



# EU SPACE

EU space skills

## Curricula and courses available in the EU

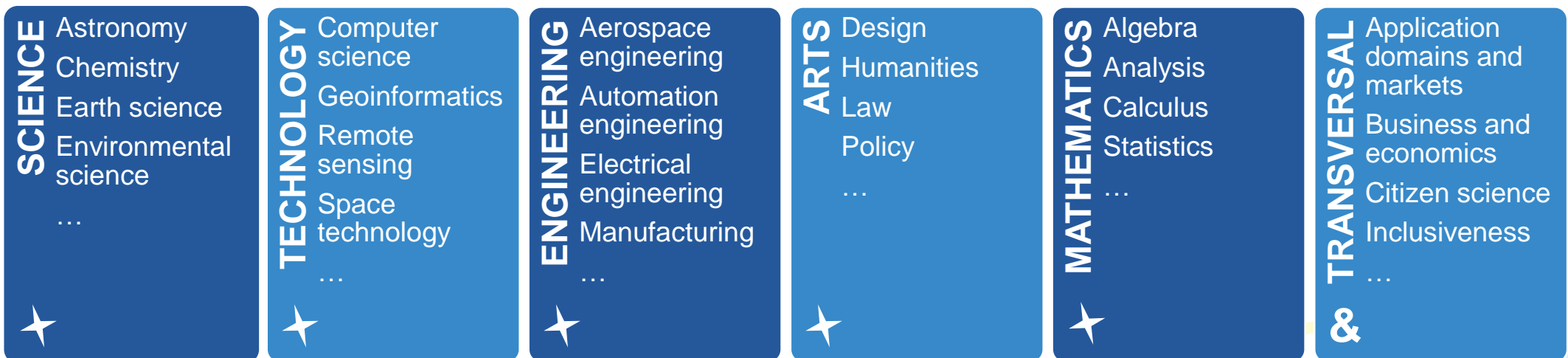
Competitiveness of the EU space sector depends on the availability of high educational standards and skilled professionals. That is why STARS\*EU has developed a space vocabulary to enable comparability and analysed the content of curricula offers throughout the EU. The desk research was complemented by interviews with study programme coordinators.

(Aero)-Space curricula have a tendency to be dominated by Science, Technology and Engineering. Nevertheless, the analysis has shown that students gain different knowledge and specialisations - despite a similarly named study programme. Also, more specialised programmes focusing on e.g., space law & astrophysics were created in the last years.



### Establishing the STEAM&T vocabulary on space-related domains and areas

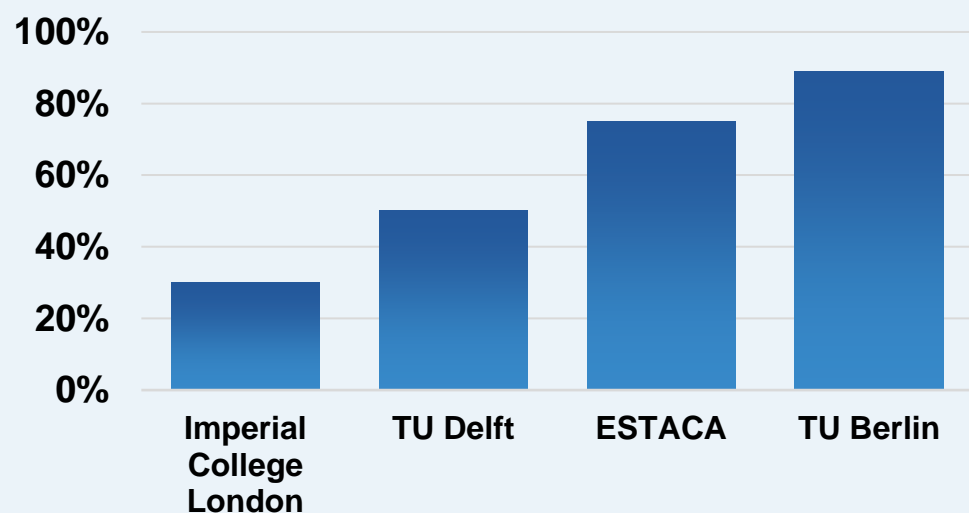
The structuring of the knowledge areas is based on the STEAM&T (Science, Technology, Engineering, Arts, Mathematics & Transversal) categories, and space related knowledge domains on a second level.



### EU Space curricula are:

- **International and regional:** Two-thirds (67%) of all analysed programmes were available in English and therefore also targeted toward international students.
- **Regular adapted to new developments:** Changes are made with care and within limits to avoid new accreditations of the complete programme (1 semester to 5 years)
- **Different levels of cooperation with industry** from placements and internships to master thesis

Share of (aero)space graduates working in the domain of space range from 25% to 85%



Take aways from the analysis of the courses with impact on the job market:



**~15% of students pursue a PhD,** all other students become available for jobs

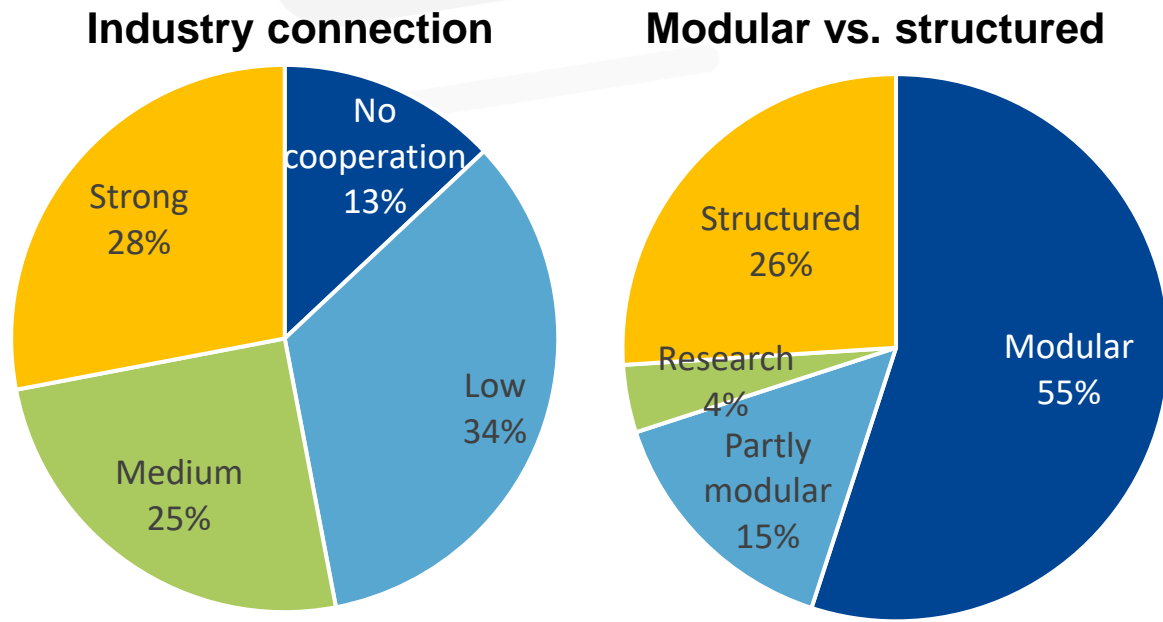


**Mandatory internship** is required by 50% of the programmes



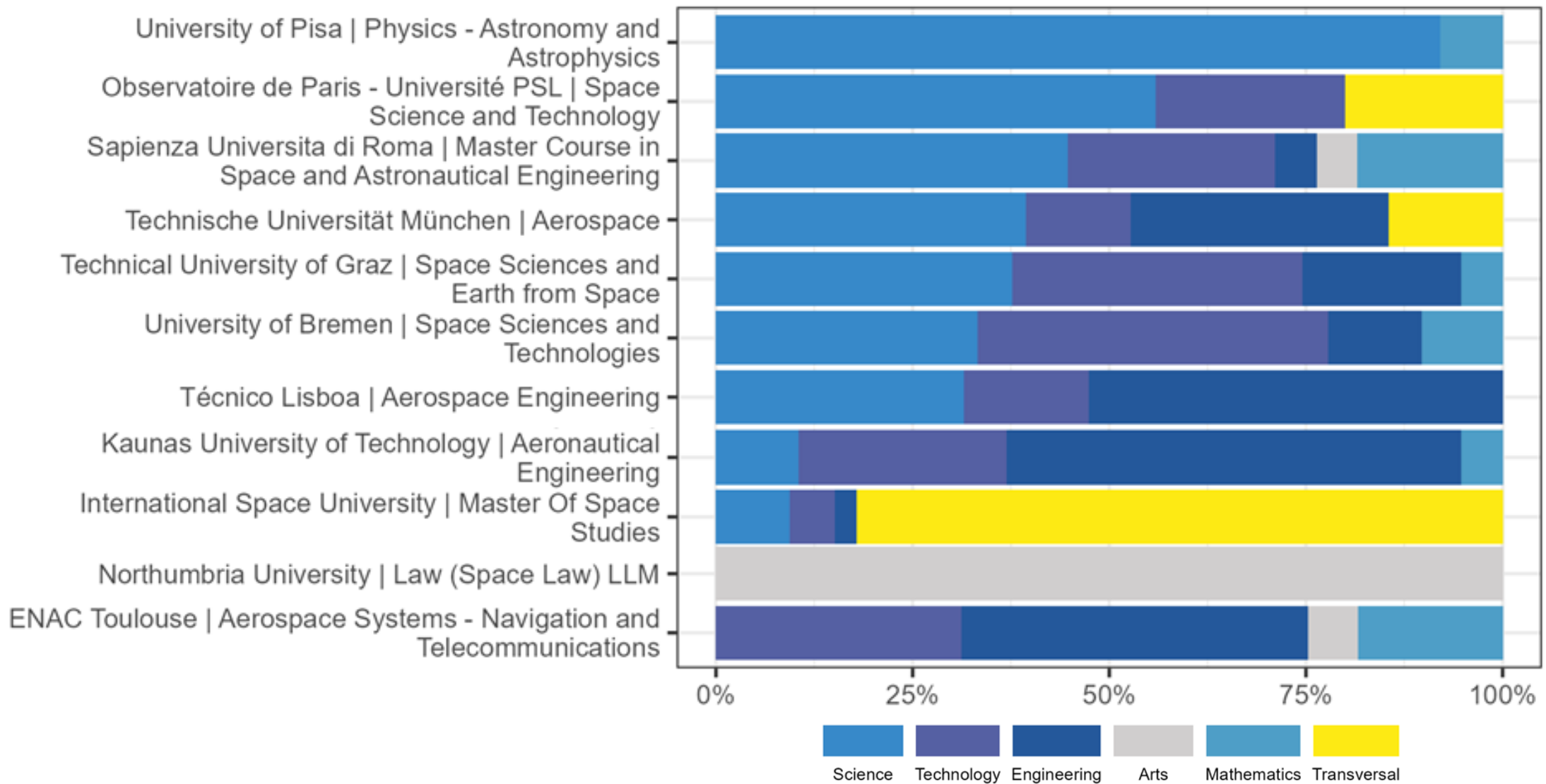
**Strong connection to industry** in aerospace engineering programmes

### Study programmes differ in modularity and link to the industry

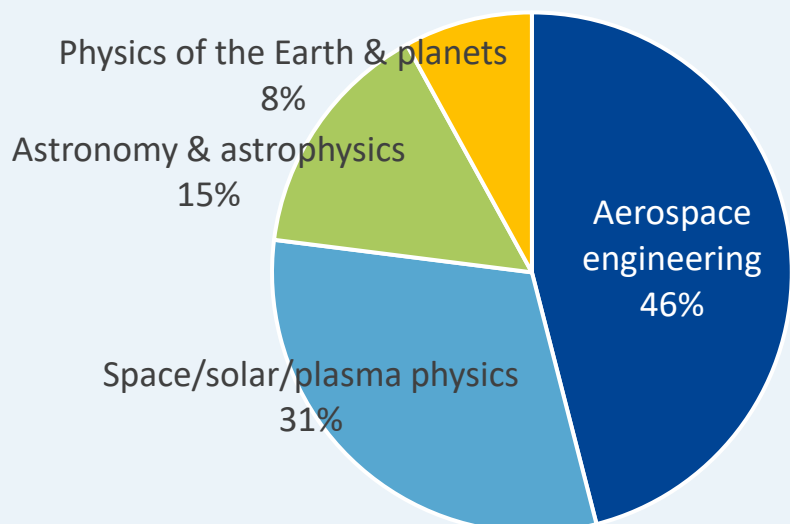


- Half of all programmes (53%) had a medium to strong connection to the industry. Only 13% had no industry partner at all.
- Nearly three thirds (70%) of the programmes have a (partly) modular structure. One quarter (26%) leaves little freedom to the students.

### STEAM&T categorisation of courses of selected university programmes



### General research focus of the study programme [total 64]



From the 64 analysed curricula over 75% focus on **aerospace engineering and space physics**. Master students typically have a **background in aerospace engineering** or related disciplines such as mechanical or electrical engineering.