



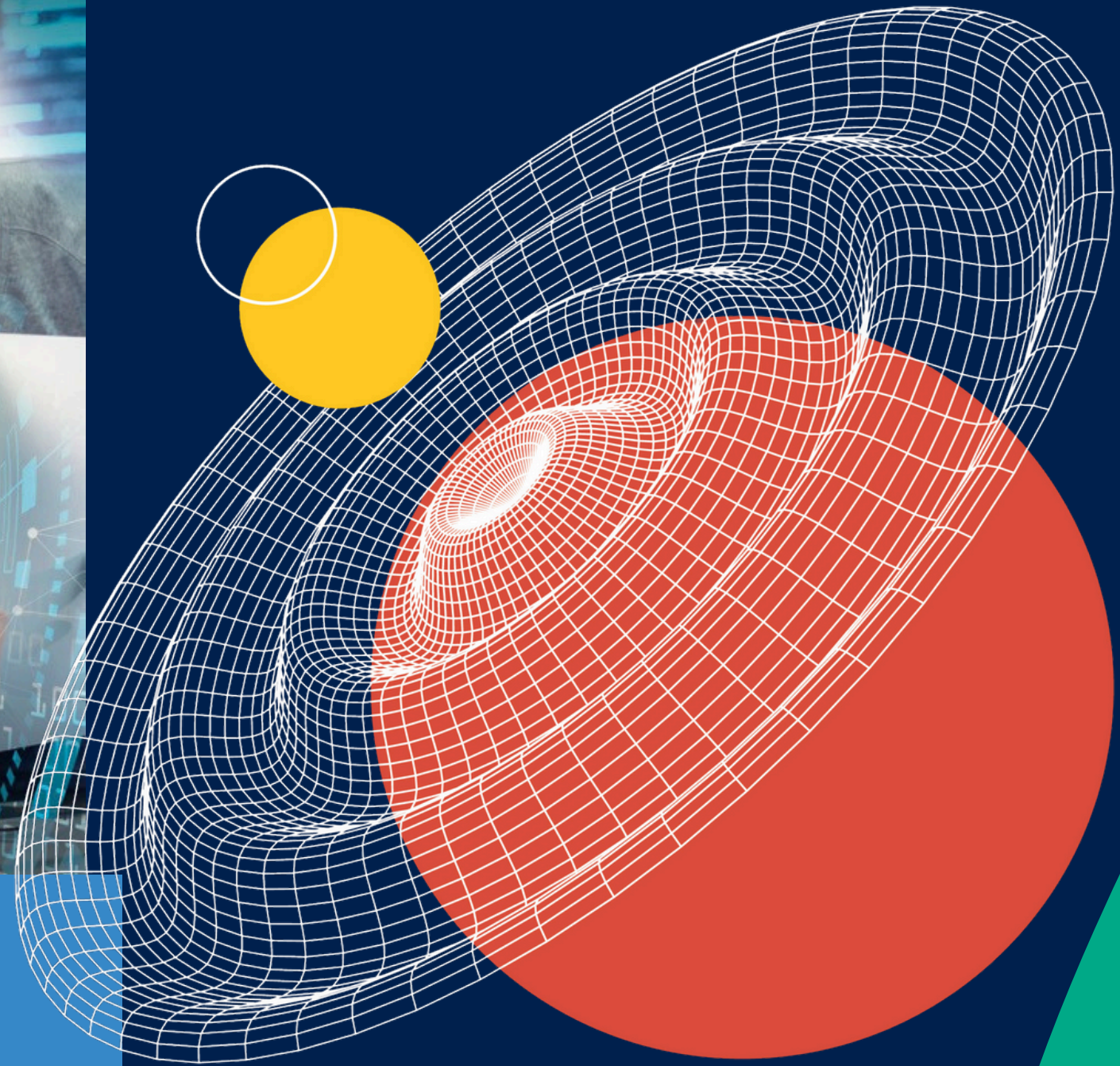
Study in Switzerland



# Educating the NEXT generation of digital leaders



Our graduate  
programs





# MSc in Quantum Software Engineering and Computer Science (QSECS)

## Facts and figures

-  Pre-requisite  
BSc in Physics or related field (with solid coding skills), BSc in Computer Science or related field.
-  Language of instruction  
English
-  Application & Admission dates  
**May 15 visa students / July 15 non-visa students - Rolling admission\***
-  Program start date  
Mid September (classes)
-  Teaching mode  
Hybrid mode (ideal if your visa is not ready on time)
-  Study duration  
Classic program (120 ECTS):  
4 semesters; Fast-track and part-time options available
-  Tuition  
30,000 CHF per year for all students \*\*
-  Location  
Schaffhausen, Switzerland
-  Scholarships  
Full scholarships and partial tuition waivers for students with excellent grades are available
-  Teaching benefits  
Supported by a unique team of world-class scientists, educators, and leaders.

## What we offer

- Deep interdisciplinary technical and quantum expertise
- Small classes of excellent students and approach
- Strong network of interrelated industries
- Modern methods of teaching and contemporary environment

\* deadline could be extended due to individual circumstances and availability  
\*\* Early Bird - 10% tuition fee reduction by Jan 31st

## The future of software is Quantum computing

This program is the first of its kind and seeks to simultaneously prepare students with the software engineering and leadership skills necessary for the quantum future. The dynamic and innovative software systems of the future require a particular kind of individual who possesses in-depth technical knowledge, a holistic approach to solving complex problems, and excellent leadership abilities.

The Master of Science in Quantum Software Engineering and Computer Science (QSECS) at Constructor Institute of Technology provides aspiring students with the unique opportunity to dive into quantum computing, learn software engineering, and understand how to create businesses around these exciting and emergent technologies. It is the ideal program for a physicist with strong coding skills or a computer scientist willing to explore quantum computing.

To prepare students for the role of leaders in research and industry, the QSECS master's program provides a strong software engineering curriculum that covers development and management, and core technical courses in quantum technology. The main areas of research are:

- Software engineering
- Quantum technologies



Constructor Institute of Technology's multi-country setup prepares graduates to play a key role in today's global and multi-ethnic society. While many students join the technology industry in high-profile roles, the QSECS program also serves as an excellent preparation for Ph.D. research in software engineering, quantum technologies, AI, and other advanced topics.

The main topics covered are:

- Advances in software engineering
- Quantum informatics
- Capstone project
- Agile product development & design
- Entrepreneurship and Intrapreneurship

## Program structure

➤ MSc Quantum Software Engineering and Computer Science (QSECS)





## C>IT: Applying knowledge with the Capstone project

The Capstone project allows students to apply the knowledge and expertise in technical, management and leadership skills gained throughout the master's program in a "real-world" project that runs over the course of three semesters. The course teaches students how to effectively design reliable systems that meet the needs of producers and customers, developing solutions to agreed-upon problems with industry partners and laboratories that act as clients. Working closely with instructors and assistants, students are mentored and work in a modern environment supported by open-source IDEs and engineering tools.



Prof. Manuel Oriol

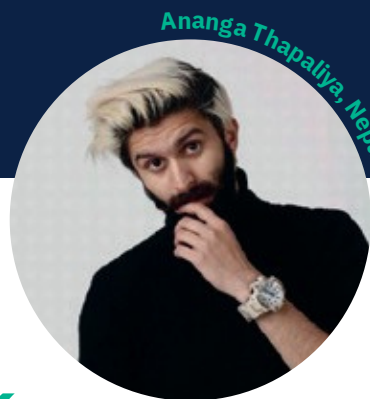
## Career opportunities

Constructor Institute of Technology's master of science programs allow you to graduate with the skills needed to drive innovation in industry, academia, or through your own startup. Through interdisciplinary learning and the development of strong skills in various functional areas, the knowledge gained throughout the master's program will not only guide you to the career of your choice but will allow you to stand out as an exceptional candidate.

With scientifically up-to-date course content, the skills and knowledge required by the industry needs of today and tomorrow are expertly met. The students profit from unique opportunities such as employment through our network, research project participation, and opportunities to access the EU and Swiss job markets.



Studying in Switzerland offers a unique and enriching experience that combines natural beauty, academic excellence, and a high quality of life.

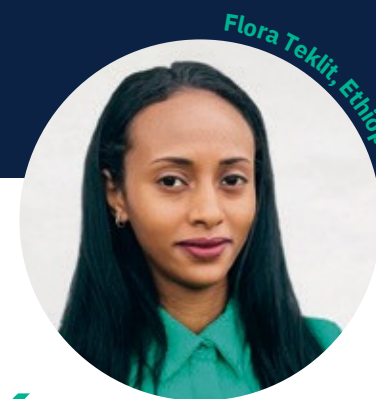


Ananga Thapaliya, Nepal

“

It's a flexible and demanding program that prepares you for the real world, equipping you with both hard and soft skills. Whether you come from a technical or business background there is something for everyone – programming, entrepreneurial, and business courses. It gives you so many opportunities by exposing you to new people and a new culture. If you are proactive, you will make connections with a lot of companies, and be able to handle yourself anywhere.”

“



Flora Teklit, Ethiopia

The way the program is designed is quite innovative. It's a mixture of technology and leadership courses, where you get good exposure to emerging technologies, and is a perfect fit for the current market. It's located in the most beautiful city, Schaffhausen, with supportive faculty members and diverse classmates. You will not regret joining this program!”

“



Yuri Gritsuk, Belarus

Switzerland is a great country to be in because of its high standard of living, the tolerance of people and the number of opportunities available.”

Check our video here



## Future leadership jobs

- **Chief Architect (CA):**  
A crucial and active horizontal role to drive the technology delivery roadmap across the organization.
- **Chief Program Officer (CPO):**  
A new leader who focuses on program value flow and delivery, stakeholder communication, cadence and planning, cross-team collaboration, and continuous improvement.
- **Chief Development Officer (CDO):**  
A strategic leader who shapes an enabling engineering environment – people, structure, agile processes, and tools.
- **Chief Security Officer (CSO):**  
A transformational leader who takes a “bodyguard” approach rather than a “gate-keeper” one.



## Take concrete steps toward the career of your dreams

Use the writing of a master's thesis to further enhance your career prospects or diversify into a different functional area.

- › Research project
- › Industry project
- › Startup design

## Industry partners

At Constructor Institute of Technology, we believe that to prepare the next generation of leaders in science, students must learn not only from renowned scientists but also from business leaders. Traditional technical education does not fully prepare students for a technical career. Our network of industry partners has experienced this first-hand. That is why we provide access points to several large software and IT organizations headquartered in Schaffhausen, allowing a one-of-a-kind relationship with industries.

- Acronis: Leader in cyber protection.
- Acumatica: Leading innovator in cloud ERP.
- Parallels: Leader in cross-platform solutions.
- Plesk: Leading WebOps hosting platform.
- cPanel: Industry-leading hosting platform.
- Runa Capital: Global venture capital firm.



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**Knowledge  
through science**