WEEK OF EDUCATION

THE HEARTBEAT OF LEARNING

UNIVERSITY OF TWENTE.

WEEK OF EDUCATION 2025

Start the show

UNIVERSITY OF TWENTE.

Steps towards a new BSc Programme

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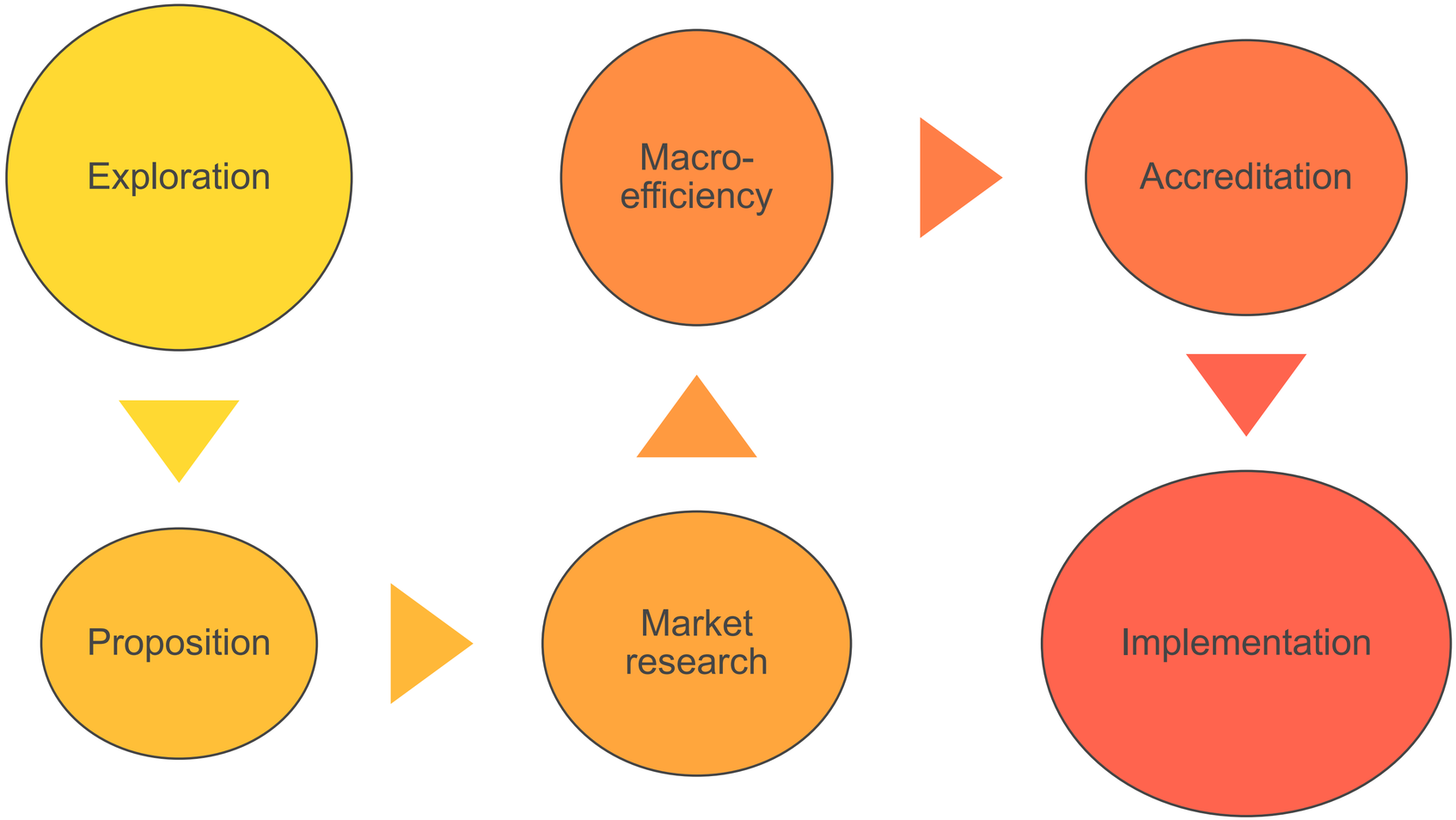
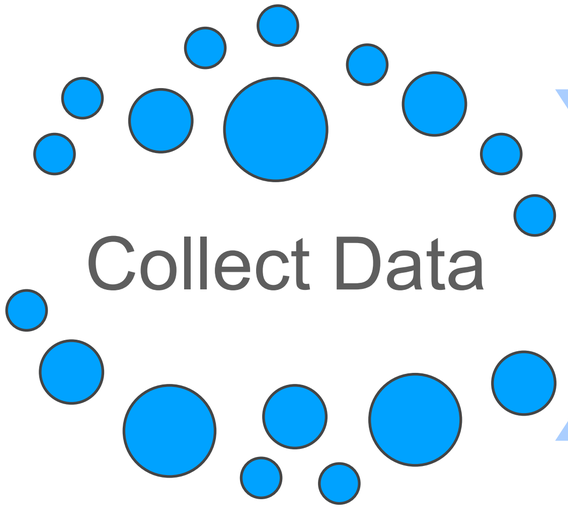
Phases

Non-linear process



Approach

semi-fictional representations of a typical member of our target audience.
to help us understand their needs, motivations, challenges, and behaviors allowing us to design more effective programmes, courses, and communication strategies



Collect Data

- Trends (internal / external)
- Niche / added value ITC
- Educational Landscape
- Market demand
- UT potential
- Inflow

Personas

- Profile and # inflow
- Competences graduates

Business case

Criteria to compare different modalities

Criteria for success

Build trust in the working group and ‘data mine’ the organization for ideas, concerns and pitfalls:

- Internal consultation sessions with support staff and all departments
- Exploration and refinement session on personas

Align expectations of project results with client:

- Regular updates to portfolio holder education
- Information agenda items in FB meetings

Work inside out and outside in:

- Find a viable niche in the market starting from with strengths of ITC
- Find the needs of the future employers
- Find the interests and aspirations of the target audience

FIVE THEMATIC AREAS FOR FUTURE EDUCATION AT ITC

As based on the results of the ITC-wide survey (n=37)

Artificial Intelligence and Machine Learning

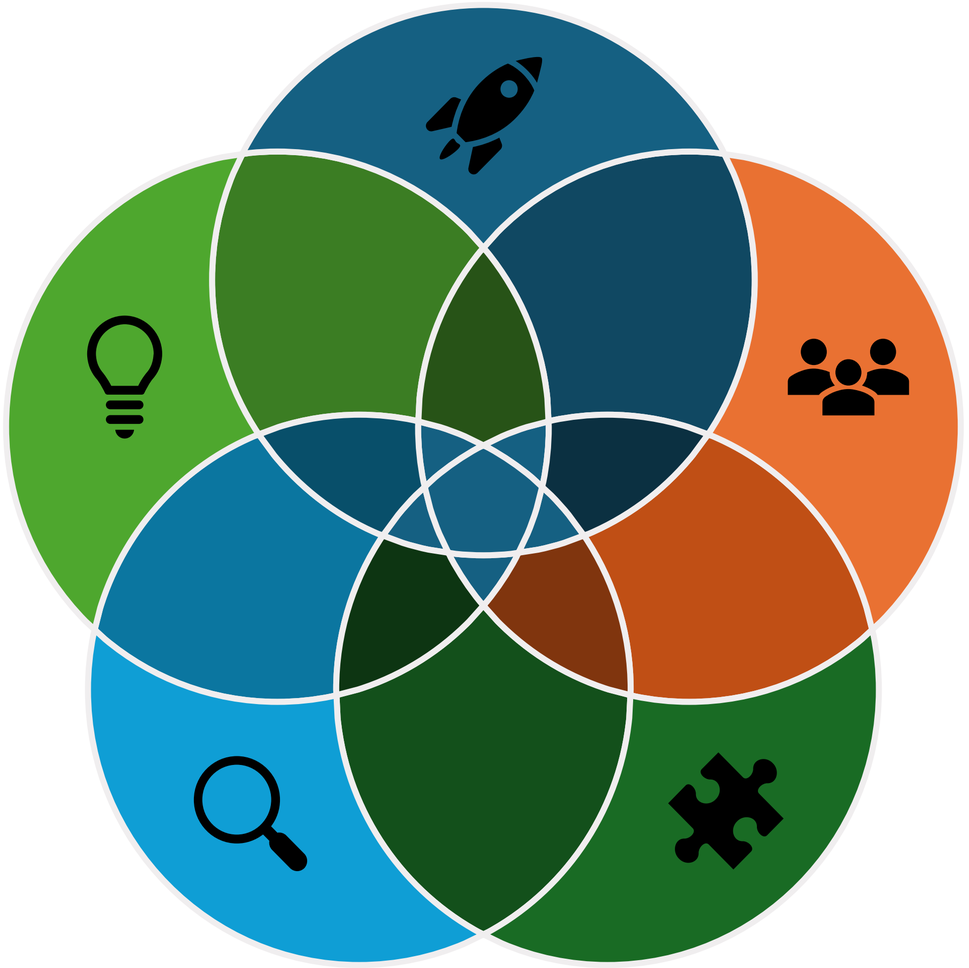
Predicted to transform data analysis, automate workflows, and integrate AI-driven methods into geospatial tasks.

Digitalization and Smart Technologies

Emphasis on digital twins, autonomous systems, and high-resolution remote sensing for enhanced environmental understanding.

Big Data and Data Science

Management and processing of vast data volumes are seen as critical, with roles in real-time data applications and large-scale analysis.



Interdisciplinary Approaches

Greater collaboration across fields (e.g., environmental science, urban planning) and a shift towards solutions addressing societal challenges.

Environmental and Climate Change

Increased focus on climate resilience, adaptation, and sustainability, requiring extensive data analysis and modelling.

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Personas

Future jobs - Competencies:

✅ **Data Science & Analysis** – Programming, statistics, machine learning, big data.
✅ **Application-Oriented Approach** – Solving real-world challenges (climate, urbanisation, food security, etc.).
✅ **Critical Thinking & Problem-Solving** – Adapting to rapid technological advancements.
✅ **Communication & Collaboration** – Strong teamwork and effective communication skills.
✅ **Ethics & Societal Impact** – Responsible data use and awareness of geospatial tech's influence.

- 🔹 **Junior Researcher** – Data acquisition, AI, scientific methods.
- 🔹 **Junior Consultant** – Data visualization, storytelling, client-focused insights.
- 🔹 **Junior Policy Officer** – Policy processes, regulations, geospatial decision support.

    - 📌 **Domain-Specific Tracks** – Flexibility to specialize (earth sciences, ecology, urban planning, water management).
    - 📌 **Industry Collaboration** – Aligning education with labor market needs.
    - 📌 **Future-Proofing** – Adapting to emerging trends and technologies.

Personas

Target audience

"Virtual Traveler"

"The Sustainability Advocate"

"The Spatial Planner"

"The Global Connector“

Bachelor's program at ITC – Narrative part 1

Are you a pioneer who dreams of a radically different approach to challenges surrounding the living environment of the Netherlands and the world? Do you not only want to learn about these issues, but also create innovative solutions? Then the Bachelor's program at ITC, University of Twente is your springboard to the future!

In this program you combine design thinking with cutting-edge technology. You will learn how to shape the living environment of tomorrow with virtual reality, 3D modeling and data analysis: from climate-proof cities to smart mobility networks and inclusive, green neighborhoods.

Facing complex global challenges like poverty, famine, climate change, pandemics, natural disasters, energy shortage, and water management requires multidisciplinary techniques to work on the root of the problem. These disciplines include economics, politics, physics, biology and behavioral sciences.

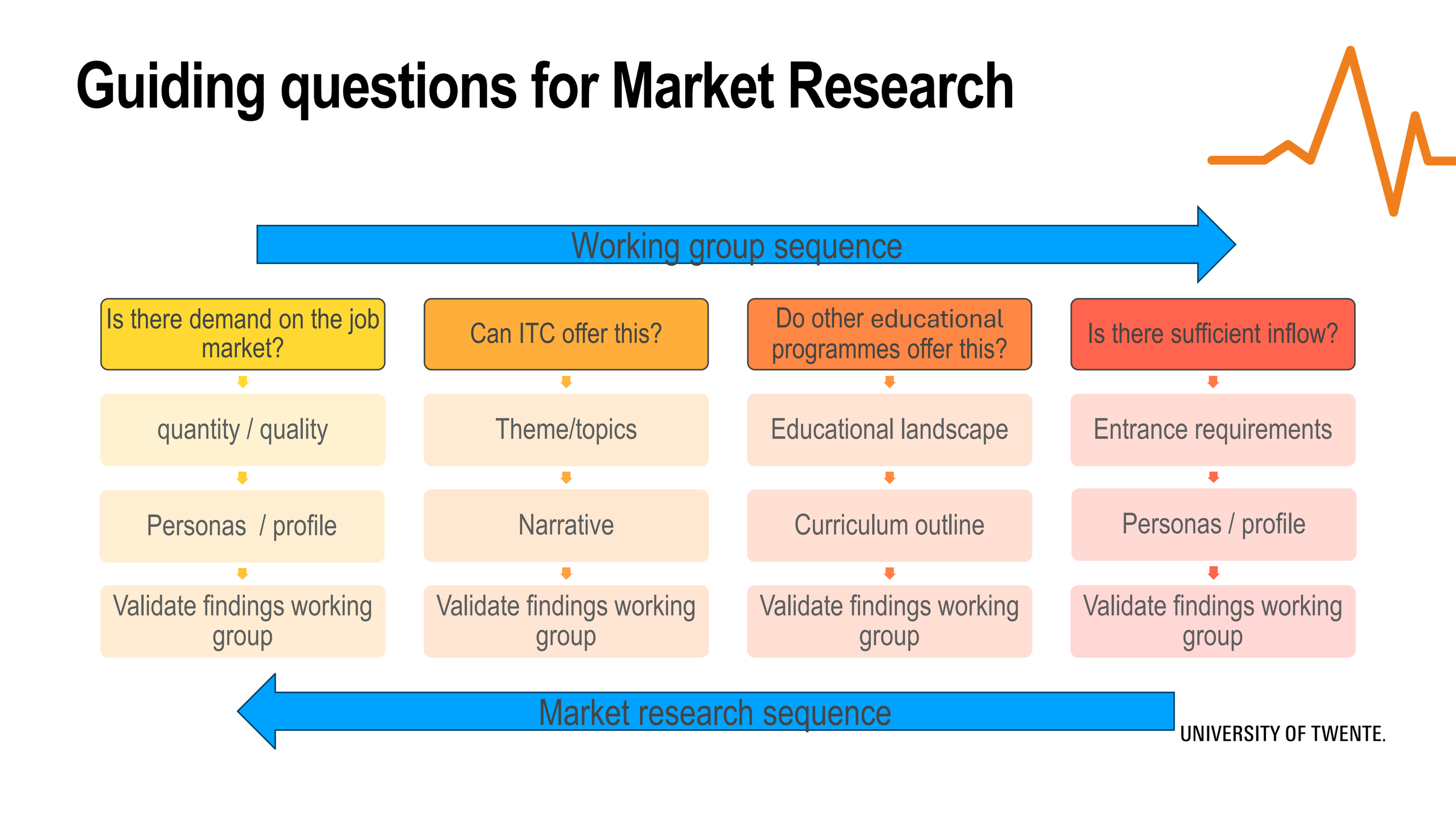
Bachelor's program at ITC – Narrative part 2

Climate change and flooding: How do we ensure that our cities and villages are resilient to extreme weather conditions?
Space Innovation: How do we create and apply new space technology for monitoring global challenges?
Sustainable mobility: How do we make it easier and more attractive to opt for cycling, public transport or electric cars?
Biodiversity: How do we ensure that there is sufficient space for plants and animals in our living environment?
Security: How do we keep ourselves safe using sensor data without compromising privacy?
Health: How can we use tech to outsmart outbreaks and save lives?

At the UT, you are challenged to make your own mark, to work together in an inspiring environment and to learn from experts in the field. The program allows you to develop your own profile as a creator of Environments of the Future. Starting from a common base, you become a specialist in your own field, focusing on the global challenge that concerns you the most.

After your studies, you will be ready to enter the labor market or continue into the master’s programme of your choice to deepen your knowledge and skills as an innovator for a sustainable and pleasant living environment, with a unique profile that is not offered anywhere else in the Netherlands

Guiding questions for Market Research



Steps in time

Oct. 2024 – Feb. 2025

Exploration phase:

Define purpose, vision and strategic positioning

- Deliverable: Informative report with first findings

Feb.–Mar. 2025

Proposition phase:

Viability of a BSc at ITC.

- Deliverable: Business case and ToR for market research

April – Sep. 2025

Market research phase

- Target group analysis.
- Labour market analysis.
- Educational landscape
- SWOT analysis: in relation to the market

Oct. 2025 – Sep. 2026

Macro-Efficiency and accreditation phase

- Macro-efficiency file and initial accreditation dossier

Sep. 2026 – Sep. 2027

Pre-Operation phase:

Register the programme, launch systems, and start recruitment for the first student intake in September 2028.

- Deliverable: Operational BSc programme September 2028

What did we miss?