



### **Higher Education Course:**

DESIGNING SUSTAINABLE FUTURES: Applying the Power of Design to Imagine and Transition to a more Sustainable World

Edition n°: 1

Review n°: 29.04.22

IFTF Website: https://www.iftf.org/future-now/article-detail/desiging-sustainable-futures/

POLI.design Website: https://www.polidesign.net/en/formazione/business-design/corso--designing-

<u>sustainable-futures/#tab\_didattica</u> **Registration**: <a href="https://sforce.co/3KoM4dR">https://sforce.co/3KoM4dR</a>

### **COURSE DETAILS**

Scientific Director: Prof. Manuela CeliDeputy Manager: Prof. Joseph Press

• Course Coordinators: Paola Galdi (POLI.design), Cindy Baskin (Institute for the Future)

Starting date: 7 October 2022Ending date: 12 December 2022

Duration: 8 week program (8 lectures)

Total hours: 32 total (8 modules of 4 hours each)

Online delivery 14:00-18:00 CET (4 hours with a 15 minute break)

Venue: Live, Online (Miro/Zoom)Language of the Course: English

Student Target: 25Cost: US\$4,200

Deadline for application: 31 August 2022

Partnership: Institute for the Future (<u>www.iftf.org</u>)

• Target: decision makers, managers, consultant sector, design agencies, organizations (for-profit and non-profit), start-ups, entrepreneurs, mid-size companies

### **GENERAL OVERVIEW**

Designing Sustainable Futures is an eight-week intensive program to develop the skills and mindset of practitioners who are passionate building a better world. Regardless of whether you have a design or management background, want to create a for-profit or non-profit, the Designing Sustainable Futures course will enable you to strengthen your resilience for making an impact. Starting with the UN's Sustainable Development Goals (see <a href="www.sdgs.un.org">www.sdgs.un.org</a>) with specific industry focus (SDGs 3, 9, 12, and 16) and a community focus (SDGs 3, 4, 5, 8, and 16), participants will explore and practice the essential skills of strategic foresight, world building, and transformation, specifically:

SDGs for Sustainable Products and Services in Key Industries:

- GOAL 3: Ensure healthy lives and promote well-being for all at all ages HealthCare & Life Sciences
- GOAL 9: Build resilient infrastructure, promote inclusive and sustainable industrialization, and foster innovation — Manufacturing & Transportation
- GOAL 12: Responsible Consumption and Production Patterns Consumer Goods
- GOAL 16: Peace and Justice Strong Institutions Public Sector & NGOs

SDGs for Equitable Communities and Empowered Leaders:





- GOAL 3 & 4: Ensure healthy lives and promote well-being for all at all ages (3), with inclusive and equitable quality education and promote lifelong learning opportunities (4) Education
- GOAL 5: Achieve equality and empowerment of all communities Diversity, Inclusion, and Belonging
- GOAL 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all — Equitable Enterprises
- GOAL 16: Promote peaceful and inclusive societies for sustainable development, provide access to
  justice for all, and build effective, accountable and inclusive institutions at all levels Regenerative
  Communities

In exploring SDGs, participants will learn the tools and methodology to understand where megatrends — like social changes, economics, diversity, climate change — are going, and develop their adaptability for any future. By seeking more sustainable futures, participants will expand their capacity for full-spectrum thinking by learning about the latest insights from neuroscience and complex systems, relating insights to their context, and experiment design-driven anticipation practice. Graduates of the course can expect to open business and/or employment opportunities in strategic foresight, innovation acceleration, and digital transformation.

#### ADDRESSED TO

- Professionals who have strategy, innovation, and/or transformation responsibilities
- Professionals and students that want to accelerate their transition to preferred futures
- Graduate students preparing for a career in strategy, innovation, and/or transformation

Alumni of the course can expect to open new job opportunities in strategic foresight, innovation acceleration, digital transformation, and social impact.

### **PROFESSIONAL OUTCOMES**

In today's job market nothing is sure, but there is an increasing career market for someone who completes a program in Design Futures or Design Fiction. Two job titles dominate these kinds of opportunities, primarily a *Strategic Foresight Practitioner and Futurist*. As foresight becomes more common as a strategic need for companies, more Strategic Foresight teams are set up, usually in Strategy or Innovation departments.

The course aims to answer this growing need through:

- A deep understanding and activation toward the SDGs through a more critical and forward-looking positioning;
- The development of UNESCO key competencies for sustainability, specifically Anticipatory, Strategic, Systems thinking, Integrated problem-solving, Normative, Critical thinking, and Self-awareness;
- The capacity to recognize the wider system scale of needs and outline several possible path toward preferred futures;
- Develop the most creative anticipatory attitudes through methods and tools typical of design practices.

Graduates of similar programs, are hired into these positions to help companies be able to design and implement services at the forefront of market innovation with sustainability.

Participants will be expected to bring a project they are currently working on that can benefit from applying their learnings from the course.





#### **DIDACTIC CONTENT & FACULTY**

### Orientation - Friday, 7 October 2022

8am-9am EDT / 14:00-15:00 CEST

### **Welcome and Onboarding Webinar**

- Introductions
- Overview of course pedagogy
- Introduce Miro board and ways of learning
- Share SDG groups
- Q&A
- Lead Faculty: Prof. Manuela Celi and Prof. Joseph Press
- Guest Faculty: listed below

#### Class 1 – Friday, 21 October 2022

8am-12pm EDT / 14:00-18:00 CEST

### **Designing Sustainable Futures: Introduction to Design Futures**

- Introduction to Design Futures, including the use of signals and drivers to create a Forecast for a Climate-Positive Future
- Groups to define an Applied Design Futures Group Project (ADF Group Project), specifically your role/archetype, shared SDG, and initial project design
- Developmental Focus Anticipatory competency: the abilities to understand and evaluate multiple futures—possible, probable, and desirable; to create one's own visions for the future; to apply the precautionary principle; to assess the consequences of actions; and to deal with risks and changes.
- Faculty: Jake Dunagan (Institute for the Future)

# Class 2 - Friday, 28 October 2022

8am-12pm EDT / 14:00-18:00 CEST

### Maintaining a Design Approach – Introduction to Speculative Design

- Introduction to Speculative Design to inform how to design informs and influences the levers of a preferred future
- Developmental Focus Strategic competency: the abilities to collectively develop and implement innovative actions that further sustainability at the local level and further afield.
- Faculty: Prof. Manuela Celi (POLI.design)

### Class 3 – Friday, 4 November 2022

8am-12pm EDT / 13:00-17:00 CEST (note winter time change)

# **Building Better Worlds – Introduction to World Building**

- Introduction to world building within a speculative future, exploring the implications and opportunities across an SDGs levers
- Developmental Focus Integrated problem-solving competency: the overarching ability to apply
  different problem-solving frameworks to complex sustainability problems and develop viable,
  inclusive, and equitable solution options that promote sustainable development, integrating the
  above-mentioned competencies.
- Faculty: Jacques Barcia (Institute for the Future)

#### Class 4 – Friday, 11 November 2022

8am-12pm EDT / 14:00-18:00 CEST

# **Designing Systems — Introduction to Systemic Design**

- Introduction to Systemic Design as a way to generate meaningful and sustainable experiences of a sustainable future
- Developmental Focus Systems thinking competency: the abilities to recognize and understand relationships; to analyze complex systems; to think of how systems are embedded within different domains and different scales; and to deal with uncertainty.
- Faculty: Prof. Silvia Barbero (Politecnico di Torino)





### Class 5 – Friday, 18 November 2022

8am-12pm EDT / 14:00-18:00 CEST

# Prototyping Artifacts from the Future: Introduction to Design Fiction

- Introduction to Design Fiction as a means to create embodied experiences of more sustainable solutions
- Developmental Focus Collaboration competency: the abilities to learn from others; to understand
  and respect the needs, perspectives, and actions of others (empathy); to understand, relate to, and be
  sensitive to others (empathic leadership); to deal with conflicts in a group; and to facilitate
  collaborative and participatory problem solving.
- Faculty: Ilana Lipsett (Institute for the Future)

### Class 6 – Monday, 28 November 2022

8am-12pm EDT / 14:00-18:00 CEST

# **Cultivating Movements: Introduction to Participatory Design**

- Introduction to Participatory Design as an approach to create a transition pathway towards a more sustainable business practices and a Climate-Positive Future
- Developmental Focus Normative competency: the abilities to understand and reflect on the norms and values that underlie one's actions; and to negotiate sustainability values, principles, goals, and targets, in a context of conflicts of interests and trade-offs, uncertain knowledge, and contradictions.
- Faculty: Anna Meroni (POLI.design)

# Class 7 - Monday, 5 December 2022

8am-12pm EDT / 14:00-18:00 CEST

#### **Engaging Stakeholders: Introduction to Storymaking**

- Introduction to Storymaking as an approach to engage stakeholders across an ecosystem to mobilize them for collective and coordinated action
- Developmental Focus Critical thinking competency: the abilities to question norms, practices, and opinions; to reflect on own one's values, perceptions, and actions; and to take a position in the sustainability discourse.
- Faculty: Prof. Tommaso Buganza (Politecnico di Milano)

# Class 8 - Monday, 12 December 2022

8am-12pm EDT / 14:00-18:00 CEST

#### Thinking Full-Spectrum: Introduction to Futures Leadership

- Introduction to Full-Spectrum Thinking & IDeaLs to explore how to engage people, and yourself, to make transformative innovation happen
- Define Applied Design Futures Personal Project (ADF Personal Project), specifically your role/archetype, priority SDG (based on group SDG), and initial project design
- Developmental Focus Self-awareness competency: the ability to reflect on one's own role in the local community and global society; to continually evaluate and further motivate one's actions; and to deal with one's feelings and desires.
- Faculty: Prof. Joseph Press (Institute for the Future; Politecnico di Milano)

#### **DURATION AND MODE OF LESSONS**

Because Designing Sustainable Futures will require a community, the course pedagogy is designed to enable in-depth investigation into the core content and strengthen connectivity amongst all participants. Therefore, each "module" above would by a total of 4 hours (total 32 hours), following the same didactic experience, in the following manner:

- 45 min Lecture, including groupwork tool and activity
- 15 min Cohort Q&A





- 60 min Group Learning (small groups with faculty)
- 15 min Break (with optional neuroplastic exercises)
- 45 min Group Sharing (between two groups)
- 30 min Cohort Reflection (entire cohort to share learnings on Miro)
- 30 min Applied Design Futures Project (Peer sharing)
- 15 min Wrap Up + Next Steps

With the above design, each module is designed to provide state-of-the-art content from experts and opportunities to apply methods and tools to wicked problems, delivered with immersive and social learning experiences. Each module will begin with a 45-minute lecture surveying recent research and case studies. Students will have the opportunity to deepen their understanding of the course content during an interactive question and answer period. By probing deeper into the content, students will prepare themselves for their own learning in small groups exploring a common SDG. Professors will join in those collaborative conversations using dialogue and critique to trigger learning. After one hour in breakouts, all students will be invited to an optional 15-minute neuroscience break, designed to stimulate the growth of new synapses in unique online experiences. Following the break, pairs of groups will share their insights and challenges in applying the content with another group, facilitated by faculty for constructive feedback. The objective of these conversations is to increase understanding and build a collective consciousness towards designing sustainable futures. Following the focused group dialogues, each group will return to the plenary to briefly share their current state and next steps with the entire cohort. Using a collaborative platform, everyone will share to strengthen collective understanding and the sense of community. The final 30 minutes will be used for group reflections and preparing for the next module.