, Business Italian, Business Spanish at level B1/B2 with target B2.1: solid prior knowledge at level A2 - Business English for academic and professional purposes at level B2+/C1 with target C1: prior knowledge at level B2 or an English bridging workshop / English preparatory course - Business English for academic and professional purposes at level C1/C2 with target C2.1: solid prior knowledge at level B2.2 / 2. Semester: Beginner modules: - Chinese, German, Spanish at level A1/A2 with target A2: no prior knowledge permitted Advanced beginner modules: - German at level A2/B1 with target B1.1: solid prior knowledge at A1 level Advanced modules: - Business German, Business French, Business Italian, Business Spanish at level B1/B2 with target B2.1: solid prior knowledge at level A2 - Business English for academic and professional purposes at level B2+/C1 with target C1: prior knowledge at level B2 or an English bridging workshop / English preparatory course - Business English for academic and professional purposes at level C1/C2 with target C2.1: solid prior knowledge at level B2.2		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Foreign Language 1 /ILV / LV-Nr: LAN.1 / 1.Semester / ECTS: 6</u> Course materials – as agreed; authentic materials, e.g., from English-language magazines (including academic journals), newspapers, and online media		
	<u>Foreign Language 2 /ILV / LV-Nr: LAN.2 / 2.Semester / ECTS: 6</u> Course materials – as agreed; authentic materials, e.g., from English-language magazines (including academic journals), newspapers, and online media		
Acquisition of skills	<u>Foreign Language 1 /ILV / LV-Nr: LAN.1 / 1.Semester / ECTS: 6</u>		

	The participants: • (A1 – Beginner) Can understand and use familiar, everyday expressions and very simple sentences aimed at satisfying concrete needs. • (A1 – Beginner) Can introduce themselves and others and ask other people questions about themselves - e.g. where they live, whom they know or what things they own - and can answer questions of this kind. • (A1 – Beginner) Can communicate in a simple way, provided the conversation partners speak slowly and clearly and are willing to help. • (A2 – Basic knowledge) Can understand sentences and frequently used expressions related to areas of the most immediate relevance (e.g. personal and family information, shopping, work, the immediate surroundings). • (A2 – Basic knowledge) Can communicate in simple, routine situations involving a straightforward and direct exchange of information about familiar and everyday matters. • (A2 – Basic knowledge) Can describe, using simple terms, their own background and education, the immediate surroundings and matters related to immediate needs. • (B1 – Advanced language use) Can understand the main points when clear standard language is used and when familiar matters from work, school, leisure, etc. are involved. • (B1 – Advanced language use) Can deal with most situations encountered while traveling in an area where the language is spoken, and can express themselves simply and coherently about familiar topics and areas of personal interest • (B1 – Advanced language use) Can report on experiences and events, describe dreams, hopes and goals, and give brief reasons or explanations for plans and opinions • (B2 – Independent language use) Can understand the main content of complex texts on concrete and abstract topics; also understands specialist discussions in their own field of expertise. Can communicate spontaneously and fluently enough that a normal conversation with native speakers is quite possible without major effort on either side. Can express themselves clearly and in detail on a wide range of topics, explain a viewpoint on a current issue and give the advantages and disadvantages of various options • (C1 – Proficient language use) Can understand a wide range of demanding, longer texts and also grasp implicit meanings. • (C1 – Proficient language use) Can express themselves spontaneously and fluently without having to search noticeably for words too often, and can use the language effectively and flexibly in social and professional life or in education and study. • (C1 – Proficient language use) Can express themselves clearly, in a well-structured and detailed manner on complex subjects, using various means of textual cohesion appropriately.
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Acquisition of skills	• (C2 – Near-native proficiency) Can understand with ease virtually everything they read or hear • (C2 – Near-native proficiency) Can summarize information from various written and spoken sources, reproducing reasons and explanations in a coherent presentation. • (C2 – Near-native proficiency) Can express themselves spontaneously, very fluently and precisely, and convey finer shades of meaning even in more complex situations. <u>Foreign Language 2 /ILV / LV-Nr: LAN.2 / 2.Semester / ECTS: 6</u> The participants: • (A1 – Beginner) Can understand and use familiar, everyday expressions and very simple sentences aimed at satisfying concrete needs. • (A1 – Beginner) Can introduce themselves and others and ask other people questions about themselves - e.g. where they live, whom they know or what things they own - and can answer questions of this kind. • (A1 – Beginner) Can communicate in a simple way, provided the conversation partners speak slowly and clearly and are willing to help. • (A2 – Basic knowledge) Can understand sentences and frequently used expressions related to areas of the most immediate relevance (e.g. personal and family information, shopping, work, the immediate surroundings). • (A2 – Basic knowledge) Can communicate in simple, routine situations involving a straightforward and direct exchange of information about familiar and everyday matters. • (A2 – Basic knowledge) Can describe, using simple terms, their own background and education, the immediate surroundings and matters related to immediate needs. • (B1 – Advanced language use) Can understand the main points when clear standard language is used and when familiar matters from work, school, leisure, etc. are involved. • (B1 – Advanced language use) Can deal with most situations encountered while traveling in an area where the language is spoken, and can express themselves simply and coherently about familiar topics and areas of personal interest • (B1 – Advanced language use) Can report on experiences and events, describe dreams, hopes and goals, and give brief reasons or explanations for plans and opinions • (B2 – Independent language use) Can understand the main content of complex texts on concrete and abstract topics; also understands specialist discussions in their own field of expertise. Can communicate spontaneously and fluently enough that a normal conversation with native speakers is quite possible without major effort on either side. Can express themselves clearly and in detail on a wide range of topics, explain a viewpoint on a current issue and give the advantages and disadvantages of various options • (C1 – Proficient language use) Can understand a wide range of demanding, longer texts and also grasp implicit meanings. • (C1 – Proficient language use) Can express themselves spontaneously and fluently without having to search noticeably for words too often, and can use the language effectively and flexibly in social and professional life or in education and study. • (C1 – Proficient language use) Can express themselves clearly, in a well-structured and detailed manner on complex subjects, using various means of textual cohesion appropriately. • (C2 – Near-native proficiency) Can understand with ease virtually everything they read or hear • (C2 – Near-native proficiency) Can summarize information from various written and spoken sources, reproducing reasons and explanations in a coherent presentation. • (C2 – Near-native proficiency) Can express themselves spontaneously, very fluently and precisely, and convey finer shades of meaning even in more complex situations.
Course contents	<u>Foreign Language 1 /ILV / LV-Nr: LAN.1 / 1.Semester / ECTS: 6</u>

	A1 – Beginner Understand and use familiar, everyday expressions and very simple sentences aimed at satisfying concrete needs. Introduce oneself and others and ask other people questions about themselves - e.g. where they live, whom they know or what things they own - and answer questions of this kind. Communicate in a simple way, provided the conversation partners speak slowly and clearly and are willing to help. A2 – Basic knowledge Understand sentences and frequently used expressions related to areas of the most immediate relevance (e.g. personal and family information, shopping, work, the immediate surroundings). Communicate in simple, routine situations involving a straightforward and direct exchange of information about familiar and everyday matters. Describe, using simple terms, one's own background and education, the immediate surroundings and matters related to immediate needs. B1 – Advanced language use Use clear standard language in academic and business contexts, communicate about familiar matters from work, school, leisure, etc., and apply relevant conversational skills. Express oneself simply and coherently about familiar topics and areas of personal interest. Report on experiences and events, describe dreams, hopes and goals, and give brief reasons or explanations for plans and opinions. B2 – Independent language use Express oneself on the main content of complex texts on concrete and abstract topics in academic and business contexts; take part in specialist discussions in one's own field of expertise. Communicate spontaneously and fluently enough that a normal conversation with native speakers is quite possible without major effort on either side. Express oneself clearly and in detail on a wide range of topics, explain a viewpoint on a current issue and give the advantages and disadvantages of various options. C1 – Proficient language use Understand a wide range of demanding, longer texts and also grasp implicit meanings. Use the language effectively and flexibly in academic and business contexts and express oneself spontaneously and fluently without having to search noticeably for words too often. Express oneself clearly, in a well-structured and detailed manner on complex subjects, using various means of textual cohesion appropriately. C2 – Near-native proficiency Communicate effortlessly in all language situations. Summarize information from various written and spoken sources, reproducing reasons and explanations in a coherent presentation. Express oneself spontaneously, very fluently and precisely, and convey finer shades of meaning even in more complex situations.
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Course contents	<u>Foreign Language 2 /ILV / LV-Nr: LAN.2 / 2.Semester / ECTS: 6</u> A1 – Beginner Understand and use familiar, everyday expressions and very simple sentences aimed at satisfying concrete needs. Introduce oneself and others and ask other people questions about themselves - e.g. where they live, whom they know or what things they own - and answer questions of this kind. Communicate in a simple way, provided the conversation partners speak slowly and clearly and are willing to help. A2 – Basic knowledge Understand sentences and frequently used expressions related to areas of the most immediate relevance (e.g. personal and family information, shopping, work, the immediate surroundings). Communicate in simple, routine situations involving a straightforward and direct exchange of information about familiar and everyday matters. Describe, using simple terms, one's own background and education, the immediate surroundings and matters related to immediate needs. B1 – Advanced language use Use clear standard language in academic and business contexts, communicate about familiar matters from work, school, leisure, etc., and apply relevant conversational skills. Express oneself simply and coherently about familiar topics and areas of personal interest. Report on experiences and events, describe dreams, hopes and goals, and give brief reasons or explanations for plans and opinions. B2 – Independent language use Express oneself on the main content of complex texts on concrete and abstract topics in academic and business contexts; take part in specialist discussions in one's own field of expertise. Communicate spontaneously and fluently enough that a normal conversation with native speakers is quite possible without major effort on either side. Express oneself clearly and in detail on a wide range of topics, explain a viewpoint on a current issue and give the advantages and disadvantages of various options. C1 – Proficient language use Understand a wide range of demanding, longer texts and also grasp implicit meanings. Use the language effectively and flexibly in academic and business contexts and express oneself spontaneously and fluently without having to search noticeably for words too often. Express oneself clearly, in a well-structured and detailed manner on complex subjects, using various means of textual cohesion appropriately. C2 – Near-native proficiency Communicate effortlessly in all language situations. Summarize information from various written and spoken sources, reproducing reasons and explanations in a coherent presentation. Express oneself spontaneously, very fluently and precisely, and convey finer shades of meaning even in more complex situations.
Teaching and learning methods	<u>Foreign Language 1 /ILV / LV-Nr: LAN.1 / 1.Semester / ECTS: 6</u> Blended learning <u>Foreign Language 2 /ILV / LV-Nr: LAN.2 / 2.Semester / ECTS: 6</u> Blended learning
Evaluation Methods Criteria	<u>Foreign Language 1 /ILV / LV-Nr: LAN.1 / 1.Semester / ECTS: 6</u> Portfolio assessment <u>Foreign Language 2 /ILV / LV-Nr: LAN.2 / 2.Semester / ECTS: 6</u> Portfolio assessment

Module number:	Scientific & Empirical Methods	Scope:	
SCI		15	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	1. Semester		
	6. Semester		
Level	1. Semester: Introduction & in-depth study / 6. Semester: In-depth study		
Previous knowledge	1. Semester: Basic knowledge of statistics and academic work acquired at school or during vocational training / 6. Semester: all content from semesters 1 to 5 / 6. Semester: Bachelor's Thesis & Research Seminar		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Scientific & Empirical Methods /ILV / LV-Nr: SCI.1 / 1.Semester / ECTS: 5</u> - Alley, M. (2018). The craft of scientific writing (Fourth edition). Springer. - American psychological association (Ed.). (2020). Publication manual of the American psychological association: The official guide to APA style (7th ed). - Gastel, B., & Day, R. (2019). How to Write and Publish a Scientific Paper (1st ed). Greenwood. https://doi.org/10.5040/9798400666926 - James, G., Witten, D., Hastie, T., & Tibshirani, R. (2021). An introduction to statistical learning: With applications in R (Second edition). Springer. - Shumway, R. H., & Stoffer, D. S. (2017). Time Series Analysis and Its Applications: With R Examples (4th ed. 2017). Springer. https://doi.org/10.1007/978-3-319-52452-8		
	<u>Bachelor's Thesis & Research Seminar /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 4</u> - American psychological association (Ed.). (2020). Publication manual of the American psychological association: The official guide to APA style (7th ed). American psychological association. - Gastel, B., & Day, R. (2019). How to Write and Publish a Scientific Paper (1st ed). Greenwood. https://doi.org/10.5040/9798400666926		
	<u>Bachelor's Thesis /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 6</u> - American psychological association (Ed.). (2020). Publication manual of the American psychological association: The official guide to APA style (7th ed). American psychological association. - Gastel, B., & Day, R. (2019). How to Write and Publish a Scientific Paper (1st ed). Greenwood. https://doi.org/10.5040/9798400666926		
Acquisition of skills	<u>Scientific & Empirical Methods /ILV / LV-Nr: SCI.1 / 1.Semester / ECTS: 5</u> The participants: • explain the principles of academic work, research logic and academic integrity. • research, evaluate and cite academic sources in compliance with copyright and citation standards. • apply digital tools and assistance systems in a targeted and reflective manner within the academic process. • apply descriptive and exploratory statistics. • interpret and visualize empirical results in tables, diagrams or short reports. • reflect on the significance of academic methodology for well-founded decisions in facility & real estate management, in the context of scientific responsibility.		
	<u>Bachelor's Thesis & Research Seminar /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 4</u> The participants: • formulate and structure an academically sound research question. • research, analyze and evaluate relevant academic and practice-oriented sources. • select and justify suitable research methods and apply them to a defined problem. • interpret and discuss results with regard to academic findings and professional-practice implications. • communicate and defend their own research results in written and oral form professionally and in an audience-appropriate manner. • reflect on their own academic work as well as the ethical and methodological aspects of the research process.		
	<u>Bachelor's Thesis /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 6</u>		

	The participants: • work independently on a clearly defined research question from the field of facility management & real estate, applying academic methods. • plan, structure and carry out an academic project on their own responsibility, complying with professional, temporal and formal requirements. • correctly apply suitable qualitative, quantitative or conceptual research methods and document their use in a comprehensible manner. • analyze, interpret and critically discuss the findings obtained in the context of current academic discourse and professional-practice requirements. • write a coherent academic paper that meets the formal, linguistic and substantive standards of the study program. • critically and reasonably reflect on their own research process as well as methodological, ethical and substantive decisions.
Course contents	<u>Scientific & Empirical Methods /ILV / LV-Nr: SCI.1 / 1.Semester / ECTS: 5</u> - Fundamentals of academic work and principles of good academic practice - Copyright, citation rules and plagiarism avoidance - Structure of academic texts and the research process - Introduction to empirical methods: qualitative and quantitative approaches - Descriptive statistics and simple data analyses - Use of digital tools and assistance systems

Course contents	- Data visualization and documentation of results
	<u>Bachelor's Thesis & Research Seminar /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 4</u> - Accompanying research seminar with peer feedback and presentations - Discussion of research design, choice of methods and interpretation of results - Reflection on practical relevance, transfer and limitations of the work - Preparation of the final presentation & final examination
	<u>Bachelor's Thesis /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 6</u> As part of this module, the bachelor's thesis is written independently. Students work on a clearly defined research question on their own responsibility, applying suitable academic methods, systematically evaluate the findings obtained, and document the results in the form of an academic paper in accordance with the formal and substantive standards of the study program.
Teaching and learning methods	<u>Scientific & Empirical Methods /ILV / LV-Nr: SCI.1 / 1.Semester / ECTS: 5</u> Lectures, discussions, case studies, group work
	<u>Bachelor's Thesis & Research Seminar /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 4</u> Lectures, discussion
	<u>Bachelor's Thesis /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 6</u> Independent academic work by the students.
Evaluation Methods Criteria	<u>Scientific & Empirical Methods /ILV / LV-Nr: SCI.1 / 1.Semester / ECTS: 5</u> Portfolio assessment
	<u>Bachelor's Thesis & Research Seminar /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 4</u> Portfolio assessment
	<u>Bachelor's Thesis /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 6</u> Bachelor's thesis

Module number:	Computer-Aided Design & Modeling	Scope:	
CAD		3	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	2. Semester		
Level	2. Semester: Introduction & in-depth study		
Previous knowledge	2. Semester: Building Materials, Physics & Construction		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Computer-Aided Design & Modeling /ILV / LV-Nr: CAD / 2.Semester / ECTS: 3</u> - Huth, M. W. (2019). Understanding construction drawings (Seventh edition). Cengage Learning.		
Acquisition of skills	<u>Computer-Aided Design & Modeling /ILV / LV-Nr: CAD / 2.Semester / ECTS: 3</u> The participants: • create and edit technical 2D drawings and simple 3D models using CAD software. • structure digital models into layers, components and views in accordance with technical standards. • correctly apply planning and drawing conventions (e.g. scales, dimensioning, symbols). • import and export data in common formats and understand their significance for collaboration and building operations. • interpret CAD plans and derive from them basic building-technology information for facility and real estate management.		
Course contents	<u>Computer-Aided Design & Modeling /ILV / LV-Nr: CAD / 2.Semester / ECTS: 3</u> - Fundamentals of computer-aided design and modeling (2D & 3D) - Operating logic and functions of common CAD software - Structure, layer organization and management of digital models - Creation of technical drawings (floor plans, sections, elevations) - Scales, symbols, dimensioning and drawing layout - Data management, file formats and interfaces - Introduction to model-based working - Visualization and presentation of simple building models		
Teaching and learning methods	<u>Computer-Aided Design & Modeling /ILV / LV-Nr: CAD / 2.Semester / ECTS: 3</u> Lectures, discussions, case studies, group work		
Evaluation Methods Criteria	<u>Computer-Aided Design & Modeling /ILV / LV-Nr: CAD / 2.Semester / ECTS: 3</u> Portfolio assessment		

Module number:	Digital Tools & Data Skills	Scope:	
DIG		3	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	2. Semester		
Level	2. Semester: Introduction & in-depth study		
Previous knowledge	2. Semester: Scientific & Empirical Methods		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Digital Tools & Data Skills /ILV / LV-Nr: DIG / 2.Semester / ECTS: 3</u> - Amos, D., Bader, D., Jablonski, J., & Heisler, F. (2021). Python basics: A practical introduction to Python 3 (Revised and updated 4th edition). Real Python. - Matthes, E. (2023). Python crash course: A hands-on, project-based introduction to programming (3rd edition). No Starch Press. - Runkler, T. A. (2025a). Data Analytics: Models and Algorithms for Intelligent Data Analysis - A Comprehensive Introduction (4th ed. 2025). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-45951-2 - Runkler, T. A. (2025b). Data Analytics: Models and Algorithms for Intelligent Data Analysis - A Comprehensive Introduction (4th ed. 2025). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-45951-2		
Acquisition of skills	<u>Digital Tools & Data Skills /ILV / LV-Nr: DIG / 2.Semester / ECTS: 3</u> The participants: • explain basic digital concepts, data structures and interfaces in facility and real estate management. • use common software tools for structured data capture and management. • apply simple scripts to analyze, filter and graphically display data. • analyze data sets for patterns, correlations and sources of error. • reflect on the benefits, limitations and ethical aspects of digital data processing in building management.		
Course contents	<u>Digital Tools & Data Skills /ILV / LV-Nr: DIG / 2.Semester / ECTS: 3</u> - Introduction to digital tools and data management - Introduction to programming and databases - Data quality, error detection and cleaning - Cloud and collaboration tools for data projects - Data protection, data security and ethical aspects of data processing		
Teaching and learning methods	<u>Digital Tools & Data Skills /ILV / LV-Nr: DIG / 2.Semester / ECTS: 3</u> Lectures, discussions, case studies, group work		
Evaluation Methods Criteria	<u>Digital Tools & Data Skills /ILV / LV-Nr: DIG / 2.Semester / ECTS: 3</u> Portfolio assessment		

Module number:	Global Real Estate Investment & Capital Markets	Scope:	
GIC		5	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	2. Semester		
Level	2. Semester: Introduction & in-depth study		
Previous knowledge	2. Semester: Business, Economics & Financing		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Global Real Estate Investment & Capital Markets /ILV / LV-Nr: GIC / 2.Semester / ECTS: 5</u> - Schoenmaker, D., & Schramade, W. (2023). Corporate Finance for Long-Term Value. Springer International Publishing. https://doi.org/10.1007/978-3-031-35009-2 - Thewissen, J., Arslan-Ayaydin, Ö., Westerman, W., & Dorsman, A. (Eds.). (2024). The ESG Framework and the Energy Industry: Demand and Supply, Market Policies and Value Creation. Springer International Publishing. https://doi.org/10.1007/978-3-031-48457-5		
Acquisition of skills	<u>Global Real Estate Investment & Capital Markets /ILV / LV-Nr: GIC / 2.Semester / ECTS: 5</u> The participants: • explain the structures, players and functional mechanisms of international real estate and capital markets. • analyze influencing factors such as interest rates, inflation, economic activity and currency risks on real estate investments. • apply static and dynamic valuation and investment methods to case examples. • compare financing instruments in terms of risk, return and liquidity. • interpret and discuss market and financial data in order to justify investment decisions in a global context.		
Course contents	<u>Global Real Estate Investment & Capital Markets /ILV / LV-Nr: GIC / 2.Semester / ECTS: 5</u> - International real estate markets and capital flows - Market structures, players and investment vehicles - Macroeconomic framework conditions - Investment decisions and risk analysis - Financing forms and capital-market instruments - Global trends: ESG investments, sustainable finance, digitization in capital markets - International case studies on real estate investments		
Teaching and learning methods	<u>Global Real Estate Investment & Capital Markets /ILV / LV-Nr: GIC / 2.Semester / ECTS: 5</u> Lectures, discussions, case studies, group work		
Evaluation Methods Criteria	<u>Global Real Estate Investment & Capital Markets /ILV / LV-Nr: GIC / 2.Semester / ECTS: 5</u> Portfolio assessment		

Module number:	Lifecycle & Maintenance Management	Scope:	
LCM		4	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	2. Semester		
Level	2. Semester: Introduction & in-depth study		
Previous knowledge	2. Semester: Building Materials, Physics & Construction, Computer-Aided Design & Modeling, Digital Tools & Data Skills		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Life Cycle & Maintenance Management /ILV / LV-Nr: LCM / 2.Semester / ECTS: 4</u> - Levitt, J. (Ed.). (2013). Facilities management: Managing maintenance for buildings and facilities. Momentum Press. - Sacks, R. (2025). BIM handbook: A guide to building information modeling for owners, designers, engineers, contractors, and facility managers (Fourth edition). Wiley.		
Acquisition of skills	<u>Life Cycle & Maintenance Management /ILV / LV-Nr: LCM / 2.Semester / ECTS: 4</u> The participants: • explain the life cycle of buildings and technical facilities from technical, economic and ecological perspectives. • distinguish and evaluate maintenance strategies according to efficiency, risk and cost. • calculate life-cycle and maintenance costs and interpret their significance for operations and investment. • analyze and reflect on the influence of sustainability, digitization and ESG criteria on life-cycle management.		
Course contents	<u>Life Cycle & Maintenance Management /ILV / LV-Nr: LCM / 2.Semester / ECTS: 4</u> - Fundamentals and strategies of maintenance - Life cycle costing and economic evaluation of FM measures - Sustainability and ESG aspects in maintenance management - Digitization and predictive maintenance - Documentation, reporting and key performance indicators - International case studies from building operations and asset management		
Teaching and learning methods	<u>Life Cycle & Maintenance Management /ILV / LV-Nr: LCM / 2.Semester / ECTS: 4</u> Lectures, discussions, case studies, group work		
Evaluation Methods Criteria	<u>Life Cycle & Maintenance Management /ILV / LV-Nr: LCM / 2.Semester / ECTS: 4</u> Portfolio assessment		

Module number:	Real Estate Marketing & Communication	Scope:	
REM		2	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	2. Semester		
Level	2. Semester: Introduction & in-depth study		
Previous knowledge	2. Semester: Business, Economics & Financing		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Real Estate Marketing & Communication /ILV / LV-Nr: REM / 2.Semester / ECTS: 2</u> - Bansude, S., & Hittalmani, V. (2021). Impact of digital marketing on real estate business. International Journal of Health Sciences, 172–183. https://doi.org/10.53730/ijhs.v5nS1.5395 - Kreutzer, R. T., & Klose, S. (2025). Practice-Oriented Online Marketing: Concepts – Tools – Checklists. Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-49745-3 - Luis, J. F., Catulo, J. D. O., Rodrigues, J. D., Piedade, N. R., & Marcos, A. D. F. (2022). The impact of the Digital Marketing in Real Estate The past, present and future of the sector. 2022 17th Iberian Conference on Information Systems and Technologies (CISTI), 1–7. https://doi.org/10.23919/CISTI54924.2022.9820245 - Stark, J. (2025). Digital Transformation of a Real Estate Company. In J. Stark, Digital Transformation of Industry (pp. 93–95). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-71590-7_17		
Acquisition of skills	<u>Real Estate Marketing & Communication /ILV / LV-Nr: REM / 2.Semester / ECTS: 2</u> The participants: • explain the fundamentals and objectives of marketing in the real estate industry. • analyze market and target-group structures in the national and international real estate environment. • develop simple marketing and communication strategies for real estate products and services. • design presentation and communication materials tailored to the target group. • reflect on cultural and ethical aspects of communication in international business contexts.		
Course contents	<u>Real Estate Marketing & Communication /ILV / LV-Nr: REM / 2.Semester / ECTS: 2</u> - Fundamentals and instruments of real estate marketing - Market and target-group analysis in national and international contexts - Marketing strategies and positioning of real estate projects - Communication policy: corporate communication, branding, public relations - Digital marketing channels - Design of property brochures, presentations and client dialogues - Intercultural communication and value orientation in the global market - Case studies of successful real estate marketing		
Teaching and learning methods	<u>Real Estate Marketing & Communication /ILV / LV-Nr: REM / 2.Semester / ECTS: 2</u> Lectures, discussions, case studies, group work		
Evaluation Methods Criteria	<u>Real Estate Marketing & Communication /ILV / LV-Nr: REM / 2.Semester / ECTS: 2</u> Portfolio assessment		

Module number:	Building Services Engineering	Scope:	
BSE		15	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	2. Semester		
	4. Semester		
	5. Semester		
Level	2. Semester: Introduction & in-depth study / 4. Semester: Introduction & in-depth study / 5. Semester: Introduction & in-depth study		
Previous knowledge	2. Semester: Building Materials, Physics & Construction / 4. Semester: Introduction to Facility & Real Estate Management, Computer-Aided Design & Modeling, Digital Tools & Data Skills / 5. Semester: Building Materials, Physics & Construction, Computer-Aided Design & Modeling		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Building Services Engineering - Water & Access Systems /ILV / LV-Nr: BSE.1 / 2.Semester / ECTS: 5</u> - Greeno, R. (2013). Building services, technology and design. Routledge. - Jadhav, N. Y. (2018). Green and Smart Buildings: Advanced technology options. Springer. - Stec, A. (2020). Sustainable water management in buildings: Case studies from Europe. Springer.		
	<u>Building Services Engineering - Electrical & Safety Systems /ILV / LV-Nr: BSE.2 / 4.Semester / ECTS: 5</u> - Wen, J. T., & Mishra, S. (Eds). (2018). Intelligent Building Control Systems. Springer International Publishing. https://doi.org/10.1007/978-3-319-68462-8		
	<u>Building Services Engineering - HVAC & Refrigeration /ILV / LV-Nr: BSE.2 / 5.Semester / ECTS: 5</u> - Kalz, D. E., & Pfafferoth, J. (2014). Thermal Comfort and Energy-Efficient Cooling of Nonresidential Buildings. Springer International Publishing. https://doi.org/10.1007/978-3-319-04582-5 - Khazaii, J. (2016). Energy-efficient hvac design. Springer International Pu. - Sharma, A., Goyal, R., & Mittal, R. (Eds). (2020). Indoor Environmental Quality: Select Proceedings of the 1st A-CIEQ (1st ed. 2020). Springer Singapore. https://doi.org/10.1007/978-981-15-1334-3 - Thompson, D. (2023). HVAC bible for beginners: A comprehensive guide to mastering HVAC technology, repairing and installing heating, ventilation, and air conditioning systems for residential and commercial buildings. Publisher not identified. - Wen, J. T., & Mishra, S. (Eds). (2018). Intelligent Building Control Systems. Springer International Publishing. https://doi.org/10.1007/978-3-319-68462-8		
Acquisition of skills	<u>Building Services Engineering - Water & Access Systems /ILV / LV-Nr: BSE.1 / 2.Semester / ECTS: 5</u> The participants: - describe the design, function and components of water, wastewater and access systems in buildings. - explain the hydraulic and mechanical basic principles of supply and disposal systems as well as elevator and conveyor technology. - analyze simple system concepts taking into account safety, energy efficiency and user comfort. - apply plans and schematics for evaluation or fault diagnosis. - assess the sustainability, cost-effectiveness and maintenance requirements of these systems in building operations.		
	<u>Building Services Engineering - Electrical & Safety Systems /ILV / LV-Nr: BSE.2 / 4.Semester / ECTS: 5</u> The participants: - describe the design, function and components of electrical power and safety systems in buildings. - explain electrical basic principles, switching types and protective mechanisms in building networks. - analyze and test simple electronic circuits with regard to function, voltage, current and safety. - evaluate the energy efficiency, sustainability and cost-effectiveness of electrical systems in building operations.		
	<u>Building Services Engineering - HVAC & Refrigeration /ILV / LV-Nr: BSE.2 / 5.Semester / ECTS: 5</u> The participants: - analyze building-services systems (heating, ventilation, air-conditioning, refrigeration) with regard to function, energy efficiency and sustainability and assess their influence on building management. - design simple HVAC concepts taking energy and cost-effectiveness aspects into account and calculate central system parameters. - reflect on ecological and economic trade-offs in building services and develop measures to increase efficiency and reduce emissions.		
Course contents	<u>Building Services Engineering - Water & Access Systems /ILV / LV-Nr: BSE.1 / 2.Semester / ECTS: 5</u>		

	- Fundamentals of water supply and drainage technology in buildings - Components and operating principles of drinking water, wastewater and rainwater systems - Elevator, escalator and access systems: design, safety, control - Hydraulic and physical fundamentals (pressure, flow, energy demand) - Energy efficiency, hygiene, maintenance and life-cycle costs - Sustainable water use (e.g. graywater, rainwater management) - Interfaces with real estate development and facility management
	<u>Building Services Engineering - Electrical & Safety Systems /ILV / LV-Nr: BSE.2 / 4.Semester / ECTS: 5</u> - Fundamentals of electrical engineering and electronics in the building context - Design and analysis of simple electronic circuits - Power supply and distribution systems - Lighting installations and control systems - Safety systems: fire detection, alarm, access control and video surveillance

Course contents	- Emergency power and UPS systems, safety lighting - Energy efficiency, sustainability and integration into building automation systems
	<u>Building Services Engineering - HVAC & Refrigeration /ILV / LV-Nr: BSE.2 / 5.Semester / ECTS: 5</u> - Fundamentals of heating, ventilation, air-conditioning and refrigeration technology (HVAC) - Components and operating principles of building-services systems - Energy efficiency, environmental aspects and sustainability in building-services systems - Interface management between planning, operation and maintenance - Digital tools and monitoring systems
Teaching and learning methods	<u>Building Services Engineering - Water & Access Systems /ILV / LV-Nr: BSE.1 / 2.Semester / ECTS: 5</u> Lectures, discussions, case studies, group work
	<u>Building Services Engineering - Electrical & Safety Systems /ILV / LV-Nr: BSE.2 / 4.Semester / ECTS: 5</u> Lectures, discussions, exercises, case studies, group work
	<u>Building Services Engineering - HVAC & Refrigeration /ILV / LV-Nr: BSE.2 / 5.Semester / ECTS: 5</u> Lectures, discussions, exercises, case studies, group work
Evaluation Methods Criteria	<u>Building Services Engineering - Water & Access Systems /ILV / LV-Nr: BSE.1 / 2.Semester / ECTS: 5</u> Portfolio assessment
	<u>Building Services Engineering - Electrical & Safety Systems /ILV / LV-Nr: BSE.2 / 4.Semester / ECTS: 5</u> Portfolio assessment
	<u>Building Services Engineering - HVAC & Refrigeration /ILV / LV-Nr: BSE.2 / 5.Semester / ECTS: 5</u> Portfolio assessment

Module number:	Study Abroad	Scope:	
SAB		30	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	3. Semester		
Level	3. Semester: In-depth study		
Previous knowledge	3. Semester: Business, Economics & Financing, Global Real Estate Investment & Capital Markets / 3. Semester: Collaboration & Interpersonal Skills / 3. Semester: Digital Tools & Data Skills		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Selected Topics in Business Management /ILV / LV-Nr: SAB.1 / 3.Semester / ECTS: 10</u> Will be specified by the respective partner university.		
	<u>Selected Topics in Innovation & Technology /ILV / LV-Nr: SAB.1 / 3.Semester / ECTS: 10</u> Will be specified by the respective partner university.		
	<u>Selected Topics in Social Skills & Communication /ILV / LV-Nr: SAB.2 / 3.Semester / ECTS: 10</u> Will be specified by the respective partner university.		
Acquisition of skills	<u>Selected Topics in Business Management /ILV / LV-Nr: SAB.1 / 3.Semester / ECTS: 10</u> The participants: • analyze the economic, political and societal framework conditions of global markets. • compare international economic systems with regard to structure, dynamics and governance. • evaluate transformation processes from an economic and social perspective. • transfer theoretical concepts and models to concrete case studies in international contexts. • reflect on intercultural learning and working experiences and derive from them practical competences for global professional fields.		
	<u>Selected Topics in Innovation & Technology /ILV / LV-Nr: SAB.1 / 3.Semester / ECTS: 10</u> The participants: • explain the concepts and technologies of smart systems. • analyze the impact of technological innovations. • evaluate international innovation and transformation strategies in terms of efficiency, sustainability and user orientation. • develop simple concepts or scenarios for the use of smart technologies. • reflect on the opportunities, risks and ethical aspects of digital innovations in global contexts.		
	<u>Selected Topics in Social Skills & Communication /ILV / LV-Nr: SAB.2 / 3.Semester / ECTS: 10</u> The participants: • analyze culturally shaped communication, leadership and decision-making styles in international organizations. • apply models of intercultural competence to real situations. • shape and steer team processes in diverse, international environments in a goal-oriented and empathetic manner. • reflect on their personal leadership behavior, understanding of values and self-image in an intercultural context. • develop strategies for leadership, motivation and conflict resolution in globally networked organizations. • integrate ethical, sustainable and intercultural perspectives into their future professional conduct. • analyze culture-specific differences in work, organizational and time structures and develop strategies based on them for a stable work-life balance. • evaluate international gender norms, equality frameworks and diversity practices in different cultural and legal systems and, building on this, design gender-inclusive forms of communication and interaction in an intercultural environment.		
Course contents	<u>Selected Topics in Business Management /ILV / LV-Nr: SAB.1 / 3.Semester / ECTS: 10</u> This module is completed during the semester abroad at a partner university. It serves to broaden subject-specific, methodological, social and intercultural competence in an international academic environment. The thematic focus is on global markets, economic and societal transformation processes and their significance for facility and real estate management. The content is described as examples and can be covered by courses offered by the partner university: - Global economic and financial systems (world markets, trade, capital flows) - International institutions and regulatory frameworks - Global transformation processes - Innovation, entrepreneurship and technology transfer in an international context - Intercultural management and communication - International case studies and project work on economic & transformation topics		

	<u>Selected Topics in Innovation & Technology /ILV / LV-Nr: SAB.1 / 3.Semester / ECTS: 10</u> This module is completed during the semester abroad at a partner university. It conveys theoretical and practical fundamentals of digital, technological and organizational innovations in global contexts. Participants learn to understand, evaluate and critically apply innovation processes and smart systems. The content is described as examples and can be covered by courses offered by the partner university: - In-depth study of smart systems - Digitization - Innovation management, design thinking and agile methods - International best practices
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Course contents	- Cybersecurity, data protection and ethical questions - Interdisciplinary case studies on smart systems and technology transfer
	<u>Selected Topics in Social Skills & Communication /ILV / LV-Nr: SAB.2 / 3.Semester / ECTS: 10</u> This module is completed during the semester abroad at a partner university. It serves to specifically foster leadership skills, intercultural understanding and global competence. Students develop the ability to lead international teams, to make productive use of diversity and to critically reflect on their own leadership behavior, as well as to further develop their own work-life balance strategies. The content is described as examples and can be covered by courses offered by the partner university: - In-depth study of international and intercultural leadership - Cultural dimensions and models - Communication, trust and conflict management in international teams - Leadership styles & global ethics - Gender, diversity & inclusion in global contexts - Personal leadership development and self-reflection - International team development and virtual leadership - Case studies of global organizations, NGOs and real estate companies
Teaching and learning methods	<u>Selected Topics in Business Management /ILV / LV-Nr: SAB.1 / 3.Semester / ECTS: 10</u> Specified by the partner university.
	<u>Selected Topics in Innovation & Technology /ILV / LV-Nr: SAB.1 / 3.Semester / ECTS: 10</u> Specified by the partner university.
	<u>Selected Topics in Social Skills & Communication /ILV / LV-Nr: SAB.2 / 3.Semester / ECTS: 10</u> Specified by the partner university.
Evaluation Methods Criteria	<u>Selected Topics in Business Management /ILV / LV-Nr: SAB.1 / 3.Semester / ECTS: 10</u> Determined by the respective partner university
	<u>Selected Topics in Innovation & Technology /ILV / LV-Nr: SAB.1 / 3.Semester / ECTS: 10</u> Determined by the respective partner university
	<u>Selected Topics in Social Skills & Communication /ILV / LV-Nr: SAB.2 / 3.Semester / ECTS: 10</u> Determined by the respective partner university

Module number:	Real Estate Development & Building Design	Scope:	
DEV		5	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	4. Semester		
Level	4. Semester: Introduction & in-depth study		
Previous knowledge	4. Semester: Building Materials, Physics & Construction, Computer-Aided Design & Modeling, Business, Economics & Financing, Global Real Estate Investment & Capital Markets.		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Real Estate Development & Building Design /ILV / LV-Nr: DEV / 4.Semester / ECTS: 5</u> - Miles, M. E., Netherton, L. M., & Schmitz, A. (2015). Real estate development: Principles and process (Fifth edition). Urban Land Institute. - Peiser, R. B. (2019). Professional Real Estate Development: The uli guide to the business. Urban Land Institute. - Walker, T., Cucuzzella, C., Goubran, S., & Geith, R. (Eds). (2023). The Role of Design, Construction, and Real Estate in Advancing the Sustainable Development Goals. Springer International Publishing. https://doi.org/10.1007/978-3-031-28739-8 - Walker, T., Krosinsky, C., Hasan, L. N., & Kibsey, S. D. (Eds). (2019). Sustainable Real Estate: Multidisciplinary Approaches to an Evolving System. Springer International Publishing. https://doi.org/10.1007/978-3-319-94565-1		
Acquisition of skills	<u>Real Estate Development & Building Design /ILV / LV-Nr: DEV / 4.Semester / ECTS: 5</u> The participants: • explain the central phases and stakeholders of real estate development from the idea to realization. • analyze location, market and usage requirements for different building types. • evaluate design and concept variants with regard to functionality, cost-effectiveness, sustainability and user quality. • develop simple building concepts or usage scenarios and visualize them with suitable digital tools. • reflect on interdisciplinary relationships between people, architecture, technology, economics and the environment. • analyze diversity-relevant requirements in real estate development projects and derive from them inclusion-oriented design and usage concepts.		
Course contents	<u>Real Estate Development & Building Design /ILV / LV-Nr: DEV / 4.Semester / ECTS: 5</u> - Fundamentals and phases of real estate project development - Location, market and usage analysis - Feasibility and viability assessment - Introduction to construction and design principles (floor plan, room program, space efficiency, facade) - Architecture and design concepts in the context of FM and operating costs - Sustainability, ESG and life-cycle considerations in the design process - Diversity and inclusion factors in project development - Case studies of international real estate projects		
Teaching and learning methods	<u>Real Estate Development & Building Design /ILV / LV-Nr: DEV / 4.Semester / ECTS: 5</u> Lectures, discussions, case studies, group work, field trips, projects		
Evaluation Methods Criteria	<u>Real Estate Development & Building Design /ILV / LV-Nr: DEV / 4.Semester / ECTS: 5</u> Portfolio assessment		

Module number:	European & International Law	Scope:	
LAW		4	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	4. Semester		
Level	4. Semester: Introduction & in-depth study		
Previous knowledge	4. Semester: Business, Economics & Financing		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>European & International Law /ILV / LV-Nr: LAW / 4.Semester / ECTS: 4</u> - Barrett, G., Müller-Graff, P.-C., Rageade, J.-P., & Vadász, V. (Eds). (2024). European Sovereignty: The Legal Dimension. Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-71851-9 - Marques, F. (with Albuquerque, P. P. de). (2024). Rule of Law in Europe (1st ed). Springer. - Saxer, U. (2025). The Law of Global and European Organizations: Institutionalized Cooperation in Disruptive Times (1st ed. 2025). Springer Nature Switzerland. https://doi.org/10.1007/978-3-032-00067-5		
Acquisition of skills	<u>European & International Law /ILV / LV-Nr: LAW / 4.Semester / ECTS: 4</u> The participants: • describe the structure, institutions and functioning of the European legal system and its legislative mechanisms. • explain the basic principles of international commercial and contract law in a European context. • identify and analyze the legal framework conditions for cross-border projects, services and investments. • evaluate legal requirements and risks in facility and real estate management, particularly with regard to ESG, sustainability and liability. • reflect on the significance of legal and ethical responsibility in global business relationships.		
Course contents	<u>European & International Law /ILV / LV-Nr: LAW / 4.Semester / ECTS: 4</u> - European Union: institutions, legal sources and decision-making procedures - Basics of the EU single market and freedom to provide services - International commercial and contract law - Fundamentals of liability law in the real estate and facility context - ESG, environmental and occupational safety law from a European and international perspective - Public procurement and compliance in the European market - Corporate governance, ethics and human rights in global value chains - International case studies		
Teaching and learning methods	<u>European & International Law /ILV / LV-Nr: LAW / 4.Semester / ECTS: 4</u> Lectures, discussions, case studies, group work, field trip		
Evaluation Methods Criteria	<u>European & International Law /ILV / LV-Nr: LAW / 4.Semester / ECTS: 4</u> Portfolio assessment		

Module number:	Project Management	Scope:	
PRM		2	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	4. Semester		
Level	4. Semester: Introduction & in-depth study		
Previous knowledge	4. Semester: none		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Project Management /ILV / LV-Nr: PRM / 4.Semester / ECTS: 2</u> - Kuster, J., Bachmann, C., Hubmann, M., Lippmann, R., & Schneider, P. (2023). Project management handbook: Agile - traditional - hybrid (Second edition). Springer. - Lock, D. (2018). Project management (Seventh edition). Routledge, Taylor & Francis Group.		
Acquisition of skills	<u>Project Management /ILV / LV-Nr: PRM / 4.Semester / ECTS: 2</u> The participants: • explain the fundamentals of project management and describe the roles, processes and phases of technical projects in the real estate and facility context. • plan technical sub-projects using internationally recognized project management methods. • analyze project risks, quality, cost and schedule deviations and develop suitable control measures.		
Course contents	<u>Project Management /ILV / LV-Nr: PRM / 4.Semester / ECTS: 2</u> - Fundamentals and process models of technical project management - Project structuring, scheduling and resource planning - Roles, responsibilities and communication within the project team - Risk management, quality assurance, change control - Digital tools - Interdisciplinary and international project coordination - Documentation and reporting of technical projects		
Teaching and learning methods	<u>Project Management /ILV / LV-Nr: PRM / 4.Semester / ECTS: 2</u> Lectures, discussions, case studies, projects, group work		
Evaluation Methods Criteria	<u>Project Management /ILV / LV-Nr: PRM / 4.Semester / ECTS: 2</u> Portfolio assessment		

Module number:	Real Estate Valuation	Scope:	
VAL		5	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	4. Semester		
Level	4. Semester: Introduction & in-depth study		
Previous knowledge	4. Semester: Introduction to Facility & Real Estate Management		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Real Estate Valuation /ILV / LV-Nr: VAL / 4.Semester / ECTS: 5</u> - Baum, A. E., Crosby, N., & Devaney, S. (2020). Property investment appraisal (Fourth Edition). Wiley. - Hayward, R. (2014). Valuation: Principles into Practice (6th ed). Taylor and Francis. Millington, A. (2013). An Introduction to Property Valuation (5th ed). Taylor and Francis. - Shapiro, E. F., Mackmin, D., & Sams, G. (2019). Modern methods of valuation (Twelfth edition). Routledge, Taylor & Francis Group.		
Acquisition of skills	<u>Real Estate Valuation /ILV / LV-Nr: VAL / 4.Semester / ECTS: 5</u> The participants: • explain the basic principles and structures of real estate valuation in an international context. • analyze legal, technical, location- and market-specific influencing factors and systematically integrate them into valuation models. • apply national and international valuation methods to determine market-appropriate real estate values.		
Course contents	<u>Real Estate Valuation /ILV / LV-Nr: VAL / 4.Semester / ECTS: 5</u> - Fundamentals of real estate valuation - Procedure and influencing factors of standardized valuation methods (comparative-value method, cost-value method, income-value method, DCF method, residual-value method) - Introduction to the valuation of rights and encumbrances		
Teaching and learning methods	<u>Real Estate Valuation /ILV / LV-Nr: VAL / 4.Semester / ECTS: 5</u> Lectures, discussions, case studies, group work		
Evaluation Methods Criteria	<u>Real Estate Valuation /ILV / LV-Nr: VAL / 4.Semester / ECTS: 5</u> Portfolio assessment		

Module number:	Workplace & Space Management	Scope:	
WSM		5	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	4. Semester		
Level	4. Semester: Introduction & in-depth study		
Previous knowledge	4. Semester: Building Materials, Physics & Construction, Introduction to Facility & Real Estate Management, Computer-Aided Design & Modeling		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Workplace & Space Management /ILV / LV-Nr: WSM / 4.Semester / ECTS: 5</u> - Redlein, A. (Ed.). (2020). Modern facility and workplace management: Processes, implementation and digitalisation. Alexander Redlein, editor. Springer. - Sacks, R. (2025). BIM handbook: A guide to building information modeling for owners, designers, engineers, contractors, and facility managers (Fourth edition). Wiley.		
Acquisition of skills	<u>Workplace & Space Management /ILV / LV-Nr: WSM / 4.Semester / ECTS: 5</u> The participants: • analyze the functional, economic and cultural requirements for modern workplace and space-usage concepts in international organizations. • design innovative workplace and space management strategies taking into account new-work approaches, hybrid working models and space optimization. • evaluate space efficiency, utilization and usage quality on the basis of quantitative and qualitative key figures. • communicate design proposals and change processes in an audience-appropriate, interdisciplinary manner using English technical terminology.		
Course contents	<u>Workplace & Space Management /ILV / LV-Nr: WSM / 4.Semester / ECTS: 5</u> - Fundamentals and objectives of workplace & space management - Strategic space planning and space management processes - Methods for space analysis, occupancy planning and utilization assessment - Concepts of work environments - Change management and user integration in space changes - Economic and sustainability aspects (ESG, green building, WELL standard) - Digital tools for space and workplace management - International best-practice cases		
Teaching and learning methods	<u>Workplace & Space Management /ILV / LV-Nr: WSM / 4.Semester / ECTS: 5</u> Lectures, discussions, case studies, group work, field trips, projects		
Evaluation Methods Criteria	<u>Workplace & Space Management /ILV / LV-Nr: WSM / 4.Semester / ECTS: 5</u> Portfolio assessment		

Module number:	Business Project	Scope:	
BPR		8	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	4. Semester		
	5. Semester		
Level	4. Semester: In-depth study / 5. Semester: In-depth study		
Previous knowledge	4. Semester: Business, Economics & Financing, Scientific & Empirical Methods, Digital Tools & Data Skills / 5. Semester: Business, Economics & Financing, Scientific & Empirical Methods, Digital Tools & Data Skills, Technical Project Management		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Business Project 1 /PT / LV-Nr: BPR.1 / 4.Semester / ECTS: 4</u> - Kuster, J., Bachmann, C., Hubmann, M., Lippmann, R., & Schneider, P. (2023). Project management handbook: Agile - traditional - hybrid (Second edition). Springer. - Lock, D. (2018). Project management (Seventh edition). Routledge, Taylor & Francis Group.		
	<u>Business Project 2 /PT / LV-Nr: BPR.1 / 5.Semester / ECTS: 4</u> - Kuster, J., Bachmann, C., Hubmann, M., Lippmann, R., & Schneider, P. (2023). Project management handbook: Agile - traditional - hybrid (Second edition). Springer. - Lock, D. (2018). Project management (Seventh edition). Routledge, Taylor & Francis Group.		
Acquisition of skills	<u>Business Project 1 /PT / LV-Nr: BPR.1 / 4.Semester / ECTS: 4</u> The participants: • plan and structure a practice-oriented project with clearly defined objectives, roles and tasks. • apply methods of project and process management in the real estate or facility context. • analyze and work on real operational problems using suitable data, tools and models. • present and document project results in an audience-appropriate and professional manner. • reflect on team processes, responsibilities and lessons learned with regard to professional practice.		
	<u>Business Project 2 /PT / LV-Nr: BPR.1 / 5.Semester / ECTS: 4</u> The participants: • plan and structure a practice-oriented project with clearly defined objectives, roles and tasks. • apply methods of project and process management in the real estate or facility context. • analyze and work on real operational problems using suitable data, tools and models. • present and document project results in an audience-appropriate and professional manner. • reflect on team processes, responsibilities and lessons learned with regard to professional practice.		
Course contents	<u>Business Project 1 /PT / LV-Nr: BPR.1 / 4.Semester / ECTS: 4</u> Working independently in small groups, students carry out a project with a scope of 4 ECTS = 100h. This is based on a predefined objective. Planning, coordination, budgeting, control, communication and reporting, as well as finding solutions, are the responsibility of the students. The role of the course instructor focuses on coaching the students.		
	<u>Business Project 2 /PT / LV-Nr: BPR.1 / 5.Semester / ECTS: 4</u> Working independently in small groups, students carry out a project with a scope of 4 ECTS = 100h. This is based on a predefined objective. Planning, coordination, budgeting, control, communication and reporting, as well as finding solutions, are the responsibility of the students. The role of the course instructor focuses on coaching the students.		
Teaching and learning methods	<u>Business Project 1 /PT / LV-Nr: BPR.1 / 4.Semester / ECTS: 4</u> Project & problem-based learning		
	<u>Business Project 2 /PT / LV-Nr: BPR.1 / 5.Semester / ECTS: 4</u> Project & problem-based learning		
Evaluation Methods Criteria	<u>Business Project 1 /PT / LV-Nr: BPR.1 / 4.Semester / ECTS: 4</u> Portfolio assessment		
	<u>Business Project 2 /PT / LV-Nr: BPR.1 / 5.Semester / ECTS: 4</u> Portfolio assessment		

Module number:	Corporate Real Estate Management	Scope:	
CRM		5	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	5. Semester		
Level	5. Semester: Introduction & in-depth study		
Previous knowledge	5. Semester: Global Real Estate Investment & Capital Markets, Lifecycle & Maintenance Management, Real Estate Development & Building Design, Real Estate Valuation, Workplace & Space Management		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Corporate Real Estate Management /ILV / LV-Nr: CRM / 5.Semester / ECTS: 5</u> - Glatte, T. (2021). Corporate Real Estate Management. Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-32222-9 - Hoendervanger, J. G. (2025). Corporate Real Estate Management: Integrating organisational, individual, and social values and needs. BOOKBROTHERS. - Jensen, P. A., & Voordt, T. van der. (2020). Facilities Management and Corporate Real Estate Management as Value Drivers: How to manage and measure adding value. ROUTLEDGE.		
Acquisition of skills	<u>Corporate Real Estate Management /ILV / LV-Nr: CRM / 5.Semester / ECTS: 5</u> The participants: • analyze corporate real estate portfolios with regard to cost-effectiveness, space usage and the company's strategic objectives. • evaluate locations and properties according to business, functional and ESG criteria. • develop real estate-related strategies to support corporate objectives. • plan and argue real estate decisions to management and stakeholders on the basis of quantitative and qualitative data. • reflect on the role of CREM in the interplay between cost-effectiveness, sustainability and employee satisfaction, and communicate proposed solutions in an audience-appropriate manner.		
Course contents	<u>Corporate Real Estate Management /ILV / LV-Nr: CRM / 5.Semester / ECTS: 5</u> - Fundamentals, objectives and tasks of corporate real estate management - Real estate portfolio strategies and life-cycle management - Location analysis, space management, workplace and new-work concepts - Economic and risk assessment, key figures in CREM - Sustainability, ESG and corporate social responsibility in real estate management - Interfaces with facility management, controlling, HR and corporate strategy		
Teaching and learning methods	<u>Corporate Real Estate Management /ILV / LV-Nr: CRM / 5.Semester / ECTS: 5</u> Lectures, discussions, exercises, case studies, group work		
Evaluation Methods Criteria	<u>Corporate Real Estate Management /ILV / LV-Nr: CRM / 5.Semester / ECTS: 5</u> Portfolio assessment		

Module number:	Data Analytics	Scope:	
DAT		5	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	5. Semester		
Level	5. Semester: In-depth study		
Previous knowledge	5. Semester: Digital Tools & Data Skills, Building Technology - Electrical & Safety Systems,		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Data Analytics /ILV / LV-Nr: DAT / 5.Semester / ECTS: 5</u> - Amos, D., Bader, D., Jablonski, J., & Heisler, F. (2021). Python basics: A practical introduction to Python 3 (Revised and updated 4th edition). Real Python. - Matthes, E. (2023). Python crash course: A hands-on, project-based introduction to programming (3rd edition). No Starch Press. - Runkler, T. A. (2025a). Data Analytics: Models and Algorithms for Intelligent Data Analysis - A Comprehensive Introduction (4th ed. 2025). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-45951-2 - Runkler, T. A. (2025b). Data Analytics: Models and Algorithms for Intelligent Data Analysis - A Comprehensive Introduction (4th ed. 2025). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-45951-2		
Acquisition of skills	<u>Data Analytics /ILV / LV-Nr: DAT / 5.Semester / ECTS: 5</u> The participants: • identify and structure relevant data sources in real estate systems. • analyze real estate data with suitable tools. • develop data-based decision models and critically assess their significance. • reflect on ethical and data-protection aspects in handling operational and usage data and develop proposals for a responsible data strategy.		
Course contents	<u>Data Analytics /ILV / LV-Nr: DAT / 5.Semester / ECTS: 5</u> - Fundamentals of data analytics in real estate and facility management - Data types and data sources - Data preparation, modeling and visualization - Key figures, KPIs and dashboards for FM and CREM processes - Data protection, data security and ethical aspects in data analysis		
Teaching and learning methods	<u>Data Analytics /ILV / LV-Nr: DAT / 5.Semester / ECTS: 5</u> Lectures, discussions, exercises, case studies, group work		
Evaluation Methods Criteria	<u>Data Analytics /ILV / LV-Nr: DAT / 5.Semester / ECTS: 5</u> Portfolio assessment		

Module number:	Energy Efficiency & Circular Systems	Scope:	
ECS		5	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	5. Semester		
Level	5. Semester: Introduction & in-depth study		
Previous knowledge	5. Semester: Building Materials, Physics & Construction, Building Technology - Electrical & Safety Systems, Building Technology - Water & Access Systems, Building Technology - HVAC & Refrigeration, Computer-Aided Design & Modeling, Lifecycle & Maintenance Management,		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Energy Efficiency & Circular Systems /ILV / LV-Nr: ECS / 5.Semester / ECTS: 5</u> - Pinterić, M. (2021). Building Physics: From physical principles to international standards (2nd ed. 2021). Springer International Publishing. https://doi.org/10.1007/978-3-030-67372-7 - Roosa, S. A., Doty, S., & Turner, W. C. (2020). Energy management handbook (Ninth edition). River Publishers. - Singh, A. K. (2025). Quantitative Assessment of Sustainability and Sustainable Development: Principles, Processes, and Challenges. Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-83852-1 - Sogut, M. Z., Karakoc, T. H., & Secgin, Ö. (2025). Energy Management: Green Transition. SPRINGER INTERNATIONAL PU. - Fet, A. M. (Ed.). (2023). Business Transitions: A Path to Sustainability: The CapSEM Model. Springer International Publishing. https://doi.org/10.1007/978-3-031-22245-0 - Fischer, M., Foord, D., Freccè, J., Hillebrand, K., Kissling-Näf, I., Meili, R., Peskova, M., Risi, D., Schmidpeter, R., & Stucki, T. (2023). Sustainable Business: Managing the Challenges of the 21st Century. Springer International Publishing. https://doi.org/10.1007/978-3-031-25397-3 - Lehtimäki, H., Aarikka-Stenroos, L., Jokinen, A., & Jokinen, P. (Eds.). (2024). The Routledge handbook of catalysts for a sustainable circular economy. Routledge, Taylor & Francis Group. - Mavropoulos, A., & Nilsen, A. W. (2020). Industry 4.0 and circular economy: Towards a wasteless future or a wasteful planet? Wiley. - Weetman, C. (2021). A circular economy handbook: How to build a more resilient, competitive and sustainable business (Second edition). Kogan Page.		
Acquisition of skills	<u>Energy Efficiency & Circular Systems /ILV / LV-Nr: ECS / 5.Semester / ECTS: 5</u> The participants: • analyze energy-consumption structures in buildings and identify optimization potential with regard to efficiency and resource use. • evaluate energy-saving measures and calculate their economic and ecological effects. • develop concepts for integrating the circular economy and resource efficiency into FM processes. • reflect on the role of facility management in the context of the energy transition and communicate sustainability strategies in an audience-appropriate way to technical and commercial stakeholders.		
Course contents	<u>Energy Efficiency & Circular Systems /ILV / LV-Nr: ECS / 5.Semester / ECTS: 5</u> - Energy efficiency in building operations: analysis, monitoring and optimization - Life cycle costs, CO ₂ accounting and energy management systems - Principles of the circular economy: material cycles, re-use & re-design - Regulatory and normative fundamentals - Practical examples of energy-efficiency projects and circular building concepts		
Teaching and learning methods	<u>Energy Efficiency & Circular Systems /ILV / LV-Nr: ECS / 5.Semester / ECTS: 5</u> Lectures, discussions, exercises, case studies, group work		
Evaluation Methods Criteria	<u>Energy Efficiency & Circular Systems /ILV / LV-Nr: ECS / 5.Semester / ECTS: 5</u> Portfolio assessment		

Module number:	Global Facility Management	Scope:	
GFM		2	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	5. Semester		
Level	5. Semester: In-depth study		
Previous knowledge	5. Semester: Introduction to Facility & Real Estate Management, Real Estate Development & Building Design, Life-cycle & Maintenance Management, Workplace & Space Management, Building Technology,		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Global Facility Management /ILV / LV-Nr: GFM / 5.Semester / ECTS: 2</u> - Akinbogun, S. P., Aigbavboa, C. O., & Akinbogun, O. T. (Eds). (2024). Facility Management Practices: Empirical Cases in Developing Countries. Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-65321-6 - Konovalov, D., Švajlenka, J., & Katunský, D. (2025). Analysis of the Current State of FM in Domestic and International Context. In Z. Blikharsky, D. Katunský, & L. Licholai (Eds), Proceedings of CEE 2025 (Vol. 781, pp. 149–154). Springer Nature Switzerland. https://doi.org/10.1007/978-3-032-06850-7_15 - Roper, K. O., & Borello, L. J. (Eds). (2014). International facility management. Wiley Blackwell.		
Acquisition of skills	<u>Global Facility Management /ILV / LV-Nr: GFM / 5.Semester / ECTS: 2</u> The participants: • compare international facility management models and analyze their influencing factors. • evaluate different service standards in an international comparison. • discuss intercultural challenges in the global FM context and develop solution approaches for successful international collaboration. • reflect on their own professional and cultural perspectives with regard to global trends.		
Course contents	<u>Global Facility Management /ILV / LV-Nr: GFM / 5.Semester / ECTS: 2</u> - International FM models and organizational forms - Global trends: digitization, sustainability, outsourcing, workplace experience - International standards and certification systems - Best-practice examples from international FM companies - Visit or virtual collaboration with partner universities / international experts		
Teaching and learning methods	<u>Global Facility Management /ILV / LV-Nr: GFM / 5.Semester / ECTS: 2</u> Lectures, discussions, exercises, case studies, group work, field trip		
Evaluation Methods Criteria	<u>Global Facility Management /ILV / LV-Nr: GFM / 5.Semester / ECTS: 2</u> Portfolio assessment		

Module number:	International Urban & Community Development Project	Scope:	
INW		2	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	5. Semester		
Level	5. Semester: In-depth study		
Previous knowledge	5. Semester: Real Estate Development & Building Design, Building Technology - Water & Access Systems, Building Technology - Electrical & Safety Systems, Building Technology - HVAC & Refrigeration, Workplace & Space Management, Energy Efficiency & Circular Systems, Computer-Aided Design & Modeling, Real Estate Valuation, Real Estate Marketing & Communication, Collaboration & Interpersonal Skills		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>International Urban & Community Development Project /ILV / LV-Nr: INW / 5.Semester / ECTS: 2</u> The literature is selected for the specific project topics and will be announced at the beginning or during the course of the project. It includes current scientific publications, case studies, international reports, and practice-oriented resources on sustainable urban and community development.		
Acquisition of skills	<u>International Urban & Community Development Project /ILV / LV-Nr: INW / 5.Semester / ECTS: 2</u> The participants: • develop innovative solution approaches for real-world problems in the field of sustainable urban & community development within an interdisciplinary team. • communicate and present project results in an audience-appropriate manner in an international context. • reflect on team processes, cultural perspectives and their own role in interdisciplinary projects.		
Course contents	<u>International Urban & Community Development Project /ILV / LV-Nr: INW / 5.Semester / ECTS: 2</u> - Project work on real-world case studies taking economics and ESG criteria into account - Teamwork in interdisciplinary and intercultural groups - Development and presentation of an innovative project concept		
Teaching and learning methods	<u>International Urban & Community Development Project /ILV / LV-Nr: INW / 5.Semester / ECTS: 2</u> Project & problem-based learning		
Evaluation Methods Criteria	<u>International Urban & Community Development Project /ILV / LV-Nr: INW / 5.Semester / ECTS: 2</u> Portfolio assessment		

Module number:	Innovation, Business & Research Transfer	Scope:	
IBP		22	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management full-time		
Position in the curriculum	5. Semester		
	6. Semester		
Level	5. Semester: In-depth study / 6. Semester: In-depth study		
Previous knowledge	5. Semester: none / 6. Semester: all content from semesters 1 to 5		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Innovation, Business & Research Transfer /ILV / LV-Nr: IBP / 5.Semester / ECTS: 2</u> aktuelle wissenschaftliche Publikationen sowie praxisorientierte Beiträge aus Fachzeitschriften, Reports, Fallstudien, Verbandsunterlagen		
	<u>Integrated Internship /BPR / LV-Nr: IBP / 6.Semester / ECTS: 20</u> - Labor, S. L. (2020). Student internship success workbook: 20+ lessons and activities for student intern career readiness : Student's guide (2nd edition). CreateSpace Independent Publishing.		
Acquisition of skills	<u>Innovation, Business & Research Transfer /ILV / LV-Nr: IBP / 5.Semester / ECTS: 2</u> The participants: • identify and classify current developments and innovation impulses from academia, industry and research within the context of facility and real estate management. • analyze practical and research examples with regard to their relevance and transferability to professional questions. • reflect on the significance of research, innovation and interdisciplinary exchange for their own professional development. • transfer selected findings into application-oriented ideas, strategies or improvement proposals for practice.		
	<u>Integrated Internship /BPR / LV-Nr: IBP / 6.Semester / ECTS: 20</u> The participants: • take on responsibility in a real professional environment of facility and real estate management and apply the knowledge they have acquired in a practice-oriented way. • analyze and evaluate operational structures, processes and tasks with regard to professional, organizational and economic interrelationships. • communicate and cooperate professionally in an interdisciplinary working context and help shape task assignments independently. • reflect on personal strengths, areas for development and career prospects. • further develop their professional attitude, self-management and ability to act. • analyze workplace-related workload and resource factors at the internship company and derive from them suitable strategies for a sustainable work-life balance in everyday working life. • evaluate diversity dimensions and possible exclusion mechanisms in the working environment and develop practice-oriented approaches for respectful, inclusive collaboration in the workplace.		
Course contents	<u>Innovation, Business & Research Transfer /ILV / LV-Nr: IBP / 5.Semester / ECTS: 2</u> Students gain insights into current topics, developments and research findings in facility and real estate management. Various experts from academia, industry and research provide practical impulses on innovation and transfer issues. The content is explored in greater depth through moderated discussions, fireside chats or field trips and reflected upon with regard to its significance for professional practice.		
	Topics covered include: - current innovation and research trends in the sector - examples of successful corporate and research collaborations - approaches to knowledge and technology transfer - sustainable and digital transformation processes in the real estate industry - reflection on one's own learning and transfer processes in a professional context		
	<u>Integrated Internship /BPR / LV-Nr: IBP / 6.Semester / ECTS: 20</u>		

	- Professional practical activity in a relevant company or organization - Application of subject-specific, methodological and social competences in practice, including the use of individual work-life balance strategies and inclusive behaviors in the working environment - Insights into operational processes, project management and decision-making structures - Reflection on professional profiles, roles and expectations in facility and real estate management, including engagement with role models, diversity aspects and inclusive collaboration - Preparation of an internship and reflection report that also documents personal insights on work-life balance and diversity in a real working context
Teaching and learning methods	<u>Innovation, Business & Research Transfer /ILV / LV-Nr: IBP / 5.Semester / ECTS: 2</u> Lectures, discussions, case studies, field trips
	<u>Integrated Internship /BPR / LV-Nr: IBP / 6.Semester / ECTS: 20</u> Professional internship
Evaluation Methods Criteria	<u>Innovation, Business & Research Transfer /ILV / LV-Nr: IBP / 5.Semester / ECTS: 2</u> Portfolio assessment
	<u>Integrated Internship /BPR / LV-Nr: IBP / 6.Semester / ECTS: 20</u> Portfolio assessment

2.3.3 Module descriptions part-time

Module number:	Construction Technology	Scope:	
BTK		6	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	1. Semester		
Level	1. Semester: Introductory & advanced		
Previous knowledge	1. Semester: none		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Building Technology /ILV / LV-Nr: BTK / 1.Semester / ECTS: 6</u> - Backe, H. (2008). Baustoffkunde: Für Ausbildung und Praxis (11. Aufl.). Köln: Werner Verlag. - Hermann, H., & Krings, W. (2017). Kleine Baustatik: Grundlagen der Statik und Berechnung von Bauteilen (18. Aufl.). Wiesbaden: Springer Vieweg. - Lutz, P., Liese, W., Kraus, U., & Schmidt, T. (2013). Lehrbuch der Bauphysik: Schall, Wärme, Feuchte, Licht, Brand, Klima. Wiesbaden: Springer Vieweg. - Neroth, G., & Vollenschaar, D. (2011). Wendehorst Baustoffkunde: Grundlagen – Baustoffe – Oberflächenschutz. Wiesbaden: Vieweg + Teubner Verlag. - Pech, A., & Pöhn, C. (2018). Bauphysik: Wärme – Feuchte – Schall – Brand. Basel: Birkhäuser.		
Acquisition of skills	<u>Building Technology /ILV / LV-Nr: BTK / 1.Semester / ECTS: 6</u> The participants: • describe and compare the most important construction and engineering materials in terms of their physical, ecological, and technical properties. • analyze the use of construction and engineering materials with regard to their load-bearing capacity, cost-effectiveness, and sustainability. • identify and assess the causes of structural defects as well as suitable measures for preventing and remediating damage. • apply basic principles of structural theory to simple building constructions and evaluate their structural function. • calculate and assess building-physics parameters (thermal, acoustic, and moisture protection) and develop simple optimization proposals for energy-efficient construction.		
Course contents	<u>Building Technology /ILV / LV-Nr: BTK / 1.Semester / ECTS: 6</u> - Properties, classification, and testing of construction and engineering materials (concrete, steel, timber, glass, plastics) - Fundamentals of structural theory (forces, stresses, structural systems) - Building-physics fundamentals: thermal, acoustic, and moisture protection - Typical damage patterns, root-cause analysis, and preventive measures - Standards, environmental aspects, and sustainability criteria in construction - Practical examples: material selection, construction, and maintenance		
Teaching and learning methods	<u>Building Technology /ILV / LV-Nr: BTK / 1.Semester / ECTS: 6</u> Lectures, discussions, exercises, case studies		
Evaluation Methods Criteria	<u>Building Technology /ILV / LV-Nr: BTK / 1.Semester / ECTS: 6</u> Portfolio assessment		

Module number:	Collaboration & Interpersonal Skills	Scope:	
CIS		6	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	1. Semester		
Level	1. Semester: Advanced		
Previous knowledge	1. Semester: none		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Collaboration & Interpersonal Skills (E) /ILV / LV-Nr: CIS / 1.Semester / ECTS: 6</u> - Bender, F. (2022). A Roadmap to Intercultural Proficiency: Navigating Through Cultural Diversity and Inclusion. Springer International Publishing. https://doi.org/10.1007/978-3-031-04899-9 - Moussa, M., Doumani, T., McMurray, A., Muenjohn, N., & Deng, L. (2022). Cross-Cultural Performance Management: Transcending Theory to a Practical Framework. Springer International Publishing. https://doi.org/10.1007/978-3-030-91268-0 - Schauer, G. A. (2024). Intercultural Competence and Pragmatics. Springer International Publishing. https://doi.org/10.1007/978-3-031-44472-2 - Stolz, I., & Oldenziel Scherrer, S. (Eds). (2022). International Leadership: Effecting Success Across Borders in a Boundaryless World. Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-37306-1		
Acquisition of skills	<u>Collaboration & Interpersonal Skills (E) /ILV / LV-Nr: CIS / 1.Semester / ECTS: 6</u> The participants: • actively shape the formation of well-functioning student teams and take responsibility for shared tasks. • apply basic communication and feedback techniques in order to interact with one another respectfully and in a solution-oriented way. • recognize and reflect on group processes, roles, and dynamics in newly formed teams. • develop and test, in semester-long academic settings, strategies for constructive conflict resolution and for dealing with different personality and working styles within their student cohort and their professional environment. • foster a positive team culture that supports learning through cooperative behavior, openness, and empathy. • analyze, as part of everyday study life, individual and organizational factors influencing students' work-life balance and derive situation-specific measures for regulating their own workload that can be integrated into the course of the semester and into a professional career. • assess gender-related inequalities in work and learning contexts and develop measures to promote non-discriminatory, gender-inclusive collaboration. • expand their learning competence through the deliberate application of suitable learning strategies and through the reflective handling of feedback and performance requirements. • develop a lasting understanding of lifelong learning and recognize the importance of continuous skills development in professional and organizational contexts.		
Course contents	<u>Collaboration & Interpersonal Skills (E) /ILV / LV-Nr: CIS / 1.Semester / ECTS: 6</u> - Fundamentals of intercultural communication - Communication styles, value orientations, and dealing with misunderstandings - Team roles and decision-making processes in culturally diverse groups - Intercultural conflict patterns and resolution strategies - Building trust, empathy, and perspective-taking in international contexts - Diversity, inclusion, and the ethical dimensions of collaboration - Reflecting on one's own cultural background and communication preferences - Models and methods for analyzing stress and resources (work-life balance) - Mechanisms of gender roles, bias, and structural disadvantage, along with practical approaches to gender-inclusive design of work and learning environments - Practical exercises for team building and collaboration in international settings - Learning strategies and methods of self-directed learning, plus techniques for acquiring and retaining knowledge effectively - The importance and concepts of lifelong learning in a professional context, including strategies for continuous skills development and reflective handling of feedback		
Teaching and learning methods	<u>Collaboration & Interpersonal Skills (E) /ILV / LV-Nr: CIS / 1.Semester / ECTS: 6</u> Lectures, exercises, presentations		
Evaluation Methods Criteria	<u>Collaboration & Interpersonal Skills (E) /ILV / LV-Nr: CIS / 1.Semester / ECTS: 6</u> Portfolio assessment		

Module number:	Fundamentals of Economics	Scope:	
ECN		6	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	1. Semester		
Level	1. Semester: Introductory		
Previous knowledge	1. Semester: none		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Fundamentals of Economics (E) /ILV / LV-Nr: ECN / 1.Semester / ECTS: 6</u> - Atrill, P., & McLaney, E. J. (2022). Accounting and finance for non-specialists (Twelfth edition). Pearson. - Keller, K. L., Keller, K. L., Alexande, & Kotler, P. (2021). Marketing Management (16th edn). - Sloman, J., Garratt, D., Guest, J., & Jones, E. (2023). Economics for Business (9th edn). Pearson.		
Acquisition of skills	<u>Fundamentals of Economics (E) /ILV / LV-Nr: ECN / 1.Semester / ECTS: 6</u> The participants: • define key terms and basic concepts of business administration, economics, and accounting. • explain the fundamental structures, workings, and interactions of companies and markets. • describe the essential principles of cost accounting, financial reporting, and budgeting. • apply basic economic models, such as supply and demand and market equilibrium, to practice-oriented problems. • analyze business case studies using management, marketing, and financial models. • prepare and interpret simple financial reports, balance sheets, and income statements. • evaluate investment and financing alternatives on the basis of common metrics (e.g., net present value, internal rate of return). • assess the efficiency of business processes and organizational structures. • integrate business, economic, and accounting knowledge to support well-founded decisions in an engineering context.		
Course contents	<u>Fundamentals of Economics (E) /ILV / LV-Nr: ECN / 1.Semester / ECTS: 6</u> Introduction to business administration: - Definition and objectives of business administration - Legal and organizational forms of companies - Management functions: planning, organizing, leading, controlling - Fundamentals of corporate governance and business ethics Marketing & sales: - Fundamentals of marketing and market segmentation - Marketing mix: product, price, distribution, communication - Market research and consumer behavior Human resource management: - Workforce planning, recruitment, and staff development - Motivation and leadership theories - Performance appraisal and compensation Procurement, production, logistics: - Fundamentals of supply chain management - Procurement and sourcing strategies - Production systems and inventory management Fundamentals of economics: - Microeconomics: supply, demand, and market equilibrium - Elasticities, cost and production theory - Macroeconomics: GDP, inflation, unemployment, fiscal and monetary policy - Economic systems and world trade Accounting and financial management: - Introduction to double-entry bookkeeping - Balance sheet, income statement, and cash flow statement - Cost and management accounting (cost types, cost centers, cost units) - Investment appraisal (static and dynamic methods) - Financing: equity and debt financing, capital structure		
Teaching and learning methods	<u>Fundamentals of Economics (E) /ILV / LV-Nr: ECN / 1.Semester / ECTS: 6</u> Lectures, discussions, case studies, group work		
Evaluation Methods Criteria	<u>Fundamentals of Economics (E) /ILV / LV-Nr: ECN / 1.Semester / ECTS: 6</u> Portfolio assessment		

Module number:	Building Design and Construction Principles	Scope:	
GEB		6	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	1. Semester		
Level	1. Semester: Introductory & advanced		
Previous knowledge	1. Semester: none		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Building Studies /ILV / LV-Nr: GEB / 1.Semester / ECTS: 6</u> - Kister, J. (with Brockhaus, M., Lohmann, M., & Neufert-Stiftung). (2025). Neufert Bauentwurfslehre: Grundlagen, Normen, Vorschriften über Anlage, Bau, Gestaltung, Raumbedarf, Raumbeziehungen, Maße für Gebäude, Räume, Einrichtungen, Geräte mit dem Menschen als Maß und Ziel: Handbuch für den Baufachmann, Bauherrn, Lehrenden und Lernenden (E. Neufert, Ed.; 44., überarbeitete und aktualisierte Auflage). Springer Vieweg. - Riccabona, C. (2002). Gebäude- und Gestaltungslehre. 1, Wohnbau (3., überarb. Aufl). Manz. - Schönfeld, J. W. (1992). Gebäudelehre (2., überarb. Aufl). Kohlhammer. - Wüstenrot Stiftung (Ed.). (2012). Raumpilot: Grundlagen, Arbeiten, Lernen, Wohnen. Kraemerverlag.		
Acquisition of skills	<u>Building Studies /ILV / LV-Nr: GEB / 1.Semester / ECTS: 6</u> The participants: • describe and classify basic building typologies according to use, function, and construction principle. • analyze typical spatial structures as well as the circulation and functional relationships of different building categories. • explain the relationship between building form, use, construction method, and technical requirements. • evaluate buildings in terms of functional appropriateness, user requirements, and sustainability aspects. • compare and document exemplary building types using plans, sections, and real-world case studies.		
Course contents	<u>Building Studies /ILV / LV-Nr: GEB / 1.Semester / ECTS: 6</u> - Introduction to building and structure typology - Systematics and classification of buildings (residential, administrative, commercial, industrial, and special-purpose buildings) - Spatial organization, circulation principles, building geometry - The relationship between building type, use, and technical infrastructure - Fundamentals of functional, building-physics, and regulatory requirements - Analysis and interpretation of planning documents for selected building types		
Teaching and learning methods	<u>Building Studies /ILV / LV-Nr: GEB / 1.Semester / ECTS: 6</u> Lectures, discussions, exercises, case studies, group work, field trips		
Evaluation Methods Criteria	<u>Building Studies /ILV / LV-Nr: GEB / 1.Semester / ECTS: 6</u> Portfolio assessment		

Module number:	Real Estate Investment & Financing	Scope:	
IIF		6	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	1. Semester		
Level	1. Semester: Introductory & advanced		
Previous knowledge	1. Semester: none		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Real Estate Investment & Finance /ILV / LV-Nr: IIF / 1.Semester / ECTS: 6</u> - Geyer, A., Hanke, M., Littich, E., & Nettekoven, M. (2015). Grundlagen der Finanzierung (5. Aufl.). Wien: Linde Verlag. - Teufelsdorfer, H., et al. (2015). Handbuch Immobilientransaktionen (2. Aufl.). Wien: Linde Verlag. - Walch, P., & Weichselbaum, K. (2018). Handbuch Immobilienfinanzierung (2. Aufl.). Wien: Linde Verlag.		
Acquisition of skills	<u>Real Estate Investment & Finance /ILV / LV-Nr: IIF / 1.Semester / ECTS: 6</u> The participants: • explain and distinguish between the basic concepts, actors, and markets of real estate investment. • analyze real estate as a capital investment, taking return, risk, and liquidity aspects into account. • calculate and evaluate investment decisions using financial mathematics methods • identify and assess forms and structures of financing for real estate projects in a national and European context. • evaluate financing strategies with regard to cost-effectiveness, sustainability, and risk management.		
Course contents	<u>Real Estate Investment & Finance /ILV / LV-Nr: IIF / 1.Semester / ECTS: 6</u> - Fundamentals of the real estate market and capital investment - Investment appraisal using static and dynamic methods - Return, risk, and liquidity analysis - Forms of financing in the real estate sector - Banks, capital markets, and alternative financing instruments - The impact of macroeconomic factors and interest rate developments - Sustainable and ESG-compliant investment strategies		
Teaching and learning methods	<u>Real Estate Investment & Finance /ILV / LV-Nr: IIF / 1.Semester / ECTS: 6</u> Lectures, discussions, exercises, case studies, group work		
Evaluation Methods Criteria	<u>Real Estate Investment & Finance /ILV / LV-Nr: IIF / 1.Semester / ECTS: 6</u> Portfolio assessment		

Module number:	Digital Tools & Data Skills	Scope:	
DAT		6	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	2. Semester		
Level	2. Semester: Introductory & advanced		
Previous knowledge	2. Semester: Scientific & Empirical Methods		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Digital Tools & Data Skills (E) /ILV / LV-Nr: DAT / 2.Semester / ECTS: 6</u> - Amos, D., Bader, D., Jablonski, J., & Heisler, F. (2021). Python basics: A practical introduction to Python 3 (Revised and updated 4th edition). Real Python. - Matthes, E. (2023). Python crash course: A hands-on, project-based introduction to programming (3rd edition). No Starch Press. - Runkler, T. A. (2025a). Data Analytics: Models and Algorithms for Intelligent Data Analysis - A Comprehensive Introduction (4th ed. 2025). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-45951-2 - Runkler, T. A. (2025b). Data Analytics: Models and Algorithms for Intelligent Data Analysis - A Comprehensive Introduction (4th ed. 2025). Springer Fachmedien Wiesbaden. https://doi.org/10.1007/978-3-658-45951-2		
Acquisition of skills	<u>Digital Tools & Data Skills (E) /ILV / LV-Nr: DAT / 2.Semester / ECTS: 6</u> The participants: • explain basic digital concepts, data structures, and interfaces in facility and real estate management. • use common software tools for structured data capture and management. • apply simple scripts to analyze, filter, and visualize data. • analyze datasets for patterns, relationships, and sources of error. • reflect on the benefits, limitations, and ethical aspects of digital data processing in building management. • transfer digital concepts and methods to their own professional fields of practice in facility and real estate management and reflect on concrete application potential in their respective company context. • analyze operational data structures and processes from their work environment and identify opportunities for optimization through the targeted use of digital tools. • assess the feasibility of implementing digital solutions, taking into account organizational conditions, resources, and existing system landscapes. • reflect on the added value of data-based decision-making foundations for strategic and operational tasks within their professional area of responsibility. • develop a deeper understanding of digital transformation processes within their own company and derive individual perspectives for further training and development from them.		
Course contents	<u>Digital Tools & Data Skills (E) /ILV / LV-Nr: DAT / 2.Semester / ECTS: 6</u> - Introduction to digital tools and data management - Introduction to programming and databases - Data quality, error detection, and data cleansing - Cloud and collaboration tools for data projects - Data protection, data security, and ethical aspects of data processing - Transferring the digital fundamentals covered to specific operational questions in each participant's company environment - Analysis and optimization of existing digital processes and system landscapes in facility and real estate management - Practice-based reflection on integrating new digital solutions into ongoing work processes, taking organizational conditions into account - Sharing experiences and discussing best practices for digital transformation projects from the participants' professional contexts - Development of small, practice-oriented implementation projects directly related to participants' own work environments		
Teaching and learning methods	<u>Digital Tools & Data Skills (E) /ILV / LV-Nr: DAT / 2.Semester / ECTS: 6</u> Lectures, discussions, case studies, group work		
Evaluation Methods Criteria	<u>Digital Tools & Data Skills (E) /ILV / LV-Nr: DAT / 2.Semester / ECTS: 6</u> Portfolio assessment		

Module number:	Introduction to Real Estate & Facility Management Teaching	Scope:	
FMI		6	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	2. Semester		
Level	2. Semester: Introductory		
Previous knowledge	2. Semester: none		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Introduction to Real Estate & Facility Management /ILV / LV-Nr: FMI / 2.Semester / ECTS: 6</u> - Brauer, K., et al. (2019). Grundlagen der Immobilienwirtschaft (10. Aufl.). Wiesbaden: Gabler Verlag. - Gondring, H., & Wagner, T. (2018). Facility Management: Handbuch für Studium und Praxis (3., vollständig überarb. Aufl.). München: Vahlen. - Krimmling, J. (2013). Facility Management: Strukturen und methodische Instrumente (4., aktualisierte Aufl.). Stuttgart: Fraunhofer IRB Verlag. - Malloth, T., et al. (2013). Immobilienmanagement Österreich (5. Aufl.). Wien: ÖVI. - Nävy, J., & Schröter, M. (2013). Facility Services – Die operative Ebene des Facility Managements. Berlin: Springer Vieweg. - Wendlinger, P. (2018). Immobilienkennzahlen (2. Aufl.). Wien: Linde Verlag.		
Acquisition of skills	<u>Introduction to Real Estate & Facility Management /ILV / LV-Nr: FMI / 2.Semester / ECTS: 6</u> The participants: • explain and distinguish between the basic terms, areas of responsibility, and actors of real estate and facility management. • analyze the life cycle phases of real estate with regard to technical, economic, and organizational aspects. • identify and evaluate key processes in real estate operations, in particular maintenance, property management, and services. • explain the relationships between user requirements, building management, and cost-effectiveness. • reflect on the role of the facility manager in the field of tension between owner, user, service provider, and sustainability.		
Course contents	<u>Introduction to Real Estate & Facility Management /ILV / LV-Nr: FMI / 2.Semester / ECTS: 6</u> - Fundamentals, terminology, and systematics of real estate and facility management - The real estate life cycle (planning, use, maintenance, disposal) - Structures and stakeholder landscape: owners, operators, users, service providers - Areas of responsibility in facility management (technical, infrastructural, commercial) - Interfaces between real estate management and facility management		
Teaching and learning methods	<u>Introduction to Real Estate & Facility Management /ILV / LV-Nr: FMI / 2.Semester / ECTS: 6</u> Lectures, discussions, exercises, case studies, group work		
Evaluation Methods Criteria	<u>Introduction to Real Estate & Facility Management /ILV / LV-Nr: FMI / 2.Semester / ECTS: 6</u> Portfolio assessment		

Module number:	International Urban & Community Development Project	Scope:	
INW		2	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	2. Semester		
Level	2. Semester: Advanced		
Previous knowledge	2. Semester: Fundamentals of Project Management, Sustainability & Energy		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>International Urban & Community Development Project (E) /PT / LV-Nr: INW / 2.Semester / ECTS: 2</u> The literature is selected for the specific project topics and will be announced at the beginning or during the course of the project. It includes current scientific publications, case studies, international reports, and practice-oriented resources on sustainable urban and community development.		
Acquisition of skills	<u>International Urban & Community Development Project (E) /PT / LV-Nr: INW / 2.Semester / ECTS: 2</u> The participants: • develop innovative solution approaches within an interdisciplinary team for real-world problems in the field of Sustainable Urban & Community Development. • communicate and present project results in an international context in a way appropriate to the audience. • reflect on team processes, cultural perspectives, and their own role in interdisciplinary projects.		
Course contents	<u>International Urban & Community Development Project (E) /PT / LV-Nr: INW / 2.Semester / ECTS: 2</u> - Project work on real-world case studies, taking economics and ESG criteria into account - Teamwork in interdisciplinary and intercultural groups - Development and presentation of an innovative project concept		
Teaching and learning methods	<u>International Urban & Community Development Project (E) /PT / LV-Nr: INW / 2.Semester / ECTS: 2</u> Project & problem-based learning		
Evaluation Methods Criteria	<u>International Urban & Community Development Project (E) /PT / LV-Nr: INW / 2.Semester / ECTS: 2</u> Portfolio assessment		

Module number:	Project Management	Scope:	
PRM		6	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	2. Semester		
Level	2. Semester: Introductory & advanced		
Previous knowledge	2. Semester: none		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Project Management /ILV / LV-Nr: PRM / 2.Semester / ECTS: 6</u> - Patzak, G., Rattay, G. (2017) Projektmanagement: Leitfaden zum Management von Projekten, Projektportfolios und projektorientierten Unternehmen. Linde. - PMI Institute (2026). A Guide to the Project Management Body of Knowledge (PMBOK) - Kraus, G. und R. Westermann (2019). Projektmanagement mit System. Wiesbaden		
Acquisition of skills	<u>Project Management /ILV / LV-Nr: PRM / 2.Semester / ECTS: 6</u> The participants: • explain the structure, phases, and stakeholder structures of construction project management. • analyze tasks, responsibilities, and interfaces between project participants across the entire project life cycle. • apply basic methods of schedule, cost, and quality management in construction. • evaluate risks, decision alternatives, and control measures with regard to project objectives and success. • communicate and document project processes, decision-making foundations, and report content in a way appropriate to the audience.		
Course contents	<u>Project Management /ILV / LV-Nr: PRM / 2.Semester / ECTS: 6</u> - Fundamentals, definitions, and objective systems of construction project management - Project participants, roles, and responsibilities - Project structuring, workflow and schedule planning - Cost planning and tracking, construction controlling - Quality management and documentation in the construction process - Risk and opportunity management - Communication and decision-making processes within the project - Introduction to digital tools		
Teaching and learning methods	<u>Project Management /ILV / LV-Nr: PRM / 2.Semester / ECTS: 6</u> Lectures, discussions, exercises, case studies, group work		
Evaluation Methods Criteria	<u>Project Management /ILV / LV-Nr: PRM / 2.Semester / ECTS: 6</u> Portfolio assessment		

Module number:	Law for Facility Management & Real Estate Management	Scope:	
REC		6	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	2. Semester		
Level	2. Semester: Introductory & advanced		
Previous knowledge	2. Semester: Introduction to Real Estate & Facility Management		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Law for Facility Management & Real Estate /ILV / LV-Nr: REC / 2.Semester / ECTS: 6</u> - Artner, S., Kohlmaier, K., et al. (2017). Praxishandbuch Immobilienrecht (2. Aufl.). Wien: Linde Verlag. - Kaiser, C., Nusser, J., & Schrammel, F. (2025). Praxishandbuch Facility Management (2. Aufl.). Wiesbaden: Springer Vieweg. - Krumschnabel, M. (2015). Immobilienverträge (1. Aufl.). Kufstein: Eigenverlag. - Meissel, F., et al. (2016). Grundbegriffe der Rechtswissenschaften (3. Aufl.). Wien: Manz Verlag. - Najork, E., et al. (2009). Rechtshandbuch Facility Management (1. Aufl.). Berlin: Springer Verlag.		
Acquisition of skills	<u>Law for Facility Management & Real Estate /ILV / LV-Nr: REC / 2.Semester / ECTS: 6</u> The participants: • describe and distinguish between the basic areas of law relevant to real estate and facility management practice. • analyze typical legal relationships and types of contract in real estate and building management. • assess legal risks in real estate transactions, property management, and facility services. • apply legal principles and standards in practice-oriented case scenarios. • communicate and justify legal arguments in a way appropriate to the audience.		
Course contents	<u>Law for Facility Management & Real Estate /ILV / LV-Nr: REC / 2.Semester / ECTS: 6</u> - Fundamentals of law: legal sources, legal systematics, contract law - Private law foundations - Real estate law: ownership, acquisition, encumbrances, land register - Building and planning law, public building law, neighbor law - Types of contracts relevant to facility management - Liability, warranty, insurance, and operator responsibility in real estate and building operation - Overview of national and European legal standards		
Teaching and learning methods	<u>Law for Facility Management & Real Estate /ILV / LV-Nr: REC / 2.Semester / ECTS: 6</u> - Artner, S., Kohlmaier, K., et al. (2017). Praxishandbuch Immobilienrecht (2nd ed.). Vienna: Linde Verlag. - Kaiser, C., Nusser, J., & Schrammel, F. (2025). Praxishandbuch Facility Management (2nd ed.). Wiesbaden: Springer Vieweg. - Krumschnabel, M. (2015). Immobilienverträge (1st ed.). Kufstein: self-published. - Meissel, F., et al. (2016). Grundbegriffe der Rechtswissenschaften (3rd ed.). Vienna: Manz Verlag. - Najork, E., et al. (2009). Rechtshandbuch Facility Management (1st ed.). Berlin: Springer Verlag.		
Evaluation Methods Criteria	<u>Law for Facility Management & Real Estate /ILV / LV-Nr: REC / 2.Semester / ECTS: 6</u> Portfolio assessment		

Module number:	Business Project	Scope:	
PRX		8	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	2. Semester		
	5. Semester		
Level	2. Semester: Advanced / 5. Semester: Advanced		
Previous knowledge	2. Semester: Business, Economics & Financing, Building Technology, Building Studies, Real Estate Investment & Financing, Digital Tools & Data Skills, Introduction to Real Estate & Facility Management / 5. Semester: Business, Economics & Financing, Building Technology, Building Studies, Real Estate Investment & Financing, Digital Tools & Data Skills, Introduction to Real Estate & Facility Management		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Practical Project I /PT / LV-Nr: PRX.1 / 2.Semester / ECTS: 4</u> - Kuster, J., Bachmann, C., Hubmann, M., Lippmann, R., & Schneider, P. (2023). Project management handbook: Agile - traditional - hybrid (Second edition). Springer. - Lock, D. (2018). Project management (Seventh edition). Routledge, Taylor & Francis Group.		
	<u>Practical Project 2 /PT / LV-Nr: PRX.2 / 5.Semester / ECTS: 4</u> - Kuster, J., Bachmann, C., Hubmann, M., Lippmann, R., & Schneider, P. (2023). Project management handbook: Agile - traditional - hybrid (Second edition). Springer. - Lock, D. (2018). Project management (Seventh edition). Routledge, Taylor & Francis Group.		
Acquisition of skills	<u>Practical Project I /PT / LV-Nr: PRX.1 / 2.Semester / ECTS: 4</u> The participants: • plan and structure a practice-oriented project with clearly defined objectives, roles, and tasks. • apply project and process management methods in a real estate or facility context. • analyze and work on real operational problems using suitable data, tools, and models. • present and document project results professionally and in a way appropriate to the audience. • reflect on team processes, responsibilities, and lessons learned with regard to professional practice.		
	<u>Practical Project 2 /PT / LV-Nr: PRX.2 / 5.Semester / ECTS: 4</u> The participants: • plan and structure a practice-oriented project with clearly defined objectives, roles, and tasks. • apply project and process management methods in a real estate or facility context. • analyze and work on real operational problems using suitable data, tools, and models. • present and document project results professionally and in a way appropriate to the audience. • reflect on team processes, responsibilities, and lessons learned with regard to professional practice.		
Course contents	<u>Practical Project I /PT / LV-Nr: PRX.1 / 2.Semester / ECTS: 4</u> Working independently in small groups, students carry out a project amounting to 4 ECTS = 100 hours. It is based on a predefined objective. Planning, coordination, budgeting, monitoring, communication, and reporting, as well as finding solutions, are the responsibility of the students. The role of the course instructor focuses on coaching the students.		
	<u>Practical Project 2 /PT / LV-Nr: PRX.2 / 5.Semester / ECTS: 4</u> Working independently in small groups, students carry out a project amounting to 4 ECTS = 100 hours. It is based on a predefined objective. Planning, coordination, budgeting, monitoring, communication, and reporting, as well as finding solutions, are the responsibility of the students. The role of the course instructor focuses on coaching the students.		
Teaching and learning methods	<u>Practical Project I /PT / LV-Nr: PRX.1 / 2.Semester / ECTS: 4</u> Project & problem-based learning		
	<u>Practical Project 2 /PT / LV-Nr: PRX.2 / 5.Semester / ECTS: 4</u> Project & problem-based learning		
Evaluation Methods Criteria	<u>Practical Project I /PT / LV-Nr: PRX.1 / 2.Semester / ECTS: 4</u> Portfolio assessment		
	<u>Practical Project 2 /PT / LV-Nr: PRX.2 / 5.Semester / ECTS: 4</u> Portfolio assessment		

Module number:	Computer-Aided Design & Bauzeichnen	Scope:	
CAD		7	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	3. Semester		
Level	3. Semester: Introductory & advanced		
Previous knowledge	3. Semester: Building Technology		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Computer-Aided Design & Technical Drawing /ILV / LV-Nr: CAD / 3.Semester / ECTS: 7</u> - Huth, M. W. (2019). Understanding construction drawings (Seventh edition). Cengage Learning.		
Acquisition of skills	<u>Computer-Aided Design & Technical Drawing /ILV / LV-Nr: CAD / 3.Semester / ECTS: 7</u> The participants: • create and edit technical 2D drawings and complex 3D models using CAD software. • structure digital models into layers, components, and views in accordance with technical standards. • correctly apply planning and drawing conventions (e.g., scales, dimensioning, symbols). • import and export data in common formats and understand their significance for collaboration and building operation. • interpret CAD plans and derive basic construction-related information from them for facility and real estate management.		
Course contents	<u>Computer-Aided Design & Technical Drawing /ILV / LV-Nr: CAD / 3.Semester / ECTS: 7</u> - Fundamentals of computer-aided design and modeling (2D & 3D) - Operating logic and functions of common CAD software - Structure, layer organization, and management of digital models - Creation of technical drawings (floor plans, sections, elevations) - Scales, symbols, dimensioning, and drawing layout - Data management, file formats, and interfaces - Introduction to model-based working - Visualization and presentation of simple building models		
Teaching and learning methods	<u>Computer-Aided Design & Technical Drawing /ILV / LV-Nr: CAD / 3.Semester / ECTS: 7</u> Lectures, discussions, case studies, group work		
Evaluation Methods Criteria	<u>Computer-Aided Design & Technical Drawing /ILV / LV-Nr: CAD / 3.Semester / ECTS: 7</u> Portfolio assessment		

Module number:	Real Estate Marketing and Corporate Planning	Scope:	
IMU		6	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	3. Semester		
Level	3. Semester: Introductory & advanced		
Previous knowledge	3. Semester: Introduction to Real Estate & Facility Management		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Real Estate Marketing & Business Planning /ILV / LV-Nr: IMU / 3.Semester / ECTS: 6</u> - Brauer, K.-U. (Ed.). (2019). Grundlagen der Immobilienwirtschaft: Recht - Steuern - Marketing - Finanzierung - Bestandsmanagement - Projektentwicklung (10., überarbeitete und aktualisierte Auflage). Springer Gabler. https://doi.org/10.1007/978-3-658-21682-5 - Kippes, S. (2020). Professionelles Immobilienmarketing: Marketing-Handbuch für Makler, Bauträger, Projektentwickler und Immobilienverwalter (2nd ed). Franz Vahlen. - Lefèvre-Sandt, E. N. (2017). Immobilien erfolgreich vermarkten: Praxiserprobte Strategien und Techniken für Makler (4. Aufl. 2017). Springer Gabler. https://doi.org/10.1007/978-3-658-15314-4		
Acquisition of skills	<u>Real Estate Marketing & Business Planning /ILV / LV-Nr: IMU / 3.Semester / ECTS: 6</u> The participants: • describe and explain the basic strategies, instruments, and processes of real estate marketing and business planning. • analyze market, location, and competitive conditions for real estate products and services. • develop simple marketing and communication concepts for real estate projects, taking target groups, market trends, and sustainability aspects into account. • calculate and assess key metrics of business planning. • integrate and present marketing and financial aspects within a consistent corporate strategy.		
Course contents	<u>Real Estate Marketing & Business Planning /ILV / LV-Nr: IMU / 3.Semester / ECTS: 6</u> - Fundamentals of real estate marketing: markets, target groups, positioning - Market and location analysis (macro and micro factors) - Marketing instruments in the real estate industry (product, price, communication, distribution) - Corporate identity, branding, and digital communication - Fundamentals of business planning and control - Financial planning: budgeting, investment, and liquidity planning - SWOT analyses, business plan, and success factors in the real estate context		
Teaching and learning methods	<u>Real Estate Marketing & Business Planning /ILV / LV-Nr: IMU / 3.Semester / ECTS: 6</u> Lectures, discussions, exercises, case studies, group work		
Evaluation Methods Criteria	<u>Real Estate Marketing & Business Planning /ILV / LV-Nr: IMU / 3.Semester / ECTS: 6</u> Portfolio assessment		

Module number:	Business English	Scope:	
SPR		12	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	3. Semester		
	4. Semester		
Level	3. Semester: B2-C1+ (CEFR - Common European Framework of Reference for Languages) / 4. Semester: B2-C1+ (CEFR - Common European Framework of Reference for Languages)		
Previous knowledge	3. Semester: Business English for academic and professional purposes at level B2+/C1 with a target of C1: level B2 or an English advanced course/English preparatory course / 4. Semester: Business English for academic and professional purposes at level B2+/C1 with a target of C1: level B2 or an English advanced course/English preparatory course		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Business English 1 /ILV / LV-Nr: SPR.1 / 3.Semester / ECTS: 6</u> Course materials – as agreed; authentic materials, e.g., from English-language magazines (including academic journals), newspapers, and online media		
	<u>Business English 2 /ILV / LV-Nr: SPR.2 / 4.Semester / ECTS: 6</u> Course materials – as agreed; authentic materials, e.g., from English-language magazines (including academic journals), newspapers, and online media		
Acquisition of skills	<u>Business English 1 /ILV / LV-Nr: SPR.1 / 3.Semester / ECTS: 6</u> The participants: • (B2 – Independent language use) Can understand the main points of complex texts on concrete and abstract topics; can also follow specialist discussions in their own field of specialization. Can interact with a degree of spontaneity and fluency that makes normal conversation with native speakers quite possible without strain for either party. Can express themselves clearly and in detail on a wide range of subjects, explain a viewpoint on a topical issue, and give the advantages and disadvantages of various options. • (C1 – Proficient language use) Can understand a wide range of demanding, longer texts and grasp implicit meaning. • (C1 – Proficient language use) Can express themselves spontaneously and fluently without much obvious searching for words, and can use the language effectively and flexibly in social and professional life or in education and study • (C1 – Proficient language use) Can produce clear, well-structured, and detailed statements on complex subjects, using various cohesive devices appropriately • (C2 – Near-native language proficiency) Can understand with ease virtually everything they read or hear • (C2 – Near-native language proficiency) Can summarize information from various written and spoken sources, reconstructing arguments and explanations in a coherent presentation. • (C2 – Near-native language proficiency) Can express themselves spontaneously, very fluently, and precisely, conveying finer shades of meaning even in more complex situations.		
	<u>Business English 2 /ILV / LV-Nr: SPR.2 / 4.Semester / ECTS: 6</u> The participants: • (B2 – Independent language use) Can understand the main points of complex texts on concrete and abstract topics; can also follow specialist discussions in their own field of specialization. Can interact with a degree of spontaneity and fluency that makes normal conversation with native speakers quite possible without strain for either party. Can express themselves clearly and in detail on a wide range of subjects, explain a viewpoint on a topical issue, and give the advantages and disadvantages of various options. • (C1 – Proficient language use) Can understand a wide range of demanding, longer texts and grasp implicit meaning. • (C1 – Proficient language use) Can express themselves spontaneously and fluently without much obvious searching for words, and can use the language effectively and flexibly in social and professional life or in education and study • (C1 – Proficient language use) Can produce clear, well-structured, and detailed statements on complex subjects, using various cohesive devices appropriately • (C2 – Near-native language proficiency) Can understand with ease virtually everything they read or hear • (C2 – Near-native language proficiency) Can summarize information from various written and spoken sources, reconstructing arguments and explanations in a coherent presentation. • (C2 – Near-native language proficiency) Can express themselves spontaneously, very fluently, and precisely, conveying finer shades of meaning even in more complex situations.		

Course contents	<u>Business English 1 /ILV / LV-Nr: SPR.1 / 3.Semester / ECTS: 6</u> B2 – Independent language use Can communicate the main points of complex texts on concrete and abstract topics in academic and business contexts; can take part in specialist discussions in one's own field of specialization. Can interact with a degree of spontaneity and fluency that makes normal conversation with native speakers quite possible without strain for either party. Can express oneself clearly and in detail on a wide range of subjects, explain a viewpoint on a topical issue, and give the advantages and disadvantages of various options. C1 – Proficient language use Can understand a wide range of demanding, longer texts and grasp implicit meaning. Can use the language effectively and flexibly in academic and business contexts, and express oneself spontaneously and fluently without much obvious searching for words. Can produce clear, well-structured, and detailed text on complex subjects, using various cohesive devices appropriately. C2 – Near-native language proficiency Effortless communication in all language situations. Can summarize information from various written and spoken sources, reconstructing arguments and explanations in a coherent presentation. Can express oneself spontaneously,
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Course contents	very fluently, and precisely, conveying finer shades of meaning even in more complex situations.
	<u>Business English 2 /ILV / LV-Nr: SPR.2 / 4.Semester / ECTS: 6</u> B2 – Independent language use Can communicate the main points of complex texts on concrete and abstract topics in academic and business contexts; can take part in specialist discussions in one's own field of specialization. Can interact with a degree of spontaneity and fluency that makes normal conversation with native speakers quite possible without strain for either party. Can express oneself clearly and in detail on a wide range of subjects, explain a viewpoint on a topical issue, and give the advantages and disadvantages of various options. C1 – Proficient language use Can understand a wide range of demanding, longer texts and grasp implicit meaning. Can use the language effectively and flexibly in academic and business contexts, and express oneself spontaneously and fluently without much obvious searching for words. Can produce clear, well-structured, and detailed text on complex subjects, using various cohesive devices appropriately. C2 – Near-native language proficiency Effortless communication in all language situations. Can summarize information from various written and spoken sources, reconstructing arguments and explanations in a coherent presentation. Can express oneself spontaneously, very fluently, and precisely, conveying finer shades of meaning even in more complex situations.
Teaching and learning methods	<u>Business English 1 /ILV / LV-Nr: SPR.1 / 3.Semester / ECTS: 6</u> Integrative course based on a communicative, action-oriented approach
	<u>Business English 2 /ILV / LV-Nr: SPR.2 / 4.Semester / ECTS: 6</u> Integrative course based on a communicative, action-oriented approach
Evaluation Methods Criteria	<u>Business English 1 /ILV / LV-Nr: SPR.1 / 3.Semester / ECTS: 6</u> Portfolio assessment
	<u>Business English 2 /ILV / LV-Nr: SPR.2 / 4.Semester / ECTS: 6</u> Portfolio assessment

Module number:	Real Estate Valuation	Scope:	
VAL		12	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	3. Semester		
Level	3. Semester: Introductory / 4. Semester: Advanced		
Previous knowledge	3. Semester: Introduction to Real Estate & Facility Management, Real Estate Investment & Financing / 4. Semester: Real Estate Valuation 1		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Real Estate Valuation - Fundamentals /ILV / LV-Nr: VAL.1 / 3.Semester / ECTS: 6</u> - Bienert, S., & Funk, M. (Eds.). (2014). Immobilienbewertung Österreich (ÖVI Edition). Wien, Österreich: Österreichischer Verband der Immobilienwirtschaft (ÖVI). - Kleiber, W. (2016). Verkehrswertermittlung von Grundstücken (8. Aufl.). Köln, Deutschland: Bundesanzeiger Verlag. - Kranewitter, H. (2017). Liegenschaftsbewertung (7. Aufl.). Wien, Österreich: Manz Verlag. - Seiser, F., & Kainz, F. (2011). Der Wert von Immobilien (1. Aufl.). Graz, Österreich: Seiser + Seiser Immobilien Consulting.		
	<u>Real Estate Valuation - Advanced /ILV / LV-Nr: VAL.2 / 4.Semester / ECTS: 6</u> - Bienert, S., & Funk, M. (Eds.). (2014). Immobilienbewertung Österreich (ÖVI Edition). Wien, Österreich: Österreichischer Verband der Immobilienwirtschaft (ÖVI). - Kleiber, W. (2016). Verkehrswertermittlung von Grundstücken (8. Aufl.). Köln, Deutschland: Bundesanzeiger Verlag. - Kranewitter, H. (2017). Liegenschaftsbewertung (7. Aufl.). Wien, Österreich: Manz Verlag. - Seiser, F., & Kainz, F. (2011). Der Wert von Immobilien (1. Aufl.). Graz, Österreich: Seiser + Seiser Immobilien Consulting.		
Acquisition of skills	<u>Real Estate Valuation - Fundamentals /ILV / LV-Nr: VAL.1 / 3.Semester / ECTS: 6</u> The participants: • explain the legal and methodological foundations of valuation. • analyze the key factors influencing property value • apply the standardized methods of real estate valuation • determine land value, property yield rate, and remaining useful life on the basis of given data and interpret the results. • prepare a structured valuation report and justify the chosen methodology comprehensibly to third parties.		
	<u>Real Estate Valuation - Advanced /ILV / LV-Nr: VAL.2 / 4.Semester / ECTS: 6</u> The participants: • analyze complex valuation cases involving different property types, taking legal, technical, and market-related factors into account. • evaluate the suitability and limitations of different methods and assess their plausibility in specific valuation situations. • calculate and interpret value parameters and carry out sensitivity and risk assessments. • compare and apply national and international valuation standards. • develop a complete valuation report, including choice of method, data preparation, argumentation, and traceability for professional recipients.		
Course contents	<u>Real Estate Valuation - Fundamentals /ILV / LV-Nr: VAL.1 / 3.Semester / ECTS: 6</u> - Fundamentals of valuation, valuation occasions, and legal frameworks - Overview of valuation guidelines - Introduction to the comparative, income, and cost approaches - Data collection and preparation - Fundamentals of preparing appraisals and structuring a valuation report - Application of simple valuation examples - Introduction to valuation software and digital valuation databases		
	<u>Real Estate Valuation - Advanced /ILV / LV-Nr: VAL.2 / 4.Semester / ECTS: 6</u>		

	- Advanced application of the comparative, income, and cost approaches with complex case studies - Dynamic valuation methods - Valuation of special-purpose properties - Sensitivity and scenario analyses, risk assessment, and plausibility checks - International valuation standards and comparison of national regulatory frameworks - ESG criteria and sustainability assessment of real estate - Structure, design, and documentation of professional appraisals
Teaching and learning methods	<u>Real Estate Valuation - Fundamentals /ILV / LV-Nr: VAL.1 / 3.Semester / ECTS: 6</u> Lectures, discussions, exercises, case studies, group work
	<u>Real Estate Valuation - Advanced /ILV / LV-Nr: VAL.2 / 4.Semester / ECTS: 6</u> Lectures, discussions, exercises, case studies, group work
Evaluation Methods Criteria	<u>Real Estate Valuation - Fundamentals /ILV / LV-Nr: VAL.1 / 3.Semester / ECTS: 6</u> Portfolio assessment

Evaluation Methods Criteria	<u>Real Estate Valuation - Advanced /ILV / LV-Nr: VAL.2 / 4.Semester / ECTS: 6</u> Portfolio assessment
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Module number:	Scientific & Empirical Methods	Scope:	
SCI		15	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	3. Semester		
	6. Semester		
Level	3. Semester: Introductory & advanced / 6. Semester: Advanced		
Previous knowledge	3. Semester: Basic knowledge of statistics and academic working methods from school or vocational training / 6. Semester: all content from semesters 1 to 5 / 6. Semester: Bachelor's Thesis & Research Seminar		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Scientific & Empirical Methods (E) /ILV / LV-Nr: SCI / 3.Semester / ECTS: 5</u> - Alley, M. (2018). The craft of scientific writing (Fourth edition). Springer. - American psychological association (Ed.). (2020). Publication manual of the American psychological association: The official guide to APA style (7th ed). - Gastel, B., & Day, R. (2019). How to Write and Publish a Scientific Paper (1st ed). Greenwood. https://doi.org/10.5040/9798400666926 - James, G., Witten, D., Hastie, T., & Tibshirani, R. (2021). An introduction to statistical learning: With applications in R (Second edition). Springer. - Shumway, R. H., & Stoffer, D. S. (2017). Time Series Analysis and Its Applications: With R Examples (4th ed. 2017). Springer. https://doi.org/10.1007/978-3-319-52452-8		
	<u>Bachelor's thesis /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 6</u> - American psychological association (Ed.). (2020). Publication manual of the American psychological association: The official guide to APA style (7th ed). American psychological association. - Gastel, B., & Day, R. (2019). How to Write and Publish a Scientific Paper (1st ed). Greenwood. https://doi.org/10.5040/9798400666926		
	<u>Bachelor's Thesis Seminar /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 4</u> - American psychological association (Ed.). (2020). Publication manual of the American psychological association: The official guide to APA style (7th ed). American psychological association. - Gastel, B., & Day, R. (2019). How to Write and Publish a Scientific Paper (1st ed). Greenwood. https://doi.org/10.5040/9798400666926		
Acquisition of skills	<u>Scientific & Empirical Methods (E) /ILV / LV-Nr: SCI / 3.Semester / ECTS: 5</u> The participants: • explain the principles of academic work, research logic, and academic integrity. • research, evaluate, and cite academic sources in compliance with copyright and citation standards. • apply digital tools and assistance systems in a targeted and reflective manner within the research process. • apply descriptive and exploratory statistics. • interpret and visualize empirical results in tables, charts, or short reports. • reflect on the importance of scientific methodology for well-founded decisions in facility & real estate management, in the context of scientific responsibility.		
	<u>Bachelor's thesis /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 6</u> The participants: • work independently on a clearly defined research question from the field of facility management and real estate, applying scientific methods. • plan, structure, and carry out an academic project on their own responsibility, in compliance with professional, time-related, and formal requirements. • correctly apply suitable qualitative, quantitative, or conceptual research methods and document their use comprehensibly. • analyze, interpret, and critically discuss the results obtained in the context of current academic discourse and the requirements of professional practice. • write a coherent academic paper that meets the formal, linguistic, and content-related standards of the study program. • reflect critically and with justification on their own research process as well as on methodological, ethical, and content-related decisions.		
	<u>Bachelor's Thesis Seminar /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 4</u>		

	The participants: • formulate and structure a scientifically sound research question. • research, analyze, and evaluate relevant academic and practice-oriented sources. • select and justify suitable research methods and apply them to a defined problem. • interpret and discuss results with regard to scientific insights and implications for professional practice. • communicate and defend their own research findings in written and oral form, professionally and appropriately for the audience. • reflect on their own academic work as well as the ethical and methodological aspects of the research process.
Course contents	<u>Scientific & Empirical Methods (E) /ILV / LV-Nr: SCI / 3.Semester / ECTS: 5</u> - Fundamentals of academic work and the principles of good academic practice - Copyright, citation rules, and plagiarism avoidance - Structure of academic texts and the research process - Introduction to empirical methods: qualitative and quantitative approaches - Descriptive statistics and simple data analyses

Course contents	- Use of digital tools and assistance systems - Data visualization and documentation of results
	<u>Bachelor's thesis /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 6</u> Within this module, students independently prepare their bachelor's thesis. They work autonomously on a clearly defined research question using appropriate scientific methods, systematically evaluate the findings obtained, and document the results in the form of an academic paper that meets the formal and content-related standards of the study program.
	<u>Bachelor's Thesis Seminar /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 4</u> - Independent work on a bachelor's thesis - Accompanying research seminar with peer feedback and presentations - Discussion of research design, choice of methods, and interpretation of results - Reflection on practical relevance, transfer, and the limitations of the work - Preparation for the final presentation & final examination
Teaching and learning methods	<u>Scientific & Empirical Methods (E) /ILV / LV-Nr: SCI / 3.Semester / ECTS: 5</u> Lectures, discussions, case studies, group work
	<u>Bachelor's thesis /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 6</u> Independent scholarly work by the students.
	<u>Bachelor's Thesis Seminar /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 4</u> Lectures, discussion
Evaluation Methods Criteria	<u>Scientific & Empirical Methods (E) /ILV / LV-Nr: SCI / 3.Semester / ECTS: 5</u> Portfolio assessment
	<u>Bachelor's thesis /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 6</u> Bachelor's thesis
	<u>Bachelor's Thesis Seminar /SE / LV-Nr: SCI.2 / 6.Semester / ECTS: 4</u> Portfolio assessment

Module number:	Study Trip & International Experience	Scope:	
STP		3	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	4. Semester		
Level	4. Semester: Advanced		
Previous knowledge	4. Semester: all modules from the 1st to the 4th semester		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Study Trip & International Experience (E) /ILV / LV-Nr: STP / 4.Semester / ECTS: 3</u> - Jones, E. L. (2006). Cultures Merging: A Historical and Economic Critique of Culture. Princeton, NJ: Princeton University Press. - Thomas, A. (Ed.). (2003). Handbuch Interkulturelle Kommunikation und Kooperation: Band 1 – Grundlagen und Praxisfelder (1st ed.). Göttingen, Germany: Vandenhoeck & Ruprecht. - Thomas, A. (Ed.). (2003). Handbuch Interkulturelle Kommunikation und Kooperation: Band 2 – Anwendungsfelder und Praxis der interkulturellen Kommunikation (1st ed.). Göttingen, Germany: Vandenhoeck & Ruprecht.		
Acquisition of skills	<u>Study Trip & International Experience (E) /ILV / LV-Nr: STP / 4.Semester / ECTS: 3</u> The participants: • analyze and compare international best practices in facility & real estate management with regard to sustainability, digitalization, and operational organization. • evaluate different building concepts, operator strategies, and cultural approaches in the real estate and facility management context. • reflect on intercultural communication and cooperation processes in a professional environment. • document and present the findings of the field trip in a structured technical report, applying scientific working methods. • transfer international perspectives to local challenges in their own professional practice.		
Course contents	<u>Study Trip & International Experience (E) /ILV / LV-Nr: STP / 4.Semester / ECTS: 3</u> - Preparation for the study trip: thematic and organizational planning - Introduction to international facility & real estate management - Visits to companies, real estate projects, trade fairs, or universities in the destination country - Expert discussions with practitioners, authorities, developers, or research institutions - Observation of international management and sustainability strategies - Intercultural communication and professional conduct in an international context - Follow-up: presentation of results, reflection, and transfer into the study program		
Teaching and learning methods	<u>Study Trip & International Experience (E) /ILV / LV-Nr: STP / 4.Semester / ECTS: 3</u> Lectures, discussions, group work, study trip		
Evaluation Methods Criteria	<u>Study Trip & International Experience (E) /ILV / LV-Nr: STP / 4.Semester / ECTS: 3</u> Portfolio assessment		

Module number:	Real Estate Development	Scope:	
DEV		12	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	4. Semester		
Level	4. Semester: Introductory & advanced / 5. Semester: Advanced		
Previous knowledge	4. Semester: Building Technology, Building Studies, Real Estate Investment & Financing, Introduction to Real Estate & Facility Management, International Real Estate Development, Construction Project Management, Law for Facility Management & Real Estate, Computer-Aided Design & Technical Drawing, Real Estate Marketing & Business Planning, Real Estate Valuation 1 / 5. Semester: Real Estate Development 1		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Real Estate Development - Location, Market, Concept /ILV / LV-Nr: DEV.1 / 4.Semester / ECTS: 6</u> - Bone-Winkel, S., & Schulte, K. W. (Eds.). (2008). Handbuch Immobilien-Projektentwicklung (3. Aufl.). Köln, Deutschland: Immobilien Manager Verlag. - Diederichs, C. J. (2006). Immobilienmanagement im Lebenszyklus: Projektentwicklung, Projektmanagement, Facility Management, Immobilienbewertung. Berlin, Deutschland: Springer. - Kallinger, W., Gartner, H., & Stingl, W. (2011). Bauträger & Projektentwickler: Immobilien erfolgreich entwickeln, sanieren und verwerten. Wien, Österreich: Manz. - Klaubetz, E., ... (Hrsg.). (2016). Handbuch Immobilienprojektentwicklung. Wien, Österreich: Linde. - Schäfer, J., & Conzen, G. (2013). Praxishandbuch der Immobilien-Projektentwicklung. München, Deutschland: C. H. Beck.		
	<u>Real Estate Development - Feasibility, ESG, Risk /ILV / LV-Nr: DEV.2 / 5.Semester / ECTS: 6</u> - Bone-Winkel, S., & Schulte, K. W. (Eds.). (2008). Handbuch Immobilien-Projektentwicklung (3. Aufl.). Köln, Deutschland: Immobilien Manager Verlag. - Diederichs, C. J. (2006). Immobilienmanagement im Lebenszyklus: Projektentwicklung, Projektmanagement, Facility Management, Immobilienbewertung. Berlin, Deutschland: Springer. - Kallinger, W., Gartner, H., & Stingl, W. (2011). Bauträger & Projektentwickler: Immobilien erfolgreich entwickeln, sanieren und verwerten. Wien, Österreich: Manz. - Klaubetz, E., ... (Hrsg.). (2016). Handbuch Immobilienprojektentwicklung. Wien, Österreich: Linde. - Schäfer, J., & Conzen, G. (2013). Praxishandbuch der Immobilien-Projektentwicklung. München, Deutschland: C. H. Beck.		
Acquisition of skills	<u>Real Estate Development - Location, Market, Concept /ILV / LV-Nr: DEV.1 / 4.Semester / ECTS: 6</u> The participants: • describe and explain the overall process of real estate development from the initial idea through to realization and use. • analyze location, market, and usage factors as a basis for development decisions. • develop initial usage concepts, incorporating technical, economic, and legal framework conditions. • calculate and assess basic metrics of project viability. • visualize and present development concepts using digital planning and CAD tools. • analyze diversity-relevant requirements in real estate development projects and derive inclusion-oriented design and usage concepts from them.		
	<u>Real Estate Development - Feasibility, ESG, Risk /ILV / LV-Nr: DEV.2 / 5.Semester / ECTS: 6</u> The participants: • analyze complex real estate development projects in terms of location quality, market potential, usage concept, and viability. • develop an integrated development and usage concept, taking urban planning, legal, technical, and economic aspects as well as inclusion-oriented considerations into account. • evaluate financing, sustainability, and ESG criteria for project decisions. • calculate and interpret viability and risk metrics for development decisions. • produce a complete project brochure or feasibility study and present it to investors and stakeholders in a way appropriate to the audience.		
Course contents	<u>Real Estate Development - Location, Market, Concept /ILV / LV-Nr: DEV.1 / 4.Semester / ECTS: 6</u> - Overview of the real estate development process - Understanding of stakeholders and roles - Location and use analysis: framework conditions, synergies, land potential - Fundamentals of project costing and viability assessment - Introduction to project control and approval processes - Preparation of an initial rough concept - Diversity and inclusion factors in project development - Visualization with CAD tools and presentation of concepts - Linking market, valuation, and financing aspects		
	<u>Real Estate Development - Feasibility, ESG, Risk /ILV / LV-Nr: DEV.2 / 5.Semester / ECTS: 6</u>		

	- Advanced phases of real estate project development - Viability, risk, and sensitivity analyses - ESG and sustainability requirements in project development - Location, building-law, and approval strategies - Investor communication, project marketing, and stakeholder management - Digital tools and BIM/CAD interfaces in development planning - Preparation of a feasibility study, including development and financing strategy as well as diversity and inclusion factors - Presentation and defense of the project concept
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Teaching and learning methods	<u>Real Estate Development - Location, Market, Concept /ILV / LV-Nr: DEV.1 / 4.Semester / ECTS: 6</u> Lectures, discussions, exercises, case studies, group work, field trip
	<u>Real Estate Development - Feasibility, ESG, Risk /ILV / LV-Nr: DEV.2 / 5.Semester / ECTS: 6</u> Lectures, discussions, exercises, case studies, group work, field trip, project
Evaluation Methods Criteria	<u>Real Estate Development - Location, Market, Concept /ILV / LV-Nr: DEV.1 / 4.Semester / ECTS: 6</u> Portfolio assessment
	<u>Real Estate Development - Feasibility, ESG, Risk /ILV / LV-Nr: DEV.2 / 5.Semester / ECTS: 6</u> Portfolio assessment

Module number:	Facility Services	Scope:	
FAS		7	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	4. Semester		
	5. Semester		
Level	4. Semester: Introductory & advanced / 5. Semester: Introductory & advanced		
Previous knowledge	4. Semester: Introduction to Real Estate & Facility Management / 5. Semester: Building Technology, Introduction to Real Estate & Facility Management, Real Estate Development 1		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Infrastructural Facility & Service Management /ILV / LV-Nr: FAS / 4.Semester / ECTS: 3</u> - Nävy, J., & Schröter, M. (2013). Facility Services – Die operative Ebene des Facility Managements (1. Aufl.). Berlin, Germany: Springer Vieweg. - Kaiser, C., Nusser, J., & Schrammel, F. (Eds.). (2025). Praxishandbuch Facility Management (2. Aufl.). Wiesbaden, Germany: Springer Fachmedien		
	<u>Maintenance Management /ILV / LV-Nr: FAS.2 / 5.Semester / ECTS: 4</u> - Schröder, W. (2021). Ganzheitliches Instandhaltungsmanagement: Aufbau, Ausgestaltung und Bewertung. Wiesbaden, Germany: Gabler Verlag		
Acquisition of skills	<u>Infrastructural Facility & Service Management /ILV / LV-Nr: FAS / 4.Semester / ECTS: 3</u> The participants: • explain the significance of service level agreements (SLAs) and key performance indicators (KPIs) in infrastructural facility management. • develop and formulate service descriptions for cleaning, caretaking, and workplace services in accordance with defined quality standards. • analyze metrics for service quality, productivity, and cost-effectiveness and evaluate their informative value for operational control. • work with common tools and checklists for quality assurance, service documentation, and communication between clients and service providers.		
	<u>Maintenance Management /ILV / LV-Nr: FAS.2 / 5.Semester / ECTS: 4</u> The participants: • explain the tasks, objectives, and strategies of maintenance across the life cycle of buildings and technical installations. • analyze maintenance strategies (preventive, corrective, condition-based) and evaluate their cost-effectiveness and operational safety. • plan maintenance and inspection processes, taking legal, regulatory, and operational requirements into account. • develop concepts for documenting, controlling, and optimizing maintenance activities using digital systems. • calculate and interpret metrics and life cycle costs for maintenance planning and controlling.		
Course contents	<u>Infrastructural Facility & Service Management /ILV / LV-Nr: FAS / 4.Semester / ECTS: 3</u> - Fundamentals of infrastructural facility management - Service level agreements and key performance indicators - Quality and service-level agreements in cleaning and building services - Service specifications, tenders, and procurement strategies - Control systems and audits - Sustainability and occupational safety in facility services - Communication and interface management between clients, users, and service providers		
	<u>Maintenance Management /ILV / LV-Nr: FAS.2 / 5.Semester / ECTS: 4</u> - Fundamentals and areas of responsibility in maintenance management - Legal and regulatory foundations - Maintenance strategies: corrective, preventive, condition-based, predictive - Maintenance and inspection planning, spare parts and resource management - Controlling instruments and key indicators - Life cycle costs, total cost of ownership, life cycle costing - Digitalization in maintenance - Interfaces with facility services and energy management		
Teaching and learning methods	<u>Infrastructural Facility & Service Management /ILV / LV-Nr: FAS / 4.Semester / ECTS: 3</u> Lectures, discussions, exercises, case studies, group work		
	<u>Maintenance Management /ILV / LV-Nr: FAS.2 / 5.Semester / ECTS: 4</u> Lectures, discussions, exercises, case studies, group work, field trip		
Evaluation Methods Criteria	<u>Infrastructural Facility & Service Management /ILV / LV-Nr: FAS / 4.Semester / ECTS: 3</u>		

	Portfolio assessment
	<u>Maintenance Management /ILV / LV-Nr: FAS.2 / 5.Semester / ECTS: 4</u>
	Portfolio assessment

Module number:	Building Services Engineering	Scope:	
TGA		12	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	4. Semester		
	5. Semester		
Level	4. Semester: Introductory & advanced / 5. Semester: Introductory & advanced		
Previous knowledge	4. Semester: Building Technology, Computer-Aided Design & Technical Drawing, Introduction to Real Estate & Facility Management / 5. Semester: Building Services Engineering - Heating, Ventilation, Air Conditioning & Plumbing		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Building Services Engineering - Heating, Ventilation, Air Conditioning & Plumbing /ILV / LV-Nr: TGA.1 / 4.Semester /</u> - Bumiller, H., Büttner, W., & Schwab, A. (2018). Fachkunde Elektrotechnik (37th ed.). Haan-Gruiten, Germany: Europa-Lehrmittel. - Burkhardt, W., & Kraus, R. (2011). Projektierung von Warmwasserheizungen (8th ed.). Munich, Germany: Oldenbourg Wissenschaftsverlag. - Büttner, W., Funk, K., & Böcker, J. (2011). Grundlagen der Elektrotechnik 1 (12th ed.). Munich, Germany: Oldenbourg Wissenschaftsverlag. - Daniels, K. (2003). Advanced Building Systems: A Technical Guide for Architects and Engineers. Munich & Zurich, Switzerland: Birkhäuser. -Feurich, H., & Kühl, L. (2011). Sanitärtechnik: Band 1 & 2 (10th rev. ed.). Düsseldorf, Germany: Krammer Verlag. - Hausladen, G., & Tichelmann, K. (2009). Ausbau Atlas: Integrale Planung, Innenausbau, Haustechnik (1st ed.). Munich, Germany: Edition Detail. - Hausladen, G., De Saldanha, M., Liedl, P., & Sager, C. (2004). ClimaDesign: Solutions for Buildings that Can Do More with Less Technology. Munich, Germany: Callwey Verlag. - Recknagel, H., Sprenger, E., & Schramek, E. (2018). Taschenbuch für Heizung, Lüftung und Klimatechnik 2019/2020 (79th ed.). Munich, Germany: Oldenbourg Industrieverlag.		
	<u>Building Services Engineering - Electrical & Vertical Transportation Systems /ILV / LV-Nr: TGA.2 / 5.Semester /</u> - Hausladen, G., & Tichelmann, K. (2009). Ausbau Atlas: Integrale Planung, Innenausbau, Haustechnik (1st ed.). Munich, Germany: Edition Detail. - Unger, D. (2018). Aufzüge und Fahrtreppen: Ein Anwenderhandbuch (VDI Book) (3rd ed.). Berlin, Germany: Springer Vieweg.		
Acquisition of skills	<u>Building Services Engineering - Heating, Ventilation, Air Conditioning & Plumbing /ILV / LV-Nr: TGA.1 / 4.Semester /</u> The participants: • describe and explain the structure, function, and interaction of building services engineering systems (heating, ventilation, air conditioning, plumbing). • analyze planning documents and technical diagrams and evaluate their suitability with regard to energy efficiency, comfort, and operational safety. • calculate basic parameters (heating load, air volumes, water supply) and use them to assess system variants. • identify and assess interfaces between technical equipment, the building envelope, and user requirements. • develop simple optimization proposals for building services systems, taking sustainability and cost-effectiveness criteria into account.		
	<u>Building Services Engineering - Electrical & Vertical Transportation Systems /ILV / LV-Nr: TGA.2 / 5.Semester /</u> The participants: • explain the structure, function, and safety principles of electrical and mechanical transportation systems (elevators, escalators, conveying systems). • analyze electrical supply systems and building infrastructure in terms of energy efficiency, operational safety, and compliance with standards. • evaluate the integration of elevator and transport systems into the overall building services (power supply, building control, fire protection, accessibility). • calculate and dimension basic electrical loads, energy requirements, and cable cross-sections in connection with building distribution systems. • develop integrative concepts for electrical and transportation systems, taking smart-building, sustainability, and safety aspects into account.		

Course contents	<u>Building Services Engineering - Heating, Ventilation, Air Conditioning & Plumbing /ILV / LV-Nr: TGA.1 / 4.Semester /</u> - Fundamentals of building services engineering - Systematics and components of heating, ventilation, air conditioning, and plumbing systems - Principles of heat and cold generation, distribution, and delivery - Ventilation and air conditioning concepts - Drinking water, wastewater, and fire protection installations - Energy assessment and efficiency indicators - Standards and guidelines - Digitalization and smart-building approaches - Interface management between architecture, building services, and facility management
	<u>Building Services Engineering - Electrical & Vertical Transportation Systems /ILV / LV-Nr: TGA.2 / 5.Semester /</u> - Fundamentals of electrical building services - Power supply, energy distribution, and load management - Lighting systems and intelligent control concepts - Security, communication, and fire protection systems - Vertical and horizontal transportation systems: elevators, escalators, and moving walkways, passenger and goods conveying technology, accessibility, and evacuation systems - Integration into building control systems - Digitalization and monitoring: predictive maintenance, IoT sensor technology

Teaching and learning methods	<u>Building Services Engineering - Heating, Ventilation, Air Conditioning & Plumbing /ILV / LV-Nr: TGA.1 / 4.Semester /</u> Lectures, discussions, exercises, case studies, group work, field trip
	<u>Building Services Engineering - Electrical & Vertical Transportation Systems /ILV / LV-Nr: TGA.2 / 5.Semester /</u> Lectures, discussions, exercises, case studies, group work
Evaluation Methods Criteria	<u>Building Services Engineering - Heating, Ventilation, Air Conditioning & Plumbing /ILV / LV-Nr: TGA.1 / 4.Semester /</u> Portfolio assessment
	<u>Building Services Engineering - Electrical & Vertical Transportation Systems /ILV / LV-Nr: TGA.2 / 5.Semester /</u> Portfolio assessment

Module number:	Property and Asset Management	Scope:	
BEW		4	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	5. Semester		
Level	5. Semester: Introductory & advanced		
Previous knowledge	5. Semester: Introduction to Real Estate & Facility Management, Real Estate Development 1, Law for Facility Management & Real Estate		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Real Estate Property Management /ILV / LV-Nr: BEW / 5.Semester / ECTS: 4</u> - Bammer, O., Fuhrmann, K., & Ledl, R. (Eds.). (2020). Handbuch Immobilienbewirtschaftung (3rd ed.). Vienna, Austria: Linde Verlag. - Gondring, H., & Wagner, T. (Eds.). (2022). Real Estate Asset Management: Handbuch für Praxis, Aus- und Weiterbildung (3rd ed.). Munich, Germany: Vahlen. - Malloth, T. (Ed.). (2021). Immobilienmanagement Österreich (7th ed.). Vienna, Austria: ÖVI – Österreichischer Verband der Immobilienwirtschaft. - Pfnür, A. (Ed.). (2019). Modernes Immobilienmanagement (5th ed.). Munich, Germany: Springer Gabler.		
Acquisition of skills	<u>Real Estate Property Management /ILV / LV-Nr: BEW / 5.Semester / ECTS: 4</u> The participants: • explain the structure, processes, and objective systems of real estate property management in the residential and commercial sectors. • analyze operating, maintenance, and administration concepts for existing properties in terms of efficiency, sustainability, and user satisfaction. • assess the legal, economic, and organizational particularities of non-profit housing. • develop proposals for optimizing property management processes, service provider control, and quality assurance. • prepare simple property management plans and justify their decisions, taking social, legal, and business criteria into account.		
Course contents	<u>Real Estate Property Management /ILV / LV-Nr: BEW / 5.Semester / ECTS: 4</u> - Fundamentals of real estate property management - Owner and user structures, stakeholder management - Operating and maintenance strategies - Rental administration, service charge accounting, tenant communication - Special features of non-profit housing in Austria and Germany - Digitalization and reporting in real estate property management - Interfaces with facility services, energy, and sustainability management		
Teaching and learning methods	<u>Real Estate Property Management /ILV / LV-Nr: BEW / 5.Semester / ECTS: 4</u> Lectures, discussions, exercises, case studies, group work		
Evaluation Methods Criteria	<u>Real Estate Property Management /ILV / LV-Nr: BEW / 5.Semester / ECTS: 4</u> Portfolio assessment		

Module number:	Innovation, Business & Research Transfer	Scope:	
IBF		2	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	5. Semester		
Level	5. Semester: Advanced		
Previous knowledge	5. Semester: none		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Innovation, Business & Research Transfer /ILV / LV-Nr: IBF / 5.Semester / ECTS: 2</u> aktuelle wissenschaftliche Publikationen sowie praxisorientierte Beiträge aus Fachzeitschriften, Reports, Fallstudien, Verbandsunterlagen		
Acquisition of skills	<u>Innovation, Business & Research Transfer /ILV / LV-Nr: IBF / 5.Semester / ECTS: 2</u> The participants: • identify and situate current developments and innovation impulses from academia, industry, and research within the context of facility and real estate management. • analyze examples from practice and research with regard to their relevance and transferability to professional questions. • reflect on the importance of research, innovation, and interdisciplinary exchange for their own professional development. • transfer selected insights into application-oriented ideas, strategies, or improvement proposals for practice.		
Course contents	<u>Innovation, Business & Research Transfer /ILV / LV-Nr: IBF / 5.Semester / ECTS: 2</u> Students gain insights into current topics, developments, and research findings in facility and real estate management. Various experts from academia, industry, and research provide practice-oriented input on questions of innovation and transfer. The content is explored in greater depth through moderated discussions, fireside chats, or field trips and is reflected upon in terms of its relevance to professional practice. Topics covered include: - current innovation and research trends in the industry - examples of successful corporate and research collaborations - approaches to knowledge and technology transfer - sustainable and digital transformation processes in the real estate industry - reflection on one's own learning and transfer processes in a professional context		
Teaching and learning methods	<u>Innovation, Business & Research Transfer /ILV / LV-Nr: IBF / 5.Semester / ECTS: 2</u> Lectures, discussions, case studies, field trips		
Evaluation Methods Criteria	<u>Innovation, Business & Research Transfer /ILV / LV-Nr: IBF / 5.Semester / ECTS: 2</u> Portfolio assessment		

Module number:	Facility Services	Scope:	
SER		4	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	5. Semester		
Level	5. Semester: Introductory & advanced		
Previous knowledge	5. Semester: Facility Services 1, Real Estate Development 1		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Workplace Management /ILV / LV-Nr: SER.3 / 5.Semester / ECTS: 4</u> - Redlein, A. (Ed.). (2020). Modern facility and workplace management: Processes, implementation and digitalisation. Springer. - Sacks, R. (2025). BIM handbook: A guide to building information modeling for owners, designers, engineers, contractors, and facility managers (Fourth edition). Wiley.		
Acquisition of skills	<u>Workplace Management /ILV / LV-Nr: SER.3 / 5.Semester / ECTS: 4</u> The participants: • analyze work environments and spatial concepts with regard to space efficiency, ergonomics, communication, and productivity. • evaluate strategic and operational requirements for modern workplace concepts. • develop sustainable space and usage concepts, taking organizational, technical, and legal framework conditions into account. • design work-environment strategies that integrate brand identity, corporate culture, and user needs. • present and justify their concepts in a way appropriate to the audience, in the form of layouts, reports, or concept papers.		
Course contents	<u>Workplace Management /ILV / LV-Nr: SER.3 / 5.Semester / ECTS: 4</u> - Fundamentals and objective systems of workplace management - Analysis of work and communication processes - Space and area strategies - Planning and evaluation of modern workplace concepts - Integration of sustainability, health, ergonomics, and energy efficiency - Digitalization and sensor technology in workplace management - Change management and employee participation in transformation processes - Legal framework conditions		
Teaching and learning methods	<u>Workplace Management /ILV / LV-Nr: SER.3 / 5.Semester / ECTS: 4</u> Lectures, discussions, exercises, case studies, group work, field trip		
Evaluation Methods Criteria	<u>Workplace Management /ILV / LV-Nr: SER.3 / 5.Semester / ECTS: 4</u> Portfolio assessment		

Module number:	Internship & Business Personality Development	Scope:	
BPR		20	ECTS
Degree program	University of Applied Sciences Bachelor's Program Facility & Real Estate Management part-time		
Position in the curriculum	6. Semester		
Level	6. Semester: Advanced		
Previous knowledge	6. Semester: all content from semesters 1 to 5		
Blocked	no		
Participant group	A-levels and/or corresponding previous training, beginners		
Literature recommendation	<u>Work placement /BPR / LV-Nr: BPR / 6.Semester / ECTS: 20</u> - Labor, S. L. (2020). Student internship success workbook: 20+ lessons and activities for student intern career readiness : Student's guide (2nd edition). CreateSpace Independent Publishing.		
Acquisition of skills	<u>Work placement /BPR / LV-Nr: BPR / 6.Semester / ECTS: 20</u> The participants: • take on responsibility in a real professional environment of facility and real estate management and apply the knowledge they have acquired in a practice-oriented way. • analyze and evaluate operational structures, processes, and tasks with regard to professional, organizational, and economic relationships. • communicate and cooperate professionally in an interdisciplinary work context and help shape tasks independently. • reflect on personal strengths, areas for development, and career prospects. • further develop their professional attitude, self-management, and practical competence. • analyze workplace-related stress, resource, and time factors within the operational processes, project structures, and decision-making processes of the placement organization and derive sustainable strategies for individual work-life balance during the practical activity. • assess diversity dimensions, role models, and expectations in the real work environment of facility and real estate management and develop inclusion-oriented approaches for respectful communication and collaboration within the team.		
Course contents	<u>Work placement /BPR / LV-Nr: BPR / 6.Semester / ECTS: 20</u> - Professional practical work in a relevant company or organization - Application of professional, methodological, and social skills in practice, including the use of individual work-life balance strategies and inclusive behaviors in the work environment - Insights into operational processes, project management, and decision-making structures - Reflection on professional profiles, roles, and expectations in facility and real estate management, including engagement with role models, diversity aspects, and inclusive collaboration - Preparation of a placement and reflection report that also documents personal insights into work-life balance and diversity in a real work context		
Teaching and learning methods	<u>Work placement /BPR / LV-Nr: BPR / 6.Semester / ECTS: 20</u> Work placement		
Evaluation Methods Criteria	<u>Work placement /BPR / LV-Nr: BPR / 6.Semester / ECTS: 20</u> Portfolio assessment		

2.4 Internship

Students independently select an internship position. In doing so, they can draw on the extensive range of internship listings provided by the Kufstein University of Applied Sciences in Tyrol. The program director verifies that the internship activities align with the program's curriculum and qualification profiles. Subsequently, the program administration assesses whether the professional internship aligns with the program's educational objectives and whether the student can be assigned tasks appropriate to his or her level of qualification. A detailed internship guide assists students with organizing their practical semester; the International Office (IRO) and the program administration are also available to students for questions and support.

Students must apply for the professional internship using a form (= job description). The form includes key information about the student and the internship supervisor, as well as the objectives and tasks/activities at the internship company. The internship is confirmed or approved by the signatures of the program administration and the internship supervisor.

The student must reflect on, document, and present the experiences and insights gained, as well as evaluate the internship site. Conversely, the internship supervisor must evaluate the student. The student must prepare an interim report, a final report, and a presentation, and must complete an evaluation form. At the beginning of the internship, the student receives an internship guide listing the tasks to be completed. A key requirement is to compare the agreed-upon goals with the goals actually achieved. The documentation prepared by the student and the supervisor is evaluated by the program director. If the achievement of the objectives and alignment with the student's skill level are not ensured, the respective internship site will be excluded from future use. A list of internship sites and the corresponding reports are available to subsequent students via the Moodle learning platform.

Students in the part-time program may have relevant professional work experience recognized as a professional internship.

2.5 Semester abroad

A semester abroad is an integral part of the third semester of the full-time track of the program and was deliberately retained by the development team at this stage of the program. This decision is based on pedagogical, content-related, and organizational considerations that ensure an optimal combination of foundational business education and international experience. By the third semester, students have acquired the core foundational competencies in business administration and economics that enable them to engage meaningfully in economics and social science courses at partner universities. These modules are offered in a comparable format at many international universities, ensuring a high degree of alignment with the competencies required by the curriculum.

Placing the semester abroad at the end of the foundational economics phase also offers clear educational benefits. Students can apply and critically reflect on their existing knowledge in a new cultural and academic environment. They gain insights into different economic traditions, institutional frameworks, and social systems, thereby deepening their understanding of global economic interrelationships. These experiences not only foster international competence but also strengthen self-organization, adaptability, and intercultural communication skills. These are key qualifications for the subsequent specialization in the field. Upon their return, students can apply their knowledge specifically to the facility and real estate management context of their further studies, thereby incorporating international perspectives into their future project and research work.

A mandatory study abroad component is not included in the part-time degree program.

3 ADMISSION REQUIREMENTS

Admission requirements at Kufstein University of Applied Sciences in Tyrol are governed by the following provisions:

1. The general admission requirements are governed by § 4 FHG, as amended; this applies to **individuals with a general university entrance qualification**.

2. **Individuals without a high school diploma** must take an **entrance qualification examination** in accordance with § 64a of the University Act (UG) of 2002, as amended. In accordance with a regulation issued by the rectorate of a university, these individuals obtain general university entrance qualifications for bachelor's programs within a specific field of study by passing the entrance qualification examination. Successful completion of the university entrance qualification examination thus entitles the student to admission to all degree programs within the field of study group for which the qualification was obtained.

The university entrance qualification examination may be taken for specific fields of study in accordance with a regulation issued by a university's rectorate; for Kufstein University of Applied Sciences in Tyrol, the relevant field of study is: Social and Economic Sciences (e.g., Business Administration, Business Education, Statistics, Sociology).

Applicants who have completed a 3-year **vocational secondary school program**, completed an **apprenticeship in the dual system**, or obtained a **subject-specific German Fachhochschulreife** qualify to study at Kufstein University of Applied Sciences, Tyrol, by passing supplementary exams in German, English, and mathematics. In the case of the German Fachhochschulreife, the supplementary exam must be taken only in those of the three subjects in which the grade on the transcript is "Unsatisfactory" or lower. All supplementary exams must be successfully completed before the start of the third semester.

3. For **individuals with relevant dual vocational training, completion of an apprenticeship** in one of the following **fields**—as specified in the current announcement by the Federal Ministry of Economy, Family, and Youth—is a prerequisite for admission:

- Civil Engineering
- Banking
- Office, Administration, Organization
- Chemistry
- Physics
- Electrical Engineering, Electronics
- Retail
- Information and Communication Technologies
- Metallurgy and Mechanical Engineering
- Transport and Warehousing

4. **Individuals who have graduated** from one of the following relevant **vocational secondary schools** with a program of at least three years may also be admitted:

- Hotel Management School, Tourism School, Hospitality School
- Business schools
- Technical schools for tourism professions
- Technical schools for business professions
- Business technical school
- Technical schools for agricultural and forestry professions
- Commercial schools

5. If foreign certificates are not deemed equivalent in terms of content and requirements

of an Austrian high school diploma, supplementary exams in English and mathematics must be taken before the start of studies. Such exams may be taken either through external providers or at the Kufstein University of Applied Sciences Tyrol International Business School for a fee.

Newly established apprenticeship programs in similar fields of study must be recognized accordingly.

The **groups of students listed in sections 3 and 4** must pass **additional exams** and, if necessary, take the corresponding preparatory courses by the start of the third semester as a prerequisite for admission. This can be done at the International Business School at Kufstein University of Applied Sciences in Tyrol.

The following supplementary exams are required for this group:

- German
- English
- Mathematics

Below is an overview of which German FOS/BOS specializations qualify as relevant admission requirements. In these cases, supplementary exams in mathematics, German, and English must be taken during the first semester (if a "Mangelhafter" or a lower grade was received in these subjects).

	FMI ft/pt
FOS	
- Technology	x
- Business & Administration	x
- Social Services	x
- Agriculture, Biotechnology, and Environmental Technology	x
- Design	x
- Health	x
- International Economics	x
BOS	
- Technology	x
- Business & Administration	x
- Social Services	x
- Agriculture, Biotechnology, and Environmental Technology	x
- Health	x
- International Economics	x
For internships in relevant fields (marketing, retail, administration), other fields of study may also be accepted (upon consultation with the program director).	x

The language of instruction for the full-time track of the program is 100% English. Therefore, a verified language proficiency level of at least B2 is required.