



Anticipating Strategic Long-term Challenges

Curriculum



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Curriculum Report

Across all countries, the workshops revealed **converging needs**:

1. **Future literacy & mindset development** – the largest skill gap.
2. **Strategic foresight tools** – very low familiarity and high demand for simple, guided tools.
3. **Decision-making under uncertainty** – universal weakness.
4. **Soft skills** (curiosity, communication, adaptability, empathy, collaboration).
5. **Ethical, social & human foresight** – strong emphasis on data sovereignty, responsible AI, and human well-being.

The final curriculum consists of **ten modules**, delivered through a **blended learning approach** including micro-learning, experiential workshops, real-world cases, simulations, and challenge-based learning.

The ASTRAL online course is designed for **professionals, organisations, and educational actors** who need to develop or strengthen their capacity to anticipate long-term technological, societal, and market trends.

Overall, the ASTRAL Online Course Is Intended for Individuals who:

- Need to **anticipate long-term futures** (10–20 years ahead)
- Must make decisions in **complex, uncertain, fast-changing environments**
- Are responsible for **innovation, strategy, transformation, or technology adoption**
- Seek skills in **foresight, ethical and responsible innovation, and strategic resilience**
- Want to use **practical, applied foresight methods** validated by experts and industry
- Benefit from a **flexible, blended learning journey** combining online modules and experiential activities

The learning format for this course is **web-based training**, offering a 100% online-asynchronous self-learning experience, meaning learners can study at their **own pace** without synchronous interactions. To enhance its adaptability for blended learning, a train-the-trainer manual has been incorporated. The course is hosted on a WordPress Learning Management Homepage (or similar) and is enriched with interactive elements through the use of open-source plug-ins.

The learning progression will follow a flexible, modular approach rather than a strictly linear sequence. Training content will be organized into independent modules, allowing learners to select and complete the modules most relevant to their needs or interests. While each module can be taken on its own, the overall design will still support a coherent learning journey by encouraging learners to

revisit key concepts across different modules. In this way, elements of spiral sequencing will be incorporated, enabling learners to reinforce previously covered material, enhance long-term retention, and deepen their understanding of the respective topics.

The course is structured around several **key components**: Theory, Inspiration through Real-life Examples, Tools, Resources and References.

The **course material** will be presented in ten modules, corresponding to the following phases:

Module 0 – LTFF Future-Readiness Self-Assessment: A structured self-assessment that measures individual and organisational readiness. Participants evaluate their mindset, digital and AI literacy, uncertainty-handling capacity, strategic thinking habits, and current foresight practices.

Module 1 –LTFF Foundations for Business (Why LTFF): Participants learn what LTFF is—and what it is not—clarifying misconceptions about prediction and highlighting the value of foresight as a practical tool for navigating uncertainty. Through real-world examples and sector-relevant cases, the module shows how LTFF strengthens competitiveness, supports innovation, reduces strategic blind spots, and enables organisations to anticipate long-term technological, social, and market shifts.

Module 2 – Future Literacy & Mindset Development: Participants learn to recognise how assumptions, mental models, and cognitive biases shape their view of the future, and they practise expanding their imagination beyond short-term constraints. By cultivating the ability to consider multiple plausible futures and question existing patterns of thinking, learners build the mindset necessary to anticipate change, embrace uncertainty, and engage more confidently in long-term strategic reflection.

Module 3 – Strategic Foresight Tools & Methods: This module provides participants with a practical introduction to the **core tools and methods used in strategic foresight**. Learners explore horizon scanning, weak-signal detection, trend and impact mapping, scenario creation, backcasting, and basic systems thinking—all presented through clear, step-by-step guidance.

Module 4 – Decision-Making Under Uncertainty: Learners explore practical frameworks for evaluating risks and opportunities, comparing alternative futures, and identifying the strategic implications of emerging trends.

Module 5 – Innovation & Transformation Skills (Future-Proof SMEs): This module equips participants with the skills and methods needed to translate future insights into meaningful innovation and organisational transformation. Learners explore how emerging trends can inspire new value propositions, business models, and strategic opportunities, even under conditions of uncertainty or limited resources.

Module 6 – Collaboration & Ecosystem Foresight: This module focuses on helping participants understand and navigate the wider ecosystems in which their organisations operate.

Module 7 – Ethical, Social & Human Foresight: This module enables participants to integrate ethical reflection and human-centred considerations into long-term strategic thinking. Learners examine how emerging technologies, data practices, and organisational decisions can affect people, communities, and society over time.

Module 8 – Road mapping & Long-Term Strategy Execution: This module focuses on translating foresight insights into clear, actionable, and time-sequenced strategies. Participants learn how to build long-term roadmaps that connect future scenarios with concrete steps, milestones, and decision points.

Module 9 – LTFF for SMEs – Application & Barriers: This module helps participants understand how to integrate Long-Term Future Foresight into the everyday reality of small and medium-sized enterprises. Learners explore the most common barriers SMEs face—such as limited time, scarce resources, short-term pressures, and cultural resistance—and identify practical ways to overcome them.

The **assessment** component of this course is designed to be highly interactive and adaptable to the learner's needs. It includes self-assessment assignments and exercises that encourage learners to reflect on the knowledge they've acquired and consider how to apply it to their unique context within their respective SMEs.