

# DIGITAL SCIENCES – A NEW SUBJECT IN LOWER SECONDARY EDUCATION

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SCRIPT, MENJE, LUXEMBOURG

digital  
sciences

# POLITICAL AND EDUCATIONAL CONTEXT

LUXEMBOURG



# COORDINATION SERVICE OF PEDAGOGICAL AND TECHNOLOGICAL RESEARCH AND INNOVATION

- The SCRIPT (Service de Coordination de la Recherche et de l'Innovation pédagogiques et technologiques) is one of the main drivers of development in the field of education in Luxembourg. It is responsible for implementing the priorities of the education policy and thus contributing to the development of school quality.



## SCRIPT

Service de Coordination de la Recherche  
et de l'Innovation pédagogiques et technologiques



# CONTEXT - LUXEMBOURG

## 21th century skills in 5 C's

- A Luxembourgish pedagogical guide to media literacy in schools, based on DigComp



einfach | digital

Zukunftskompetenze  
fir staark Kanner



 **STEM Alliance**  
inGenious education & industry

 **SCIENTIX**  
The community for science  
education in Europe

 **STEAM IT**  
AN INTERDISCIPLINARY STEM APPROACH

# CONTEXT - LUXEMBOURG

## 21th century skills in 5 C's

**einfach | digital**

Zukunftskompetenze  
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### ■ Primary school



**Cycle 4 (schoolyear 21/22)**

CODING (Competence 3.4)

**Cycle 1 to 3**

Work in progress



### ■ Evaluationform

MEDIA PASSPORT

### ■ Secondary school

"Digital sciences is the school's response to the digitalisation of our lives and our working environment," Claude Meisch, Minister of Education, Childhood and Youth, Luxembourg.

digital  
sciences



# DIGITAL SCIENCES – BUILDING BRIDGES

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# DIGITAL SCIENCES – 6 AREAS



My digital world and me!  
#communication



The world wide web, its web and me!  
#critical thinking



Do you speak IT? My language, their language!  
#big data / internet of things



The game, analog or digital, alone or together, a whole program!  
#programming, computational thinking, collaboration



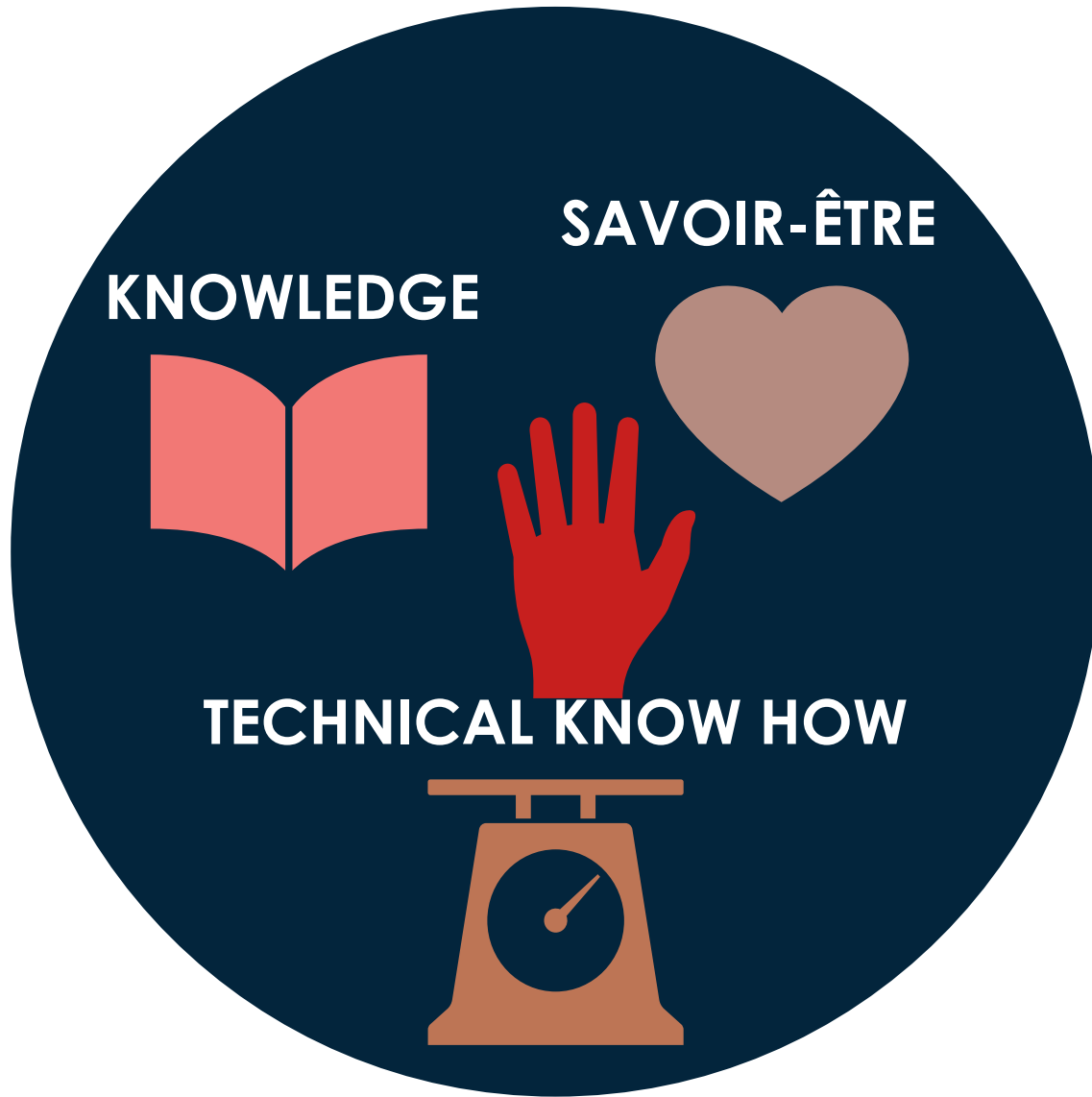
The robot, partner for better or worse?  
#robotics



Is there such a thing as a machine that is smarter than me?  
#Artificial intelligence, creativity

**The new discipline will focus on 6 main themes, addressing the cognitive, technical and human dimensions of digitalization:**





- Balanced
- Student-centered
- Project-based
- Multidisciplinary subject

## DIGITAL SCIENCES





# DIGITAL SCIENCES

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Humanities

- Languages
- Social Sciences
- Arts

Sciences

- Mathematics
- Informatics

Natural Sciences

- Chemistry
- ...





Thank you!