

# TRAIN4SUSTAIN PASSPORT

ISSUED TO

*Balázs Léb*

## PERSONAL DATA

**First Name:** Balázs

**Surname:** Léb

**Date of Birth:** 13.01.1984

**Country:** Hungary

## EDUCATION

**Organisation:**

**Graduation:**

**EQF level:**

**Period:** from 27.11.2023 to 27.11.2023

**Organisation:** IIPLE

**Graduation:** Technician for management of construction site.

**EQF level:**

**Period:** from 29.08.2023 to 30.08.2023

**Organisation:** The Institution

**Graduation:** The Activity

**EQF level:** The Level

**Period:** from 28.08.2023 to 01.09.2023

## QUALIFICATIONS OWNED

Rateko\_TrainingAirTight. (DE)

Rateko\_Training Ins. (DE)

BIM Modeler (SP)

iiSBE\_SNTool (IT)

Alternative Energy System Technician (SP)

Biodiversity expert

# Level of competence by area of expertise

## Society

Accessibility

Barrier free accessibility

**AC1.1 Accessibility of public spaces 5**

**AC1.2 Design for All 5**

Adaptation and resilience to climate change

Climate change resilient buildings

**AD1.1 Resilience to extreme weather events 5**

**AD1.3 Resilience to heatwaves 5**

Comfort and well being

Quality of air

**CO1.2 Indoor air pollutants management 4**

Thermal comfort

**CO2.1 Indoor Thermal Comfort 0**

**CO2.2 Outdoor Thermal Comfort 0**

Visual comfort

**CO3.1 Daylighting 0**

**CO3.2 Interior lighting 0**

**CO3.3 Outdoor lighting 0**

Electromagnetic pollution

**CO5.1 Management of indoor exposure to ELF magnetic fields 2**

**CO5.2 Management of indoor exposure to RF/MW electromagnetic fields 3**

Safety

Earthquake

**SA2.1 Risk to occupants and facilities from earthquake 0**

## Process

Sustainable Building Design

Integrative design

**BD1.1 Integrated Design Process 2**

**BD1.2 Use of assessment tools in IDP 4**

Built Environment Certification systems

Building sustainability certification

<b>BE1.1</b>	<b>Energy Performance Certification</b>	<b>4</b>
<b>BE1.2</b>	<b>Building sustainability certification systems</b>	<b>1</b>
	Small Urban scale assessment systems	
<b>BE2.1</b>	<b>Small Urban scale sustainability assessment systems</b>	<b>3</b>
	Innovative Digital Solutions	
	Building Information Modelling	
<b>ID1.1</b>	<b>Operation of BIM systems</b>	<b>4</b>
	Interdisciplinary Skills	
	Procurement	
<b>IS1.1</b>	<b>Green Procurement</b>	<b>1</b>
	Quality assurance	
<b>IS2.1</b>	<b>Quality assurance planning and management</b>	<b>3</b>
	Collaboration and Communication	
<b>IS3.1</b>	<b>Motivation and communication - Design Team</b>	<b>3</b>
	Information management	
<b>IS4.1</b>	<b>Management of information in a design process</b>	<b>3</b>
	Safety assurance	
<b>IS5.1</b>	<b>Risk prevention, safety and health of workers</b>	<b>5</b>
	Listed Buildings	
	Improving energy performance of listed buildings	
<b>LB1.1</b>	<b>Handling and architectural conservation of listed buildings</b>	<b>1</b>
	Sustainable construction	
	Sustainable construction management	
<b>SC1.1</b>	<b>Construction Activity Pollution Management</b>	<b>1</b>
<b>SC1.2</b>	<b>Sustainability awareness</b>	<b>0</b>

## Environment

	Energy	
	Energy Performance Assessment	
<b>EN1.1</b>	<b>Energy Simulation</b>	<b>3</b>
	Energy Management	
<b>EN2.1</b>	<b>Smart grid systems</b>	<b>2</b>
<b>EN2.2</b>	<b>Domotic systems</b>	<b>3</b>
<b>EN2.3</b>	<b>Building Management Systems (BMS)</b>	<b>4</b>
	Energy Production and HVAC systems	
<b>EN3.1</b>	<b>Heating and cooling systems</b>	<b>4</b>
<b>EN3.2</b>	<b>Ventilation systems</b>	<b>4</b>

<b>EN3.3</b>	<b>Hot water systems (DHW)</b>	<b>3</b>
<b>EN3.4</b>	<b>Electric heating systems</b>	<b>4</b>
<b>EN3.5</b>	<b>Heat pump systems and geothermal energy systems</b>	<b>4</b>
<b>EN3.6</b>	<b>Solar thermal energy systems for heating, cooling and DHW</b>	<b>4</b>
<b>EN3.7</b>	<b>Solar power systems for electricity generation</b>	<b>3</b>
<b>EN3.9</b>	<b>Mini wind power generation</b>	<b>5</b>
Energy Reduction		
<b>EN4.1</b>	<b>Thermal insulation</b>	<b>5</b>
<b>EN4.2</b>	<b>Building air tightness</b>	<b>4</b>
<b>EN4.3</b>	<b>Window and glazing systems</b>	<b>4</b>
<b>EN4.4</b>	<b>Solar shading systems</b>	<b>2</b>
<b>EN4.5</b>	<b>Passive systems for cooling and heating</b>	<b>2</b>
<b>EN4.6</b>	<b>Energy saving strategies for lighting</b>	<b>4</b>
<b>EN4.7</b>	<b>Mitigation strategies for urban thermal effects</b>	<b>4</b>
<b>EN4.8</b>	<b>Building occupancy behavior</b>	<b>1</b>
Habitat		
Land Use		
<b>HA1.1</b>	<b>Site preservation, regeneration and development</b>	<b>3</b>
Biodiversity		
<b>HA2.1</b>	<b>Management of biodiversity on the site</b>	<b>0</b>
Materials		
Design for deconstruction, reuse and recycling		
<b>MA1.1</b>	<b>Materials and components for ease of disassembly</b>	<b>4</b>
Sustainable materials		
<b>MA2.1</b>	<b>Life Cycle Assessment (building scale)</b>	<b>3</b>
<b>MA2.2</b>	<b>Recycled and reused materials</b>	<b>2</b>
<b>MA2.3</b>	<b>Regenerative materials and technologies</b>	<b>3</b>
Water		
Effluents management		
<b>WA2.3</b>	<b>Urban Waste Water Treatment</b>	<b>2</b>

## Economy

Economical quality		
Cost planning and management		
<b>EQ1.1</b>	<b>Construction cost planning</b>	<b>4</b>
<b>EQ1.2</b>	<b>Life cycle cost assessment</b>	<b>1</b>
Green value		

<b>EQ2.1</b>	<b>Value creation and risk exposure</b>	<b>5</b>
	Financing schemes and business models	
<b>EQ3.1</b>	<b>Financing schemes for sustainable building</b>	<b>1</b>
	Operative costs	
<b>EQ4.1</b>	<b>Operating and maintenance cost management</b>	<b>1</b>
<b>EQ4.2</b>	<b>Use stage energy cost management</b>	<b>3</b>

# Acquired learning outcomes

## Society

- AC1.1.1** Understanding accessibility standards, codes and regulations
- AC1.1.2** Applying accessibility standards, codes and regulations
- AC1.1.3** Determining design considerations for accessible public spaces
- AC1.1.4** Designing spaces to be inclusive and accessible
- AC1.1.5** Measuring the accessibility of a public space
- AC1.2.1** Understanding the principles of universal design
- AC1.2.2** Understanding the differences between universal design and accessible design
- AC1.2.3** Proposing basic universal design solutions
- AC1.2.4** Designing strategies that promote inclusion
- AC1.2.5** Determining design goals to adopt universal design principles
- AC1.2.6** Developing building operational policies and programs that support inclusion
- AC1.2.7** Integrating universal design strategies with other design approaches
- AD1.1.1** Understanding the importance of building resilience to extreme weather events
- AD1.1.2** Proposing and selecting basic solutions for floodproofing concepts
- AD1.1.3** Determining the wet floodproofing concept for buildings in Flood Hazard Areas
- AD1.1.4** Determining the structural floodproofing concept in buildings in Flood Hazard Areas
- AD1.1.5** Engineering the wet floodproofing requirements in Flood Hazard Areas
- AD1.1.6** Assuring the quality of water penetration resistance of joints in buildings
- AD1.1.7** Managing building resiliency to extreme weather
- AD1.1.8** Checking facade air permeability
- AD1.1.9** Installing the wet floodproofing requirements for buildings in Flood Hazard Areas
- AD1.1.10** Installing the structural waterproofing systems for buildings in Flood Hazard Areas
- AD1.3.1** Understanding the importance of cooling load avoidance
- AD1.3.2** Assessing heat management strategies
- AD1.3.3** Determining the concept of cooling-load-avoidance measures
- AD1.3.4** Determining the concept of cool materials to reduce heat sensitivity
- AD1.3.5** Assessing heat management strategies for indoor environment
- AD1.3.6** Engineering the internal gains concept and conductive and infiltration heat gains
- AD1.3.7** Managing building's internal gains
- AD1.3.8** Installing insulation of HVAC ductwork, pipes and tanks in a workmanlike manner
- AD1.3.9** Installing cool roofing, and/or cool pavement systems
- AD1.3.10** Maintaining heating and air conditioning systems in advanced buildings
- CO1.2.1** Understanding the importance of indoor air pollution control
- CO1.2.2** Applying basic solutions to control indoor air pollution

- CO1.2.3** Proposing conceptual solutions to control indoor air pollution
- CO1.2.4** Engineering solutions to control indoor air pollution
- CO1.2.5** Optimising the detailed design of indoor air pollution control
- CO2.1.2** Applying basic solutions for indoor thermal comfort
- CO2.1.3** Proposing conceptual solutions for indoor thermal comfort
- CO2.1.4** Engineering the concept design for indoor thermal comfort
- CO2.1.5** Optimising the detailed design for indoor thermal comfort and developing new technical solutions
- CO2.1.6** Specifying the design for indoor thermal comfort in tender documents
- CO2.1.7** Measuring thermal comfort in indoor workplaces and residential buildings
- CO2.2.2** Proposing conceptual solutions for outdoor thermal comfort
- CO2.2.3** Optimising the detailed design for outdoor thermal comfort and developing new technical solutions
- CO2.2.4** Measuring thermal comfort in urban outdoor spaces
- CO3.1.2** Applying basic solutions for daylighting
- CO3.1.3** Proposing conceptual solutions for daylighting
- CO3.1.4** Engineering the concept design for daylighting
- CO3.1.5** Developing new technical solutions and optimising the detailed design for daylighting
- CO3.1.6** Specifying the design for daylighting in tender documents
- CO3.1.7** Installing windows, skylights and light transport systems
- CO3.1.8** Installing daylight harvesting systems
- CO3.1.9** Assuring the quality of installed daylighting systems
- CO3.1.10** Measuring visual comfort in indoor workplaces and residential buildings lit by daylight
- CO3.2.2** Applying basic solutions for indoor lighting
- CO3.2.3** Proposing conceptual solutions for indoor lighting
- CO3.2.4** Engineering the concept design for indoor lighting
- CO3.2.5** Developing new technical solutions and optimising the detailed design for indoor lighting
- CO3.2.6** Specifying the design for indoor lighting in tender documents
- CO3.2.7** Installing the lighting system according to specified design documentation
- CO3.2.8** Installing the lighting system evaluating product equivalence criteria
- CO3.2.9** Assuring the quality of installed lighting systems
- CO3.2.10** Measuring visual comfort in indoor workplaces and residential buildings lit by artificial lighting
- CO3.3.2** Applying basic solutions for outdoor lighting
- CO3.3.3** Proposing conceptual solutions for outdoor lighting
- CO3.3.4** Engineering the concept design for outdoor lighting
- CO3.3.5** Developing new technical solutions and optimising the detailed design for outdoor lighting
- CO3.3.10** Measuring visual comfort in outdoor spaces lit by artificial lighting
- CO5.1.1** Understanding the importance of ELF-EMF management
- CO5.1.2** Applying basic solutions for ELF-EMF management
- CO5.2.1** Understanding the importance of RF/MW-EMF management
- CO5.2.2** Applying basic solutions for RF/MW-EMF management

- CO5.2.3** Proposing conceptual solutions for RF/MW-EMF management
- SA2.1.1** Understanding the importance of the major principle of earthquake design
- SA2.1.2** Proposing and selecting basic cost-effective solutions for seismic-resistant infrastructure systems
- SA2.1.3** Proposing and selecting basic solutions for earthquake-resistant design of steel and concrete buildings

## Process

- BD1.1.1** Understanding the Integrated Design Process (IDP)
- BD1.1.2** Applying IDP approach
- BD1.2.1** Understanding the importance of quality of site assessment
- BD1.2.2** Collecting and assessing information about the site
- BD1.2.3** Identifying, assessing, and documenting existing building materials and technical facilities
- BD1.2.4** Proposing sustainable strategies for the site based on the site assessment
- BD1.2.5** Setting up the construction site based on the site assessment
- BD1.2.6** Developing a site assessment report
- BE1.1.1** Understanding the importance of energy efficiency
- BE1.1.2** Understanding the positive impact on the energy transition through energy management and energy building retrofits
- BE1.1.3** Applying specific legislation, interpreting indicators and standards in the energy sector
- BE1.1.4** Applying basic solutions for energy performance
- BE1.1.5** Analysing building designs and documents compliance for EPC
- BE1.1.6** Performing an energy analysis for EPC
- BE1.1.7** Developing an EPC
- BE1.2.1** Understanding of sustainability assessment methodologies
- BE1.2.2** Understanding building sustainability certification (BSC) systems processes
- BE2.1.1** Understanding the importance of sustainable communities concepts
- BE2.1.2** Understanding certification systems processes for small urban areas
- BE2.1.3** Applying a sustainability certification process for small urban areas
- BE2.1.4** Selecting the appropriate sustainability certification system
- ID1.1.1** Understanding the BIM process
- ID1.1.2** Applying BIM data management
- ID1.1.3** Designing according to BIM principles
- ID1.1.4** Verifying the compliance to regulatory methods using dynamic building modelling
- ID1.1.5** Using 3D scanner technologies to model existing buildings
- ID1.1.6** Designing and engineering solutions through BIM models
- ID1.1.7** Using the BIM model for construction planning and costing
- IS1.1.1** Understanding the importance of green procurement
- IS2.1.1** Understanding the contents of quality assurance planning
- IS2.1.2** Defining the integrated design approach in the project
- IS2.1.3** Proposing and selecting legal responsibilities of quality assurance auditing



- IS2.1.4** Proposing and selecting the quality procedures in relation to the Quality Assurance
- IS2.1.5** Determining the Quality Assurance auditing concept
- IS2.1.6** Determining Environmental Management (EM) Quality Assurance concepts
- IS2.1.10** Discussing the basic quality control for a renewable energy product
- IS3.1.1** Understanding effective communication technics
- IS3.1.2** Communicating design
- IS3.1.3** Providing advisory service for clients
- IS4.1.1** Understanding the importance of multidisciplinary management of information
- IS4.1.2** Analyzing costs, risks and market value
- IS4.1.3** Managing evidence-based design decisions
- IS5.1.1** Understanding occupational safety and health (OSH)
- IS5.1.2** Providing employees with safety training
- IS5.1.3** Providing employers with safety training
- IS5.1.4** Proposing conceptual model for occupational safety and health
- IS5.1.5** Auditing performance
- IS5.1.6** Ensuring safety, health, and welfare of the workers
- LB1.1.1** Promoting sustainable approach of conservation of the historic built environment
- SC1.1.1** Defining deconstruction method in the site
- SC1.2.1** Providing the public community with environmental awareness training

## Environment

- EN1.1.1** Understanding the importance of building energy performance simulation
- EN1.1.2** Applying simplified tools for building energy performance simulation
- EN1.1.3** Performing building energy performance simulation (quasi-steady state method) by means of tools compliant with EN standards
- EN2.1.1** Understanding the importance of smart grid systems
- EN2.1.2** Applying tools for smart grid system simulation
- EN2.2.1** Understanding the importance of domotic systems
- EN2.2.2** Preliminary assessment of energy saving potential by means of a domotic system
- EN2.2.3** Proposing conceptual solutions for domotic systems
- EN2.3.1** Understanding the importance of BMS
- EN2.3.2** Preliminary assessment of energy saving potential by means of BMS
- EN2.3.3** Proposing conceptual solutions for BMS
- EN2.3.4** Engineering the concept design for BMS
- EN2.3.6** Specifying the design for BMS in tender documents
- EN2.3.7** Assuring the quality of BMS
- EN2.3.8** Commissioning BMS to ensure operation as planned
- EN2.3.9** Ensuring optimal operation of BMS during life cycle
- EN3.1.1** Understanding the importance of heating and cooling systems

- EN3.1.2** Applying basic solutions for heating and cooling systems
- EN3.1.3** Proposing conceptual solutions for heating and cooling systems
- EN3.1.4** Engineering the concept design for heating and cooling systems
- EN3.1.5** Developing new technical solutions and optimising the detailed design for heating and cooling systems
- EN3.1.6** Specifying the design for heating and cooling systems in tender documents
- EN3.1.7** Assuring the quality of heating and cooling systems
- EN3.1.8** Installing traditional systems for heating and cooling
- EN3.1.10** Commissioning heating and cooling systems to ensure operation as planned
- EN3.1.11** Ensuring optimal operation of heating and cooling systems during life cycle
- EN3.2.1** Understanding the importance of ventilation systems
- EN3.2.2** Applying basic solutions for ventilation systems
- EN3.2.3** Proposing conceptual solutions for ventilation systems
- EN3.2.4** Engineering the concept design for ventilation systems
- EN3.2.6** Specifying the design for ventilation systems in tender documents
- EN3.2.7** Assuring the quality of ventilation systems
- EN3.2.8** Installing domestic ventilation systems
- EN3.2.10** Commissioning ventilation systems to ensure operation as planned
- EN3.2.11** Ensuring optimal operation of ventilation systems during life cycle
- EN3.3.1** Understanding the importance of DHW systems
- EN3.3.2** Applying basic solutions for DHW systems
- EN3.3.3** Proposing conceptual solutions for DHW systems
- EN3.3.4** Engineering the concept design for DHW systems
- EN3.3.5** Developing new technical solutions and optimising the detailed design for DHW systems
- EN3.3.6** Specifying the design for DHW systems in tender documents
- EN3.3.7** Assuring the quality of DHW systems
- EN3.3.8** Installing DHW systems
- EN3.3.9** Installing advanced systems for DHW
- EN3.3.10** Commissioning DHW systems to ensure operation as planned
- EN3.4.1** Understanding the importance of electric heating systems
- EN3.4.2** Applying basic solutions for electric heating systems
- EN3.4.3** Proposing conceptual solutions for electric heating systems
- EN3.4.4** Engineering the concept design for electric heating systems
- EN3.4.6** Specifying the design for electric heating systems in tender documents
- EN3.4.7** Assuring the quality of electric heating systems
- EN3.4.8** Installing traditional systems for electric heating
- EN3.4.10** Commissioning electric heating systems to ensure operation as planned
- EN3.4.11** Ensuring optimal operation of electric heating systems during life cycle
- EN3.5.1** Understanding the importance of heat pump systems
- EN3.5.2** Applying basic solutions for heat pump systems

- EN3.5.3** Proposing conceptual solutions for heat pump systems and geothermal heat pumps (GHPs)
- EN3.5.4** Engineering the concept design for heat pump systems and geothermal heat pumps (GHPs)
- EN3.5.6** Specifying the design for heat pump systems in tender documents
- EN3.5.7** Assuring the quality of heat pump systems
- EN3.5.8** Installing heat pump systems for domestic use
- EN3.5.10** Commissioning heat pump systems to ensure operation as planned
- EN3.5.11** Ensuring optimal operation of heat pump systems during life cycle
- EN3.6.1** Understanding the importance of solar thermal energy systems
- EN3.6.2** Applying basic solutions for solar thermal energy systems
- EN3.6.3** Proposing conceptual solutions for solar thermal energy systems
- EN3.6.4** Engineering the concept design for solar thermal energy systems
- EN3.6.6** Specifying the design for solar thermal energy systems in tender documents
- EN3.6.7** Assuring the quality of solar thermal energy systems
- EN3.6.8** Installing solar thermal energy systems for domestic use
- EN3.6.10** Commissioning solar thermal energy systems to ensure operation as planned
- EN3.6.11** Ensuring optimal operation of solar thermal energy systems during life cycle
- EN3.7.1** Understanding the importance of solar power systems for electricity generation
- EN3.7.2** Applying basic solutions for solar power systems for electricity generation
- EN3.7.3** Proposing conceptual solutions for solar power systems for electricity generation
- EN3.7.4** Engineering the concept design for solar power systems for electricity generation
- EN3.7.5** Developing new technical solutions and optimising the detailed design for solar power systems for electricity generation
- EN3.7.6** Specifying the design for solar power systems for electricity generation in tender documents
- EN3.7.7** Assuring the quality of solar power systems for electricity generation
- EN3.7.8** Installing solar power systems for domestic use
- EN3.7.9** Installing advanced solar power systems for electricity generation
- EN3.7.10** Commissioning solar power systems for electricity generation to ensure operation as planned
- EN3.9.1** Understanding the importance of mini wind power generation
- EN3.9.2** Applying basic solutions for mini wind power generation systems
- EN3.9.3** Proposing conceptual solutions for mini wind power generation systems
- EN3.9.4** Engineering the concept design for mini wind power generation systems
- EN3.9.5** Developing new technical solutions and optimising the detailed design for mini wind power generation systems
- EN3.9.6** Specifying the design for mini wind power generation systems in tender documents
- EN3.9.7** Assuring the quality of mini wind power generation systems
- EN3.9.8** Installing mini wind power generation systems in residential buildings
- EN3.9.9** Installing advanced systems for mini wind power generation systems
- EN3.9.10** Commissioning mini wind power generation systems to ensure operation as planned
- EN3.9.11** Ensuring optimal operation of mini wind power generation systems during life cycle

- EN4.1.1 Understanding the importance of thermal insulation
- EN4.1.2 Applying basic solutions for thermal insulation
- EN4.1.3 Proposing conceptual solutions for thermal insulation
- EN4.1.4 Engineering the concept design for thermal insulation
- EN4.1.5 Developing new technical solutions and optimising the detailed design for thermal insulation
- EN4.1.6 Specifying the design for thermal insulation in tender documents
- EN4.1.7 Installing thermal insulation in a workmanlike manner
- EN4.1.8 Installing thermal insulation in advanced buildings
- EN4.1.9 Assuring the quality of installed thermal insulation
- EN4.1.10 Measuring thermal performances of building envelope
- EN4.2.1 Understanding the importance of building air tightness
- EN4.2.2 Applying basic solutions for building air tightness
- EN4.2.3 Proposing conceptual solutions for building air tightness
- EN4.2.4 Engineering the concept design for building air tightness
- EN4.2.6 Specifying the design for building air tightness in tender documents
- EN4.2.7 Installing airtight envelopes in a workmanlike manner
- EN4.2.9 Assuring the quality of installed airtight envelopes
- EN4.3.1 Understanding the importance of window/glazing systems
- EN4.3.2 Applying basic solutions for window/glazing systems
- EN4.3.3 Proposing conceptual solutions for window/glazing systems
- EN4.3.4 Engineering the concept design for window/glazing systems
- EN4.3.6 Specifying the design for window/glazing systems in tender documents
- EN4.3.7 Installing windows in a workmanlike manner
- EN4.3.9 Assuring the quality of installed windows and glazing systems
- EN4.4.1 Understanding the importance of solar shading systems
- EN4.4.2 Applying basic solutions for solar shading systems
- EN4.4.3 Proposing conceptual solutions for solar shading systems
- EN4.5.1 Understanding the importance of passive systems for cooling and heating
- EN4.5.2 Applying basic solutions for passive systems for cooling and heating
- EN4.6.1 Understanding the importance of energy saving for lighting
- EN4.6.2 Applying basic solutions of energy saving for lighting
- EN4.6.3 Proposing conceptual solutions of energy saving for lighting
- EN4.6.4 Engineering energy saving strategies for lighting
- EN4.6.6 Specifying energy saving technologies for lighting in tender documents
- EN4.7.1 Understanding the importance of mitigation strategies for urban thermal effects
- EN4.7.2 Proposing conceptual solutions for mitigation strategies for urban thermal effects
- EN4.8.1 Understanding the importance of occupant behavior in building energy policies
- HA1.1.1 Understanding the value of sustainable development strategies
- HA1.1.2 Determining the concept of watercourses quality management

- HA1.1.3** Proposing and selecting basic solutions for conservation of nature, in relation to forestry issues
- HA1.1.4** Determining the concept of restoration programme for soil and vegetation
- HA1.1.5** Conducting awareness training and site induction
- HA1.1.8** Understanding the principles of watercourses quality management
- HA1.1.9** Understanding the concept of the information and data required for a comprehensive site assessment
- HA1.1.10** Proposing a waste management plan
- HA2.1.1** Understanding the principles of qualitative rapid biodiversity survey
- HA2.1.10** Proposing basic solutions for managing biodiversity
- MA1.1.1** Understanding the concept of design to disassembly.
- MA1.1.2** Understanding the concept of building as material bank (BAMB) and building material passport
- MA1.1.3** Proposing basic design solutions to minimize resource depletion and waste generation.
- MA1.1.4** Interpreting engineering drawings. Demonstrating practical skills in operation and demolition processes.
- MA1.1.5** Considering the end-of-life stage
- MA1.1.6** Engineering structural solutions for disassembly
- MA2.1.1** Understanding minimal environmental principles needed to do the job successfully.
- MA2.1.2** Understanding the principles of a life cycle assessment approach to reduce the environmental impact of the built environment.
- MA2.1.3** Applying LCA analysis in a design process.
- MA2.1.4** Evaluating and selecting construction products and systems based on LCA analysis.
- MA2.2.1** Understanding of the importance of using recycled and recovered materials for buildings.
- MA2.2.2** Applying recycled and recovered materials in buildings.
- MA2.2.3** Considering recyclability of building materials and components in modernisation measures.
- MA2.3.1** Understanding the importance of using nature-based materials in a building construction.
- MA2.3.2** Selecting nature-based materials. Applying technical standards and regulations.
- MA2.3.3** Evaluating and proposing building materials according to ecological factors and primary energy consumption.
- MA2.3.4** Assuring the quality of nature-based materials installation.
- MA2.3.7** Developing and optimising solutions for nature-based materials. Creating new applications for nature-based materials.
- WA2.3.1** Understanding the principles of wastewater reuse systems in relation to efficient water-saving measures
- WA2.3.2** Proposing and selecting basic solutions for wastewater reuse systems
- WA2.3.3** Proposing and selecting basic requirements for wastewater collection and purification
- WA2.3.4** Proposing basic solutions for surface water drainage systems
- WA2.3.5** Determining the concept of the catchment, and storage systems
- WA2.3.6** Determining the concept of sewerage systems
- WA2.3.7** Evaluating the wastewater treatment plants installation requirements
- WA2.3.8** Proposing basic solutions for surface water drainage systems
- WA2.3.9** Engineering the urban wastewater treatment plants

## Economy

- EQ1.1.1** Understanding the procedures to produce a construction cost planning
- EQ1.1.2** Applying costs planning and estimating construction budget.
- EQ1.1.3** Naming and describing construction processes. Performing tasks of organizing and preparing investments. Performing construction quantity calculations.
- EQ1.1.4** Proposing solutions and planning costs for building renovation.
- EQ1.1.5** Evaluating cost development over time
- EQ1.1.6** Evaluating the feasibility of design and methodological solutions
- EQ1.1.7** Evaluating costs of modernisation and optimization measures in existing buildings
- EQ1.2.1** Understanding the principles of Life Cycle Cost assessment
- EQ1.2.2** Understanding the impacts of Life Cycle Cost assessment
- EQ2.1.1** Understanding the values of sustainable design
- EQ2.1.2** Proposing and selecting basic solutions for improved sustainability value creation
- EQ2.1.3** Managing value optimisation of operational costs
- EQ2.1.4** Identifying financial benefits of ESG (Environmental, Social, Governance) criteria on a Real State value
- EQ2.1.5** Assuring value optimisations and performance risks reduction on site
- EQ3.1.1** Understanding the concepts and benefits of green finance
- EQ3.1.2** Understanding the most effective and more popular strategies to encourage green buildings
- EQ4.1.1** Understanding maintenance costs
- EQ4.2.1** Understanding in-use energy costs savings of the green domestic systems
- EQ4.2.2** Analysing utility tariffs for energy supply cost reduction
- EQ4.2.3** Performing energy-saving benefit evaluation