



The northernmost University of Technology in Scandinavia
World-class research and education

***Welcome to
Luleå University of
Technology***

***Diego Galar
Professor***

LULEÅ
UNIVERSITY
OF TECHNOLOGY



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Our location



Luleå
*170 km south of
the Arctic circle*

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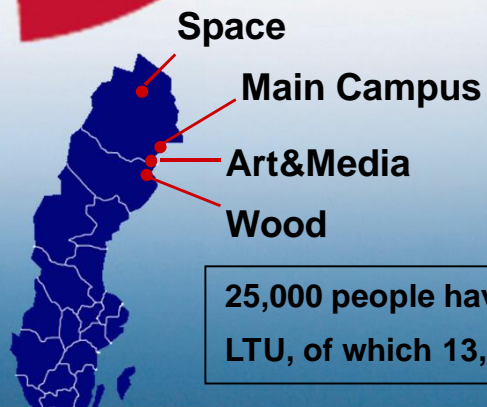
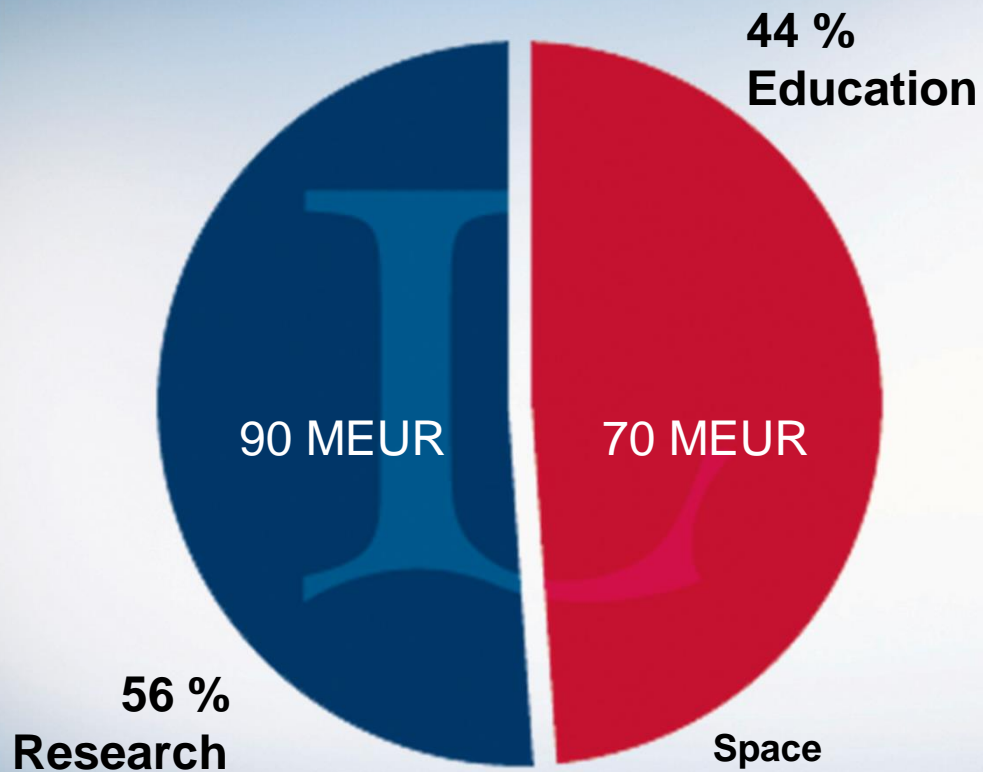
The University – our strengths

- Leading-edge research . in cooperation
- Applied research
- Multidisciplinary
- Strategic research and innovation areas
- Our geographical location - climate
- Warm and welcoming



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Luleå University of Technology



25,000 people have graduated from LTU, of which 13,000 work in the region

Facts about

Luleå University of Technology

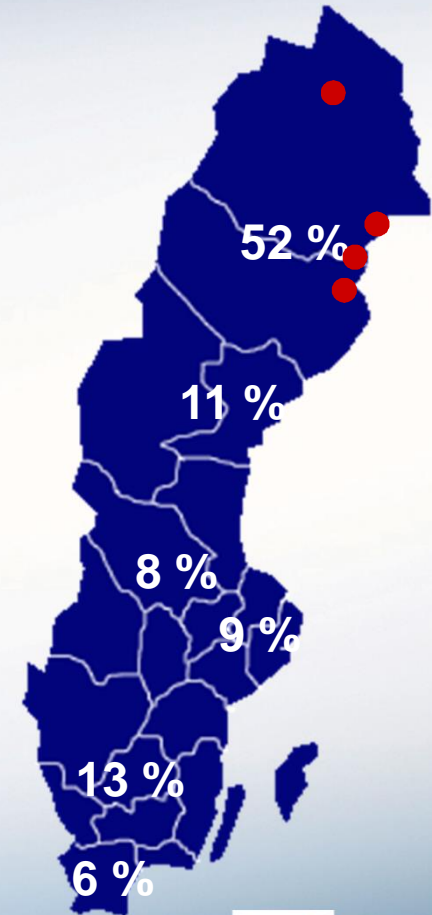
- Founded 1971
- Turnover EUR 160 million
- 16 000 students
- 1,570 employees
 - 180 professors
 - 530 teachers & researchers
 - 580 PhD students
- 70 research subjects in 9 research areas





We offer study programmes in..

- Engineering
- Health science
- Music, media and theatre
- Social and behavioural science
- School of teaching
- Interdisciplinary studies





Strong research and innovation areas at LTU

- ***Attractive built environment***
- ***Effective innovation and organisation***
- ***Future mining***
- ***Renewable energy***
- ***Innovative art and technology***
- ***Sustainable transports***
- ***Intelligent industrial processes***
- ***Enabling ICT***
- ***Smart machines and materials***



Research centres- an excellent way of cooperation

Organizational model for leading edge research through close cooperation between the university and external parties within the private and/or the public sector.

- ***Tied to a department at the university***
- ***Board dominated by external representatives***
- ***External chairman of the board***
- ***Manager employed by the university***
- ***Projects mainly manned by university personnel***
- ***Financing dominated by external funding***
- ***All participant contribute in cash or kind***



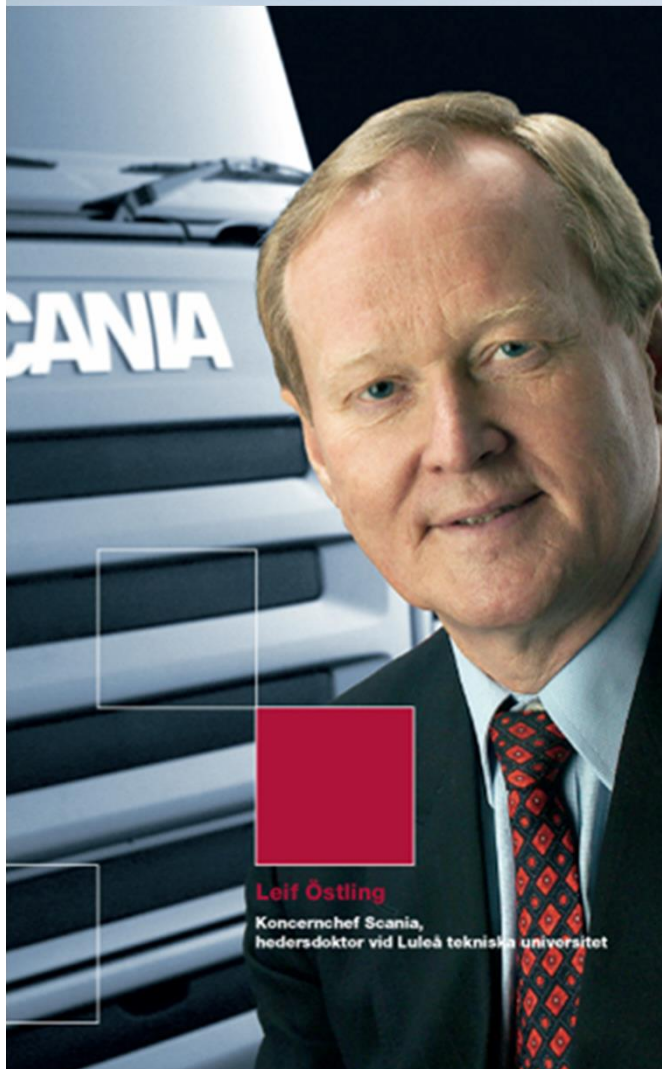
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- Luleå University of Technology's strength is its leading-edge research, with close ties to industry, in important growth areas such as product development and high-performance steel.

Leif Östling, CEO Scania

Examples of leading research

- Mining engineering and metallurgy
- Tribology
- Energy technology and renewable energy
- Sustainable resources
- Process IT
- High-performance steel
- Materials Science



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Division of Operation and Maintenance Engineering





Division Research



Operation & Maintenance

- Railway
- Mining
- Production
- Aviation



Condition Monitoring
Simulation & Vibration measurement

RAMS
eMaintenance



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Centres of Excellence



COMPETENCE CENTRE
**Centre for Maintenance
and Industrial Services**

- ” Vattenfall
- ” LKAB
- ” UTEK
- ” Underhållsföretagen
- ” Boliden
- ” Saab Aerotech
- ” SKF CMS
- ” DynaMate
- ” Gestamp HardTech
- ” Smurfit Kappa Kraftliner

www.cmis.se



Luleå Railway Research Center



- ” Trafikverket
- ” Vossloh
- ” Duroc
- ” Jernbaneverket
- ” LKAB
- ” EuroMaint Rail
- ” ÅF-Rail
- ” WSP
- ” ALSTOM Transport-Paris
- ” Norrteknologi AS, Narvik
- ” Etteplan-Sverige

Strategic research center of TrV for R & D in
maintenance of railway system

www.jvtc.ltu.se

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Research Programs

R&D Program

- RAMS(Reliability, Availability, Maintainability, Safety)
- Condition Monitoring
- Product Support/Service Engineering
- **Production assurance**
- Data to Decision
- Design for/out maintenance
- Remaining Useful Life
- Maintenance optimization
- eMaintenance solutions

Railway



- RAMS
- Condition Monitoring
- Data to Decision
- Design for Maintenance
- Remaining Useful Life

Manufacturing



- RAMS
- Design for/ out Maintenance
- Remaining Useful Life

Mining



- Condition Monitoring
- Production Assurance
- Remaining Useful Life

Aviation



- Data to Decision
- eMaintenance
- Maintenance Program
- Development



Learn more at
www.ltu.se

Thank You!