



مؤسسة دبي للمستقبل
DUBAI FUTURE FOUNDATION

أكاديمية دبي للمستقبل
DUBAI FUTURE ACADEMY

MASTERPLAN SUMMARY

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INTRODUCTION

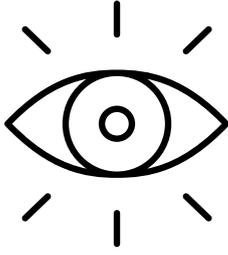


Dubai Future Academy is the capacity-building arm of the Dubai Future Foundation and provides learning opportunities for Emirati and other key stakeholders.

The education schemes that the Academy provides are strictly focused on future studies (henceforth referred to as 'futures'). The past is studied only inasmuch as it provides the reference point for our exploration of the future. Whether it is about skills, technologies or modes of well-being, our interest in operating in any area is only if those topics bear particular relevance to the future. As the Academy, we focus on skills that enable us to build a better Dubai. We call these skills 'generic future skills'.

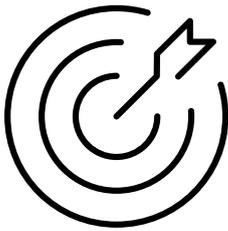
Launched in 2017, the Dubai Future Academy was established with the following vision and mission statements.





VISION

Be the knowledge hub for those creating the future



MISSION

Equipping generations of leaders with the skills of the future

Our master plan will be encompassing the key domains of education and learning that will equip the Dubai of the future with resilience and transformative capacity.

As the disruption of the coronavirus clearly teaches us, the only way to deal with complexities and uncertainties is to proactively build the flexibility and human capacity to act as each situation demands. In the years and decades to come, Dubai needs to diversify its R&D&I (research, development and innovation) portfolio into new technologies, high value-added industries and start-ups, as well as highly qualified and future-orientated human resources. It can be argued that only then can the UAE's aspiration to be the best country in the world actually come true, with Dubai acting as the centrepiece of that development, having built its critical potential to plan for the future at AREA 2071, which is the future building platform of Dubai¹.

The overarching plan is to build generic future skills and this implies working on three pillars of know-how.

FUTURES METHODOLOGIES

Foresight Skills

Give us the methodologies and tools to imagine and create pathways to the next phase of our societies.

Trainings include:

- Scenario Building
- Systems Thinking
- Horizon Scanning & Weak Signals
- Visionary Management

FUTURES TECHNOLOGIES

Technical Insights

Provide us with a solid understanding of the key technological enablers that can massively improve our resource efficiency.

Trainings include:

- Artificial Intelligence
- Augmented & Virtual Reality
- New Energy Technology
- Blockchain
- Big Data
- Gene Tech
- 3D Printing
- Internet of Things
- Robotics

FUTURES LITERACY

Human Skills

Help us understand and become aware of how we use futures.

Trainings include:

- Empathy Skills
- Observation Skills
- Communications Skills
- Creativity Skills
- Complexity Skills
- Planetary Skills
- Cognitive Capacity
- Motivational Capacity

FUTURE OF DUBAI

A Sustainable Future Society

Build new operational models for communities and economies

- Urban Futures
- Future of Work
- Platform Economies
- Sustainable Financial Models
- Circular Economy
- Sustainable Lifestyle
- Human, Nature, and Technology Integration

All three pillars are needed to build the future of Dubai as a sustainable society that is capable of shaping a better life for its people as a community and serving as a model of sustainable development for the region and the world at large. Moreover, each of the pillars will be linked to actionable outcomes, which will be directly linked with the goals and objectives of the UAE Strategy for the Future.

Each of the three pillars requires a combination of technical or 'hard' skills on one hand, and human or 'soft' skills on the other. Aptitudes related to learning are orientated towards human skills, while work on disruptive technologies clearly falls into the domain of technological skills. The training to use foresight methodologies involves a combination of human, social and technological skills.

FUTURES METHODOLOGIES

How can we navigate an ambiguous future successfully?

As the world's complexity grows, we will encounter more circumstances where we need to use foresight methodologies to make sense of the situation and project various possible outcomes. We need to be prepared for many different kinds of futures and acquire the tools needed to navigate in unfamiliar waters. The specific tools required are essential for our continued well-being, if not, for our very own survival in a world of ever-increasing complexity and uncertainty. Many of the methods now used can be traced back to scenario techniques invented during the Cold War era after the Second World War, in which unprecedented methods of mass destruction threatened the existence of humanity. Later, many businesses and governments successfully deployed comparable foresight methods to orientate their communities towards futures that differ markedly from the past. Such future methodologies include the following:

- **Scenario building** tools help us evaluate different future outcomes on a rational basis based on the choices we impose;
- **Systems thinking** frame works allow us to detect dependencies and feedback loops that are critical to understand any complex event;
- **Horizon and weak signal** tools enable us to trace and assess the significance of events on the horizon that may have major relevance for our future;
- **Visionary management** helps us to build future pathways that are consistent and integrate vision-building with objectives, strategies and resource allocations.

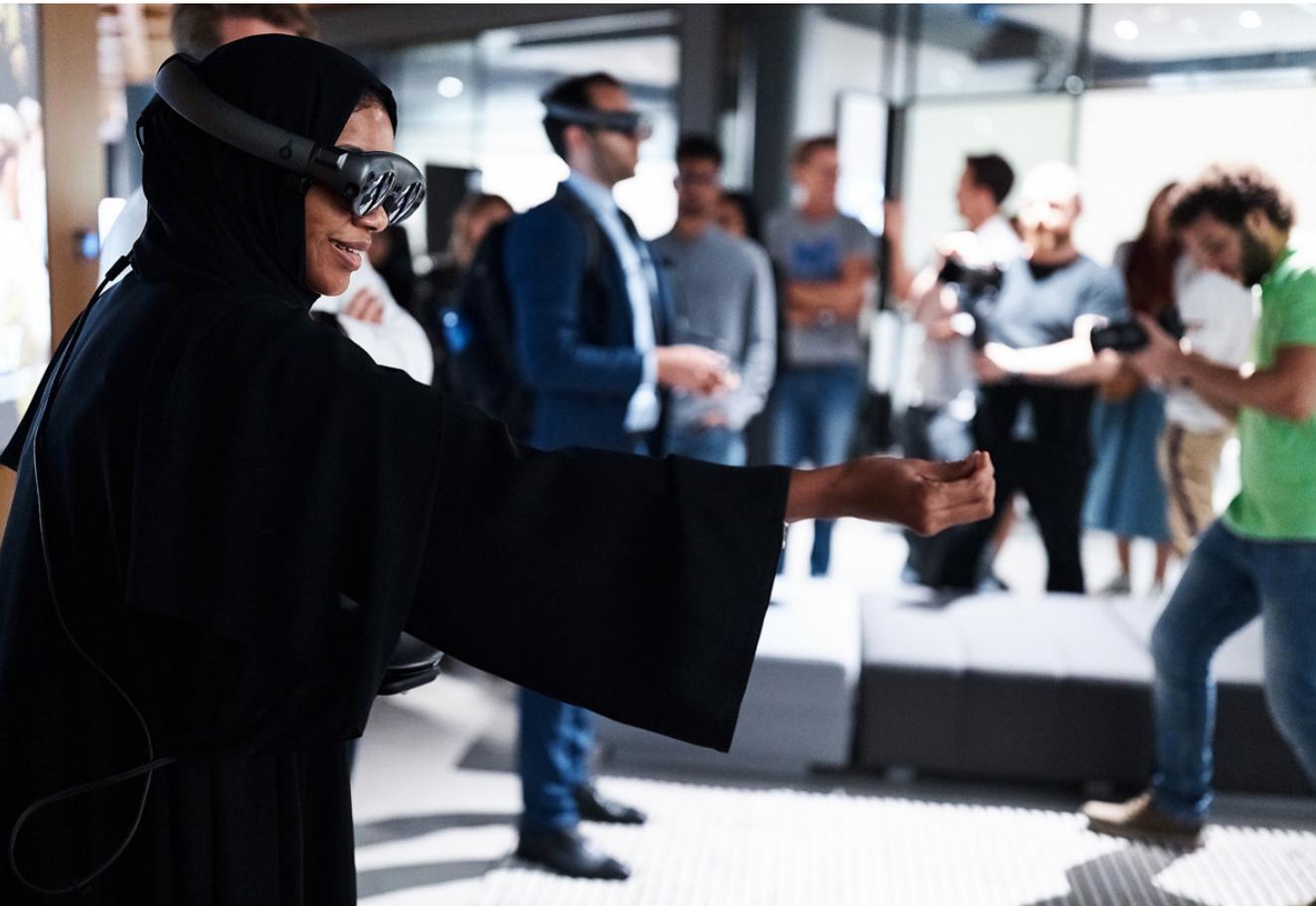


FUTURES TECHNOLOGIES

How can we fully utilize emerging technologies?

The Academy needs to help its participants to understand how emerging and potentially disruptive technologies can assist us in building systems that speed up communication, make our transactions more secure and transparent, create more sustainable energy, streamline governance processes and enable us to live more fulfilling lives. We need more technology foresight as the fourth industrial revolution is setting in. The world around us is rapidly changing as routine jobs are increasingly executed by learning machines empowered by algorithms. Only those economies that massively invest in new technologies will thrive as it is estimated that up to 30 per cent of current jobs will be lost simply through applying artificial intelligence². Technologies that demand our particular attention are:

- **Artificial intelligence and machine learning**, due to their capacity to speed up communication processes between machines and humans, and introduce learning into many technological systems;
- **Blockchain and Cryptocurrency**, due to their capacity to increase transparency and security in any transactional system and ultimately create the possibility of a more neutral global currency;
- **Augmented and virtual reality technologies**, due to their capacity to improve learning through experience and transcend time and place;
- **New gene technologies**, due to their capacity to optimise our food production and address human health issues;
- **New energy technologies**, due to their capacity to provide more sustainable sources of energy, critical to overcoming climate change;
- **The Internet of Things (IoT)**, due to its ability to integrate and co-ordinate multiple physical assets and digital systems;
- **Big Data**, due to its capacity to extract information from large volumes of data;
- **3D Printing**, due to its capacity to make three dimensional objects from digital data using additive processes;
- **Robotics**, due to its capacity to speed up manufacturing processes.



FUTURES LITERACY

What are the soft skills needed to adapt to the future?

The Academy's focus on education, coupled with its interest in preparing participants for a rapidly changing environment, brings us to the concept of 'Futures Literacy'. Firstly, Futures Literacy explores our cognitive capacity to understand the different developmental trajectories of various societies and their impact. It also involves the capacity to understand how we can shift our perspectives and become aware of our own assumptions about the future. Secondly, Futures Literacy involves our direct relationship with the future. How do we create a relationship with the future that is positive? How do we find our own strengths in life and project them into the future? Thirdly, Futures Literacy endorses active capacities to be proactive towards the future. We should not simply let the future "happen" but actively shape our journey here on Earth. This requires motivational capacity.

So how do we improve people's capacity to understand the essence of the future and make use of that understanding in their decisions and actions today? After all, the future arises largely out of the decisions we make in the present.

The skills that we will be building are specific competences in observation and communication, which are linked to processing and implementation skills. The task of the Academy is to enhance these skills by setting them within an intellectual framework and developing them through practical exercises.

Active and dynamic skills provide us with the critical tools to be proactive in the world, instead of passively waiting for things to happen to us. This is why we call those skills 'active', since they increase our capacity to act at any given moment based on our observations.



- **Planetary living skills** help us in becoming aware of our personal relationship with the planet and observing our immediate impact on the physical environment around us. In a world facing a growing environmental crisis, we need to be able to relate to nature as a collaborator rather than an enemy to conquer;

- **Complexity skills** help us deal with the growing complexity of our societies. The aim is to improve an individual's flexibility, capacity to manage uncertainty, and ability to act in complex decision-making situations;

- **Creativity skills** address creativity as a unique human feature that technology or artificial intelligence cannot replace and there is a growing realisation that creativity is becoming all the more important as machines, robots and artificial intelligence release us from monotonous and repetitive tasks;

- **Empathy skills** focus directly on our capacity to reach out to others and loosen our innate bias to be self-centered in our thoughts and actions.

A SUSTAINABLE FUTURE SOCIETY



The overall target in developing these generic future skills and capacities is to contribute to shaping Dubai into a sustainable future society.

Our well-being in the future ultimately will depend on our capacity to generate concepts that demonstrate how our societies should function in the future. For instance, only 9 per cent of all the materials in the products we consume are currently reused, meaning that 91 per cent of those materials are essentially wasted. The only society we should think of as sustainable is the society that designs, reuses and circulates all its material. Thus, to create viable projections of future societies, we need vision-building and scenario techniques that enable us to see where we want to go, why it is important and how to reach that destination. In particular, we are interested in

- **New industrial models**, such as the circular economy, which go beyond 'extract and waste' models of current society;
- **New economic models**, such as platform economies, which transcend hierarchical and rigid economic systems inherited from the industrial models of the past;
- **New financial models**, such as Islamic banking, which even if not new, have been marginalised in the current financial system, or crowdsourcing funding as a new model of financing the development of goods and services;
- **New lifestyle models**, such as low-carbon lifestyles that reduce our ecological footprint and make us act in accordance with the global target to hold the rise in temperatures to 1.5°C above pre-industrial levels.

PARTNERSHIP MODELS



Dubai as the testbed for the Future: Partnership Model for Dubai Future Academy

The Dubai Future Academy, an initiative of the Dubai Future Foundation, aims to position Dubai and the UAE as the world's leading centre of excellence in developing futures skills, strategic foresight and futures studies. According to this plan, the Academy, together with Dubai Future Foundation, will be identifying key technological trends and emerging waves of change and building partnerships with leading experts and institutions around the world. The idea is to support Dubai to become a testbed for the world in imagining, designing and implementing new innovations that will make both Dubai and the UAE fast, agile and sustainable, ready to ride the wave of new technological and social innovations. Those that venture in testing new models and acting as a living laboratory are typically those that are able to gain the most from new developments by bringing and scaling the innovations into the world's markets.

The partnership models of Dubai Future Academy will take place in the following areas:

- **specific training programmes** for Emiratis delivered by globally renowned experts and cascaded through 'Train-the-Trainer' modules, which will create a community of local future changemakers;
- **a fellowship programme** in which leading foresight experts from around the world will give their insights to the work programme of the Academy and offer tailored

trainings. Their research findings would be disseminated at the events and the publications organised by the Dubai Future Academy. Fellows will also provide training for DFF members in the topics they are specialized in;

- **designing and implementing a foresight network platform** with the Dubai Future Research unit of the Dubai Future Foundation. This could entail building a collaboration with international institutions, such as United Nations and UNESCO, as well as with leading technology innovation hubs around the world.



CONCLUSION



All of these activities are designed to build the Academy into a true global hub of futures knowledge and training, ensuring that the latest strategic foresight knowledge and best practices are embedded in day-to-day life by relevant stakeholders in Dubai. This would establish Dubai Future Academy as a credible opinion leader in its own right in these fields.

There are two main assets that organisations and individuals need to develop in the future: resilience and transformation. In a world of uncertainties and disruptions it is all the more important to be resilient, prepared and responsive. To achieve this, we need strategic foresight – by which we mean a systematic approach to develop plausible alternatives for the future. We need to generate insights that are based on careful deliberation of future options, make strategic choices under uncertain conditions and prepare for future disruptions.

As we are riding the sixth wave of our development as a human civilisation, we at Dubai Future Foundation are in the vanguard of the transformation, building the capacity in innovation needed for Emiratis to imagine, design and implement the future that we all want. We will contribute to the mission of positioning of Dubai and the UAE as the global leader in sustainable innovation by offering cutting-edge education and training in the fields of futures skills and foresight. This is the long-term agenda of the Academy.

“Determination, strategy, and vision for the future are our real resources in the quest for excellence and success.”

His Highness Sheikh Mohammed bin Rashid Al Maktoum
Vice President, Prime Minister and Ruler of Dubai





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