Foreword

Vision

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Digital technology is a major economic, political, social and scientific challenge of our times, which profoundly impacts the academic world. Distance learning, augmented reality, artificial intelligence and big data are examples of technological trends that are changing universities. These and other developments are present in the daily lives of students, teaching staff and researchers. They are revolutionising ways of teaching and learning, opening new fields of academic activity, providing powerful tools for producing and sharing knowledge, and encouraging new ways for scientists to interact with society. Digital technology is also contributing to changes for university administrative and technical staff, as services are moving online, new jobs are emerging and novel digital tools are rapidly developed.

The University of Geneva is keenly aware of these issues, and has recognised this digital transformation as a cross-cutting theme that affects all of its activities. The impact of digital technology was thus explicitly included in 2015 in the University’s strategic plan “The University of Geneva in 2025” *, expressing the institution’s ambition to be “a major player in the digital revolution”. This aim involves, in particular, continuous development of digital infrastructure and services, promoting teaching and research concerning digital technology and its consequences, implementing new methods of sharing knowledge, and optimising various administrative processes. To achieve this objective, a Digital University initiative was established at the Rectorate level and a Digital Strategy Office (Bureau de la Stratégie Numérique or BSN) was created in 2016, with the mission of defining and piloting the University’s Digital Strategy, as well as monitoring and coordinating digital initiatives within the University and stimulating innovative projects.

* https://www.unige.ch/plan-strategique
As an important step in the development of this strategy, the BSN organized four consultative workshops in autumn 2017, in which the whole University community was invited to take part. In addition, a participative website enabled everyone to contribute their thoughts and to continue discussions beyond the workshops.

This broad consultation was followed by a comprehensive series of interviews with representatives of the faculties and the common services. These discussions made it possible to identify the main areas where digital activities were occurring at the University and those where new initiatives still need to be developed.

This wide-ranging consultative process has made it possible to establish a Digital Strategy – accompanied by an Action Plan – that applies to the University as a whole. This strategy approaches the digital transformation not only from a technical point of view but also from the point of view of the changes that it will entail for students, teaching staff, researchers, administrative and technical staff, and the University’s partners. This inclusive approach is shared by the Action Plan, which includes projects and initiatives resulting from the consultations and discussions. These will be implemented in collaboration with all relevant University stakeholders.

Yves Flückiger
Rector
The University of Geneva has decided to develop a strategy that aims to encompass several dimensions of the impact of digital technology, without focusing too narrowly on digital tools and infrastructures. For the University of Geneva, digital technology is seen as:

- A **subject** of teaching and research: the University trains and prepares its students for the digital transformation of society by giving them the means to understand and face the challenges that the digital world presents. Digital is understood not only in its technological dimension, but also in its broader impacts, in particular cultural, economic, legal and social.

- A **tool** for teaching and research: the University offers its own community, as well as society at large, new digital services that enable them to benefit from the advantages of new technologies for teaching, research and outreach activities.

- A **challenge** for society: the University aims to play an active part in debates on digital technology at the local, national and international level, and plans to contribute – through its activities and projects – to the strategic plans of the State of Geneva, the Swiss Confederation and of various international organisations with which the University has special ties.
A strategy to support the University of Geneva’s missions and values

The University’s Digital Strategy is inspired by the missions and values defined in the strategic plan “The University of Geneva in 2025”. It provides a springboard for strengthening ties between the University and International Geneva; consolidating the role of the University as a regional, national, and international reference; promoting the emergence of interdisciplinary activities; and establishing the University’s capacity for innovation in the use and development of new digital technologies for education and research, such as artificial intelligence.

The Digital Strategy is a tangible expression of the University’s global vision, presenting a series of objectives aiming to strengthen the institution’s digital activities and projects, as well as helping to develop new initiatives, thereby contributing to the digital transformation that is underway in society and in the world of academia. In equipping ourselves with a Digital Strategy, the University of Geneva aims to:

- Support, develop and promote the University’s digital expertise in an interdisciplinary and global manner
- Strengthen the University’s capacity for developing innovative teaching, research and digital services
- Establish collaborations on digital issues with academic and non-academic external partners
- Enable the University community as well as the broader society to come to grips with the digital transformation
- Create conditions for appropriate and responsible use of digital technology by the University community
Themes and Objectives
Digital technology is transforming our society profoundly. The world of academia has a responsibility to understand and assist this digital transformation, in order to prepare the students, in all the programs that the University offers, for a globalised and digital world. As a place where knowledge is developed and shared, the University promotes teaching and research that make it possible to better understand digital technology and its social, economic and environmental impacts as a subject of study. The University is also committed to seizing the opportunities offered by digital technology for providing quality teaching and responding to current and future challenges in education, such as adapting the University infrastructure for the digital transition, and innovating in teaching and knowledge assessment.

**OBJECTIVES**

1. Integrate digital technology and reflection on its impacts into all forms of academic training.
2. Promote the development of new fields of research on digital technology and its consequences.
3. Support the creation of innovative types of teaching and knowledge assessment based on digital technologies.
Digital solutions for open, connected science

Technological innovation is changing the organisation of science and research in fundamental ways. Thanks to digital technology, research teams the world over can work together and access a wide range of scientific data. Scientific publications are ever more accessible thanks to the move towards open access journals and the use of open digital platforms. As an institution that aims to participate in the digital transformation, the University of Geneva wants to contribute to the development of open, better-connected science for the benefit of the scientific community and society.

4. Create framework conditions that favour the transmission and sharing of results of scientific research and the online visibility of the University’s activities.

5. Raise awareness about practices of teaching and research that transmit knowledge based on open, participative and inclusive methods, and train the University community accordingly.

6. Support the digitalisation of the scientific and cultural heritage of the University and its partners in order to facilitate the sharing and study of these resources.
Thanks to close ties with the region and numerous partnerships with other universities, companies, public bodies and international organisations, the University of Geneva is playing a part in shaping the digital world of tomorrow in myriad ways, preparing society to deal with and adapt to the increasing speed of digital transformation.

7. Establish the University as a centre of expertise and innovation on digital transformation at the service of society.

8. Work with the University’s partners to shape the digital society of tomorrow.

9. Contribute to the political and intellectual debate on digital technology and the challenges it poses.
Digital tools for the University community

Digital technology provides great opportunities when it comes to simplifying ways of working, collaborating or interacting, but it comes with certain risks and can be frustrating. This is particularly true if it creates inequality, or if it is introduced without adequate explanation or institutional support. Faced with technological challenges, the University of Geneva wishes to promote a digital strategy that focuses on people and reflects current environmental concerns. It aims to enable everyone to acquire a basic understanding of digital technologies, by developing tools and services adapted to the needs of users, and by accompanying digital innovation with thoughtful reflection on the resulting changes.

10. Develop basic digital skills within the University community and ensure that everyone can use digital tools in a responsible and mindful manner.

11. Limit the environmental impact of digital technology and encourage its use with a view to sustainable development.

12. Encourage proposals and initiatives from the University community for development of tools and services adapted to the community’s needs, and ensure support for changes resulting from digitalisation.
Governance for the digital transformation of the University

As digital technology has implications for all of the University’s activities, appropriate governance is essential, taking into account all stakeholders within the institution. This governance must enable the University to keep track of digital activities and projects within the institution and further afield, and, above all, to develop new knowledge by bringing together people active in digitalisation at the University and by promoting collaboration with external partners.

13. Implement institutional governance that ensures a cross-cutting approach to digitalisation.

14. Ensure that activities and projects for the Digital Strategy are firmly established in the faculties, interfaculty centres, and services.

15. Federate and coordinate major digital activities and projects across the University and promote strategic collaborations with external partners.
Digital technology at UNIGE in numbers

10,000 hours of classes and conferences stored on the audio-visual distribution platform per year

1,800 terabytes of research data – the equivalent of 2,000 years of non-stop music – saved in the academic storage space

600,000 people signed up for UNIGE Massive Open Online Courses (MOOCs)

1,400 WiFi hotspots on the University campus

67,000 publications saved in the University’s open archive, and 930,000 documents downloaded

50 million emails sent to the University community’s email accounts per year

1.3 million accounting entries per year