

Engineering at the University of Luxembourg

University of Luxembourg

Aerospace Research Activities

Edder Rabadan Santana

and

Prof. Stephan Leyer

Research Unit in Engineering Science (RUES)

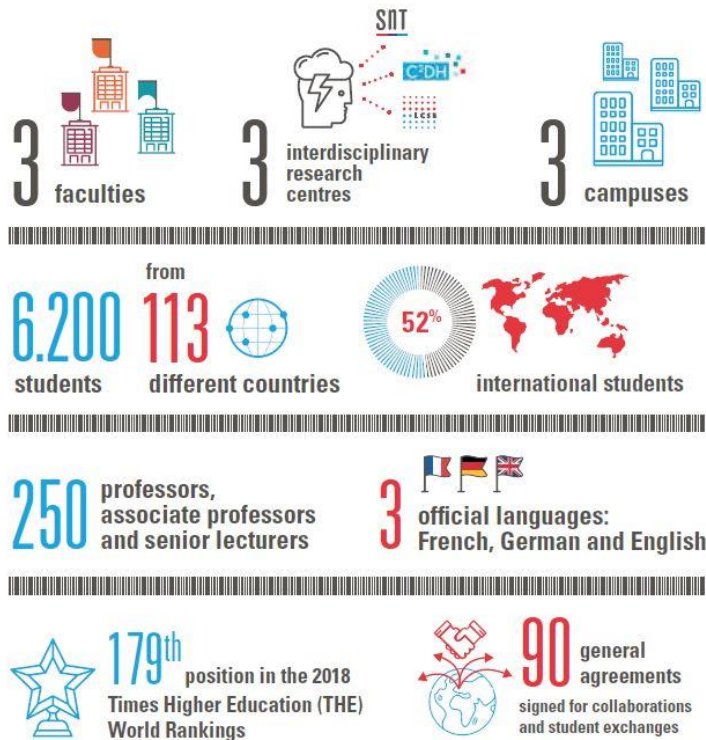
Faculty of Science, Technology
and Communication (FSTC)

University of Luxembourg

Multilingual. Personalized. Connected.



University of Luxembourg – Key Figures



University of Luxembourg – Faculties and Research Centres



Faculty of Science,
Technology
and Communication



Faculty of Law,
Economics
and Finance



Faculty of Language
and Literature, Humanities,
Arts and Education



- **Creation:** 2003 as a merged of 2 former institutions
 - *Institut Supérieur de Technologie (IST), 1916*
 - *Département des Sciences of the Centre Universitaire du Luxembourg*
- **Location:** the FSTC is located on 3 campus sites

KIRCHBERG



- Engineering

LIMPERTSBERG



- Physics and Materials Science

BELVAL



- Computer Science
- Mathematics
- Laboratory for Photovoltaics
- House of Biomedicine
- Life Sciences

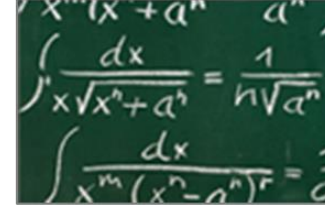
Research Units at the FSTC



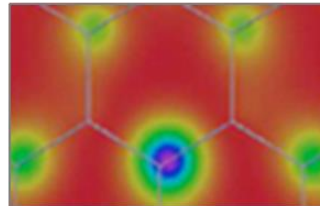
**Computer Science
and Communications
(CSC)**



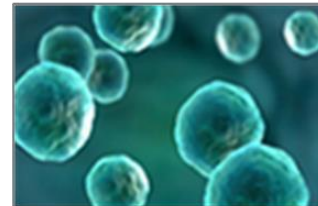
**Engineering
Sciences (RUES)**



**Mathematics
(RMATH)**



**Physics and
Materials Science
(PHYMS)**



**Life Sciences
(LSRU)**

Research activities/fields

- Mechatronics, robotics
- Ground antenna Galileo
- Satellite communications
- Space based observation
- Global Navigation Satellite System (GNSS)
- Geodetic observation: terrestrial, airborne and space-borne gravity measurements

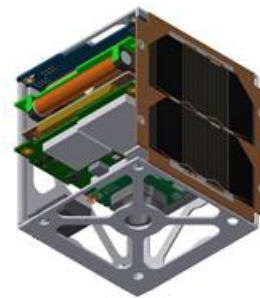


Space Masters Program coming in 2019!

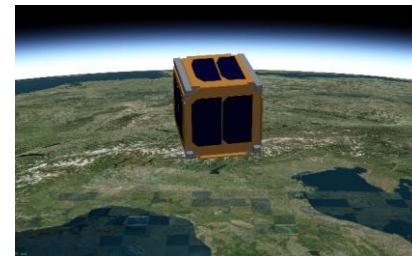


LuxCube Program: first CubeSat project in Luxembourg

- Student-driven project
- LuxCube objectives:
 - Training of engineering students to design, build, test and operate space hardware
 - Develop in-house know-how and increase research activities in Luxembourg
 - Contribute to strength the links between the space industry and UL
- Mission objectives:
 - Educational training
 - Earth observation
 - Technology demonstration: thin-film solar cells
- Status:
 - Kick-off: September 2018
 - Team of 14 students
 - Expected launch: 2020



LuxCube preliminary systems layout



LuxCube flying over central Europe towards Luxembourg



LuxCube kick-off presentation on 20 September, 2018, Jan Thoemel (Gomspace), Agnieszka Lukaszczyk (Planet Lab.), Edder Rabadan, Stephan Leyer and Andrija Djordjevic (Uni Lu).

Engineering at the University of Luxembourg



Villmools Merci