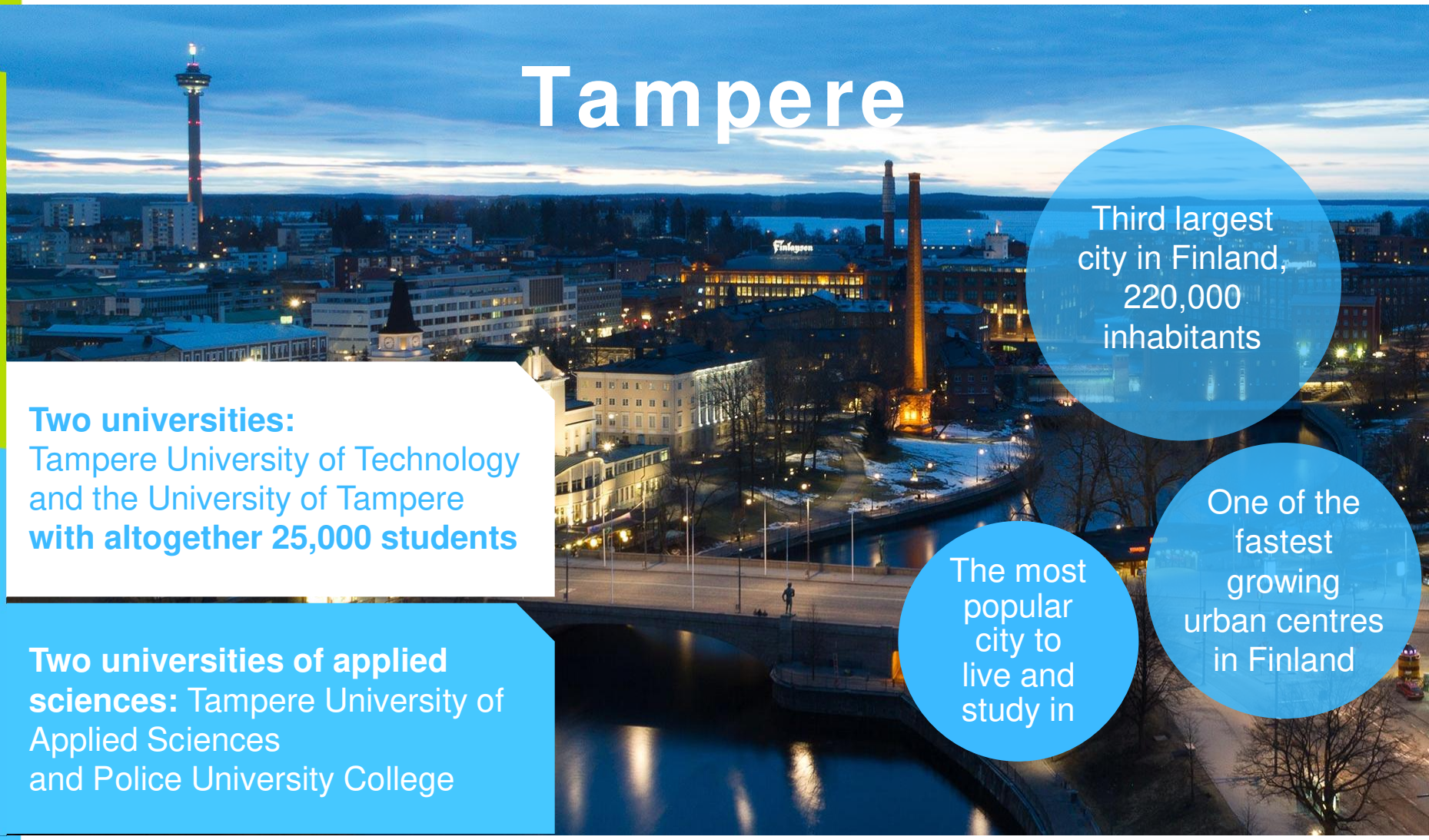
# Tampere University of Technology (TUT)

Technology for the benefit of people and the environment

# Tampere



Third largest city in Finland, 220,000 inhabitants

One of the fastest growing urban centres in Finland

The most popular city to live and study in

**Two universities:**
Tampere University of Technology and the University of Tampere
**with altogether 25,000 students**

**Two universities of applied sciences:** Tampere University of Applied Sciences
and Police University College

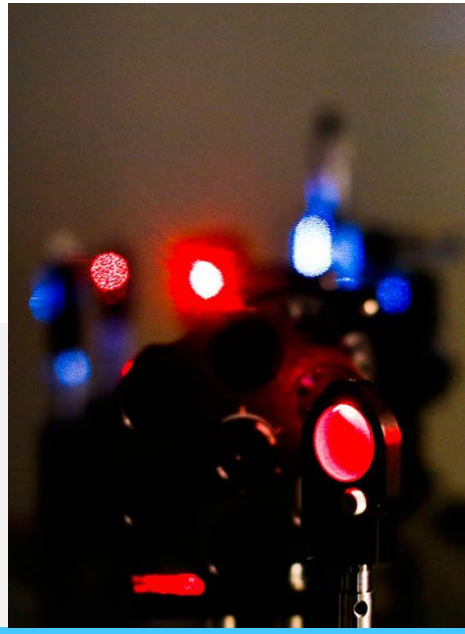
# Tampere University of Technology


Established in 1965

In 2015:
1,700 employees
21% international,
50 nationalities

In 2015:
8,300 students
140 professors
1200 peer reviewed publications

# TUT in rankings



**11th in the world** in the Times Higher Education (THE) **university list for industry collaboration** in 2015. The ranking indicates how much companies are involved in and invest time in the active research area of the institution.

**30th** on the QS 2016 ranking of world's top young universities.

Ranked 319th in the **QS World University Ranking** in 2016. TUT achieved its best positions in the categories for teacher-student relationship and international staff.

TUT has had a positive trend curve in its placements in the key international comparisons. In many rankings, TUT has established itself **among the top 400 universities**.

# Technology for the benefit of people and the environment

Our research combines

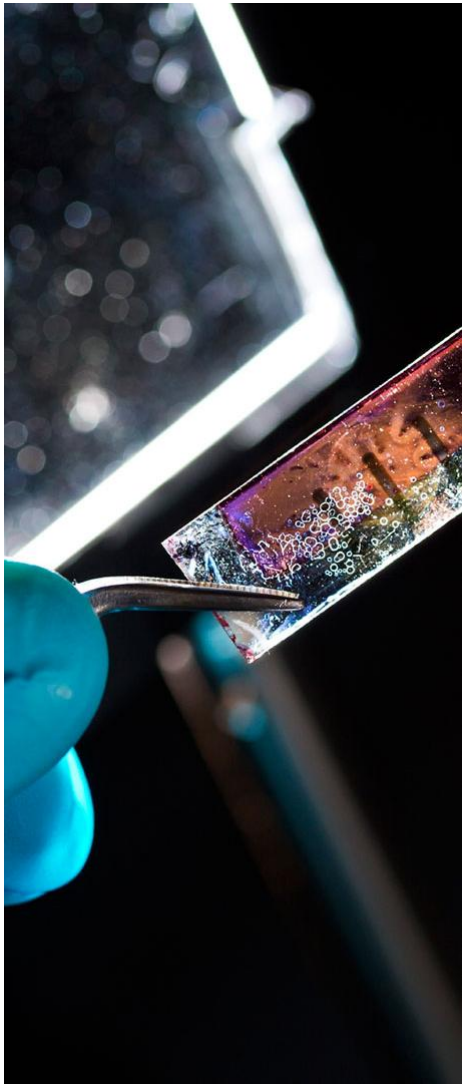
- **natural sciences**
- **technology and**
- **business.**

The research fields represented at the University play a key role in addressing global challenges, such as climate change and demographic ageing.

# Research profile

We develop technologies that reshape the competitive landscape of Finnish industry.

- **Digital operating environment**
- **Energy- and eco-efficiency**
- **Health technology**
- **Light-based technologies**



# Digital operating environment

## – harnessing machine intelligence for the benefit of people

§ We refine exponentially growing volumes of data and study machine-to-machine communication technologies.

§ **Our University enjoys a reputation for research excellence in signal processing.**

§ **We are seeking to become** the world's foremost hub of research in intelligent machines and networked systems.

# Energy- and eco-efficiency

## – circular economy for a greener tomorrow

- We develop new technologies and materials for
  - energy production
  - intelligent energy systems
  - efficient life-cycle performance
  - environmental impact management.

- **Our goal is** to establish an international reputation for research in circular economy.
- **We maintain a world-class research infrastructure.**

# Health technology

## – better quality of life through new technology

- We develop new methods for monitoring and maintaining human health. We place special emphasis on diagnostic and regenerative technologies.

- The key to our success is our close and multidisciplinary collaboration with biologists and clinicians.
- **We are internationally recognized for our expertise in biomodelling.**

# Light-based technologies

## – natural sciences lay the foundation for technological breakthroughs

- We develop new laser sources and methods for the sophisticated control and utilization of the properties of light. Together with new photosensitive materials, they drive the development of unique new applications in multiple areas.

- **Our University is one of the world's leading centres for photonics research.**

# NSF Center for Visual & Decision Informatics

- US National Science Foundation Industry/University Cooperative Research Center
- conducts research on next generation visual and decision support tools to improve the interpretation and analysis of information
- 2012: Drexel & UL – Lafayette
- 2015: Tampere Univ. Tech.: director Prof. Moncef Gabbouj
  - first partner outside US in the NSF Centers

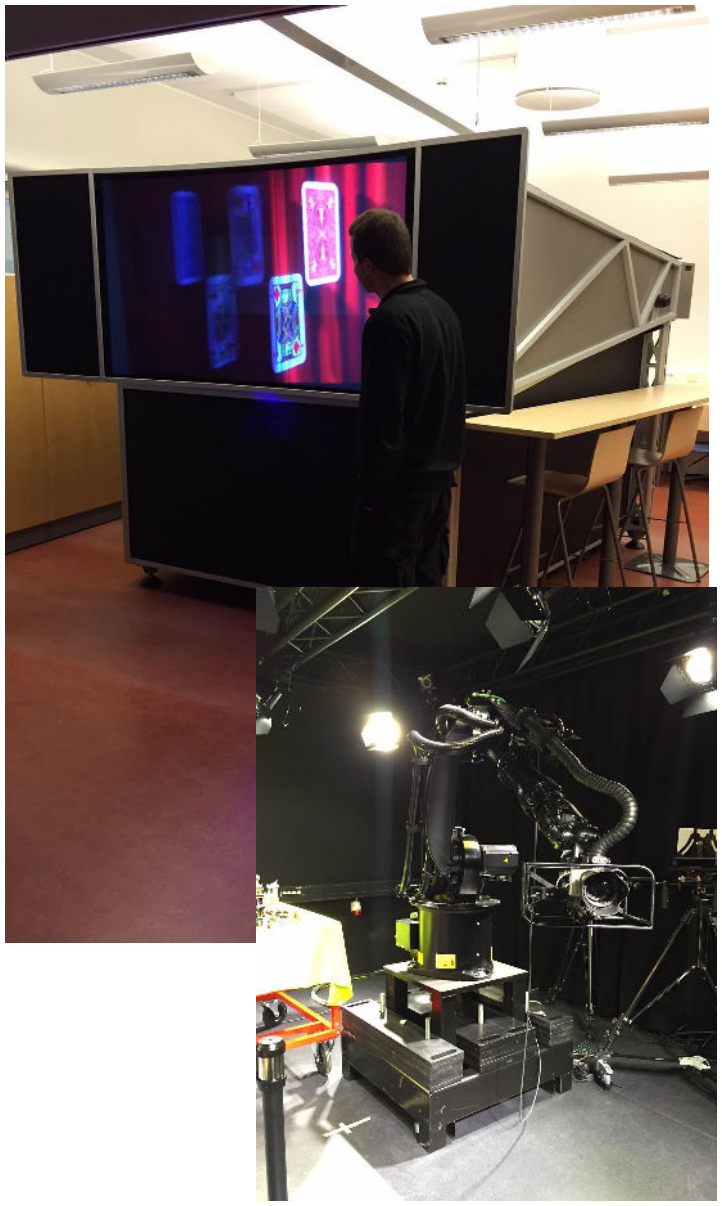


TAMPERE
UNIVERSITY OF
TECHNOLOGY


UNIVERSITY
OF
LOUISIANA
Lafayette

# Center for Immersive Visual Technologies

- National research infrastructure
  - visual content creation
  - representation of visual data
  - advanced displays
  - user experience
- camera systems, range sensors; displays (stereoscopic and multi-view, light-field and holographic prototypes); high-precision high-speed eye trackers and motion trackers, 360 video cameras



- Thank You!

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