



# ANNUAL REPORT 2022

IT UNIVERSITY OF COPENHAGEN



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# UNIVERSITY DETAILS



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<b>Website</b>	www.itu.dk
<b>CVR-no.</b>	29 05 77 53
<b>Financial Year</b>	1 January – 31 December 2022
<b>Registered office</b>	København

## BOARD OF DIRECTORS

### Carsten Krogh Gomard

Chairman of the Board of Directors, Investor and professional board member, born 1966.  
Netcompany co-founder

### Lars Mathiesen

Deputy Chairman of the Board of Directors, Director, Frost Management, born 1956.  
Member of the Board of Directors of YOUANDX.  
Member of the IT Project Council of the Municipality of Copenhagen, the IT Council of Danish Regions, It-tilsynet in Skat and KL/KOMBITs Digitaliseringsråd.  
Expert Judge at the Court of Appeal of Eastern Denmark.

### Kristine Stenhuus

Executive Vice President, ATP, Udbetaling Danmark, born 1973.

### David Basin

Dr., professor, ETH Zürich, born 1961.

### Christina Hvid

CEO, Molio, born 1970.  
Chairman of the Board of Directors of Fonden Hornbæk Kunstmuseum.  
Board Member of the Danish Management Society (VL).

### Mircea Lungu

Associate Professor, IT University of Copenhagen, born 1980.

### Lou Nørgaard Rudd

Academic Officer, IT University of Copenhagen, born 1979.

### Mohammad El Baker Ammar Rehda

Bachelor of Science Student, IT University of Copenhagen, born 2000.  
Joined the Board of Directors 1 January 2023.

### Stefan Roy Friis Frederiksen

Master of Science Student, IT University of Copenhagen, born 1994.  
Joined the Board of Directors 1 February 2023.

# EXECUTIVE MANAGEMENT, AUDITORS, ATTORNEYS AND BANK



## EXECUTIVE MANAGEMENT

Per Bruun Brockhoff  
Vice Chancellor

Jens Christian Godskesen  
Pro-rector

Georg Dam Steffensen  
University Director

## AUDITOR

Rigsrevisionen  
(The Danish National Audit Office)  
Landgreven 4  
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## INSTITUTIONAL AUDITOR

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## ATTORNEYS

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Advokatfirma I/S  
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1208 København K  
CVR 41071354

## BANK

Danske Bank A/S  
Holmens Kanal 2-12  
1092 København K

# STATEMENT BY THE BOARD OF DIRECTORS AND THE EXECUTIVE MANAGEMENT

Today the Board of Directors and the Executive Management have discussed and approved the Annual Report of the IT University of Copenhagen.

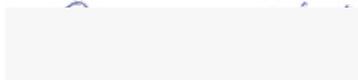
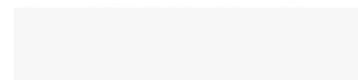
The Annual Report has been prepared in accordance with the Danish State Accounting Act, etc., Executive Order no. 116 of 19 February 2018 on the State's Accounting, etc., the detailed guidelines in the Ministry of Finance's Financial Administrative Guide, Executive Order on the Universities Act (LBK no. 778 of 07/08/2019), Executive Order BEK no. 1957 of 15/10/2021 on Grants and Auditing etc. of Universities and the guidelines for preparing an annual report issued by the Danish Agency for Higher Education and Science.

**It is hereby stated that:**

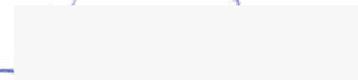
1. The Annual Report gives a true and fair view, i.e. the Annual Report does not contain any material misstatement or omissions, including adequate presentation and reporting on the Strategic Framework Contract.
2. The transactions comprised by the financial reporting are consistent with appropriations granted legislation and other regulations as well as agreements entered into and general practice.
3. Business procedures have been established that ensure financially appropriate administration of the funds and the operation of the institutions comprised by the Annual Report.

Copenhagen, 29 March 2023

## THE EXECUTIVE MANAGEMENT OF THE IT UNIVERSITY OF COPENHAGEN

 Per Bruun Brockhoff Vice Chancellor	 Jens Christian Godskesen Pro-rector	 Georg Dam Steffensen University Director
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## THE BOARD OF DIRECTORS OF THE IT UNIVERSITY OF COPENHAGEN

 Carsten Krogh Gomard Chairman, External member	 Lars Mathiesen Deputy Chairman, External member	 Kristine Stenhuus External member
 David Basin External member	 Christina Hvid External member	 Mircea Lungu Staff-elected member
 Lou Nørgaard Rudd Staff-elected member	 Mohammad El Baker Ammar Rehda Student-elected member	 Stefan Røy Friis Frederiksen Student-elected member

# INDEPENDENT AUDITORS' REPORT

## TO THE BOARD OF DIRECTORS OF THE IT UNIVERSITY OF COPENHAGEN

### Opinion

We have audited the financial statements of the IT University of Copenhagen for the financial year 1 January - 31 December 2022, which comprise accounting policies, income statement, balance sheet, cash flow statement and notes, including special statements.

The financial statements are prepared in accordance with the Statutory Order no. 116 of 19 February 2018 on State Accounting etc., Statutory Order no. 778 of 8 August 2019 on Universities, Statutory Order no. 1957 of 15 October 2021 on the Grants and Auditing, etc., of universities as well as the Danish Agency for Higher Education and Science's guidelines on the preparation of annual reports (the Danish State's accounting rules).

In our opinion, the financial statements are, in all material respects, correct, i.e. prepared in accordance with the Danish State's accounting rules.

### Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs) and additional requirements applicable in Denmark as well as public auditing standards as the audit was performed on the basis of the provisions of the Danish State's accounting rules. Our responsibilities under those standards and requirements are further

described in the "Auditor's responsibilities for the audit of the financial statements" section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Independence

We are independent of the university in accordance with the International Ethics Standards Board for Accountants' International Code of Ethics for Professional Accountants (IESBA Code) and the additional ethical requirements applicable in Denmark, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the IESBA Code.

### Management's responsibilities for the financial statements

Management is responsible for the preparation of financial statements that are, in all material respects, correct, i.e. prepared in accordance with the Danish State's accounting rules. Management is also responsible for such internal control that Management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, Management is responsible for assessing the University's ability to continue as a going

concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting in preparing the financial statements unless Management either intends to liquidate the University or to cease operations, or has no realistic alternative but to do so.

### Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance as to whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and additional requirements applicable in Denmark as well as public auditing standards, cf. the Danish State's accounting rules, will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit conducted in accordance with ISAs and additional requirements applicable in Denmark as well as public

auditing standards, cf. the Danish State's accounting rules, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by Management.

- Conclude on the appropriateness of Management's use of the going concern basis of accounting in preparing the financial statements and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the University's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the University to cease to continue as a going concern.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

#### Statement on the Management's review

Management is responsible for the Management's review (pages 9 - 23), Key Financial Figures and Ratios (pages 39 - 41) and reporting on the Strategic Framework Contract (pages 43 - 48), in the following referred to as the other reports.

Our opinion on the financial statements does not cover the other reports, and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other reports and, in doing so, consider whether the other reports are materially inconsistent with the financial statements or our knowledge obtained during the audit, or otherwise appears to be materially misstated.

Moreover, it is our responsibility to consider whether the other reports provide the information required under the Danish State's accounting rules.

Based on the work we have performed, we conclude that the other reports are in accordance with the financial statements and have been prepared in accordance with the requirements of the Danish State's accounting rules. We did not identify any material misstatement of the Management's review.

#### Report on other legal and regulatory requirements

##### Statement on compliance audit and performance audit

Management is responsible for ensuring that the transactions included in the financial reporting comply with appropriations granted, legislation and other regulations and with agreements entered into and usual practice and that due financial consideration has been taken of the management of the funds and operations of the activities covered by the financial statements. Consequently, Management is responsible for establishing systems and procedures supporting economy, productivity and efficiency.

In performing our audit of the financial statements, it is our responsibility to perform compliance audit and performance audit of selected items in accordance with public auditing standards. When conducting a compliance audit, we test the selected items to obtain reasonable assurance as to whether

the transactions covered by the financial reporting comply with the relevant provisions of appropriations, legislation and other regulations as well as agreements entered into and usual practice. When conducting a performance audit, we perform assessments to obtain reasonable assurance as to whether the tested systems, processes or transactions support due financial considerations in relation to the management of the funds and operations of the entities covered by the financial statements.

We must report on any grounds for significant critical comments, should we find such when performing our work.

We have no significant critical comments to report in this connection.

Copenhagen, 29 March 2023  
EY Godkendt Revisionspartnerselskab  
CVR no. 30 70 02 28

Morten Weinreich Larsen

State Authorised Public Accountant  
mne42791



# OPERATING REVIEW



# IT UNIVERSITY 2022

The IT University of Copenhagen (hereafter called IT University) has had another amazing year delivering strong results, launching new initiatives and presenting a satisfactory financial result.

In the educational field, the IT University cemented its position as one of the most attractive study environments in Denmark. Again in 2022, the university experienced a massive interest in the BSc and MSc study programmes. Especially the growth in the number of female applicants helped reach the high number of applicants. The number of admitted female BSc students reached a record high level of 36 per cent. In comparison, only 25 per cent female students were admitted in 2015, the year the effort to increase the diversity of the student population was initiated.

In 2022, the IT University unfortunately had to reject more than 50 per cent of the applicants. Therefore, the effort to secure increased basic funding continues, because this will allow the IT University to educate even more IT specialists to the benefit of the Danish society.

In 2022, it was also decided that the IT University was exempted from the requirement to reduce the educational activities as part of the education relocation reform that the Danish Parliament passed the same year.

The IT University has also strengthened the research profile. Among others, this has been achieved through establishing three new

research centres: Danish Institute for IT Program Management, Center for Digital Play, and The Center for Climate IT. The level of received external funding remained on the same record high level as the past two years. In 2022, the IT University achieved to have a total of four European excellence grants – ERC grants – distributed across all three research departments.

On an organisational level, the IT University was also strengthened when the Board of Directors appointed Professor Per Bruun Brockhoff as new Vice Chancellor. Per Bruun Brockhoff comes from a position as Head of DTU Compute. He brings with him strong research competencies and leadership experience.

The financial result of 2022 was DKK 10.1 million lower than budgeted. The Executive Management finds the result satisfactory in the light of an unstable global financial market. The turmoil on the global stock market has resulted in an acceptable loss of 6.6 per cent in securities corresponding to a loss of DKK 7.8 million, which makes the IT University's financials DKK 7.0 million lower than budgeted.

The Executive Management would like to thank all employees and students at the IT University and not least our indispensable partners for their great engagement and effort to strengthen the IT University in 2022.



# PRESENTATION

The IT University of Copenhagen is an independent university under the Ministry of Higher Education and Science.

## MISSION

*The mission of the IT University is to provide internationally leading teaching and research, which enable Denmark to become exceptionally good at creating value with IT.*

The IT University will create this value mainly via research and education.

## VISION

*We create and share knowledge that is profound and leads to ground-breaking information technology and services for the benefit of humanity.*

# STRATEGY

The main focus of the strategy for the years 2022-2025 is the ambition – given the necessary political and financial support – to double activities by 2030 in education of highly educated IT specialists and excellent research that are in demand by the labor market and are of societal importance.

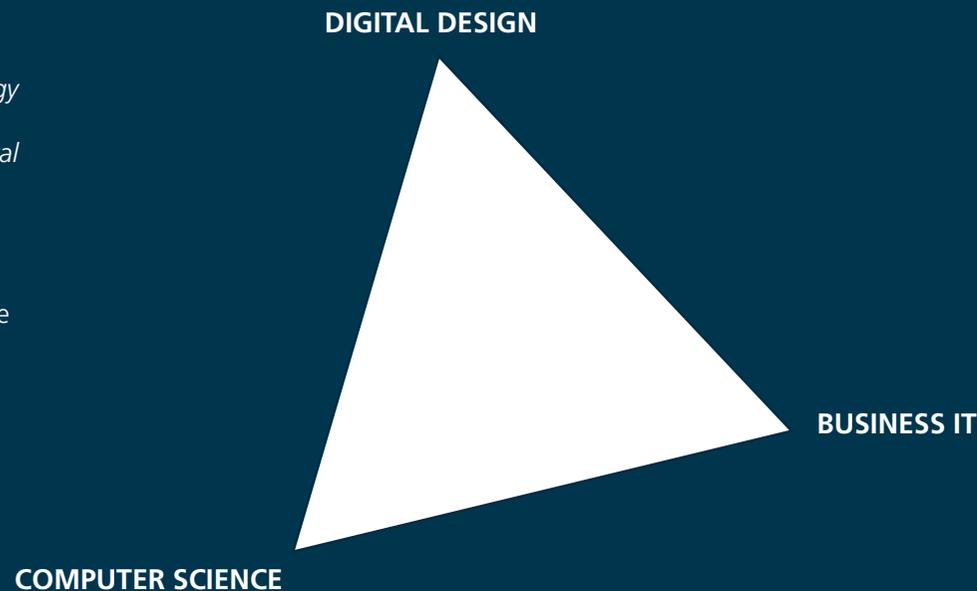
**In concrete terms the IT University works with the following three main areas of action:**

1. Growth in the number of highly educated IT professionals, including more female IT specialists, and activities within lifelong learning
2. Delivering research and educational activities that contribute to shaping a sustainable digital future
3. Creating an inclusive environment where all students and employees can thrive and excel.

## Profile of the IT University

*The essence of information technology is the creation, sharing and handling of mental concepts by means of digital technology.*

Thus, it is the mental concepts of humans, which constitute the core of information technology. Some of these concepts are based in natural sciences and technology, some in the arts and some in the use of IT by the business community. This diversity of specialisation is expressed in the triangle of the IT University:



This view is decisive for the ability of the IT University to attract a large number of researchers and students to this area. As a university dedicated to IT, the IT University has the special advantage of being able to gather these very different approaches to IT in one organisation with common targets and strategy. The vision adds that the three different perspectives all must contribute to create and share knowledge that is profound and leads to ground-breaking information technology and services for the benefit of humanity.

The IT University has three departments corresponding to the three corners of the triangle: The Business IT Department, the Computer Science Department and the Digital Design Department.

### Work on the quality and relevance of the study programmes

In 2022, the process towards a new institutional accreditation continued, which the IT University began in autumn 2021. The work on quality assurance was documented based on criteria, such as the systematic and involving approach to quality work, and the study programmes being linked to relevant research environments.

In the autumn of 2022, the IT University achieved a positive institutional accreditation which is valid until September 2028. Thus, the significant and important work of systematising and continuously developing and adjusting the IT University's quality work continues to be recognised. The accreditation process has also provided input for minor adjustments to the IT University's quality policy.

The work on relevance of the study programmes also took place in 2022 in close collaboration with the university's five Programme-Specific Employers' Panels and the overlying Executive-Level Employers' Panel. Every panel has met twice in 2022 and have submitted reports to the university with assessments and recommendations.

In 2022, work continued for an inclusive and attractive study environment where the well-being of students and lecturers is seen as crucial for educational quality and professional outcome. The focus is on a safe and inclusive study start through a digital study start course and a number of other activities handled by the IT University's Study and Career Guidance throughout the first year of study.



## WORK OF THE BOARD OF DIRECTORS

The composition of the Board of Directors until the end of June 2022 was as follows: Carsten Krogh Gomard (Chairman), Lars Mathiesen (Deputy Chairman), Kristine Stenhuus, David Basin, Christina Hvid, Lou Nørgaard Rudd, Mircea Lungu, Dagmar Bondo Kristiansen and Mikala Sofie Skoglund Thomsen.

Mikala Sofie Skoglund Thomsen resigned from the Board of Directors at the end of June 2022 and is per 1 July 2022 replaced by alternate Stefan Roy Friis Frederiksen until Mohammad El Baker Ammar Rehda took over on 1 January 2023. Dagmar Bondo Kristiansen resigned from the Board of Directors at the end of

January 2023 and was replaced by alternate Stefan Roy Friis Frederiksen per 1 February 2023.

Based on the IT University's overall strategy for 2022-2025, the Board of Directors has had in 2022 a special focus on the three overall strategic targets: "Educate more IT professionals and IT researchers", "Engage in research and education activities that help shape a sustainable digital future" and "Enable all students and staff to thrive and excel together".

When the Government, together with the parties to the agreement, in 2022 agreed on

how the relocation agreement from 2021 regarding the relocation of study places from the major cities should be implemented in practice until 2030, the IT University was the only university in Denmark exempted from the agreement. This means that the IT University is not required to relocate or reduce its study places in Copenhagen.

It remains the IT University's ambition to work towards admitting and educating more IT specialists and IT researchers who are in demand by the labor market and can contribute to shaping a sustainable digital future.

The Board of Directors of the IT University has continued to focus on the gender balance among students, and in 2022 targets have been set for the number of female students admitted on the BSc study programmes. The well-being of students and staff also has the Board of Directors' attention.

Finally, the Board of Directors has continued to discuss the IT University's work with information security, including the general threat level for the sector.



# STRATEGIC FRAMEWORK CONTRACT

In 2022, the IT University entered a new Strategic Framework Contract with the Ministry of Higher Education and Science. In the contract period 2022-2025, the strategic targets for the IT University are:

1. Relevant study programmes with low unemployment and gender diversity
2. Strengthened study well-being and high learning outcome
3. Strengthened IT research that reflects the needs of the society
4. Strengthen the IT University's PhD School and focus on contributing innovation and value for society
5. Lifelong learning that contributes to a strengthened competitiveness.

For each of the five strategic targets, the IT University has initiated initiatives that support the target fulfilment of the Strategic Framework Contract and will report on the progress of the five strategic targets through dialogue meetings with the ministry and by the annual Status Statement. The conclusions from the 2022 Status Statement are reproduced in the chapter "[The Strategic Framework Contract for 2022-2025](#)".



# FINANCIAL RESULTS FOR THE YEAR

The IT University's total income of DKK 393.0 million was DKK 2.7 million (0.7 per cent) lower than the budget. This was mainly due to the fact that the IT University's income from ITU Professional Courses was lower than budgeted.

The IT University's total costs of DKK 405.8 million exceeded the budget by DKK 0.4 million (0.1 per cent). Personnel costs exceeded the budget by DKK 3.5 million

(1.3 per cent), which was due, among others, to the fact that the departments have utilised the framework for hiring academic staff and co-financing project employments to a greater extent than in previous years. Other ordinary operating costs were DKK 3.1 million lower than budgeted (2.3 per cent) despite high energy prices and rising inflation. The effects of this were offset by reversed provisions relating to COVID-19 and unused reserves in the budget.

The IT University's financials were DKK 7.0 million lower than budgeted, which was mainly due to a negative net return on the IT University's securities portfolio of DKK 7.8 million.

The IT University considers the year's deficit of DKK 18.9 million, which is DKK 10.1 million higher than budgeted, as acceptable considering societal developments in 2022.

## Cash holdings

The IT University's cash holdings have decreased with DKK 17.1 million to DKK 47.6 million which is primarily due to the negative result of the year. The IT University considers the cash holdings to be sufficient to carry out the planned activities in 2023.

**Table 1: Financial result of the year (DKK M)**

	Realised 2022	Budget 2022	Budget 2023
Income	393.0	395.7	417.1
Government grants and tuition fees	310.5	310.3	322.7
External research funding	71.4	70.8	77.6
Other income	11.1	14.5	16.8
Costs	405.8	405.4	421.1
Personnel costs	274.8	271.2	283.2
Other ordinary operating costs and depreciation	131.1	134.1	137.9
Profit before financial income and costs	-12.8	-9.7	-4.0
Financial income and costs	-6.1	0.9	0.9
Profit	-18.9	-8.8	-3.1

# ACADEMIC PERFORMANCE FOR THE YEAR

## RESEARCH

Research at the IT University has also in 2022 had a great impact. This has been achieved, among others, through active participation in the public debate, dissemination efforts in the media and at conferences, as well as through the official opening of two new research centres. It is also extremely positive that the researchers at the IT University are maintaining last year's record high level for attracting external research funding. In addition, all of the IT University's research publications are registered as Open Access publications for the fourth year in a row.

Below is a short status on research at the IT University in 2022.

### Awards and research dissemination

Several researchers have received awards and acknowledgements for their research in 2022.

Professor Roman Beck received AIS's Impact Award (Association for Information Systems) for developing, together with Danish Standards, a new international governance standard for blockchain and DLT, which is the first of its kind and has been adopted and published by the leading organisation ISO (International Organization for Standardization). The standard includes guidelines for organisations on how to implement governance in blockchain and DLT systems. You will also find answers to questions about how governance key concepts such as decision-making rights, responsibility and incentive are effectively handled within the framework of the technology.

PhD student at the Center for Digital Play at the IT University, Leon Y. Xiao, was named a "Game Changer" by the recognised game industry media GamesIndustry.biz, for his research on "loot boxes". A loot box is basically a business model designed as a virtual lottery in a computer game where users pay to participate in the hope of winning a prize that can optimise the gaming experience. Leon Y. Xiao's research focuses on the ethical and legal issues posed by loot box technology.

The research group NETworks, Data, and Society (NERDS), which works at the intersection of networks, data science and social systems, won the award Research Environment of the Year 2022. The award, which was given for the first time, was instituted by Danish Young Academy – an independent platform under The Royal Danish Academy of Sciences and Letters – aimed at young researchers within all academic disciplines. The NERDS research group at the IT University was founded three years ago and has 14 members, including lecturers, PhD students, postdocs and interns. Since the group's founding, NERDS members have published 46 research papers in respected journals such as Nature and PNAS, and the subject material covers everything from bicycle infrastructure to gender equality and multilayer networks.

In 2022, Claus Brabrand and Miguel Angel Sicart were appointed professors at the IT University. Claus Brabrand, who is also Head of the Center for Computing Education

Research (CCER), researches what digital competences are and how best to learn and teach them. Miguel Angel Sicart, who is also Head of the Center for Digital Play, researches computer games, "gamification" and other forms of games and play.

In May 2022, the IT University held the conference "Ethics as a Guide in the AI Landscape" in collaboration with the National Center for Ethics. At the conference, there was presentations and debates on how core principles such as responsibility, transparency, privacy, dignity and equality can be ensured in connection with technology development, as well as how ethics can concretely help to set a direction. The IT University had a presentation on data ethics as a foundation for digital welfare and participated in the final panel debate.

On 25 - 26 October 2022, the Digital Tech Summit was held at Bella Center Copenhagen, the largest research and technology conference in the Nordic region, where the IT University was a co-organiser. Over the two days, 4,000 visitors could experience more than 90 sessions where 300 speakers from research and industry presented the latest tech trends. The IT University was represented at 13 of the sessions, and the university's researchers gave presentations on topics such as "NLP and Fake News", "GovTech in a Danish Context", "Voice, AI and Robots" and "Cryptographic protocols for blockchain platforms". The Digital Tech Summit had a dedicated Startup Community with its own stages and 600

participants from startups. 80 companies and organisations had a stand at the conference.

On 9 - 14 December 2022, "The International Conference on Information Systems" (ICIS) 2022 was held with the theme "Digitization for the Next Generation" in the Bella Center Copenhagen. ICIS is the most prestigious conference where international academics and research-oriented practitioners in information systems gather to share and discuss the latest research within the field. Professor Roman Beck was Co-Chair and a driving force in the planning and execution of the conference, where European Commission Executive Vice-President, Margrethe Vestager, also received the AIS (Association for Information System) Leadership Excellence Award 2022.

Denmark has an indicator for Open Access publication of research results. When releasing the indicators in 2022, the IT University was again a clear number one among all Danish universities. For the fourth year in a row, all publications of the IT University were registered as Open Access publications, while the second best Danish university had registered 74 per cent of its publications as Open Access publications and the national average was 63 per cent.

### External research funding

In 2022, the IT University received external research funding for a total of DKK 92.6 million, which is close to last year's record level. Listed below are some of these externally funded projects that were realised in 2022 or will be realised in 2023, as well as the allocated grants for each of them.

Associate Professor Radu-Cristian Curticapean received approximately DKK 11 million from the European Research Council's Starting Grant for the project "Counting (with) homomorphisms". The purpose of the project is to investigate resource requirements – time and memory allocation – for calculation tasks that deal with the counting of certain combinatorial objects. Counting problems are used in network analysis, machine learning, probabilistic databases and statistical physics, among others. They are connected to larger issues within complexity theory and are often a prerequisite for the algorithmic solution of challenges that are not necessarily about counting.

Professor Carsten Schürmann is leading the project "Trust through Software Independence and Program Verification", which with a grant of DKK 3.6 million from DIREC (Digital Research Centre Denmark) together with the Greenlandic authorities will investigate how an internet election in Greenland will affect voters' confidence in the electoral process. The target is to give the Greenlandic decision-makers good prerequisites for deciding whether the Greenlandic voters should have the opportunity to submit their vote online.

Professor Steffen Dalsgaard received approximately DKK 15 million from the European Research Council's Consolidator Grant for the research project "Decoupling IT? A Global Comparative Ethnography of the Role of IT in the Mitigation of the Climate Crisis". The grant allows for the ongoing research on climate and IT to take a global perspective, focusing on five countries – Kenya, Bangladesh, Brazil, China, and Iceland – where IT solutions have been used to solve location-specific climate issues. In addition to Steffen Dalsgaard, Associate Professor Cancan Wang, Associate Professor James Maguire and Assistant Professor Priscila Santos Da Costa and Postdoc Hasib Ahsan participate in the Decoupling IT project. The project is also created together with external contributors.

Associate Professor Michael Kastoryano received DKK 5 million from the Carlsberg Foundation's Semper Arden's Accelerate Grant for the project "Quantum-Inspired Algorithms: Probably the Best Differential Solvers in the World". The purpose of the project is to utilise quantum-inspired algorithms' potential in a wide range of use cases within, for example, natural science, engineering and the finance sector. Quantum-inspired algorithms are, in short, super fast algorithms that can be used on existing traditional computer hardware. This will enable complex calculations to be done much faster, which could make development and production cheaper and potentially better.

Professor Sebastian Risi received DKK 14.8 million from the European Research Council's

Consolidator Grant for the project "GROW-AI: Growing Machines Capable of Rapid Learning in Unknown Environments". The purpose of the project is to develop artificial intelligence that can enable machines to adapt to unforeseen events. If machines are able to learn quickly and adapt to new situations and circumstances in the same way as human intelligence, far more processes can be automated. This could have a huge impact at all levels of society, from machines that can perform rescue missions under difficult conditions, to something as simple as emptying a dishwasher without smashing a plate.

Associate Professor Oksana Kulyk received a grant of DKK 2.8 million from the Independent Research Fund Denmark's Inge Lehmann Programme for the project "Usable Coercion-Resistant Internet Voting". The purpose of the project is to develop systems for internet election that are both user-friendly and resistant to so-called coercion situations where voters are forced or pressured to vote for a particular candidate.

Assistant Professor Paloma Thomé de Lima received a grant of DKK 2.8 million from the Independent Research Fund Denmark's Inge Lehmann Programme for the project "Unifying Theories for Graph Modification Problems". The purpose of the project is to deeply investigate the special properties that allow the development of efficient algorithms in relation to graph modification problems, and how to mathematically explain the probability of their occurrence.

Associate Professor Rasmus Ejlers Møgelberg received a grant of DKK 2.8 million from the Independent Research Fund Denmark for the project "Algebraic Effects and Guarded Recursion". The purpose of the project is to investigate dependent types more closely – a construction in programming languages that the programmer can use to express properties of programmes that can be verified as part of the programme development. Dependent types can help constructing secure programmes and improve troubleshooting, but so far programming languages with dependent types have had its limitations.

Associate Professor Jonas Fritsch received a grant of DKK 2.8 million from Independent Research Fund Denmark for the project "Voice as a Matter of Design: A Framework for Novel Vocal Imaginaries". The purpose of the project is to investigate how synthetic voices are designed to speak and their aural qualities. What is the significance of how synthetic voices sound, how do they listen to us humans, and what does this mean for our experience of the technology and of each other?

Associate Professor Luca Rossi and Postdoc Vasileios-Spyridon Vlassis have both secured grants for their respective research projects in digital innovation and cultural dynamics totaling just over DKK 4.6 million from the European CHANSE programme. With the project "PolarVis", Luca Rossi is planning the first large-scale mapping of the pending (and often conflicting) narratives about climate change on the web. Vasileios-Spyridon Vlassis'

project “DiGeMERGE” takes a closer look at the spread and significance of digital disaster communication as well as the practical, ethical and societal consequences, including the fundamental shift in knowledge sharing – from top-down communication to user-generated sharing.

Postdoc Morten Roed Frederiksen has received DKK 1.6 million from Independent Research Fund Denmark for a research project “Deep Neural Network Based Physical Response Prediction Using Correlated Patterns in Dynamic Sensor Input for Adaptive Robots”. The purpose of the project is to make robots better at interpreting human emotions, including creating technology that can help children with anxiety.

Associate Professor Pinar Tözün received DKK 2.7 million from the Novo Nordisk Foundation for the project “Machine Learning on Tiny Hardware (MOTH)”. The purpose of the project is to develop new mechanisms that can increase the value of data using the computing capacity of small hardware units. If the researcher is successful with the project, it could pave the way for a reduction in data traffic to and from large data centres. When smaller units, which are closer to the data source itself, can perform the calculations themselves and thereby produce greater value, the need to draw on the large computational resources is reduced. The effect will be a reduction in latency and financial costs and ultimately a reduction in the CO<sub>2</sub> footprint.

### New research centres

In 2022, two new research centres at the IT University were officially opened.

On 24 November 2022, the Center for Digital Play opened with Professor Miquel Angel Sicart as Head of Center. The vision for the new centre is to create a foundation for research that uses play as a central concept for understanding the interaction between technology, society and culture. There are four research groups associated with the centre. Games, which will be dealing with research within computer games; Creative AI Lab, which is dealing with machine learning and artificial intelligence by exploring fundamental issues with creative artificial intelligence; Media, Art and Design, which specialises in digital technologies in the culture industry; as well as Digitalis, dealing with social media and online culture.

On 7 December 2022, the Center for Climate IT opened with Professor Steffen Dalsgaard as Head of Center. The Center for Climate IT is based on the recognition that climate challenges cannot be solved without an inventive, critical, reflective and productive use of digital technologies and digitisation processes. Digital technologies and climate change are linked in multiple and complex ways. On the one hand, IT can help create solutions that contribute to more sustainable usage of the planet’s resources. On the other hand, the IT sector and the use of IT technologies emit large amounts of CO<sub>2</sub> as well. The Center for Climate IT, in collaboration with private and public partners, will concentrate on both sides of the issue and their solutions.

### Contributing valuable research

In a new research article, analyses of Copenhagen’s cycling infrastructure are described with a view to identifying where it would be best to invest in, for example, new bicycle paths. The research study was carried out at the IT University by PhD Student Anastassia Vybornova, Postdoc Tiago Oliveira Cunha and Associate Professor Michael Szell in cooperation with Universität für Bodenkultur in Vienna. According to Michael Szell, the purpose of the research is to develop an automated way to find gaps in the cycling infrastructure of large cities. In the research article the 105 most important gaps in Copenhagen’s cycling infrastructure have been identified. First, the researchers have used algorithms to pinpoint the gaps, and then they verified their data by visiting the places. In addition, they have compared their data with a survey in which approximately 10,000 Copenhagener’s answer where they find it difficult or dangerous to cycle. It is considered that the combination of raw data, observations and experiences can form a good starting point for the city planners in Copenhagen, as well as in other cities where they want to improve the conditions for cyclists.

On average, 45 per cent of large IT projects exceed their budget, and in several cases, this happens by more than 200 per cent. But why do the large IT projects get out of hand? According to a new research article published in the “Journal of Management Information Systems” with the title “The Empirical Reality of IT Project Cost Overruns: Discovering a Power-Law Distribution” by VKR Professor and Head of the Danish Institute for IT Program

Management at the IT University, Bent Flyvbjerg, project planners’ risk assessments are deficient. When taking risks into account during implementation of IT projects, the number of potential problems cannot be expected to be statistically limited. According to Bent Flyvbjerg, IT projects have infinite variance. This means that the list of risks is endless, which has a large impact on how risks are assessed. According to new research, several risk assessments often result from the erroneous statistical assumption that IT projects follow, or are like, a normal distribution curve, where extraordinary events are rare deviations. In reality, IT projects follow a power-law that better reflects the unpredictability of working with IT projects. This means that we must move away from the idea of making credible predictions, because it does not work for IT projects. Instead, IT project managers must focus on prevention.

As a result of a political agreement from 3 December 2021 the current administrative set-up around the Danish Bibliometric Research Indicator (BFI) has been phased out starting from and including 2021. The Danish Agency for Higher Education and Science’s calculations of previous years’ bibliometric points (BFI points) are shown in table 2.

There has been a decrease in terms of the number of peer-reviewed publications, as 319 peer-reviewed publications were registered in 2022 versus 362 in 2021.

In 2022, there have been 126 externally funded research projects, a record high number for the IT University. At the same time, there has been an increase in collaboration projects with

the business sector from 37 projects in 2021 with a consumption of DKK 19 million to 46 projects in 2022 with a consumption of DKK 26 million.

Three inventions were registered in 2022, while no patent applications was submitted and the IT University had no patents issued, cf. the table with key financial figures and ratios.

#### **Collaboration with external partners**

At the IT University, there is a long tradition of interacting with external organisations and corporations, both in relation to the design and implementation of the study programmes and in working with the underlying research. Collaborations are established in several ways e.g., in direct collaboration with students, researchers and lecturers or as external member of the IT University's research centres.

#### *Becoming a preferred research partner*

Going forward, there will be even more focus on collaboration with external organisations. A focus area in the IT University's strategy towards 2025 is to make research even more visible, to thereby create a basis for establishing more and closer collaboration with the public and private sector, to support their work with the digital transformation and the implementation of new technologies and business models. In addition to the researchers'

own cooperative relationships, in 2022 the IT University has developed a new collaboration model that establishes a visible and structured approach for collaboration that can be founded in research centres, research groups, student labs, student groups or as strategic collaborations, which allows for the building of a longterm relationship where knowledge can be exchanged and developed over time, enabling the IT University to be (or remain) a preferred knowledge partner within the university's research areas.

#### *External "Innovation Hubs" at the IT University*

As part of the IT University's desire to create more interfaces with the surrounding world some companies have established themselves physically at the IT University. The daily presence on campus makes it easier for researchers and students to get access to business collaborations.

Among the present companies is Novo Nordisk in the form of their digital innovation hub, which regularly holds both social and professional events where the IT University's students have the opportunity to participate. For example, the speaker event "How Novo Nordisk uses Machine Learning in Production" was held in the autumn, where proof-of-concept solutions were presented to the IT University's students.

#### **Entrepreneurship and innovation projects**

The results from two innovation projects have created a basis for obtaining additional innovation funding in 2022.

The "LAIKA, Machine Learning for Writers" project led by Associate Professor Martin Pichlmair which received just over DKK 1.5 million from the Innoexplorer program in 2021 – was successfully completed in autumn 2022. The results were so promising that Martin Pichlmair subsequently founded the company "Write with LAIKA ApS" together with two other co-founders and ITU Business Development A/S in the group of owners. The company subsequently succeeded in getting a commitment of just over one million DKK from the Innovation Fund Denmark's Innofunder program to support the company's further commercialisation journey in 2023.

Also, Associate Professor Cancan Wang's innovation project, "CARE in Fintech", which received DKK 0.2 million from Copenhagen Fintech in 2021, was successfully completed in 2022. The project's results have subsequently created the basis for a new grant from Copenhagen Fintech, also of DKK 0.2 million for the project "Integrated Data for ESG Analytics (IDEA) for Fintech".

### The PhD School

In 2022, the IT University admitted 15 new PhD students and 17 PhD students graduated. In addition to the high number of graduated, in 2022 the PHD School focused on further developing and strengthening the great research communities through activities and initiatives formulated in an action plan. The action plan was formed in 2022 based on the

outcome of the investigation into the quality of the PhD programme at the IT University, which was initiated in 2021 and finalised with two workshops for PhD students and supervisors.

Besides focusing on great research communities, in 2022 the PhD School was involved in sharpening the scope of career paths for the IT

University's PhD students. Among others, a career workshop was held during one of the school's PhD luncheons and the development of a new PhD course on innovation collaboration was initiated. In the autumn, the IT University's PhD School was visited by the Data Science Research Programme at Malmö University, where PhD students from both institutions presented their research projects

and where various topics were put up for discussion, such as the relevance of their research for society as well as collaboration with external partners.

**Table 2: Research full-time equivalents, PhD theses and publications**

	2018	2019	2020	2021	2022
Number of admitted PhD students	13	20	22	25	15
Approved PhD theses	13	10	12	12	17
PhD students (full-time equivalents)	33	40	41	54	56
VIP: Assistant professors, associate professors and professors (full-time equivalents)	86	94	107	112	116
Number of publications (peer-reviewed)	256	234	254	362	319
Publication points *	255	194	220	*	*

\* Figures from the Danish Agency for Higher Education and Science, which do not calculate publication points after 2020.

## EDUCATION

In 2022, the IT University offers 10 full-time study programmes, of which four are BSc study programmes and six are MSc study programmes. For both BSc and MSc study programmes there has been a small decrease in the number of applicants, admitted students and graduates while there has been an increase in the number of enrolled students. The students' study activity in the form of full-time student equivalents is at the same level as in 2021, cf. table 3.

The IT University has again in 2022, in spite of the drop in applicants, had a very high number of applicants for the study places that the university's financial framework allows for.

In 2022, the number of admitted BSc students is back at the same level as before the two years of additional admissions via temporary STEM and COVID-19 grants in 2020-2021. 523 students were admitted on the MSc study programmes in 2022, which is slightly fewer admitted MSc students than the last two years at the IT University. The number of admissions to both BSc and MSc study programmes was, however, lower than expected, as fewer applicants accepted the offer of a study place. Going forward, the IT University will take this trend into account when applicants are offered a study place. One third of the admitted MSc students have a BSc degree from the IT University, while the rest have a BSc degree from a different Danish or foreign educational institution.

The number of enrolled students is record high in 2022, which applies to both BSc and MSc students. The high number of enrolled students is due to, among others, the high number of admitted students in 2021.

COVID-19 still affected the study year in 2022, although to a far smaller extent than in the previous years. Exams at the start of 2022 were held online and there were still some restrictions on student's and staff's access to campus until 1 February. The spring semester's teaching and exams were held as before COVID-19, although a small part of the teaching on individual courses took place online at the beginning of the semester.

After several years of a significant increase in full-time student equivalent earnings, the full-time student equivalent earnings in 2022 is at the same level as the full-time student equivalent earnings in 2021.

In 2022, 35 students were admitted on the part-time study programme "Master in IT Management". This means that the number

of admitted students is approaching 40, which was the usual number of admitted students before the revision of the study programme in 2021, cf. table 3. Study activity in the form of full-time student equivalents obtained by part-time students has stabilised in 2022 after several years with a decreasing trend.

**Table 3: Enrolled students, full-time student equivalents, graduates and completion times**

	2018	2019	2020	2021	2022
Applicants for the MSc study programmes	1,217	1,130	1,195	1,342	1,199
Admitted MSc students	517	507	536	550	523
Enrolled MSc students	1,088	1,123	1,164	1,157	1,206
Graduated MSc students	380	391	454	488	400
Completion time. MSc students (years)	1.8	1.8	1.8	1.8	1.8
Applicants for the bachelor study programmes	1,787	1,577	1,807	1,853	1,767
Admitted bachelor students	341	364	433	396	338
Enrolled bachelor students	861	963	1,099	1,114	1,118
Graduated bachelor students	156	169	228	249	231
Completion time. Bachelor students (years)	2.8	2.8	2.8	2.8	2.8
Number of full-time student equivalents	1,445	1,582	1,702	1,867	1,851
Admitted master's students	40	42	41	24	35
Enrolled master's/diploma students	431	243	200	189	165
Number of full-time student equivalents obtained by part-time students	94	68	54	47	45

*Note: Full-time student equivalents are calculated at 31 August. Students and graduates are calculated at 30 September. The completion time, which is 1.8 years for MSc students, is calculated as the median of the number of commenced study months for graduates who complete their MSc degree in the period 1 October to 30 September. The same method is used for bachelor students.*

# OUTLOOK FOR THE COMING YEAR

In 2021, the IT University adopted a new strategy for the period 2022-25. The strategy contains three overall targets: “Educate more IT professionals and IT researchers”, “Engage in research and education activities that help shape a sustainable digital future”, and “Enable all students and staff to thrive and excel together”. In 2023, work on implementing the strategy will be intensified.

In 2022, the IT University entered a new Strategic Framework Contract for the period 2022-2025. In 2023, the work to achieve the targets set in this contract will be intensified.

The IT University expects to continue to attract many qualified students to the university's attractive study programmes, where the graduates are highly valued.

In August 2022, the former government presented a major reform proposal in the university sector. Similar reform plans are formulated in the government programme for the new SMV government. Prior to a reform, the IT University will continue its outreach activities with the aim of working towards more study places at the IT University. Meanwhile, the IT University will initiate preparatory measures aimed at any new educational instruments and be ready to quickly adapt to a possible new reality.

In 2022, the IT University has again a high total amount of attracted externally funded research projects, and in 2023 the university will continue the implementation of the external funds and continue to work on attracting externally funded research projects,

considering the financial sustainability of the institution.

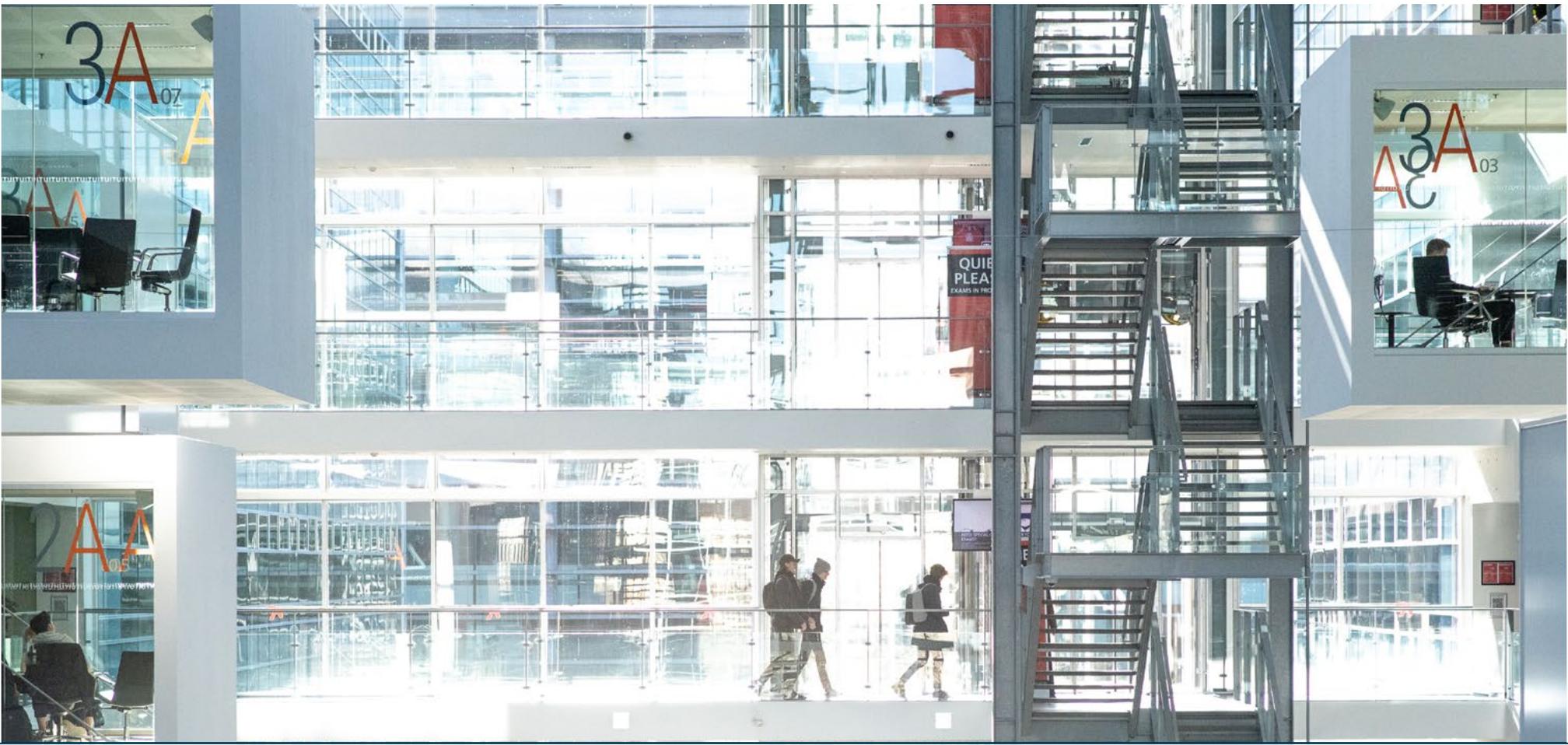
Many students and researchers at the IT University have a great interest in sustainability, so it is expected that the IT University's activities regarding sustainability, including the establishment of the new Center for Climate IT, will be intensified in 2023.

The IT University will continue to work purposefully to strengthen the quality of the study programmes through a good study environment and accommodate the increasingly large group of young people with special needs. As a part of this we will continue and further develop the many activities to create a safe and inclusive study start.

In 2023, the IT University will create a new and strengthened joint vision and strategy in the area of lifelong learning, with the aim that the IT University will develop this area in the long term to be a substantial part of the university's activities.

The budget for 2023 is shown in table 1. The expected income, which is DKK 417.1 million, includes an increase in the basic grant for education of DKK 8 million per year (about 25 per cent). The increase is due to the significant growth in the number of admitted students and study activity in recent years. In addition, several years of growth in the received external research funding is reflected in the turnover of external funds.





# FINANCIAL STATEMENTS



# APPLIED ACCOUNTING POLICIES

## BASIS OF ACCOUNTING

The IT University's Annual Report is prepared in accordance with the Danish State Accounting Act, etc., Executive Order on the State's Accounting, etc. (BEK no. 116 of 19/02/2018), the guidelines in the Ministry of Finance's Financial Administrative Guide, Executive Order on the Universities Act (LBK no. 778 of 07/08/2019), Executive Order on Grants and Auditing etc. of Universities (the Executive Order on Subsidies and Auditing) (BEK no. 1957 of 15/10/2021) and the guidelines for preparing an annual report issued by the Danish Agency for Higher Education and Science.

The financial statements are presented in DKK 1,000.

## CHANGE IN ACCOUNTING POLICIES

The applied accounting policies are consistent with those of previous year.

## COMMON CHART OF ACCOUNTS AND DISTRIBUTION OF COSTS BY PURPOSE

The IT University has implemented the common chart of accounts for educational institutions under the Ministry of Higher Education and Science with effect from 1 January 2021.

The common chart of accounts includes the dimensions nature (state chart of accounts), sub-accounts, place and purpose. The common chart of accounts is used in accordance with the Danish Agency for Higher Education and Science's accounting and distribution guidelines, incl. associated models and guides.

At the time of accounting, all income and costs that cannot be unambiguously registered on one purpose are recorded on a temporary distribution purpose (purpose 8) for later distribution by purpose.

In addition, the IT University must state that:

- Salary costs are allocated to purpose on the basis of agreed standard time or a qualified estimate
- Operating costs are allocated to purpose on the basis of full-time equivalents or a qualified estimate.

## ANNUAL REPORT TEMPLATE

The Annual Report has been prepared in accordance with the common annual report template for educational institutions under the Ministry of Higher Education and Science.

## DISPENSATIONS

The IT University uses the following accounting dispensations:

- Costs in the income statement are divided into the statements on personnel costs, rent, depreciations and other operating costs
- Internal government purchases and sales are not posted to separate G/L accounts
- Purchases from municipalities are not posted to separate G/L accounts.

## SPECIFIC AREAS

The section describes accounting policies in specific areas.

### Foreign currency translation

Receivables, payables and other items denominated in foreign currencies that have not been settled at the balance sheet date are translated using the exchange rate at the balance sheet date.

Profit and loss that arise due to differences between the exchange rate on the day of the transaction and the exchange rate on the day of payment are recognised in the income statement as a financial item.

## INCOME STATEMENT

### Income

Income is recognised in the year to which the income relates.

The IT University receives government grants in accordance with section 19.22.45 of the Danish Finance Act. In accordance with the guidelines of the Ministry of Higher Education and Science, the IT University does not accrue government grants received.

Government grants are paid on an ongoing basis as monthly payments on account, which are adjusted before the end of the year on the basis of the actual production of full-time student equivalents, fulfillment of performance targets and other adjustments to the annual government grant.

Tuition fee is recognised in the year to which the income relates.

Grants received and commitments, including income from cooperation agreements subject to conditions of use by the grantor, are recognised as income as the costs are paid.

Grants that are not subject to conditions are recognised as income at the time of receipt.

### Ordinary operating costs

Ordinary operating costs are recognised in the year they relate to.

Goods and services are recognised in the year they are delivered.

### Financial income and costs

Financial income and costs are recognised in the year they relate to.

Returns from investment fund certificates, including interest and dividends from shares and bonds as well as value adjustments, are recognised based on the individual securities' official prices on the balance sheet date.

## ASSETS

Assets are recognised in the balance sheet when it is probable that future economic benefits will flow to the university and when the value of the asset can be measured reliably.

### Intangible and tangible fixed assets

The IT University recognises acquisitions with a total acquisition cost of DKK 100,000 or more if the acquisition is intended for permanent ownership and use.

The acquisition cost includes the purchase price and costs directly related to transport as well as external assistance for installation and preparation.

In-house developed software is recognised when it is essential for the IT University's task performance. Only costs that relate to the development process and that result in a real increase in value are capitalised.

Works of art or artistic decoration of premises received by the IT University are not recognised as assets.

Intangible and tangible assets are measured at purchase price less accumulated depreciation.

Depreciation is allocated on a straight-line basis over the expected life of the asset, which is set at:

Software .....	5 years
Leasehold improvements.....	10 years
Installations.....	20 years
IT equipment .....	3 years
Operating equipment and inventory..	5 years

The carrying amount of intangible and tangible assets is subject to an annual test for indications of impairment. Impairments are recognised as write-downs in the income statement.

The IT University does not aggregate assets.

### Fixed asset investments

Entities in which the university holds the majority of the votes or in some other way exercises control are considered subsidiaries.

Investments in subsidiaries are measured at cost price at the time of acquisition.

The carrying amount of financial assets is subject to an annual test for indications of impairment. Impairments are recognised as

write-downs in the income statement, and full or partial reversals of previous write-downs are also recorded in the income statement.

### Receivables

Receivables are measured at nominal value less write-down for bad debt losses.

The IT University recognises incurred costs relating to externally funded activities in progress, where the IT University has acquired the right to fundings that have not yet been paid in, as receivables from externally funded activities.

Write-downs to offset losses are calculated on the basis of an individual assessment of the individual receivables. In addition, the IT University recognises a general provision to meet unforeseen losses relating to externally funded activities in progress.

Prepayments and accrued income under receivables comprise prepaid expenses relating to activities to be incurred in subsequent financial years.

### Securities

The IT University's securities portfolio comprises investment fund shares, which are recognised in accordance with the individual securities' official exchange rates on the balance sheet date, including the associated interest rate.

## LIABILITIES

Liabilities are recognised in the balance sheet when an outflow of economic benefits is probable and when the liability can be reliably measured.

### Provisions

Provisions are recognised when the university, as a result of a previous event, has a legal or constructive obligation where it is probable that the obligation will be settled.

### Short-term liabilities

Liabilities other than provisions are measured at amortised cost, which is in all material respects equivalent to the nominal value.

Grants received in respect of externally funded activities, where the costs have not yet been incurred, are recognised as prepaid restricted grants, which are continuously reduced by revenue recognition corresponding to the costs incurred for the activities.

The holiday pay obligation is based on the individual employee's salary expense per holiday day. The holiday pay obligation consists of

earned special holiday days from the previous financial year, but which have not yet been taken, special holiday days earned in the current financial year as well as earned but not taken holiday in accordance with the new Holidays Act with simultaneous holiday. In addition, the special holiday allowance for the current financial year that has not been paid out is included.

Prepayments and accrued income under short-term liabilities comprise prepaid income relating to activities to be incurred in the following financial year.

### Contractual liabilities and contingent liabilities

Under contractual obligations and contingent liabilities, the carrying amount of lease agreements entered into as well as pending cases raised against the university are disclosed, which it is not considered probable that the university will settle.

## CASH FLOW STATEMENT

The cash flow statement shows cash flows for the year divided into operating, investing and financing activities, as well as how these cash flows have affected the year's cash holdings. The cash flow statement is prepared according to the indirect method and is based on the profit for the year.

# INCOME STATEMENT 1 JANUARY – 31 DECEMBER

Note	2022 DKK '000	2021 DKK '000	
1	Government grants	302,021	308,233
2	Other grants	71,420	56,961
3	Sale of goods and services	7,612	6,869
4	Other income	11,945	9,176
	<b>Total operating income</b>	<b>392,998</b>	<b>381,239</b>
	Personnel costs	274,757	259,589
	Rent	37,681	37,100
	Depreciations	1,843	1,622
	Other operating costs	91,527	78,664
5	<b>Total operating costs</b>	<b>405,808</b>	<b>376,976</b>
	<b>PROFIT BEFORE FINANCIALS</b>	<b>-12,810</b>	<b>4,264</b>
6	Financial income	4,117	2,295
7	Financial costs	10,197	273
	<b>Total financial income and costs</b>	<b>-6,080</b>	<b>2,022</b>
	<b>PROFIT/LOSS FOR THE YEAR</b>	<b>-18,890</b>	<b>6,286</b>
<b>RESULTATDISPONERING</b>			
	<b>2022 DKK '000</b>	<b>2021 DKK '000</b>	
	Predisposed to retained earnings	-18,890	6,286
	<b>Total distribution of profit</b>	<b>-18,890</b>	<b>6,286</b>

# BALANCE SHEET AT 31 DECEMBER

## ASSETS AT 31 DECEMBER

Note	2022 DKK '000	2021 DKK '000
Software	0	73
<b>8 Total intangible fixed assets</b>	<b>0</b>	<b>73</b>
Installations	2,100	1,771
Leasehold improvements	6,144	6,671
IT equipment	658	1,004
Inventory	1,064	1,177
<b>9 Total tangible fixed assets</b>	<b>9,967</b>	<b>10,622</b>
Investments in subsidiaries	5,000	3,500
<b>10 Total fixed assets investments</b>	<b>5,000</b>	<b>3,500</b>
<b>TOTAL FIXED ASSETS</b>	<b>14,967</b>	<b>14,196</b>
<b>11 Deposits</b>	<b>7,740</b>	<b>7,740</b>
<b>12 Receivables from sales of goods and services</b>	<b>6,141</b>	<b>7,314</b>
Receivables from ongoing externally funded activities	17,022	7,811
<b>13</b>		
<b>14 Other receivables</b>	<b>6,059</b>	<b>2,977</b>
Interim balance with the Ministry of Higher Education and Science	314	0
Prepaid costs	751	2,495
<b>Total receivables</b>	<b>38,027</b>	<b>28,338</b>
<b>15 Securities</b>	<b>110,905</b>	<b>118,758</b>
<b>16 Cash holdings</b>	<b>47,554</b>	<b>64,627</b>
<b>TOTAL CURRENT ASSETS</b>	<b>196,486</b>	<b>211,723</b>
<b>TOTAL ASSETS</b>	<b>211,452</b>	<b>225,919</b>

## EQUITY AND LIABILITIES AT 31 DECEMBER

Note	2022 DKK '000	2021 DKK '000
Initial capital at 1 January 2005	16,454	16,454
Retained earnings	51,107	69,998
<b>17 Total equity and liabilities</b>	<b>67,561</b>	<b>86,451</b>
<b>18 Total provisions</b>	<b>836</b>	<b>1,342</b>
Salary due	2,154	4,762
Holiday allowance	17,377	35,201
Prepaid restricted grants	76,519	47,170
Interim balance with the Ministry of Higher Education and Science	25,318	28,870
Prepaid income	642	328
Suppliers of goods and services	15,155	16,337
<b>19 Other short-term liabilities</b>	<b>5,890</b>	<b>5,458</b>
<b>Total short-term liabilities</b>	<b>143,055</b>	<b>138,126</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>211,452</b>	<b>225,919</b>
<b>20 Collateral</b>		
<b>21 Contractual liabilities</b>		
<b>22 Contingent assets and liabilities</b>		

# CASH FLOW STATEMENT 1 JANUARY TO 31 DECEMBER

Note	2022 DKK '000	2021 DKK '000
<b>Profit/loss for the year</b>	<b>-18,890</b>	<b>6,286</b>
Profit and loss by sale of fixed assets	1,843	1,622
Change in provisions	-506	-491
Reversed depreciation on ownership shares	-1,500	0
<b>Reversal of items with no cash flow effect</b>	<b>-163</b>	<b>1,131</b>
Change in receivables excl. externally funded activity in progress	-478	-851
Change in ongoing externally funded activities	-9,211	-5,759
Change in short-term liabilities excl. prepaid restricted grants	-24,420	-785
Change in prepaid restricted grants	29,349	-15,949
<b>Change in working capital</b>	<b>-4,759</b>	<b>-23,343</b>
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>	<b>-23,813</b>	<b>-15,927</b>
Purchase and sale of intangible fixed assets	0	447
Purchase and sale of tangible fixed assets	-1,113	-5,969
Purchase and sale of financial fixed assets	0	0
<b>Cash flows from investing activities</b>	<b>-1,113</b>	<b>-5,522</b>
<b>CASH FLOW OF THE YEAR</b>	<b>-24,926</b>	<b>-21,449</b>
Cash holdings incl. securities in total at 1 January	183,386	204,835
<b>CASH HOLDINGS INCL. SECURITIES IN TOTAL AT 31 DECEMBER</b>	<b>158,459</b>	<b>183,386</b>

# NOTES TO THE FINANCIAL STATEMENTS

## 1. GOVERNMENT GRANTS

	2022 DKK '000	2021 DKK '000
Education grants, full-time education	181,441	175,894
Education grants, part-time education	1,454	1,463
Grants for other purposes *	-16,410	-13,937
Grants for research and development	135,537	144,814
<b>Total government grants</b>	<b>302,021</b>	<b>308,233</b>

\* Grants for other purposes include a permanent grant reduction regarding the SEA rent reform with effect as of 1 January 2020. The grant reduction in 2022 amounts to DKK 16,578 thousand and DKK 16,417 thousand in 2021.

## 2. OTHER GRANTS

	2022 DKK '000	2021 DKK '000
Research funding from Danish public sources etc.	33,325	26,080
Research funding from Danish private sources etc.	24,543	15,792
Research funding from EU	7,151	6,498
Research funding from foreign sources etc.	3,271	4,016
Grants for other activities	3,077	4,397
External requester payment	51	178
<b>Other grants in total</b>	<b>71,420</b>	<b>56,961</b>

## 3. SALE OF GOODS AND SERVICES

	2022 DKK '000	2021 DKK '000
Course activity (income covered business)	2,000	2,066
Other sale of goods and services	5,612	4,804
<b>Sale of goods and services in total</b>	<b>7,612</b>	<b>6,869</b>

## 4. OTHER INCOME

	2022 DKK '000	2021 DKK '000
Tuition fees, full-time education	849	550
Tuition fees, part-time education	7,585	5,724
Rental of premises and equipment	3,174	1,765
Other income	336	1,137
<b>Other income in total</b>	<b>11,945</b>	<b>9,176</b>

## 5. OPERATING COSTS

	2022 DKK '000	2021 DKK '000
Education	131,946	125,137
Research	138,307	113,226
Dissemination and exchange of knowledge	8,531	18,789
General common costs	47,259	45,473
Buildings and building operations	79,765	74,351
<b>Total operating costs</b>	<b>405,808</b>	<b>376,976</b>

## 6. FINANCIAL INCOME

	2022 DKK '000	2021 DKK '000
Return on securities portfolio, profit	2,454	2,272
Other financial income	1,663	23
<b>Total financial income</b>	<b>4,117</b>	<b>2,295</b>

## 7. FINANCIAL COSTS

	2022 DKK '000	2021 DKK '000
Return on securities portfolio, loss	10,182	182
Other financial costs	14	91
<b>Total financial costs</b>	<b>10,197</b>	<b>273</b>

## 8. INTANGIBLE FIXED ASSETS

	Acquired software DKK '000	Total intangible fixed assets DKK '000
Purchase price beginning of the year	7,881	7,881
Additions during the year	0	0
Disposals during the year	-608	-608
<b>Purchase price end of the year</b>	<b>7,273</b>	<b>7,273</b>
Accumulated depreciations beginning of the year	7,808	7,808
Depreciations during the year	73	73
Reversed depreciations	-608	-608
<b>Accumulated depreciations end of the year</b>	<b>7,273</b>	<b>7,273</b>
<b>Book value end of year</b>	<b>0</b>	<b>0</b>

## 9. TANGIBLE FIXED ASSETS

	Installations	Leasehold improvements	IT equipment	Inventory	Total tangible fixed assets
	DKK '000	DKK '000	DKK '000	DKK '000	DKK '000
Purchase price beginning of the year	1,809	8,023	2,948	1,691	14,471
Additions during the year	430	309	125	249	1,113
Disposals during the year	0	0	-178	-70	-248
<b>Purchase price end of the year</b>	<b>2,239</b>	<b>8,332</b>	<b>2,896</b>	<b>1,870</b>	<b>15,336</b>
Accumulated depreciations beginning of the year	38	1,352	1,945	514	3,848
Depreciations during the year	101	836	471	362	1,769
Reversed depreciations	0	0	-178	-70	-248
<b>Accumulated depreciations end of the year</b>	<b>139</b>	<b>2,188</b>	<b>2,237</b>	<b>806</b>	<b>5,370</b>
<b>Book value end of the year</b>	<b>2,100</b>	<b>6,144</b>	<b>658</b>	<b>1,064</b>	<b>9,967</b>

## 10. FIXED ASSETS INVESTMENTS

Investments in subsidiaries	2022 DKK '000	2021 DKK '000
<b>ITU Business Development A/S</b>		
Contributed capital in the financial year	0	0
Accumulated contributed capital at 31 December	5,000	5,000
Book value of the ownership share	5,000	3,500
Income in the financial year	1,418	1,760
Costs in the financial year	1,271	2,003

### Supplementary note

The IT University has established the subsidiary ITU Business Development A/S (ITU BD) in accordance with LBK no. 580 of 1 June 2014 and has an ownership interest of 100 per cent.

The IT University has contributed capital of DKK 5,000 thousand to ITU BD in 2014. In 2019, the value of the IT University's investment is written down to DKK 3,500 thousand. In 2022, the write-down of the investment is reversed, which results in a book value of DKK 5,000 thousand.

## 11. DEPOSITS

	2022 DKK '000	2021 DKK '000
Deposits regarding leases listed as current assets	7,730	7,730
Other deposits listed as current assets	10	10
<b>Receivables from the sale of services in total</b>	<b>7,740</b>	<b>7,740</b>

## 12. RECEIVABLES FROM SALES OF GOODS AND SERVICES

	2022 DKK '000	2021 DKK '000
Receivables from sales of goods and services etc.	6,141	7,314
<b>Receivables from sales of goods and services in total</b>	<b>6,141</b>	<b>7,314</b>

## 13. RECEIVABLES FROM ONGOING EXTERNALLY FUNDED ACTIVITIES

	2022 DKK '000	2021 DKK '000
Receivables from ongoing externally funded activities	17,735	10,430
Provision for losses on ongoing externally funded activities	-714	-2,619
<b>Receivables from ongoing externally funded activities in total</b>	<b>17,022</b>	<b>7,811</b>

## 14. OTHER RECEIVABLES

	2022 DKK '000	2021 DKK '000
Receivables, interim salaries and reimbursements	1,047	285
Other receivables	5,013	2,692
<b>Other receivables in total</b>	<b>6,059</b>	<b>2,977</b>

## 15. SECURITIES

	2022 DKK '000	2021 DKK '000
Other securities	110,905	118,758
<b>Securities portfolio in total</b>	<b>110,905</b>	<b>118,758</b>

## 16. CASH HOLDINGS

	2022 DKK '000	2021 DKK '000
Cash holdings at bank	47,554	64,627
<b>Cash holdings in total</b>	<b>47,554</b>	<b>64,627</b>

## 17. EQUITY

	2022 DKK '000	2021 DKK '000
Initial capital by 1 January 2005	16,454	16,454
Retained earnings at 1 January	69,998	63,712
Retained earnings, this year	-18,890	6,286
<b>Total equity</b>	<b>67,561</b>	<b>86,451</b>

## 18. PROVISIONS

	2022 DKK '000	2021 DKK '000
Salary – tenure	836	1,342
Other provisions	0	0
<b>Total provisions</b>	<b>836</b>	<b>1,342</b>

## 19. OTHER SHORT-TERM LIABILITIES

	2022 DKK '000	2021 DKK '000
Salary due	3,996	3,825
Print payable, students	0	21
VAT payable	0	114
Deposits	1,527	1,438
Other payables	367	289
<b>Total other short-dated payables</b>	<b>5,890</b>	<b>5,458</b>

## 20. COLLATERAL

The IT University has not provided any mortgages or collateral.

## 21. CONTRACTUAL LIABILITIES

In May 2015, the IT University concluded a rent agreement with the Danish Building and Property Agency. Section 60(1) of the Danish Business Lease Act applies to the lessee's conditions. As a main rule, the lease can only be terminated in its entirety. The period of notice is six months for removal on the first day of a month. In December 2019, the IT University signed a rental agreement with DR Byen. The period of notice is six months for removal on the first day of a month.

## 22. CONTINGENT ASSETS AND LIABILITIES

For 56 co-funded PhD students of a total of 67 PhD students ultimo 2022, the IT University guarantees payment of the students' salaries for the 3-year or 4-year period in which their employment contracts are non-terminable by the university. The liability may become relevant if the payroll costs are not covered by companies or institutions with which education agreements have been concluded.

The IT University is comprised by the government self-insurance principle and has taken out liability insurance for members of the Board of Directors.

# SPECIAL STATEMENTS

## 1. TYPES OF ACTIVITIES

	2022 DKK '000	2021 DKK '000	2020 DKK '000	2019 DKK '000
<b>Ordinary activities</b>				
Income	330,425	322,809	299,749	298,937
Costs	344,649	319,017	306,566	295,702
<b>Profit</b>	<b>-14,224</b>	<b>3,792</b>	<b>-6,818</b>	<b>3,234</b>
<b>Grant funded research activities</b>				
Income	54,059	47,770	35,628	33,908
Costs	54,059	47,770	35,628	33,909
<b>Profit</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Other grant funded activities</b>				
Income	1,955	1,931	593	0
Costs	1,955	1,931	593	0
<b>Profit</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Commercial activities</b>				
Income	6,560	8,728	6,681	7,690
Costs	5,145	8,256	5,259	4,442
<b>Profit</b>	<b>1,414</b>	<b>472</b>	<b>1,422</b>	<b>3,248</b>
<b>Accumulated profit per 31 December</b>	<b>22,697</b>	<b>21,283</b>	<b>20,811</b>	<b>19,389</b>

### Supplementary note

The IT University's commercial activities comprise rental of premises, events and courses etc.

The accumulated profit regarding commercial activities is based on the year 2007 as the first year of accrual, cf. letter of 5 December 2022 from the Danish Agency for Higher Education and Science with Guidance for the annual report template for educational institutions under the Ministry of Higher Education and Science.

## 2. MANAGEMENT SALARIES

	2022	2021
	DKK '000	DKK '000
<b>Board of Directors</b>		
Number of external board members	5	5
Board fee paid to chairman	134	131
Board fee paid to other external board members	268	247
<b>Managers</b>		
Number of managers, full-time equivalents	23.9	23.8
Management salaries incl. pension	22,611	22,068

### Supplementary note

None in 2022.

## 3. STUDENT POLITICAL ACTIVITIES

	2022	2021
	DKK '000	DKK '000
Student political activities	690	684
Other student activities	0	0
<b>Total</b>	<b>690</b>	<b>684</b>

## 4. FREE UNIVERSITY PLACES AND SCHOLARSHIP FUNDS

	2022	2021
<b>Government grants rate 3</b>		
Number of students enrolled in full or partial free university places per 30 September	10	9
Number of recipients of scholarships in the period 1 January to 31 December	7	8
<b>Government grants and consumption (DKK '000)</b>		
Government grant from the Danish Agency for Higher Education and Science	1,617	1,553
Total amount paid as free university places	628	495
Total amount paid as scholarships	817	417
<b>Profit</b>	<b>171</b>	<b>641</b>
<b>Accumulated profit per 31 December</b>	<b>2,810</b>	<b>2,639</b>

### Supplementary note

The IT University only has free university places in government grants rate 3 and has not transferred profits regarding foreign payment students.

## 5. STAFF FULL-TIME EQUIVALENTS

	2022	2021
<b>Staff (full-time equivalents) incl. employees on social terms</b>	<b>457</b>	<b>456</b>

## 6. OTHER SPECIAL STATEMENTS

The IT University is not responsible for carrying out the secretariat function for scholarships and the like.

The IT University has not contributed funds to foundations whose main purpose is to establish dwellings close to universities.

The IT University does not incur costs for administration of foundations and associations, including commercial foundations and associations in accordance with section 11(1) of the Danish Act on the Commercial Activities and Co-operation with Foundations of Public Research Institutions.

## KEY FINANCIAL FIGURES AND RATIOS

Income statement (DKK '000)	2022	2021	2020	2019	2018
Government grants	302,021	308,233	289,809	287,395	250,783
Other grants	71,420	56,961	38,625	36,287	30,046
Sale of goods and services	7,612	6,869	7,906	9,158	8,821
Other income	11,945	9,176	6,311	7,696	9,252
<b>Total operating income</b>	<b>392,998</b>	<b>381,239</b>	<b>342,652</b>	<b>340,535</b>	<b>298,902</b>
Personnel costs	274,757	259,589	236,623	210,367	191,892
Rent	37,681	37,100	35,033	39,052	
Depreciations	1,843	1,622	1,348	1,421	1,457
Other operating costs	91,527	78,664	75,043	83,213	106,102
<b>Total operating costs</b>	<b>405,808</b>	<b>376,976</b>	<b>348,047</b>	<b>334,053</b>	<b>299,451</b>
<b>Profit before financial income and costs</b>	<b>-12,810</b>	<b>4,264</b>	<b>-5,395</b>	<b>6,482</b>	<b>-549</b>
<b>Profit</b>	<b>-18,890</b>	<b>6,286</b>	<b>-3,331</b>	<b>9,257</b>	<b>-1,981</b>

Balance sheet (DKK '000) *	2022	2021	2020	2019	2018
Fixed assets	14,967	14,196	10,295	8,578	6,676
Balance total	211,452	225,919	236,858	190,721	177,481
Equity	67,561	86,451	80,166	83,497	74,240

\* The IT University has no long term debt.

Economic key figures (per cent)	2022	2021	2020	2019	2018
Profit margin	-4.8	1.6	-1.0	2.7	-0.7
Liquidity ratio	156.3	205.7	187.0	242.9	228.5
Robustness ratio	32.0	38.3	33.8	43.8	41.8

Staff (full-time equivalents)	2022	2021	2020	2019	2018
Academic staff	222	222	192	171	160
Part-time academic staff	53	48	51	44	40
Technical and administrative staff	182	185	174	162	152
<b>Total</b>	<b>457</b>	<b>456</b>	<b>417</b>	<b>376</b>	<b>352</b>

Study activity – ordinary study programmes	2022	2021	2020	2019	2018
Number of full-time equivalents (including guest students)	1,851	1,867	1,702	1,582	1,445
Number of admitted in BSc study programmes	338	396	433	364	341
Number of admitted in MSc study programmes	523	550	535	507	517
Number of students enrolled in ordinary study programmes per 30 September	2,324	2,271	2,263	2,086	1,949
Number of BSc graduates	231	249	228	169	156
Number of MSc graduates	400	488	454	391	380

Study activity – part-time study programmes	2022	2021	2020	2019	2018
Number of full-time students equivalents obtained by part-time students	45	47	54	68	94

Study activity – income covered business	2022	2021	2020	2019	2018
Study activity, income covered business, turnover (DKK '000)	2,000	2,066	1,222	1,661	1,195

Internationalisation	2022	2021	2020	2019	2018
Number of outbound students (exchange students)	67	17	41	75	71
Number of inbound students (exchange students)	31	12	39	35	38
Number of foreign students on entire study programmes in Denmark	400	336	302	296	318

Research education	2022	2021	2020	2019	2018
Number of PhD students enrolled	69	70	61	54	50
Number of PhD students admitted during the year	15	25	22	20	13
Number of approved PhD theses for the year	17	12	12	10	13

Research and communication	2022	2021	2020	2019	2018
Number of research publications with BFI classification *	*	*	199	181	213
Number of patent applications	0	0	0	1	1
Number of patents issued	0	0	0	0	0
Number of inventions for which application for registration has been filed	3	0	1	1	0
Number of projects with enterprises	46	37	33	37	29
Number of external projects	126	102	100	95	87
Economic co-operation with business community (DKK'000)	26,411	19,019	15,668	15,094	10,322

\* Danish Agency for Higher Education and Science does not compile research publications with BFI classification after 2020. BFI is the abbreviation for bibliometric research indicator.

Building	2022	2021	2020	2019	2018
<b>Total building area (gross area calculated in m<sup>2</sup>)</b>	32,618	32,618	32,618	23,352	23,352



# THE STRATEGIC FRAMEWORK CONTRACT FOR 2022-2025

The Strategic Framework Contract is valid for 2022-2025 and includes five strategic targets:

1. Relevant study programmes with low unemployment and gender diversity
2. Strengthened study well-being and high learning outcome
3. Strengthened IT research that reflects the needs of the society
4. Strengthen the IT University's PhD School and focus on contributing innovation and value for society
5. Lifelong learning that contributes to a strengthened competitiveness.

In 2022, which is the first year of the contract period, the IT University assesses that there has been a satisfactory development in all five strategic targets, cf. the table below:

Strategic target	Satisfactory	Acceptable	Unsatisfactory
1	x		
2	x		
3	x		
4	x		
5	x		

The IT University has used the first of the four years in the Strategic Framework Contract period to launch several analyses, and subsequent reorganisations and preparation of action plans within the individual target areas. This applies, for example, within the first target, where plans have been developed both for being able to continue with the high proportion of admitted female students and for being able to reduce the drop-out on the BSc study programmes.

Within target 3 on research, in 2022 the IT University has planned and established two new research centres within climate IT and digital games in order to strengthen the IT research in relation to the needs of the society. Within the targets 4 and 5, it is planned to expand the business focus of the PhDs and to increase lifelong learning for the needs of business.

Below, the IT University's work with and development within each of the five strategic targets in 2022 are elaborated.

# STRATEGIC TARGET 1

## Strategic target 1:

The IT University will ensure the relevance of the study programmes through ongoing dialogue with the employers' panels about the study programmes' Employability Profiles and green competencies. In addition, the IT University will continue the effort for gender diversity among students through targeted recruitment activities and the retention of female students on the study programmes in question.

Overall, the IT University assesses that there is a very satisfactory development within the target, as there has been significant progress within most of the target's indicators in 2022 compared to the baseline in 2021. The progress also applies to the relevance of the IT University's study programmes regarding lower unemployment as well as a higher proportion of admitted and better retention of female bachelor students.

The very satisfactory development in the relevance of the study programmes can be seen in the fact that the graduates' unemployment rate calculated 4-7 quarters after graduation has decreased significantly in 2022 to a very low unemployment rate of 6.2 per cent compared to the baseline for 2021 of 10.9 per cent. In addition, the average of the last three years graduates' unemployment rates calculated 4-7 quarters after graduation is maintained at 8.7 per cent and thus unchanged for the IT University's graduates compared to the baseline, while the corresponding unemployment rate for all Danish universities is at a higher level and has increased minimally to 13.7 per cent compared to the baseline of 12.9 per cent. Furthermore, there is still a high proportion of 84 per cent of the IT University's employed

MSc graduates in the private sector, where the baseline in 2021 was 85 per cent.

In order to maintain the relevance of the study programmes with the competencies demanded by the employers, the IT University has set the target for the strategy period that the study programmes in the future must contribute to the green transition and thereby support a sustainable development of the Danish society. In 2022, the target is to start the development with the study programmes at the Department of Business IT. The target was achieved, as the employers' panels have decided on the format for how a green competence profile is added to the study programmes' Employability Profiles.

A significant supportive activity in relation to the relevance of the study programmes is a continued close dialogue with the IT University's Executive-Level and Programme-Specific Employers' Panels, which consist of relevant labor market representatives.

For the indicator of gender diversity, an extremely satisfactory development is also seen, as the proportion of female student admitted on the IT University's BSc study programmes

increased by more than 5 percentage points from 30.6 per cent in 2021 to 36.1 per cent in 2022, which is a record high proportion of female students admitted on the IT University's BSc study programmes.

In addition, the drop-out rate of female bachelor students after the first year of study was almost halved from 19.9 per cent in 2021 to 10.7 per cent in 2022. The IT University assesses this significant increase in retention as very positive in a study year where the first semester was still very much affected by COVID-19.

After a series of COVID-19 related cancellations in the previous two years, the IT University has been able to resume a range of supportive activities in 2022 with focus on the recruitment and retention of female bachelor students. The most important are the targeted offers for females in high schools for participation in the Coding Café and IT Camp activities. Likewise, newly developed workshops for the teachers have focused on diversity and inclusion, and thereby on preventing drop-out from the study programmes.

## STRATEGIC TARGET 2

### Strategic target 2:

The IT University will have an increased focus on study start activities for BSc and MSc students for the purpose of promoting the students' positive expectations, commitment and motivation, and creating good professional and social communities that ensure a strong foundation for their future study well-being and learning.

Overall, the IT University assesses that there is a satisfactory development in the target of strengthened study well-being and high learning outcome.

Within the area of student well-being in 2022, the IT University has had a special focus on the study start on as well the BSc as the MSc study programmes. A newly developed digital study start course was offered to all BSc students starting their studies in autumn 2022. In the course, the students work with the transition from youth education to the university as well as well-being and other optimal conditions for studying and learning.

Another new initiative is a workshop for the tutors, students who are further in their study, who participate in the study start as guides for the new BSc and MSc students. The tutors were trained in planning and implementing an inclusive study start, where social communities are created and where the new students feel welcome and safe. Since the Danish Student Survey has not carried out a new assessment of the strategic target indicator 'The social study environment is good' in 2022, the IT University has instead carried out an evalu-

ation of the study start, where the majority of the new BSc students expressed that they felt welcome and included.

The strategic target's two indicators on maintaining a high learning outcome have not been assessed by the Danish Student Survey in 2022, and therefore the development related to the baseline in 2021 is not known. Therefore, the evaluation results from the IT University's own half-yearly course evaluation are taken into account, where there is an increase in the students' assessment of the two overall learning questions to 4.5 in 2022 compared to 4.3 in 2021 on a 1-6 scale. As the Danish Student Survey was not carried out in 2022, there is no new data for the indicators on well-being and study intensity.

In summary, it is assessed that these new supportive activities, which have been carried out at the study start in 2022 under the auspices of the IT University's Study and Career Guidance, have had a positive impact on the target of creating social communities and well-being, which is a prerequisite for high learning outcome.

The drop-out rate after the first year of study is also an indicator of, among others, study well-being at the study start. The drop-out rate after the first year of the BSc study programmes has decreased in 2022 from the baseline of 15.5 per cent in 2021 to 14.4 per cent in 2022. On the MSc study programmes, the drop-out rate after the first year of study is unchanged, as the drop-out rate in 2022 is 6.8 per cent where the baseline was 6.9 per cent in 2021. The IT University assesses the increase in the retention of BSc students as positive in a study year where the first semester was still very much affected by COVID-19.

## STRATEGIC TARGET 3

### Strategic target 3:

The IT University intends to strengthen the IT research by establishing a research centre that can strengthen research within green digital transition; strengthen the research field of data science by maintaining the level of VIPs and expanding the amount of external research funding; establish a research centre with focus on research within digital play.

The IT University has made significant progress and thus a satisfactory development within this target in 2022, as research with focus on both green digital transition and digital play has been strengthened, at the same time as the number of academic staff and consumption of external research funding within data science have increased.

An interdisciplinary research centre, the Center for Climate IT, with focus on green digital transition, has been established. The centre has the participation of researchers from each of the three departments of the IT University, and there are 25 researchers associated with the centre at the end of 2022. External funding related to the centre has not yet been consumed, as the centre was inaugurated in early

December 2022. The initiation of the development of a climate strategy for the IT University has been a significant supportive activity for the establishment of the research centre.

The number of academic staff at assistant professor, associate professor and full professor level within the research field of data science has increased by five across the three departments at the IT University. At the end of 2022, 28 researchers were employed in the mentioned job categories, where 23 researchers were employed at the end of 2021, which is the baseline for this indicator. The researchers within the field have consumed external research funding for a total of DKK 13.3 million, which is a significant growth compared to the baseline in 2021 of DKK 9.7

million. As a significant supportive activity, in 2022 the IT University has successfully applied to several private foundations which have given the opportunity to apply for support in the data science field.

In 2022, a research centre was launched, the Center for Digital Play, consisting of more than 25 researchers. The centre was established in December 2022, as a further development of the former Center for Computer Games. The new centre has a wider scope than just computer games. As a significant supportive activity, researchers from the centre have established a new collaboration agreement within the Digital Play field in 2022.

## STRATEGIC TARGET 4

### Strategic target 4:

The IT University will strengthen IT research relevant to society and contribute to innovation outside the university sector through business-oriented career opportunities aimed at students at the IT University's PhD School. As part of strengthening the PhD School, the IT University will highlight the career opportunities outside the university sector and contribute with innovative solutions for the benefit of society through the university's collaboration with GTS's, clusters and companies.

Overall, the IT University assesses that there is a satisfactory development within the target. The assessment is based on the fact that, in order to contribute to IT research relevant to society and innovation outside the university sector, several activities have been carried out for the IT University's PhD students to make the career opportunities visible. Furthermore, in 2022, there have been significantly more graduates and significantly fewer admitted than the average for the baseline for the indicators in the past four years.

For PhD students to help strengthen IT research relevant for society and contribute with innovation outside the university sector, it is important to increase the number of PhD graduates at the IT University. In 2022, 17 PhDs graduated from the IT University, which shows a significant increase compared to the past four years' average of 12 graduates, which forms the baseline for the target's indicator. Furthermore, the 17 graduates are higher than the 14 graduates, which is the IT University's target for graduates in 2022.

Admission of PhD students is the prerequisite for being able to increase the number of PhD graduates. The IT University has admitted 15 PhD students in 2022, which is significantly fewer than during the past four years' average of 20 PhD students, which forms the baseline for this indicator, and which is also the IT University's target for 2022. In addition to the 15 admitted in 2022, decisions were made in the second half of 2022 to admit further eight PhD students with planned starts in the second part of 2022, but who have been postponed to start in early 2023. Since there are unusually many postponements, the IT University assesses that in 2022 there has been a satisfactory level of activity in the admission process of new PhD students.

To strengthen PhD students' research work relevant for society and raise awareness of opportunities to support innovation in Danish companies, several activities have been carried out in 2022 to make the career opportunities outside the university sector visible for PhD students at the IT University. In 2022, the

development of a PhD course on career and innovation collaborations is initiated as well as discussion of career choices at the PhD students' annual MUS, employee development interview. During one of the PhD School's 'PhD luncheons', a career workshop was held with a presentation on 'transferable skills' and research work outside the university, including among others a presentation by a former PhD student at the IT University.

## STRATEGIC TARGET 5

Strategic target 5:

The IT University will increase the course activities that contribute to lifelong learning, and in this way contribute to Denmark being able to maintain a strong competitiveness and enter the future strengthened.

Despite the fact, that there are no significantly increased course activities in 2022, the IT University assesses that, overall, there is a satisfactory development within the area of the target, as organisational changes have been made in 2022 as well as several adjustments to the offer of lifelong learning with the purpose of increasing the activities in the future.

The development within the target's indicators shows that the number of course participants and part-time students has increased in 2022, while the number of held course activities has decreased.

The number of course participants and part-time students has increased by 6 per cent from a baseline of 600 in 2021 to 634 in 2022. The

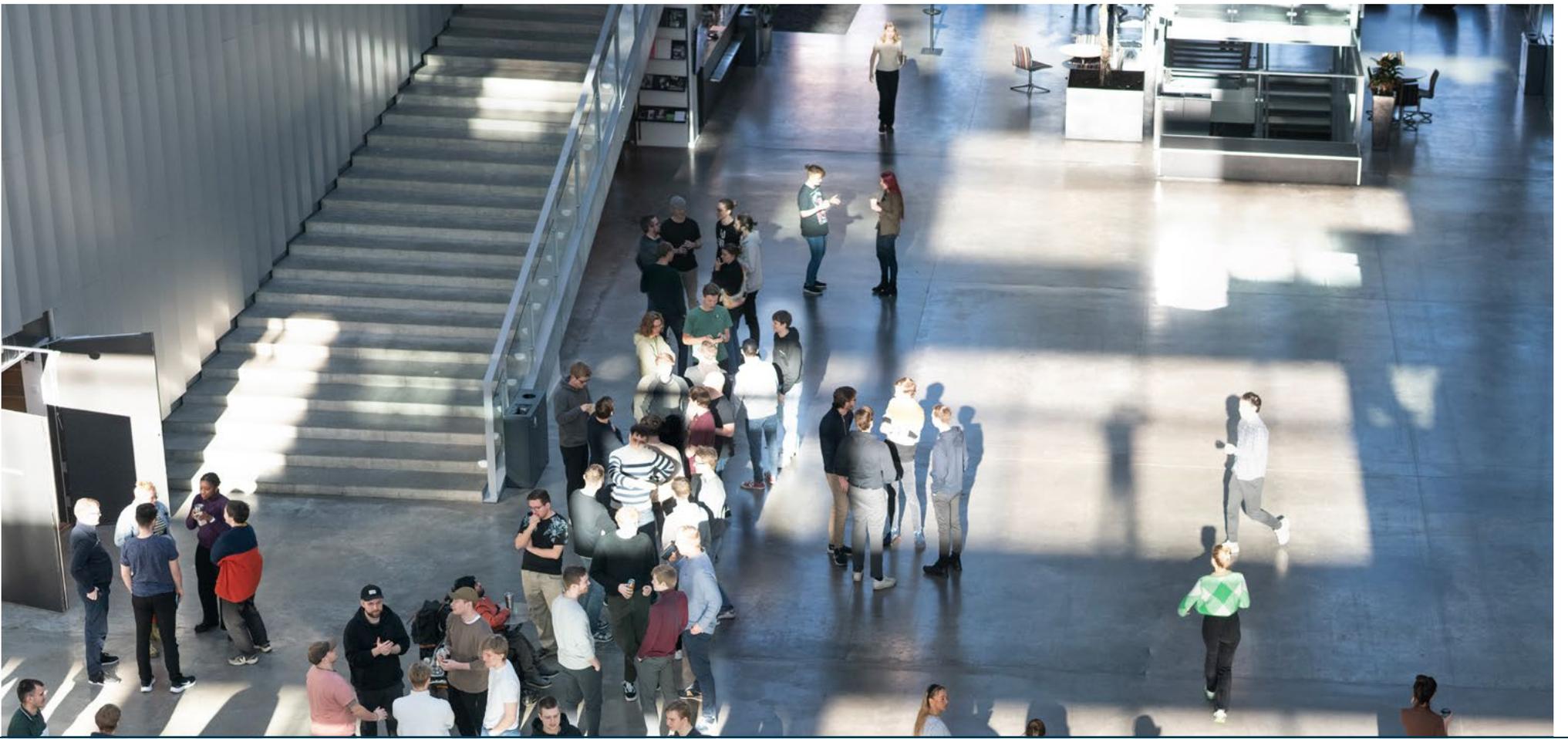
increase, which has occurred despite a falling number of held courses, is primarily due to the holding of two courses, SikkerCyber and Teknosofikum, both of which had relatively large numbers of participants.

The number of held course activities has fallen by 18 per cent from a baseline of 100 in 2021 to 82 in 2022. The decrease is primarily due to fewer courses being offered as income covered business, which are named ITU Professional Courses. At the same time, there has been a decrease in the number of webinars.

The turnover relating to course activities carried out as income covered business is nearly unchanged in 2022 at DKK 2.00 million compared to the baseline in 2021, which was DKK 2.07 million. It has thus been possible

to maintain a turnover at the same level with fewer course activities, which means that it has been possible to attract more participants per course activity.

A baseline has been established in 2022 for the indicator regarding the evaluation of the courses offered as income covered business. Five conditions are evaluated, two of which 1) assessment of the course's professional content, and 2) whether the course met expectations, are included as indicators for the strategic target. In 2022, the first condition had an average evaluation result of 4.23 and the second an evaluation result of 4.45 on a scale of 1-5, with five being the best. The evaluation results are assessed to be very satisfactory.



# APPENDIXES



# APPENDIX 1

## MANAGEMENT STRUCTURE OF THE IT UNIVERSITY 31 DECEMBER

The IT University is governed by a Board of Directors and an Executive Management.

### The Board of Directors

The Board of Directors of the IT University includes a chairman, a deputy chairman and seven members. The chairman, deputy chairman and three members are external members, one member is elected by and among the academic staff at the IT University, one member is elected by and among the technical/administrative staff at the IT University, and two members are elected by and among the students at the IT University.

The Board of Directors is the highest authority of the IT University. The Board of Directors protects the interests of the IT University in its role as an educational and research institution and establishes guidelines of its organisation, long-term activities and development.

Board meetings are public. However, cases which fall within the statutory provisions on secrecy in public administration, all cases related to persons and cases which include information on contract negotiations with private parties or similar negotiations with public partners are handled in confidence.

### Vice Chancellor

The Vice Chancellor answers to the Board of Directors on all matters and is responsible for the day-to-day management of the IT University within the framework stipulated by the Board of Directors. This right of management includes all staff employed by the IT University.

The Vice Chancellor must ensure that the IT University acts in accordance with the legislation and regulations in force from time to time and is obliged to carry out all other actions, which are required in order to ensure that the IT University is managed in a good and proper manner.

### Pro-rector

The Pro-rector supplements the Vice Chancellor in all types of tasks carried out by the Vice Chancellor.

### University Director

The University Director is responsible for ensuring that the entire administration supports research and education to the widest possible extent. The University Director is accountable to the Vice Chancellor for the observance of the legislation in force in the administrative area and for ensuring cohesion between the

administrative processes across the administrative departments.

The University Director is in charge of all large inter-disciplinary projects of the administrative departments and represents the administration in relation to the external world.

### Executive Management

The Executive Management includes the Vice Chancellor, the Pro-rector and the University Director. The Executive Management is responsible for the preparation of the strategies of the IT University and the preparation and negotiation of the Development Contract with Ministry of Higher Education and Science.

The Executive Management is responsible for ensuring that the development of the IT University is supported optimally within the financial framework provided by the Board of Directors. The work of the Executive Management results in cohesion between research, education and administration. In its day-to-day work, the Executive Management works on the promotion of the three core values of the IT University: Trend setting, responsibility and openness, throughout the organisation.

### Academic Council

The Vice Chancellor appoints an Academic Council. The Academic Council includes a chairman and four members and chooses its own chairman among the members of the council. Two members are elected by and among the academic staff at the IT University, and two members are elected by and among the students at the IT University.

The Academic Council answers to the Vice Chancellor in the areas of central strategic research and education and plans the exchange of know-how, awards the degrees PhD and doctorate and may issue statements on all academic matters of material importance to the activities, etc., of the IT University.

### Study Committee

The Vice Chancellor appoints one or more study committees, including members in identical numbers of academic staff (VIP) and students. Each study committee appoints a chairman among its VIP members and a deputy chairman among its student members. The chairman and the deputy chairman are approved by the Vice Chancellor.

The study committee carries out planning, implementation and development of courses and tuition, including quality assurance and quality development of courses and tuition, preparation of draft curricula and amendments to these and approval of plans for preparation of courses and tests, etc.

#### PhD Council

The Vice Chancellor appoints a PhD Council, including members in identical numbers of science staff (VIP) and students. The chairman and the deputy chairman are appointed by the Vice Chancellor on recommendation of the PhD Committee.

The PhD Council approves PhD courses, issues statements on the evaluation of the PhD programme, and provides guidelines to the Head of the PhD Programme and approves applications for merit and exemption, etc.

#### Heads of Department

The Heads of Department are appointed and dismissed by the Vice Chancellor. The Head of each Department is responsible for the day-to-day management of the department,

including the planning and allocation of tasks. The Head of Department may request staff to carry out specific tasks. When academic staff is not occupied with such tasks, they carry out independent research within the strategic framework of the IT University.

A Head of Department ensures quality and cohesion in research and education and must include the Study Committee and the Head of studies in its evaluation of education and tuition.

#### Dean of Education

The Dean of Education is employed by the Vice Chancellor. The Dean of Education has the overall responsibility for all the IT University's educational activities, their organisation, implementation, quality assurance and development. In addition, the Dean of Education is responsible for leading the renewal of teaching and educational activities, including the development of new study programmes, and the management of the organisational changes that are needed to achieve targets and meet quality standards.

#### Cooperation and Safety Committees

The safety and cooperation organisation of the IT University consists of a Main Co-operation and Safety Board (H-SiSu) and two sub-committees: the Administrative Co-operation and Safety Board (A-SiSu), which covers the administrative section, and the Research Cooperation and Safety Board (F-SiSu), which covers the department, plus two safety groups in each sub-committee.

In general, subjects related to members of staff are handled by H-SiSu, including policies, strategies, workplace assessments (APV), staff satisfaction evaluations (MTU) and drafts for staff development meetings (MUS). Subjects relevant to administration or research only are handled by A-SiSu and F-SiSu, respectively. As a rule, subjects relating to health and safety at work are handled by A-SiSu and F-SiSu.

Close cooperation between the "SiSu"s are presupposed. Discussion of topics may be delegated by H-SiSu to A-SiSu or F-SiSu, respectively, and topics which have been discussed in A-SiSu and F-SiSu may be handled by H-SiSu if this is considered necessary.

# APPENDIX 2

## MEMBERS OF THE EMPLOYERS' PANELS OF THE IT UNIVERSITY

### EXECUTIVE-LEVEL EMPLOYERS' PANEL:

**Tine Thorn (chairman)**

IT Development Manager, AP Pension

**Michael Aagaard Biermann**

CIO, Ørsted

**Anders Peter Kierbye Johansen**

Chief People and Culture Officer, Maersk  
Mc-Kinney Møller Center for Zero Carbon  
Shipping

**Mads Kjøller Damkjær**

Managing Partner, Tomorrow projects

**Signe Caspersen**

Deputy Director, Økonomistyrelsen

**Gert Sylvest**

Co-founder, VP of Network Products,  
Tradeshift

**Lars Endahl**

Statistical Vice President, Novo Nordisk

**Thomas Krogh Jensen**

CEO, Copenhagen Fin Tech

**Mette Lundberg**

Direktør for politik og kommunikation,  
IT-B Branchen

### BACHELOR IN SOFTWARE DEVELOPMENT (SWU), BACHELOR IN DATA SCIENCE (DS), CAND. IT., SOFTWARE DESIGN (SD), CAND.SCIENT. COMPUTER SCIENCE (CS) AND CAND.SCIENT. DATA SCIENCE:

**Christian Bjerre Nielsen (chairman)**

Chief Product Officer, uQualio ApS

**Bodil Biering**

Independent Consultant

**Kaare Brandt Petersen**

Director of Learning Analytics, Laerdal  
Copenhagen

**Søren Ilsoe**

Director for AI and Data Consulting, Deloitte

**Mikkel Mühldorff Sigurd**

Optimization Manager, Maersk Line

**Mille Østerlund**

Chef for Civil rådgivning, CFCS – Center for  
Cybersikkerhed

**Galina Ianchina**

Deputy Director for IT, Roskilde Universitet

**Jane Eriksson Dahl**

Head of Division, Digitaliseringsstyrelsen

**Maiken Lykke**

Country Manager, Sopra Steria

**Massimo Giulio Caterino**

Sr. Cloud Solution Architect, App Innovation,  
Microsoft

**Anne Hauberg Aakjer**

Chief Data Officer, BEC

**Daniel Schiermer**

Head of e-Trading, Managing Director, Nordea  
Markets, Corporates & Institutions

**Jacob Benjamin Cholewa**

Managing Architect, Netcompany

**Torben Wind Meyhoff**

Vice President Architect Manager, SimCorp

**BACHELOR IN DIGITAL DESIGN AND INTERACTIVE TECHNOLOGIES (DDIT) AND CAND. IT., DIGITAL DESIGN AND INTERACTIVE TECHNOLOGIES (DDIT):**

**Rie Scheuermann Christensen (formand)**

Lead Digital Product Designer, Lego

**Michael Harboe**

Strategic Advisor and CEO, Virsabi

**Sarah Kirkeby**

Head of Office – IT and Digital Innovation, Erhvervsstyrelsen

**Cecilie Dannisøe**

User Experience Director, 1508

**Emma-Catrine Hviid**

Head of UX & Design, Nykredit

**Kristina Touborg**

Corporate Vice President for Business Support – API Production, Novo Nordisk

**Lars Reimar**

Creative Director, FOSS

**CAND.IT., GAMES (GAMES):**

**Astrid Refstrup (formand)**

CEO, Triple Topping

**Adam Mechtley**

Director, Software Engineering, Unity Technologies

**Marina Surdu**

Senior Talent Acquisition & Employer Branding Specialist, IO Interactive

**Hannah Nicklin**

CEO, Die Gute Fabrik

**Christos Iosifidis**

Chief Product Officer, Wellidium

**Aleksandra Bralczyk**

Recruiting Team Lead, Tactile

**Anders Tankred Holm**

Head of Technology, LEGO Games

**BACHELOR IN GLOBAL BUSINESS INFORMATIC (GBI) AND CAND.IT., DIGITAL INNOVATION AND MANAGEMENT (DIM):**

**Kirsten Nielsen (formand)**

Talent Pipeline Management-Programme Manager, Nordea Markets, Nordea

**Joacim Jeppesen**

Global Chief Growth Officer, Valtech

**Ina Corydon**

Director, KOMBIT

**Gert Hemmingsen**

Executive Director, Valcon Consulting A/S

**Martin Petersen**

Partner, EY

**Franci Johansen**

Unit Manager, CIMT, Region Hovedstaden

**Mette Steffensen**

Managing Director, Accenture

**Carolina Benjaminsen**

CEO, DigitalLead

**Anne Vadgaard**

Manager, Netcompany

**MASTER IN IT MANAGEMENT (ILM):**

**Ghita Thiesen (formand)**

Head of Office, KL

**Martin Jensen Buch**

Head Consultant, IT-Branchen

**Erik Møberg**

Director, Rambøll Management Consulting

**Pernille Juel Sefort**

HR Manager, Naviair

**Lisbeth Nielsen**

CEO, Sundhedsdatastyrelsen

**Mikkel Ebbesen**

Regional Director, DK, Computas

**Steffen Rasmussen**

Head Consultant, Landbrugsstyrelsen

**Dorthe Vang Kristensen**

Head of Center, Beskæftigelses- og Integrationsforvaltningen, Københavns Kommune

# APPENDIX 3

## WHISTLEBLOWER SCHEME AT THE IT UNIVERSITY

Based on EU directive 2019/197 of 23 October 2019, the IT University has established an internal whistleblower scheme. The IT University has chosen to make use of external assistance for the whistleblower scheme from Damkjær Lauritzen Advokatfirma I/S. Going forward, the assistance consists of receiving/screening of reports and specific interpretation, while the IT University's lawyers in the Management Secretariat have been appointed as an internal whistleblower unit and thus the internal unit that receives and initiates investigations and more at the IT University.

**Publication of information about the IT University's whistleblower scheme**  
 In accordance with the Act on Protection of Whistleblowers, information is hereby provided on the website about the general activity of the IT University's whistleblower scheme for the period 17 December 2021 to 31 December 2022. For the sake of clarity, the information that the IT University is obliged to publish is inserted in the table below.

Number of reports received	Number of reports that have been considered	Number of reports that have been rejected	Number of reports that have caused a report to the police	General themes
1	0	1	-	-