COMPUTER SCIENCE DEPARTMENT STRATEGY

Version 1.0 of 2022-02-07

Who we are and want to remain:

- We offer challenging, rewarding and well-taught education programs.
- We conduct internationally recognized research.
- Our core competences are computer science, software engineering and data science.
- We value collaboration with other branches of research.
- We seek impact and interest beyond academia, including industry and government.
- We have no internal barriers to collaboration.
- We have an attractive and inclusive work environment.
- We have efficient, rational, and transparent procedures.

Strategic focus areas 2022-2025:

- Unite the department, organizationally and physically.
- Improve PhD processes and PhD scientific environment.
- Acquire more research funding to have more PhD students and postdocs.
- Improve the relation to the rest of ITU, including executive management.
- Maintain our education programs' attractiveness to students and employers.

Unite the department

The coherence of the department is in general quite good, but in recent years it has suffered from (a) the recurring pandemic lockdowns, (b) the strong growth in both faculty, PhD students and postdocs, and (c) the split into two buildings. Soon (a) should be history, and (b) should calm down somewhat. It remains a fact that the split into two buildings is detrimental to collaboration between groups and disciplines, also because the inefficient working conditions in EHK cause employees to prefer to work elsewhere.

The CS department will strive to (1) improve knowledge sharing across all groups and centres, (2) thereby increase the likelihood of new synergies between groups and fields, and (3) improve co-location for everybody.

Improve PhD processes and scientific environment

The CS department will prioritize creating rich computer science content for the courses of the PhD school. By the end of the strategy period, it should be possible for most CS PhD students to graduate earning 80% of ECTS points at the IT University. The graduate offer should attract PhD students from other universities in Denmark to most courses and to CS department researchers as external co-supervisors.

The CS department will aim to streamline ITU internal processes (the interpretation of Danish law) such that it is possible to interview candidates for PhD positions within a month of starting the hiring process. Most CS PhD projects should have the option to start within 3 months of starting the hiring process.

This will require: (1) ensuring more influence (representation) of the department in the PhD Council; (2) promoting development of new PhD courses in CS; (3) protecting PhD students from high teaching and administration requirements; (4) simplifying and accelerating the hiring process for PhD students.

Acquire more research funding

The CS department works actively to strengthen its research activities and its reputation. The number of PhD students should be increased. The department strives both to increase ITU-internal funding and to further support faculty members in attracting external funding, especially from research grants and collaboration with industry. The ITU has limited government base funding yet must maximise its main outputs: education and research. Base funding must be spent wisely to support as much externally funded research as possible.

Improve the relation to the rest of ITU

The CS department will assume more responsibility for the overall functioning and development of the IT University through contributions to a reform of the management structure, simplification of administrative procedures, general efficiency, and implementation of the university strategy.

This will likely require that faculty gets further involved in cross-cutting forums and processes, such as the PhD School, union work, IT infrastructure council, IT security group, and so on, and we should seize opportunities to improve things and help each other internally at the IT University.

Maintain our education programs' attractiveness to students and employers

We aim to maintain and improve the high quality and attractiveness of our education programs by (1) ensuring that management decisions are not in conflict with our goal of having ambitious STEM educations; (2) continued student recruiting efforts focusing on competent, ambitious, and motivated people selected from a large pool of applicants; (3) continued retention efforts that avoid discrepancies between the promises of recruiting materials and the actual form and contents of education programs; and (4) continued updates of the content and structure of education programs based on scientific depth and industrial relevance.

Sources for this department strategy

- ITU workplace assessment December 2020, documented in Rambøll reports.
- Early CS department draft strategy (in department wiki), discussed in ad hoc department board 18 Jan 2021; in faculty meetings 19 Jan and 26 Jan 2021; and in an anonymous survey conducted Jan-Feb 2021.
- CS department retreat September 2021, documented in Teams channels *Retreat follow-up 1-5, n.*
- Ad hoc department board meetings 29 Oct, 29 Nov, 17 Dec 2021, 25 Jan 2022; faculty meetings 23 Nov, 7 Dec, 21 Dec 2021; workshops 9 Dec 2021; drafts and discussions in Teams channel *CS department strategy* Dec 2021 - Jan 2022.