

# ANNUAL REPORT 2019

IT UNIVERSITY OF COPENHAGEN

# CONTENT

UNIVERSITY DETAILS	
MANAGEMENT STATEMENTS AND INDEPENDENT AUDITORS REPORT	6
STATEMENT BY THE BOARD OF DIRECTORS AND THE EXECUTIVE MANAGEMENT	
INDEPENDENT AUDITORS' REPORT	
OPERATING REVIEW	10
PRESENTATION	11
STRATEGY	
WORK OF THE BOARD OF DIRECTORS	
	15
FINANCIAL RESULTS FOR THE YEAR	
ACADEMIC PERFORMANCE FOR THE YEAR	
OUTLOOK FOR THE COMING YEAR	22
FINANCIAL STATEMENTS	
APPLIED ACCOUNTING POLICIES	
INCOME STATEMENT 1 JANUARY – 31 DECEMBER	
BALANCE SHEET AT 31 DECEMBER	29
CASH FLOW STATEMENT 1 JANUARY TO 31 DECEMBER	
NOTES TO THE FINANCIAL STATEMENTS	
KEY FINANCIAL FIGURES AND RATIOS	
REPORTING	
THE STRATEGIC FRAMEWORK CONTRACT FOR 2019	
STRATEGIC TARGET 1	
STRATEGIC TARGET 2	
STRATEGIC TARGET 3	
STRATEGIC TARGET 4	
STRATEGIC TARGET 5	
STRATEGIC TARGET 6	
APPENDIXES	
APPENDIX 1 – MANAGEMENT STRUCTURE OF THE IT UNIVERSITY 31 DECEMBER	
APPENDIX 2 – MEMBERS OF THE EMPLOYERS' PANELS OF THE IT UNIVERSITY	
APPENDIX 3 – THE DATA PROTECTION OFFICER'S STATUS OVER 2019	54

# **UNIVERSITY DETAILS**



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CVR-no.	29 05 77 53
Registered office	Copenhagen

#### **BOARD OF DIRECTORS**

#### Maria Rørbye Rønn

Chairman of the Board of Directors, Director General of Radio Denmark, CEO, born 1964. Deputy Chairman of the Board of Directors of Ritzaus Bureau A/S. Member of Advisory Board Ordrupgaard.

#### Lars Mathiesen

Deputy Chairman of the Board of Directors, Director, Frost Management, born 1956. Associated Director, Deloitte. Member of the Board of Directors of Signicat A/S. Member of the National IT Project Council, the IT Project Council of the Municipality of Copenhagen, the IT Council of Danish Regions and the Expert Council of the Capital Region of Denmark.

#### David Basin Dr., Professor, ETH Zürich, born 1961.

#### Lars Frelle-Petersen

Director, Confederation of Danish Industry, born 1970. Chairman of the Board of Directors of the Association Roskilde Festival and Bygnings- og udviklingsfonden at the Danish Museum of Science and Technology. Member of the Board of Directors of DenmarkBridge, DIBD A/S, MADE, Copenhagen HealthTech and Copenhagen FinTech.

#### Kristine Stenhuus Vice President, NNIT, born 1973.

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#### Mircea Lungu

Associate Professor, IT University of Copenhagen, born 1980. Joined the Board of Directors on 1 January 2020.

#### Karina Garnier Christensen Academic Advisor, IT University of Copenhagen, born 1973.

#### Sebastian Mateos Nicolajsen

Bachelor of Science Student, IT University of Copenhagen, born 1998. Joined the Board of Directors on 1 January 2020.

#### Sophia Aumüller-Wagner

Master of Science Student, IT University of Copenhagen, born 1989. Joined the Board of Directors on 1 January 2020.

# **EXECUTIVE MANAGEMENT, AUDITORS, ATTORNEYS AND BANK**



#### EXECUTIVE MANAGEMENT

Martin Tvede Zachariasen Vice Chancellor

Jens Christian Godskesen Pro-rector

Georg Dam Steffensen University Director

#### AUDITOR

Rigsrevisionen (The Danish National Audit Office) Landgreven 4 DK-1301 København K

#### INSTITUTIONAL AUDITOR

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#### ATTORNEYS

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# MANAGEMENT STATEMENTS AND INDEPENDENT AUDITORS REPORT

# 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 Executive Order no. 870 of 26 August 2019 on Grants and Auditing etc. of Universities.

#### It is hereby stated that:

- 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 comprised by the Annual Report.

Copenhagen, 1 April 2020

#### THE EXECUTIVE MANAGEMENT OF THE IT UNIVERSITY OF COPENHAGEN

Martin Tvede ZachariasenJens ChritVice ChancellorPro-rector

Jens Christian Godskesen Pro-rector Georg Dam Steffensen University Director

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

Maria Rørbye Rønn	Lars Mathiesen	David Basin
Chairman, External member	Deputy Chairman, External member	External member
Lars Frelle-Petersen	Kristine Stenhuus	Mircea Lungu
External member	External member	Staff-elected member
Karina Garnier Christensen	Sophia Aumüller-Wagner	Sebastian Mateos Nicolajsen
Staff-elected member	Student-elected member	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 2019, which comprise accounting policies, income statement, balance sheet, cash flow statement and notes, including supplementary information. The financial statements are prepared in accordance with the Danish State's accounting rules and ministerial order no. 870 of 26 August 2019 on funding and auditing, etc., of universities (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' Code of Ethics for Professional Accountants (IESBA Code) and additional requirements applicable in Denmark, and we have fulfilled our other ethical responsibilities in accordance with these rules and requirements.

### 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, reporting on the Strategic Framework Contract and financial highlights

Management is responsible for the Management's review (pages 10 - 22), reporting on the Strategic Framework Contract (pages 41 - 48) and financial highlights (pages 39 - 40), 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 entities 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, 1 April 2020 ERNST & YOUNG Godkendt Revisionspartnerselskab CVR no. 30 70 02 28

Peter Gath State Authorised Public Accountant mne19718

Morten Weinreich Larsen State Authorised Public Accountant mne42791



# **OPERATING REVIEW**





# PRESENTATION

The IT University of Copenhagen (hereafter called IT University) 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 IT research and IT 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 2017-2021 is to increase, as much as possible, the number of people in Denmark creating value with IT in ways that meet the standards of leadingedge IT research.

# In concrete terms the IT University works with the following areas of action:

- 1. Increasing the number of highly educated IT professionals
- 2. Increasing the number of female IT professionals
- 3. Increasing quality and relevance of all study programmes
- **4.** Increasing IT research within areas of major societal importance, specifically:
  - a. Digitalisation
  - **b.** Information security
  - c. Data science
- 5. Strengthening the IT subjects in primary and secondary education.

#### **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, or the intellect, 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: BUSINESS IT

**DIGITAL DESIGN** 

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.

COMPUTER SCIENCE

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

In 2016, the IT University achieved a positive institutional accreditation. The positive institutional accreditation is valid until 2022.

With the institutional accreditation, the IT University has systematised its quality assurance work considerably. The IT University's Quality Policy sets quality standards and describes processes to discover and handle any breach of these quality standards.

Feedback and learning technology are two out of six selected pedagogical focus areas in the quality development of the study programmes at the IT University and have been as such for several years.

In 2019, the quality grant of the government grants has contributed to the IT University's further developing of a toolbox, "Teaching Guide" and conducting competence development workshops for teachers and teaching assistants. In addition, the quality grant has helped increasing the number of platforms, including licenses for specific technologies. These tools and teacher competences have, among others, been used at pilot projects at selected courses where blended learning has been included in the teaching, including increased use of relevant digital tools for tests and feedback that support the students learning.

Further, the IT University has used the quality grant to increase and further develop the "Study Lab", which is a supplement to the teaching of programming courses and other technical courses. Here, students receive individual and competent help and feedback from teaching assistants. The quality grant has thus contributed to initiatives that have increased the focus on feedback and the usage of technology in the study programmes. The work on relevance is carried out in cooperation with the university's five Programme-Specific Employers' Panels and the overlying Executive-Level Employers' Panel. All Employers' Panels have met at least twice in 2019 and have submitted reports to the university offering assessments and recommendations. In 2019, the approach to the work in the Employers' Panels has been evaluated and this has led to some minor changes in the commissariat of the Employers' Panels, including their way of meeting and reporting.

# WORK OF THE BOARD OF DIRECTORS

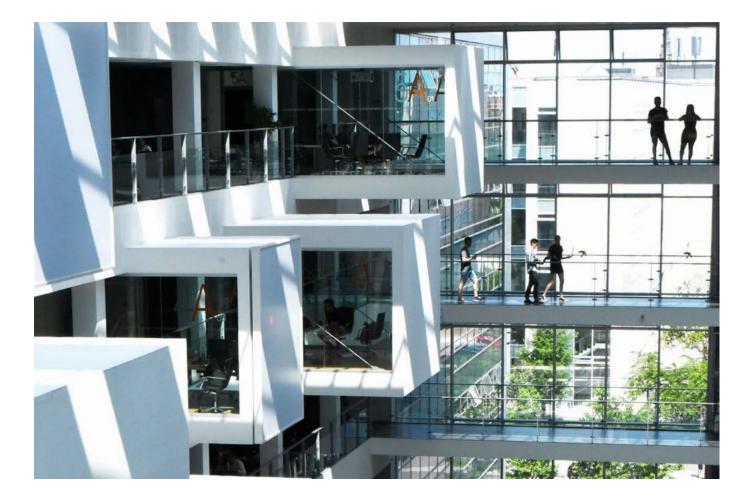
The composition of the Board of Directors has been the same throughout the year 2019: Maria Rørbye Rønn (Chairman), Lars Mathiesen (Deputy Chairman), Kristine Stenhuus, Lars Frelle-Petersen, David Basin, Karina Garnier Christensen, Irina Shklovski, Emma Arfelt Kock and Liam Phan Asmussen.

In 2019, based on the IT University's overall strategy for 2017-2021, the Board of Directors has had a special focus on the role of the IT University to meet the demand for highly skilled IT specialists in Denmark. The Board of Directors and the management have the ambition to increase the number of admitted applicants on the university's study programmes and work purposefully to create the necessary framework for this.

The so-called international dimensioning, which from 2019 has limited the admission of English-language foreign students at the IT University, has had the attention of the Board of Directors in 2019. The dimensioning has meant that the university has had to tighten admission requirements in relation to Danish language skills on three of the university's study programmes. The increased admission requirements have reduced the number of applications for the university's study programmes accordingly.

The Board of Directors of the IT University continues to focus on the gender balance among students, and in 2019, just like in 2018, targets have been set for the number of female students on the BSc study programmes in Software Development and Data Science.

Finally, the Board of Directors has been preoccupied with the IT University's efforts on information security and has, among others, discussed the topic at the Board of Directors' strategy seminar in 2019.

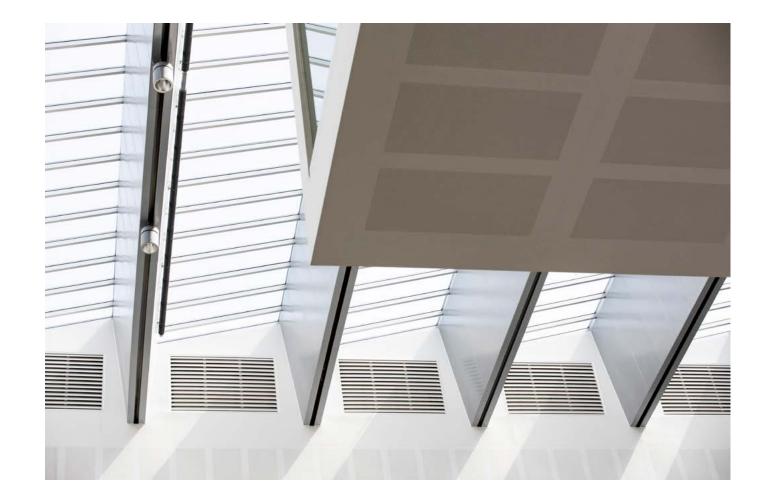


# STRATEGIC FRAMEWORK CONTRACT

2019 was the second year in the period of the Strategic Framework Contract for 2018-2021. In the contract period, the strategic targets for the IT University are:

- **1.** Increasing the capacity of research-based education of technical IT professionals
- **2.** Increasing the number of female technical IT professionals
- **3.** Achieving a high learning outcome for all students
- **4.** All graduates should achieve good career opportunities
- **5.** Strengthening IT research within areas that reflects societal needs
- **6.** Strengthening the IT subjects in primary schools and high schools by co-operation and exchange of knowledge.

Based on an assessment of the progress made in realising each of the six strategic targets of the Strategic Framework Contract, the IT University has prepared a statement for 2019. The conclusions of the statement are presented in chapter 'Reporting of the Strategic Framework Contract for 2019'.



# FINANCIAL RESULTS FOR THE YEAR

The financial results for the year are provided in table 1. The table shows a positive result of DKK 9.3 million, which is 5.6 million better than the budgeted profit of DKK 3.7 million. The positive result for the year before financial income and expenses of DKK 6.5 million is significantly better than last year's negative result before financial income and expenses of DKK -0.5 million.

#### TABLE 1: Financial result of the year (DKK M)

Realised 2017	Realised 2018	Realised 2019	Budget 2019	Budget 2020
276.0	298.9	340.5	334.1	343.8
177.7	191.9	210.4	211.4	222.9
103.7	107.6	123.7	120.0	142.5
-5.4	-0.5	6.5	2.8	-21.5
3.3	-1.4	2.8	0.9	0.9
-2.1	-2.0	9.3	3.7	-20.6
76.2	74.2	83.5	77.9	62.9
	2017 276.0 177.7 103.7 -5.4 3.3 -2.1	20172018276.0298.9177.7191.9103.7107.6-5.4-0.53.3-1.4-2.1-2.0	201720182019276.0298.9340.5177.7191.9210.4103.7107.6123.7-5.4-0.56.53.3-1.42.8-2.1-2.09.3	2017201820192019276.0298.9340.5334.1177.7191.9210.4211.4103.7107.6123.7120.0-5.4-0.56.52.83.3-1.42.80.9-2.1-2.09.33.7

\* Equity at 31 December for budget 2019 and 2020 are adjusted based on the realised results in 2018 and 2019.

#### Income

The difference between the budgeted and the realised income of DKK 334.1 and DKK 340.5 million, respectively, came out at DKK 6.4 million.

Income from government grants and tuition fees was DKK 294.4 million, which is DKK 4.3 million higher than budgeted. The primary reasons are slightly higher study activity on both full-time and part-time study programmes than budgeted as well as a higher employment rate among newly graduated than budgeted, which gives a higher employment bonus. Further, at the end of 2019, the IT University has received the first tranche of a multiannual grant from the STEM Pool for increasing admission of students as well as a smaller grant for well-being activities for students.

Income from externally funded research came out at DKK 36.1 million, which is DKK 2.1 million higher than budgeted.

Other income, for example from commercial activities and externally funded development projects, was DKK 10.1 million as budgeted.

#### Personnel expenses

The realised personnel expenses of DKK 210.4 million essentially corresponds to the budgeted personnel expenses with a deviation of less than one per cent. Personnel expenses have increased compared to 2018 due to an increase in educational activities and externally funded research.

Personnel expenses for the academic staff were DKK 3.0 million less than budgeted. While the increase in educational activities succeeds as planned, the recruitment of researchers with a teaching obligation at the academic departments has been delayed, meaning that personnel expenses are DKK 5.0 million lower than budgeted. By contrast, the number of employments funded by externally funded research was DKK 2.0 million higher than budgeted.

Personnel expenses for the technical and administrative staff are DKK 3.0 million higher than budgeted, primarily due to transfers from the management pool to support growth in education and research activities.

#### Ordinary operating costs

The realised operating costs and depreciations of DKK 123.7 million are close to the budgeted operating costs and depreciations with a deviation of three per cent.

#### Financials

The financials are affected by a high positive return of DKK 4.3 million on the securities holding of the IT University. The IT University has chosen to write down the investment capital in the subsidiary company, ITU Business Development A/S by DKK 1.5 million, as the company's equity has decreased since its founding in 2014. In the short term, there is no prospect of a restoration of equity, but the IT University still trust that the company at longer term will generate a positive return.

# **ACADEMIC PERFORMANCE FOR THE YEAR**

#### RESEARCH

Research at the IT University has had a great impact in 2019. This has been achieved through, among others, visibility in the media, participation in debates at, among others, "Folkemødet" (Denmark's Democratic Festival on Bornholm) and by establishing two new research centers: Center for Information Security and Trust and Center for Digital Welfare. It has been extremely positive that the researchers at the IT University have attracted external research funding of a magnitude that has not been seen before. Further, it is the first year where all of the IT University's research publications are registered as Open Access publications.

Below is a short status on research at the IT University in 2019.

#### Strengthening the reputation

A number of researchers have received awards and acknowledgements for their research in 2019. Professor and Head of Center for Computer Games Research, Espen Arseth, was admitted into the prestigious Royal Danish Academy of Sciences and Letters. The Royal Danish Academy of Sciences and Letters is a Danish academy of sciences, founded in 1742 to promote scientific knowledge and technology.

Assistant Professor Rune Kristian Lundedal Nielsen received the Tietgen Award for his research in computer games and addiction. The award includes DKK 500,000. The Tietgen Award is awarded to younger researchers who contribute with knowledge for the benefit of the Danish business sector. With his research Rune contributes with knowledge to the issue of whether children and adolescents become addicted from the hours spent in front of the computer with computer games. The "Digital Games Research Association" declared Associate Professor Torill Mortensen to be "Distinguished Scholar" at the annual conference in Kyoto. The title was given because of Torill's high scientific level, which has contributed to define the field of research in computer games.

Professor and Head of the European Blockchain Center, Roman Beck, was declared by the recognised German magazine "WirthschaftsWoche" to be one of the most influential German "Business Administration" professors, ranked as number 45 out of 2500 professors. The worldwide nonprofit organisation, Open Web Application Security Project (OWASP), has appointed Assistant Professor Alessandro Bruni as local manager in Copenhagen. OWASP's mission is to make software security visible so both individuals and organisations can make well informed decisions.

Associate Professor Barbara Plank has received the prestigious Amazon Research Award for her work on improving automatic language understanding. Barbara's research focuses on deep learning methods for language technology. In the Amazon project, she will develop algorithms to make products like digital assistants better understand users' commands. Professor Philippe Bonnet was awarded the "MDM 20-Year Influential Paper Award" at the "Mobile Data Management" (MDM) conference for the article "Towards Sensor Database Systems". The award is part of the celebration of MDM's 20th birthday and is awarded an article that has had an unusually significant impact in the research field. The article has more than 1,000 references from other researchers.

Carsten Schürmann, Thore Husfeldt and Yvonne Dittrich were appointed professors at the IT University in 2019. Thore is a researcher within the field of algorithmics, Carsten within the field of information security and Yvonne within the field of software engineering.

IT University researchers have often been quoted in the media in 2019 on, for example, blockchain technology, computer games, artificial intelligence, data and IT security. Assistant Professor James Maguire was in the media with the message that data politics is inextricably linked to climate policy. He asks the questions about the climate when large tech companies such as Google, Facebook and Apple set up data centers in Denmark and elaborates that universities have a special responsibility for contributing pioneering and socially relevant research that links climate and data policy closely.

Professor Roman Beck was in the media with the message that the Danish industry has a potent blockchain environment with an unresolved potential. Assistant Professor Rune Kristian Lundedal Nielsen was quoted for instance in "Politiken" for insisting that you cannot become addicted to computer games. Professor Kasper Støy has explained and demystified the concept of artificial intelligence. Professor Brit Ross Winthereik urged for responsible use of public data, among others at "Folkemødet". "Information" quoted Associate Professor Aske Kammer for criticism of large tech companies' use of public data. Associate Professor Søren Debois was often in the media and commented on the vulnerability of Danish companies when it comes to cyber security.

The high profile Professor Emerita Shoshana Zuboff from Harvard Business School spoke at a conference organised by DI Digital and the IT University's Research Centre for Government IT on digital accountability to stakeholders from the public and private sector in a fully booked meeting hall. Shoshana Zuboff's latest book "The Age of Surveillance Capitalism" has received excellent reviews and has been called the first significant review of the economic, social and political state of our age. With her book, Shoshana Zuboff has put digital accountability on the agenda.

Denmark has an indicator for Open Access publishing of research results. When releasing the indicators in 2019, the IT University was a clear number one among all Danish universities. For the first time, all publications of the IT University were registered as Open Access publications while the second best Danish university had registered 64 per cent of its publications as Open Access publications and the national average was 44 per cent.

#### **External research funding**

In 2019, the IT University received external research funding for a total of DKK 63.8 million, which is the largest annual amount received to date in the university's 20-year history. Listed below are some of the projects that were realised in 2019 or will be realised in 2020.

Associate Professor Barbara Plank received a grant of DKK 6.1 million from the Independent Research Fund Denmark's Sapere Aude programme for the project "Multilingual Variety-aware Language Understanding Technology". The purpose of the project is to develop data extraction algorithms that will bring small languages closer to the accuracy level that exists for languages where large amounts of annotated data are available, such as English.

Associate professor Sebastian Risi received a grant of DKK 6.2 million from the Independent Research Fund Denmark's Sapere Aude programme for the project "Adaptive Machines for Industrial Automation". The aim of the project is to develop a fundamentally new paradigm in adaptable machines that continuously learns from experience and that uses previously learned knowledge in new situations.

Associate Professor Vasilis Galis was awarded DKK 6.0 million from the VELUX FONDENs

"Core-group programme" for the research project "Welfare after Digitalization". The project examines the consequences of public digitalisation in four key welfare areas in Denmark: the police, primary school, health care and municipal administration. The project focuses on the relationship between institutional values, infrastructural design and political structures and on the opportunities and constraints that this complex relationship presents.

Associate professor Natalie Schluter has received DKK 3.2 million from Google Research Award for the project "Probing Sound for Better Low-ressource NLP". The purpose of the project is to improve crosslingualism and translation of small languages by using sound as a source.

Associate Professor Barbara Plank has together with Maria Barrett been awarded DKK 2.5 million from the VILLUM FONDEN's international Postdoc programme targeted women in research with the project "A Modeling Relations in Text Using Human Data". Maria Barrett will work with eyetracking and prosodic data to characterize words and text sequences. In this way, a computer will automatically better be able to predict interrelationships in texts.

Associate Professor Bernardo David has received DKK 2.9 million from the

Independent Research Fund Denmark for the project "Transaction Anonymity and Accountability in Cryptocurrencies". The purpose of the project is to design encrypted financial transaction systems, which both maintain personal security and at the same time allow follow-up by the use of modern encrypted protocol techniques.

Associate Professor Barbara Plank has received DKK 2.9 million from the Independent Research Fund Denmark's thematic research in digital technologies for the project "Multilingual Information Extraction for Job Market Analysis". The project will further develop digital techniques, including machine learning, for language understanding, especially regarding smaller languages. The project is being implemented in collaboration with the Danish Agency for Labour Market and Recruitment.

Associate Professor Sebastian Risi has received DKK 2.9 million from the Independent Research Fund Denmark's thematic research in digital technologies for the project "Improving Generalisation in Deep Learning through Quality Diversity". The project is working on a new approach to make neural networks more robust by training groups of networks. It is expected that the method can provide a deeper insight into how neural networks work, and thereby bringing us one step closer to a more explainable artificial intelligence. Associate Professor Bernardo David has received DKK 2.9 million from the Independent Research Fund Denmark's thematic research in digital technologies for the project "Publicly Verifiable Multiparty Computation and Applications". In this research project, Bernardo will explore how to build secure computer protocols for contracts that hide private data from outsiders but allow third parties to verify that the contract has been accomplised properly.

Associate Professor Leon Derczynski has received DKK 2.9 million from the Independent Research Fund Denmark's thematic research in digital technologies for the project "Verif-AI". In the project, Leon will explore ways to find misinformation across languages by detecting where claims have been made and comparing these claims with knowledge bases, such as Statistics Denmark.

Associate Professor Steffen Dalsgaard has received DKK 2.6 million from the Independent Research Fund Denmark's thematic research in digital technologies for the project "Making Sense of Urban Air". In collaboration with the City of Copenhagen's "Copenhagen Solutions Lab", Steffen will through this project investigate how new and more detailed air pollution data from Google's Project Air View is made available in Copenhagen, and what reactions and behavioral patterns such new data sets and data types can cause.

#### New research centers

In 2019, the IT University has established two new research centers, the Center for Information Security and Trust and the Center for Digital Welfare.

Center for Information Security and Trust A future, effective Danish cyber defense depends, among others, on creating a high academic level within the area in Denmark. A high level of IT security is the basis for the political ambitions to increase digitalisation in the public and private sectors, can be realised. The Center for Information Security and Trust is an interdisciplinary center that will contribute to create the basis for the level of IT security in Denmark to match current and future cyber threats.

The new center will be a central national focal point for education and research in IT security, and there will be broad cooperation with both public and private companies as well as Danish and international research institutions. The center, which is anchored at the Department of Computer Science, will be carried by researchers from various academic backgrounds. This is based on an understanding that, in practice, IT security cannot be isolated as a computer science challenge - it is very much about trust and ethics. Therefore, the center will also work with e.g. social science and philosophical aspects of IT security, both in education and research. Professor Carsten Schürmann is Head of the Center.

#### Center for Digital Welfare

We do not know enough about the conseguences of the comprehensive digitalisation of the welfare society. Despite an extensive digital infrastructure in Denmark, there is not much Danish research on the long-term consequences of digitalisation. That is why the IT University has launched the Center for Digital Welfare, which will investigate a number of problems related to digitalisation in the public sector. The new interdisciplinary research center will, among others, investigate the effects of the digital solutions and help create a basis for future digitalisation to align with the values of the welfare society. Head of the Center is Brit Ross Winthereik, who is professor at the Department of Business IT, and has for more than 20 years been researching in digitaliisation of the public sector

#### Contributing valuable research

The European Blockchain Center at the IT University has published the report "Study on the Economic Impact of Blockchain on the Danish Industry and Labor Market". The report, which is funded by the Danish Industry Foundation, shows that Danish companies are far ahead in terms of incorporating blockchain into their businesses. This is illustrated, among others, by the fact that 15 per cent of the large companies and 12 per cent of the medium companies already use blockchainbased solutions.

Language technology can become an important factor of survival for threatened dialects like the dialect spoken at Bornholm (called Bornholmsk). Researchers from the IT University have initiated the first pilot project on Bornholmsk language technology – and created a precursor to 'Google Translate' in Bornholmsk. In collaboration with linguists at the University of Copenhagen, Assistant Professor Leon Derczynski has just developed the first ever language technology tools that can pave the way for digital solutions in Bornholmsk.

It affects our relationship with the public in a number of areas when the contact becomes digital. Assistant Professor Christian Østergaard Madsen from the Research Centre for Government IT calls on greater political interest in the consequences of digitalisation – because it is the trust of the public that is at risk. The many changes and unanswered questions about the consequences of digitalisation cause Christian Østergaard Madsen to call for a greater political focus on digitalisation – and not least to understand, that it has consequences to move the contact with the citizens to a computer screen.

Computer games, like movies, comics and TV series, can be interpreted in many different ways. Often parents and children interpret computer games like "Fortnite" differently, which gives rise to a lack of understanding, thinks PhD Student Ida Kathrine Hammeleff Jørgensen, who is researching in how computer games represent themes such as violence and gender. Ida thinks that the debates on gender and violence in computer games often is missing attention for games to be understood in many different ways – which are equally legitimate. Algorithms can help us to identify fake stories, but it is not without problems to make the technology as judge of what is true and false, says Assistant Professor Leon Derczynski, who is researching in automatic tracking of fake information. The technology might become a useful weapon against fake news and misinformation. It can for example help journalists, who want to fact check their sources and thereby contribute to the limitation of the spread of false information.

There has been a small increase in the number of bibliometric points, BFI, which are calculated by the Danish Agency for Science and Higher Education with almost one year delay. For 2018, a total of 255 points were calculated versus 248 the year before, cf. table 2. Concerning the number of peer-reviewed publications, there have been a small decrease to 234 peer-reviewed publications in 2019 versus 256 in 2018.

There has been an increase in the number of cooperation projects with the business sector from 29 in 2018 to 37 in 2019. At the same time, financial cooperation with the business sector has increased from DKK 10.3 million in 2018 to DKK 15.1 million in 2019. One patent application was submitted in 2019, which was also the case in 2018. One invention was registered in 2019, where no inventions was registered in 2018. As in 2018, the IT University had no patents issued in 2019, cf. the table with Key financial figures and ratios.

#### Entrepreneurship

The IT University is one of the Danish universities participating in the initiative "Open Entrepreneurship", which is meant to increase innovation in Danish compagnies by means of research-based knowledge, inventions and patents. The initiative is supported by the Danish Industry Foundation, and the IT University has received approximately DKK 5 million to establish an innovation unity. The project continues for two more years, and in the last period almost all Danish universities will participate.

#### Strengthen the PhD School

In 2019, Associate Professor Sisse Finken took on the leadership of the PhD School of the IT University. The IT University admitted 20 new PhD students and 10 PhD students graduated in 2019. Several of the PhD students have received attention. PhD student Cathrine Seidelin received an EliteForsk travel grant of DKK 200.000, which is used for a stay abroad at the University of Washington. Cathrine is researching how smaller companies without large IT departments can become better at taking advantage of big data opportunities.

The PhD School was evaluated by an international panel in 2019. The panel suggested, among others, increased strategic focus on the school, as well as the IT University developing its own PhD courses. In 2019, the Head of the PhD School has made a considerable effort to develop the teaching at the PhD School with emphasis on upgrading of the IT University's PhD advisors as well as developing courses for enrolled PhD students.

#### TABLE 2: Research full-time equivalents, PhD theses and publications

	2015	2016	2017	2018	2019
Number of admitted PhD students	14	18	15	13	20
Approved PhD theses	13	15	11	13	10
PhD students (full-time equivalents)	35	32	39	33	40
VIP: Assistant professors, associate professors and professors (full-time equivalents)	72	76	77	86	94
Number of publications (peer-reviewed)	231	231	230	256	234
Publication points	202	236	248	255	*

\* Unfortunately, the figures from the Danish Agency for Science and Higher Education were not available at the completion of the Annual Report.

#### **EDUCATION**

As a consequence of the introduction of the international dimensioning, the admission requirement in relation to Danish language proficiency at the BSc study programmes in Data Science and Global Business Informatics was tightened in 2019. This has resulted in a lower number of applicants for the BSc study programmes in 2019 than in 2018 – roughly equivalent to the number of English-language foreign applicants in 2018. The same reason – as well as increased admission requirements in programming and qualitative methods – have led to a decrease in the number of applicants for the university's MSc study programmes.

Despite the tightened admission requirements, the IT University still has a very good number of applicants in relation to the total number of students that the university's financial framework enables. In 2019, the IT University received 302 first-priority applications for the BSc study programme in Software Development, where 140 students could be admitted. It was therefore decided to transfer 16 study places from the BSc study programme in Data Science to the BSc study programme in Software Development, so that more well-qualified first-priority applicants could be offered a study place.

The total number of enrolled BSc and MSc students is increasing and is now exceeding the number of enrolled students before the Progress Reform. Likewise, the number of BSc and MSc graduates is increased from 2018 to 2019, cf. Table 3.

In the spring of 2019, the IT University got a new MSc study programme in Data Science approved. The plan was to open for admission to this study programme in 2020, when the first bachelors on the BSc study programme in Data Science will graduate. However, it was not possible to ensure the financial framework to open for admission, and the Board of Directors decided in September 2019 not to open the study programme in 2020. A possible opening for admission to the study programme in 2021 awaits clarification on the financial framework during 2020.

The number of applications for the part-time study at the IT University, the Master's study programme in IT Management is good. A revision of the study programme is started in 2019 and a revised version will be offered in 2021.

#### TABLE 3: Enrolled students, full-time student equivalents, graduates and completion times

	2015	2016	2017	2018	2019
Applicants for the MSc study programmes	1,691	1,881	1,707	1,217	1,130
Admitted MSc students	412	479	498	517	507
Enrolled MSc students	1,133	1,106	1,049	1,088	1,123
Graduated MSc students	405	414	470	380	391
Completion time, MSc students (years)	2.6	2.3	2.0	1.8	1.8
Applicants for the bachelor study programmes	999	1,165	1,715	1,787	1,577
Admitted bachelor students	215	273	333	341	364
Enrolled bachelor students	652	682	762	861	963
Graduated bachelor students	162	169	169	156	169
Completion time, bachelor students (years)	2.8	2.8	2.8	2.8	2.8
Number of full-time student equivalents	1,271	1,361	1,357	1,445	1,582
Admitted master's/diploma students	121	69	52	40	42
Enrolled master's/diploma students	689	567	493	431	243
Number of full-time student equivalents obtained by part-time students	105	96	75	94	68

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**

Due to the political agreement in 2018 on additional base grants, the IT University is still planning to continue increasing the number of admitted students on the BSc study programme in Data Science and the MSc study programmes in Computer Science and Software Design.

In December 2019, the IT University signed a rental agreement with DR for renting approximately 9,300 square meters in DR Byen. The rented premises lie in immediate vicinity of the university's current building and are going to house teaching, research and administration. The rental ensures that the IT University can increase the activities in the coming years. The rental agreement will start on 1 March 2020 and moving in is expected right after the summer holidays in 2020.

The IT University wants to open a new MSc study programme in Data Science beginning admission in 2021. Further, the IT University wants to increase the number of admitted students to the BSc study programme in Software Development, the BSc study programme in Global Business Informatics and the MSc study programme in Digital Innovation and Management, which have many qualified applicants and very low unemployment rates among graduates.

In 2019, the IT University significantly increased the total volume of the externally funded research projects, and will in 2020 continue to work on maintaining, and likely further increase, the amount of the externally funded research projects.

The budget for 2020 shows a net deficit of DKK 20.6 million with a related equity forecast as at 31 December 2020 of DKK 62.9 million, cf. table 1. The deficit is primarily due to one-time expenses related to renting new premises in DR Byen.





# **FINANCIAL STATEMENTS**

# **APPLIED ACCOUNTING POLICIES**

#### **Basis of accounting**

The annual report for the IT University has been prepared in accordance with Executive Order no. 870 of 26 August 2019 on Grants and Auditing, etc., of Universities.

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

#### **Recognition and measurement**

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

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

On initial recognition, assets and liabilities are measured at cost. Subsequently, assets and liabilities are measured as described below for each individual item.

In recognising and measuring assets and liabilities, probable economic benefits and liabilities occurring prior to the presentation of the annual report that evidence conditions existing at the balance sheet date are taken into account.

#### 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.

**Corporation tax and deferred tax** The IT University is not liable to pay tax.



#### **INCOME STATEMENT**

#### **ITEMS OF INCOME**

#### **General matters**

The income of the IT University includes government grants for basic research, grants per student and operating income from the ordinary government appropriation. In addition, the university receives donations and grants, income from cooperation agreements, student fees from part-time programmes and income from other commercial activities.

#### **Government grants**

The IT University is entitled to government grants, and the grants to the university are disclosed in the Finance and Appropriation Act. Grants are recognised as income in the period to which they relate.

Grants per student are paid on account on a monthly basis based on the anticipated number of full-time equivalents. Every year in October, the actual production of full-time equivalents is calculated, and the on account payments are adjusted.

#### External grants and donations

Grants 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.

#### **Financial income**

Financial income comprises return in the form of interest and dividend from investments in shares, bonds and investment fund shares as well as value adjustments of securities recognized at the quoted price of the individual securities at the balance sheet date.

Tuition fees for part-time programmes, other commercial activities and rental income The income is recognised in the period to which it relates.

#### COSTS

Costs include external costs incurred for the activities of the year. Costs comprise staff costs, consumables, services, insurance premiums, maintenance costs and other operating costs of running the university.

#### **BALANCE SHEET**

#### Intangible assets

Software is capitalised when it is vital to the task handling of the university, and when its size and useful life are significant.

Only costs related to the development process and which result in a real increase in value are capitalised. Costs incurred during the initial phase and the phases of operation are recognised as expense.

Software is measured at cost less accumulated amortisation. Amortisation is provided on a straight-line basis over the expected useful lives of the assets from the date when the assets are available for use. The expected useful life is five years.

#### Property, plant and equipment

IT and AV equipment, machinery, tools and equipment as well as leasehold improvements are measured at cost less accumulated depreciation.

Cost comprises the purchase price and any costs directly attributable to the acquisition as well as costs for preparing the assets for use.

Depreciation is provided on a straight-line basis over the expected useful lives of the assets. The expected useful lives are as follows:

IT and AV equipment3 years
Machinery, IT systems, tools
and equipment5 years
Leasehold improvements10 years

Assets with a cost of less than DKK 100,000 per item are expensed in the year of acquisition. For this purpose, the IT University does not aggregate assets.

#### INVESTMENTS

#### Investments in subsidiaries

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 recognised at acquisition at cost.

#### Impairment write-downs

The carrying amount of intangible assets, property, plant and equipment and financial assets is subject to an annual test for indications of impairment. Impairment losses are recognised in the income statement.

#### **Securities**

Securities comprise investments in bonds, shares and investment fund shares that are recognized in accordance with the quoted price of the individual securities at the balance sheet date, including accrued interest.

#### Collections and works of art

The IT University has received works of art from various donors. In accordance with the accounting rules of the Government, these works of art are not recognised at a value.

#### Receivables

Receivables are measured in the balance sheet at nominal value less write-down for bad debt losses. Write-down for bad debt losses is based on an individual assessment of receivables.

#### Externally funded activities in progress

On an ongoing basis, the IT University enters into agreements with businesses, public institutions and private organisations on research activities. The activities funded by the grantor are set out in the agreements. To the extent that the IT University incurs costs for activities that are funded under the agreements, but for which the grants have not yet been paid, the grants to which the IT University has obtained a right are recognised as receivables from externally funded activities in progress.

Grants received, covering costs that have not yet been paid, are recognised as prepaid restricted grants.

The IT University charges a fee to cover overhead costs related to grant activities. The fee is recognised as income as the grants are used.

Provision for bad debt losses is made on the basis of an individual assessment of the individual

externally funded activities in progress and as a general provision for unforeseen losses. The provision is set off against receivables from externally funded activities.

#### **Prepayments and deferred income**

Prepayments comprise costs incurred concerning subsequent financial years. Prepaid costs relate to rent, insurance premiums, subscriptions and prepaid wages and salaries, etc. Deferred income comprises payments received concerning income in subsequent years.

#### Liabilities

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

#### Provisions

Provisions are recognised when, as a result of past events, the university has a legal or a constructive obligation and it is probable that there may be an outflow of resources embodying economic benefits to settle the obligation.

### Contractual obligations and contingent liabilities

Contractual obligations and contingent liabilities include liabilities related to leases and pending litigation against the university that the university will most likely not have to settle.

#### **CASH FLOW STATEMENT**

The cash flow statement shows the university's cash flows from operating, investing and financing activities for the year, the year's changes in cash and cash equivalents as well as the university's cash and cash equivalents at the beginning and end of the year. The cash flow statement cannot be derived solely from the published accounting records.

#### Cash flows from operating activities

Cash flows from operating activities are calculated as the surplus for the year adjusted for non-cash items, such as depreciation, amortisation and impairment losses, as well as changes in working capital, interest received and interest paid. Working capital comprises current assets, excl. cash and cash equivalents less current liabilities other than provisions.

#### Cash flows from investing activities

Cash flows from investing activities comprise cash flows from acquisitions and disposals of intangible assets, property, plant and equipment and investments.

#### Cash flow from financing activities

Cash flows from financing activities comprise cashflow from raising and repayment of longterm debt and securities.

#### **STAFF ACCOUNTING**

The IT University recognizes all categories of staff in the staff account in accordance with Universities Denmark's definition manual. Remuneration paid staff (external examiners, guest lecturers) are not included in the staff accounting.

#### **SEGMENT INFORMATION**

Presentation of income, staff costs and operating costs follow the public sector chart of accounts.

#### **FINANCIAL HIGHLIGHTS**

Financial highlights are prepared in accordance with section 23(2) of Executive Order on Grants and Auditing. The IT University uses the definition manual for the statistics of Universities Denmark.

Costs based on purposes follow "Vejledning om hovedområde- og formålsfordeling af universiteternes omkostninger" (Guidelines on classification by main area and purpose of the costs of the universities) issued by the Ministry of Higher Education and Science in December 2012. An effort is made to ensure that as many of the university's costs as possible are attributed directly to professional purposes, i.e. education, research as well as communication and exchange of knowledge. Costs which cannot be attributed to these categories are classified by means of sharing keys.

# **INCOME STATEMENT 1 JANUARY – 31 DECEMBER**

Note		2019 DKK´000	2018 DKK´000
1	Government Grants	287,395	250,783
2	Tuition fee	6,963	8,249
3	External research funding	36,113	29,948
	Other income	10,065	9,921
	Total income	340,535	298,902
4	Staff costs	210,367	191,892
8	Depreciation. amortisation and impairment losses	1,421	1,457
5	Other ordinary operating costs	122,265	106,102
	Total ordinary operating costs	334,053	299,451
	PROFITT/LOSS FROM ORDINARY ACTIVITIES	6,482	-549
6	Financial income	4,291	3,373
7	Financial expenses	1,516	4,804
	Total financial income and expenses	2,775	-1,432
	PROFITT/LOSS FOR THE YEAR	9,257	-1,981
DISTRIB	PROFITT/LOSS FOR THE YEAR JTION OF PROFIT	9,257	-1,98 <sup>-</sup>

	<b>2019</b> DKK´000	2018 DKK´000
Predisposed to retained earnings	9,257	-1,981
Total distribution of profit	9,257	-1,981

# **BALANCE SHEET AT 31 DECEMBER**

#### **ASSETS AT 31 DECEMBER**

Note		2019 DKK´000	2018 DKK´000
			DRK 000
	Software	1,221	1,482
9	Total intangible assets	1,221	1,482
-		.,	.,
	Leasehold improvements	3,773	130
	IT equipment	84	63
	Fixtures and fittings, tools and equipment	0	0
9	Total property, plant and equipment	3,857	194
	Investments in subsidiary	3,500	5,000
10	Total investments	3,500	5,000
	TOTAL NON-CURRENT ASSETS	8,578	6,676
	Trade receivables	9,529	4,474
	Receivables from externally funded activities	6,834	4,845
	Other receivables	3,915	3,504
	Prepayment	2,163	2,662
	Total receivables	22,441	15,485
	Securities portfolio	114,825	110,666
	Cash and cash equivalents	46,118	44,654
	Total cash	160,944	155,320
	TOTAL CURRENT ASSETS	183,385	170,805
	TOTAL ASSETS	191,963	177,481

#### **EQUITY AND LIABILITIES AT 31 DECEMBER**

	2019	2018
	DKK′000	DKK´000
Equity at 1 January	74,240	76,221
Retained surplus	9,257	-1,981
Total equity and liabilities	83,497	74,240
Provision for re-establishment	2,924	2,881
Total Provisions	2,924	2,881
Trade payables	18,598	11,225
Holiday allowance	27,964	25,624
Other payables	9,639	10,005
Prepaid restricted contributions	18,156	17,743
Prepaid government grants	30,290	33,768
Other prepayments	895	1,995
Total short-term	105,542	100,360
TOTAL EQUITY AND LIABILITIES	191,963	177,481
	Retained surplus Total equity and liabilities Provision for re-establishment Total Provisions Trade payables Holiday allowance Other payables Prepaid restricted contributions Prepaid government grants Other prepayments	DKK'000Equity at 1 January74,240Retained surplus9,257Total equity and liabilities83,497Provision for re-establishment2,924Total Provisions2,924Trade payables18,598Holiday allowance27,964Other payables9,639Prepaid restricted contributions18,156Prepaid government grants30,290Other prepayments895Total short-term105,542

**13** Mortgages and collateral

- **14** Contractual obligations
- **15** Contingent liabilities
- **16** Staff accounts
- **17** Segment information
- **18** Commercial activities
- **19** Related parties
- 20 Additional factors

# **CASH FLOW STATEMENT 1 JANUARY TO 31 DECEMBER**

Note		2019 DKK´000	2018 DKK´000
	Profit/loss for the year	9,257	-1,981
8	Depreciation, amortisation and impairment losses Profit and loss by sale of fixed assets	1,421 47	1,457 9
	Changes in provisions Reversal of items with no cash flow effect	43 <b>1,511</b>	29 <b>1,495</b>
	Change in receivables Change in current liabilities	-6,956 5,182	2,181 6,719
	Change in working capital	-1,774	8,901
	CASH FLOWS FROM OPERATING ACTIVITIES	8,994	8,415
9	Purchase and sale of intangible assets and property, plant and equipment Value adjustment of financial fixed assets	-4,870 1,500	-362 0
	Cash flows from investing activities	-3,370	-362
	Purchase and sale of securities Cash flow from financing activities	-4,159 <b>-4,159</b>	1,590 <b>1,590</b>
	CHANGES IN CASH AND CASH EQUIVALENTS	1,465	9,644
	Cash and cash equivalents at 1 January	44,654	35,010
	CASH AND CASH EQUIVALENTS AT 31 DECEMBER	46,118	44,654

# NOTES TO THE FINANCIAL STATEMENTS

#### **1. GOVERNMENT GRANTS**

	<b>2019</b> DKK′000	<b>2018</b> DKK´000
Full-time education *	136,555	131,401
Part-time education	2,081	3,139
Exchange students	480	461
Efficiency improvements *	0	-3,120
Free university places and scholarships	1,824	2,140
Excess study time bonus *	5,759	0
Employment bonus *	5,422	0
Quality grants *	931	0
Completion bonus *	0	14,139
Research	132,693	101,650
Other purposes	1,649	974
Total government grants	287,395	250,783

\* A new government grant system went into effect on 1 January 2019. In the new government grant system, the completion bonus and efficiency improvements are cancelled, while excess study time bonus, employment bonus and quality grants have been added. In addition, the government rate per full-time students FTE (full-time equivalents) is reduced and partly replaced by a base grant from 2019.

#### **2. TUITION FEES**

	<b>2019</b> DKK′000	2018 DKK′000
Participants in part-time education	5,788	7,001
Other tuition fees	1,174	1,248
Tuition fees in total	6,963	8,249

#### **3. EXTERNAL RESEARCH FUNDING**

	<b>2019</b> DKK′000	<b>2018</b> DKK′000
Danish public research funding	7,902	6,934
Danish private research funds	12,882	9,845
EU research funds	13,071	12,660
Other foreign research funds	2,258	510
Total external research funding	36,113	29,948

#### **4. STAFF COSTS**

	<b>2019</b> DKK′000	2018 DKK′000
Wages and salaries	212,483	193,747
Refound of wages and salaries	-3,989	-3,636
Other staff costs	1,874	1,781
Total staff costs	210,367	191,892

#### 5. OTHER ORDINARY OPERATING COSTS

	<b>2019</b> DKK′000	<b>2018</b> DKK′000
Rent	39,052	37,952
Other ordinary operating costs	83,213	68,149
Total ordinary operating costs	122,265	106,102

#### **6. FINANCIAL INCOME**

	<b>2019</b> DKK′000	2018 DKK′000
Return on securities portfolio, profit	4,288	3,318
Other financial income	3	55
Total financial income	4,291	3,373

#### **7. FINANCIAL EXPENSES**

	<b>2019</b> DKK′000	<b>2018</b> DKK′000
Return on securities portfolio, loss	4	4,781
Write-down of investments	1,500	0
Other financial expences	12	23
Total financial expenses	1,516	4,804

#### 8. DEPRECIATION AND WRITE-DOWNS

	2019 DKK′000	2018 DKK′000
Depreciation and write-downs	1,421	1,457
Total depreciation and write-downs	1,421	1,457

Financial Statements Applied Accounting Policies Income Statement 1/1 - 31/12 Balance Sheet at 31/12 Cash Flow Statement 1/1 - 31/12 Notes Key Financial Figures and Ratios

#### 9. FIXED ASSET NOTE

	Software	Leasehold improvements	IT equipment	Fixtures and fittings, tools and equipment	Total
	DKK'000	DKK'000	DKK'000	DKK'000	DKK'000
Purchase price at 1 January	7,523	430	5,536	613	14,101
Additions during the year	879	3,882	109	0	4,870
Disposals during the year	0	-145	0	0	-145
Purchase price at 31 December	8,403	4,167	5,644	613	18,826
Accumulated depreciations/amortisation and write-down at 1 January	6,041	299	5,473	613	12,425
Depreciation/amortisation and write-downs for the year	1,141	193	87	0	1,421
Reserved depreciation/amortisation for the year	0	-98	0	0	-98
Accumulated depreciations/amortisation and write- down at 31 December	7,182	394	5,560	613	13,749
Purchase price at 31 December	1,221	3,773	84	0	5,078

#### **10. FINANCIAL FIXED ASSETS**

	2019 DKK'000	2018 DKK′000
Equity investments in ITU Business Development A/S	3,500	5,000
Total equity investments in subsidiary	3,500	5,000

The IT University is writing down ITU BD's equity as it has decreased since its founding. The IT University wants to value the investment cautious and still trust that ITU BD will be able to generate a positive return at the long term.

#### **11. STATEMENT OF CHANCES IN EQUITY**

	<b>2019</b> DKK′000	<b>2018</b> DKK′000
Accumulated retained earnings at the beginning of the year	74,240	76,221
Retained earnings for the year	9,257	-1,981
Total equity and liabilities	83,497	74,240

#### **12. OTHER PAYABLES**

	<b>2019</b> DKK′000	2018 DKK'000
Performance pay	1,310	1,158
Fixed-term employment	860	772
Wages and salaries payable	4,084	5,114
Auditors	123	110
Print payable, students	40	32
VAT payable	427	256
Deposits	952	952
Other payables	1,842	1,612
Total other payables	9,639	10,005

#### **13. MORTGAGES AND COLLATERAL**

The IT University has not provided any mortgages or collateral.

#### **14. CONTRACTUAL OBLIGATIONS**

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 rent agreement with DR Byen. The period of notice is six months for removal on the first day of a month. The lease can be terminated at the earliest April 2022 for removal October 2022.

#### **15. CONTINGENT LIABILITIES**

For 29 co-funded PhD students of a total of 54 PhD students ultimo 2019, 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.

#### **16. STAFF ACCOUNTS**

Full-time equivalents	2019	2018	2017	2016
Academic staff	171	160	150	135
Part-time academic staff	44	40	43	43
Other full-time equivalents	162	151	140	137
Full-time equivalens (FTEs) in total	376	351	333	315

Number of employees	2019	2018	2017	2016
Number of employees 1 January	745	831	797	743
Accessions	487	433	533	512
Resignations	341	519	499	458
Number of employees 31 December	891	745	831	797

Note: The IT University has changed the calculation of employees and has downgraded the number of accessions and resignations for 2018 onwards.

#### **17. SEGMENT INFORMATION**

	<b>2019</b> DKK′000	2018 DKK'000
Ordinary activities		
Income	298,937	263,278
Staff costs	-185,844	-169,445
Operating costs	-109,858	-96,514
Profitt/loss for the year before financial income and expenses	3,234	-2,681
Commercial activities		
Income	7,690	8,372
Staff costs	-2,497	-3,386
Operating costs	-1,946	-2,856
Profit/loss for the year before financial income and expenses	3,248	2,131
Externally funded research activities		
Income	33,908	27,252
Staff costs	-22,026	-19,062
Operating costs	-11,882	-8,190
Profit/loss for the year before financial income and expenses	0	0
Profit/loss for the year before financial income and expenses	6,482	-549

#### **18. COMMERCIAL ACTIVITIES**

The IT University's commercial activities comprise letting of premises, events, parking etc.

The table shows the profit/loss for the year and the accumulated profit/loss for a 4-year period where the accumulated profit/loss must not be negative under the rules of the Ministry of Finance for commercial activities.

	<b>2019</b> DKK′000	2018 DKK'000	2017 DKK'000	2016 DKK′000
Income	7,690	8,372	6,311	6,101
Direct and indirect costs	4,442	6,241	4,380	4,840
Profit/loss for the year	3,248	2,131	1,930	1,261
Accumulated retained earnings at 31 December	19,389	16,141	14,009	12,079

In accounting for the accumulated profit / loss on commercial activities, the institution must build on 2007 as the first earning year, so that there in recent years accumulated result is summed over four years of results. The accumulated result for 2015 must correspondingly include the accumulated result for the period 2007-2015.

## **19. RELATED PARTIES**

Related parties	Transactions
Ministry of Higher Education and Science (UFM)	Government grants from UFM amounts to DKK 287,395 thousand in 2019 and DKK 250,489 thousand in 2018.
Danish Ministry of Education (UVM)	Government grants from UVM amounts to DKK 0 thousand in 2019 and DKK 293 thousand in 2018.
Board of Directors	Renumeration to the Board of Directors amounts to DKK 387 thousand in 2019 and DKK 381 thousand in 2018.
	Renumeration to the Executive Management amounts to DKK 4,066 thousand in 2019 and DKK 4,918 thousand in 2018.
Executive Management	The significant decrease in remuneration to the Executive Management can be attributed to the payment of a fixed-term employment bonus and remaining holidays of DKK 1.2 million in 2018 to Vice Chancellor Mads Tofte in connection with his resignation.
Student organisation at the IT University (ITU Student Council)	Contribution paid to ITU Student Council amounts to DKK 627 thousand in 2019 and DKK 583 thousand in 2018.
	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. The IT University owns 100 per cent of the company. The share capital amounts to DKK 1,000 thousand.
ITU Business Development A/S (ITU BD)	Profit for the year in ITU BD is DKK -876 thousand and equity at 31 December 2019 amounts to DKK 2,681 thousand.
	ITU BD has provided services for the IT-University of Copenhagen and taken over obligations regarding patents of DKK 2,112 thousand in 2019 and DKK 1,788 thousand in 2018.
	ITU BD has from 2015 rented office space at the IT University of DKK 287 thousand in 2019 and DKK 258 thousand in 2018.
Folketingets Finansudvalg (FFU, Danish Parliament´s Finance Committee)	The IT University does not have any contruction projects, which require approval from the FFU.

## **20. ADDITIONAL FACTORS**

Other matters which the IT University must disclose in accordance with:

- Executive Order No. 870 of 26 August 2019 on Grants and Auditing etc. of Universities.
- Letter from Danish Agency for Institutions and Educational Grants of 19 December 2019 on the annual report for 2019.

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

The IT University has established and owns a company, ITU Business Development A/S, to promote the flow of knowledge and technology between research institutions and the business community in accordance with section 4 (1) of the Danish Act No. 580 of 1 June 2014 on the Commercial Activities and Co-operation with Foundations of Public Research Institutions (law of technology transfer).

The IT University has not contributed funds to foundations whose main purpose is to establish dwellings close to universities in accordance with section 10(2) of the Danish Act on the Commercial Activities and Co-operation with Foundations of Public Research Institutions (law of technology transfer).

The IT University has no costs for administration of foundations and associations, including commercial foundations and associations.

The IT University does not offer study programmes abroad.

The IT University does not participate in Erasmus Mundus programmes.

The IT University complies with the EU rules on government grants for research infrastructure.

## **KEY FINANCIAL FIGURES AND RATIOS**

Income (DKK´000)	2019	2018
Education	160,015	159,528
Research	132,693	101,650
External funds*	45,575	39,110
Research-based government consultancy	0	0
Other grants	1,649	-2,146
Other income	3,378	-672
Total	343,311	297,470

\* External funds relate to subsidy-funded research activities, other subsidy-funded activities and commercial income covered activities.

Costs (DKK´000)	2019	2018
Education	163,428	148,445
Research	133,478	113,631
Dissemination and knowledge sharing	19,619	17,125
Government consultancy services	0	0
General management, administration and service	14,464	14,078
Total	330,989	293,279

Staff (full-time equivalents)	2019	2018
Academic staff	171.1	159.7
Part-time academic staff	43.5	39.9
Other full-time equivalents	161.8	151.5
Total	376.5	351.0

Balance sheet (DKK´000)	2019	2018
Equity	83.497	74.240
Balance sheet total	191.963	177.481

Economic key figures (per cent)	2019	2018
Profit margin	2.7	-0.7
Liquidity ration	236.4	228.5
Finance degree*	0.0	0.0

\* The IT University has no long term debt

Building (m2)	2019	2018
Building, total	23,352	23,352

Bachelor and MSc students for the period 1 October - 30 September	2019	2018
Number of admitted bachelor students	364	341
Number of admitted MSc students	507	517
Number of students enrolled at 30 September	2,086	1,949
Number of full-time equivalents (including guest students)	1,582	1,445

Graduated bachelor and MSc students for the period 1 October - 30 September	2019	2018
Number of graduated bachelor students	169	156
Number af graduated MSc students	391	380

Free university places and scholarship	2019	2018	2017	2016
Number of students enrolled in free university places at 30 September	9	11	12	12
Number of full-time equivalents in free university places	9	12	11	10
Number of students who have received scholarships	14	19	17	17
Total amount paid as free university places, rate 3 (DKK'000)	909	1,110	1,040	943
Total amount paid as scholarships (DKK'000)	915	1,030	1,355	1,072
Government grants on free university places and scholarship (DKK'000)	1,475	1,523	1,544	1,584
Profit for the year (DKK'000)	-350	-617	-851	-430
Account balance at 31 December (DKK'000)	1,818	2,168	2,784	3,635

Part time students in the period 1 October - 30 September	2019	2018
Number of admitted diploma and master's students	42	40
Number of fee-paying part-time students	306	410
Number of full-time students equivalents obtained by part-time students	68	94
Number of graduated diploma and master's students	54	74

Internationalisation for the period 1 September - 31 August	2019	2018
Number of exchange students outbound (including exchange grants)	75	71
Number of exchange students, in bound	35	38
Number of foreign students at 30 September	296	318

Research education	2019	2018
Number of PhD students enrolled at 31 December	54	50
Number of PhD students admitted during the year	20	13
Number of approved PhD theses for the year	10	13

Results for research and communication	2019	2018
Number of research publications	234	256
Number of patent applications	1	1
Number of patents issued	0	0
Number of inventions for which application for registration has been filed	1	0
Number of projects with enterprises	37	29
Number of external projects	95	87
Economic co-operation with business community (DKK'000)	15,094	10,322



## THE STRATEGIC FRAMEWORK CONTRACT FOR 2019

The Strategic Framework Contract is valid for 2018-2021 and in the second year of the contract the IT University has again made clear progress in most of the six strategic targets:

- **1.** Increasing the capacity of research-based education of technical IT professionals
- **2.** Increasing the number of female technical IT professionals
- 3. Achieving a high learning outcome for all students
- 4. All graduates should achieve good career opportunities
- 5. Strengthening IT research within areas that reflects societal needs
- **6.** Strengthening the IT subjects in primary schools and high schools by co-operation and exchange of knowledge.

Five of the targets have been progressing in 2019, while for one target there has been no progress, cf. the table below.

The progress is found both within the educational targets and within research.

For the strategic target 2, the IT University did not reach the target of admitting the desired number of females to the BSc study programme in Software Development. In return, the dropout rate among females admitted on the same study programme has been lower than the target level. Therefore, there has been no overall progress within this target. In 2020, the IT University will continue to put extra focus on supportive activities in order to regain progress with the target in addition to the three-year communication project which started in 2019, the purpose of which is to increase interest towards studying the technical BSc study programmes among the young – especially among females.

	Progress	No progress
Strategic target 1	Х	
Strategic target 2		х
Strategic target 3	х	
Strategic target 4	х	
Strategic target 5	х	
Strategic target 6	x	

Strategic target 1. Increasing the capacity of research-based education of technical IT professionals. The IT University will, if the government grants in the future provides the opportunity herefore, increase the capacity of research-based education of technical IT specialists to meet the demand and support Denmark's digital growth.

The foundation for increasing the capacity of research-based education of technical IT specialists was established during 2018 with an increase in base grants. In 2019, those grants were used for the creation of more research-based study places in both the technical BSc study programmes and in the technical MSc study programmes. In addition, the grant was increased in 2019.

For the technical BSc study programmes, the IT University's target was to increase the number of admitted students to 223 in 2019. This target was achieved, with 230 BSc students enrolled – of which 162 students were admitted on the BSc study programme in Software Development and 68 students on the BSc study programme in Data Science. Hereby there has been an increase of 27 BSc students, which corresponds to an increase in the number of admitted students of 10 and 21 per cent respectively compared to the 2017 indicators, which were 147 and 56 admitted bachelor students.

For the technical MSc study programmes, there has been an increase of 27 students, corresponding to an increase of 17 per cent in the number of students admitted in 2019 compared to the number of students admitted in 2017. In 2019, the increased allocation of basic grants has thus meant an increased admission of totally 54 technical IT students at the IT University compared to 2017.

In addition, the target for the two technical BSc study programmes was to have a maximum dropout rate of 20 per cent during the first year of study in 2019. This target has been achieved with a dropout rate of 17 per cent on the BSc study programme in Software Development and a dropout rate of 16 per cent on the BSc study programme in Data Science. Further, the dropout rate for the study programmes in 2019 has been in accordance with the baseline level as set in 2017 and 2018.

As a supportive activity, a significant communication effort was carried out in 2019, as well, with a focus on the technical IT study programmes. Another significant supportive activity has been the employment of additional researchers in the sphere of technical IT research.

As there is a growth in the number of admitted technical IT students compared to 2017 and since the admission of BSc students is larger than the target for 2019, and while the dropout rate in the first study year of these programmes is on par with the dropout rate in 2017, the IT University makes the assessment that a clear progress has been achieved in this strategic target.

Strategic target 2. Increasing the number of female technical IT professionals to enhance the quality of society's digitalization. The IT University will increase the proportion of female students and by becoming even better at retaining female students on the study programmes.

Overall, there has not been progress in 2019 within this target compared to the baseline from 2017 as there has been both decline and progress in the indicators.

In 2019, the IT University has retained the same low dropout rate of 13 per cent among female students on the BSc study programme in Software Development, which was achieved in 2018. The target of having a maximum dropout rate among female students of 20 per cent in 2019 on this study programme was thus achieved. In 2019, the IT University obtained a 17 per cent share of admitted female students on the BSc study programme in Software Development, which is a lower proportion of female students on the study programme compared to 2018 where it was 20 per cent and a lower share than the target of 24 per cent.

In 2019, the IT University for the first time obtained an equal gender distribution on a technical IT study programme, the MSc study programme in Software Design. Software Design is aimed at students with a non-IT bachelor's degree who want to combine their academic skills with computer science skills such as software development, data analysis and algorithm development. Of the 107 students admitted on the study programme, 56 are females, corresponding to 52 per cent of the total number of students admitted this year. In 2018, 41 per cent female students were admitted.

Among all admitted BSc and MSc students at the IT University in 2019, 38 per cent are females while there are 25 per cent females admitted at the technical BSc and MSc study programmes. Despite the fact that there may be some variation in the proportion of females admitted at each study programmes, the percentage of females admitted overall at the IT University and on the technical study programmes in the years 2017-2019 has been stable and has only varied by 1-3 percentage points.

As supportive activity, a significant communication effort targeted at females has also been carried out in 2019. As a new element of the effort, a role model campaign was launched in 2019 consisting of videos with female software developers – primarily with a background in Software Design – with a total of 1.9 million exposures throughout 2019. The overall assessment of this target can therefore be nuanced by the fact that where there has been a decrease in the share of admitted females on the BSc study programme in Software Development, there has been a significant increase in the share of admitted females on the technical MSc study programme in Software Design.

Based on the decline in the admission of females on the BSc study programme in Software Development, the IT University has launched a major three-years dissemination project focusing on increasing the interest among the young – especially females - to study the most technical BSc study programmes. The IT University has received a grant of DKK 3.8 million from the Novo Nordisk Foundation to run the project. The grant will, among others, be used to create a YouTube universe with tutorials for illustrating what programming is and how the technology can help solve major societal problems. The university will help to settle the existing unhelpful notions of who is suitable for studying a technical IT education.

Strategic target 3. Achieving a high learning outcome for all students. The IT University will strengthen the research coverage of certain study programmes and maintain a high degree of quality, seen with the students' eyes.

There is progress in this target, as in 2019 there has been an increase in the VIP/DVIP ratio compared to the baseline set in 2016 and since all study programmes have a VIP/DVIP ratio of at least 2.4 in 2019.

The IT University's total VIP/DVIP ratio was 4.7 in 2019, which is higher than the standard of 3.5 in the IT University's quality policy. In 2019, on each of the IT University's 10 study programmes the VIP/DVIP ratio in 2019 was at least 2.4, which is the minimum for any study programme. At the BSc study programme in Software Development, where the VIP/DVIP ratio in 2018 was 1.9, the target is achieved in 2019 with a VIP/DVIP ratio of exactly 2.4.

The national education evaluation "UddannelsesZoom" did not take place in 2019 which is why the IT University's internal course evaluation is included as a supportive activity. In the spring of 2019, the average score of the IT University's internal course evaluation was 4.75 which meets the IT University's course evaluation target, which is precisely 4.75 based on an evaluation scale between 1-6.

Strategic target 4. All graduates should achieve good career opportunities. The IT University will reduce the unemployment among graduates on those MSc study programmes that don't already have low unemployment. This will be done through revision of the study programmes in close dialogue with the employers.

The IT University has progressed within this strategic target, with unemployment among graduates decreasing significantly in 2019 compared to the baseline in 2017 and to the decrease in unemployment among graduates at the national level.

Unemployment among graduates calculated as the average of the unemployment rate from the last three years 4-7 quarters after graduation has decreased from the 2017 baseline of 11.2 per cent to 9.8 per cent in 2019. The IT University also considers it positive that the university's MSc unemployment rate is below the national average, which were 12.5 per cent and 11.0 per cent in 2017 and 2019 respectively. The national education evaluation "UddannelsesZoom" did not take place in 2019. Therefore, in 2019 no evaluation has been made by the graduates of whether their study programme has equipped them for their jobs. In 2018, which is the latest evaluation year, the score was 3.7, and the target of 4.0 was not achieved. The next evaluation will be made in 2020.

With regards to the relevance seen with employers' eyes, the IT University's close dialogue with the employers under the auspices of the employment panels has continued to be an important supportive activity throughout 2019 as far as reducing graduates' unemployment is concerned. In 2019, one of the important supportive activities has also been the continued implementation of the strengthening revisions that several of the IT University's study programmes have undergone in recent years. This applies, for example, to the BSc and MSc study programmes in Digital Design and Interactive Technologies, both of which were revised in 2017/2018. Further, this also applies to the MSc study programme in Games, where the number of admitted students was self-dimensioned, and where the first students graduated in 2018.

Strategic target 5. Strengthening IT research within areas that reflects societal needs. The IT University intends to educate and recruit more researchers in the field of Digitalisation and, if the prerequisite for strategic target 1 is met also in the field of Information Security and Data Science.

The IT University has progressed within this target in 2019, as the research environments in Digitalisation, Information Security and Data Science all have been strengthened during 2019, among others through the employment of more researchers.

In 2018, the IT University established the "Research Centre for Government IT" in collaboration with the Danish Agency for Digitisation. The center will, among others, offer research-based short courses for public managers, which can help them fulfil their role in digitalisation projects in the public sector. In 2018, a draft was prepared for teaching steering committee members in public IT projects. This teaching has not yet been offered and conducted. The strengthening of the center during 2019 has been through fully establishment and staffing. The IT University has also strengthened the research environment within Information Security. The "Center for Information Security and Trust" is fully established in 2019 with the employment of a professor, two associate professors and an assistant professor in Information Security. Thus, the target of employing at least two researchers at the assistant professor level or higher in the field of Information Security has been achieved in 2019. The newly established Advisory Board has had the first meeting at the IT University and has made several recommendations to the University.

Finally, the IT University has strengthened the research environment in Data Science. In 2019, the IT University has employed three assistant professors, thereby achieving the target of employing at least two researchers at the

assistant professor level or higher in the field of Data Science during 2019. Consequently, there is an increase of four FTE's (full-time equivalents) at the end of 2019 compared to the baseline of three FTE's in 2017.

The main supportive activity has been the staffing of the three research environments mentioned above. In 2019, seven researchers have been employed in the Information Security and Data Science research environments. Overall, since 2017 the number of employed researchers has more than doubled compared to the six researchers employed in 2017 at baseline.

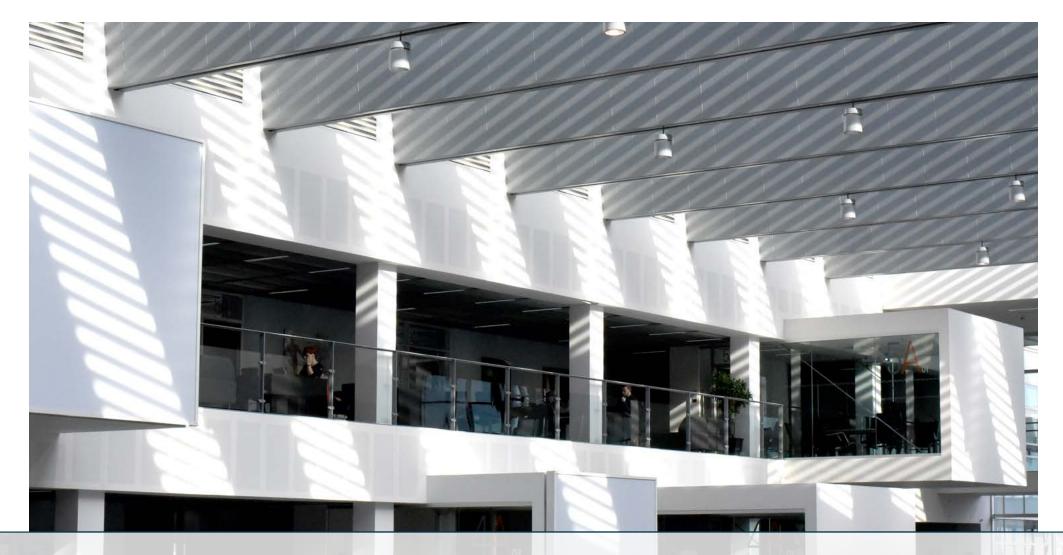
Strategic target 6. Strengthening the IT subjects in primary schools and high schools by co-operation and exchange of knowledge. During the term of the contract, the IT University will teach high school teachers and provide academic input for strengthening IT subjects in primary schools and in high schools.

Since, in addition to the further education of high school teachers, a new strategy has been prepared for the expansion of research and teaching in Computational Thinking, the IT University considers that there has been a clear progress within this target.

The IT University has in collaboration with It-vest taught 24 high school teachers in the programming part of the course 'Informatics 1 for High School Teachers'. In addition, at least six high school teachers have studied a Single Subject course at the IT University during 2019. If all high school teachers pass the courses, the IT University will have achieved the 2019 target on further education, properly in collaboration with other universities, of at least 30 high school teachers who are to teach the subject Informatics.

As planned, in 2019 an evaluation of the course offered to high school teachers in collaboration with It-vest was for the first time conducted by using the same evaluation method that is used for other courses at the IT University. The course evaluations show an average score of 5.16, which for the first time can be directly compared with the target of 4.75 for course evaluations at the IT University. The high average score from the evaluation shows that there is great satisfaction with the course among high school teachers.

In addition to the further IT education of high school teachers, in 2019 the IT University has also prepared a strategy for expanding research and teaching in Computational Thinking. The strategy is planned to be implemented in close collaboration with the primary and secondary school sector as well as with other higher education institutions researching or teaching within the area. Further, the IT University is present on national committees within Informatics and Technology in the primary and secondary school sector.



# **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 Prorector 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.

#### Head of Studies

The Head of Studies is appointed and dismissed by the Vice Chancellor on recommendation of the Study Committee. The Head of Studies is in charge of the practical preparation of tuition and tests and other evaluations which constitute part of the examination in cooperation with the study committee.

#### **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 subcommittees: 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:

Jan Sirich (chairman) Entrepreneur, CEO & Founder, TheNext

Charlotte Mark Managing Director, Microsoft Development Center Copenhagen

Henrik T. Krøyer Head of Mainframe, Danske Bank

Mette Fjord Sørensen Head of Research, Higher Education and Diversity, Confederation of Danish Industry.

Marianne Sørensen Director, Employment and Integration Administration, Municipality of Copenhagen **Tine Thorn** Head of Development, IT Digital Udvikling, AP Pension

Brit Kannegaard Johannessen Senior Vice President, NNIT

Michael Aagaard Biermann CIO, Ørsted

Marc Schröter Senior Vice President, Product Management, SimCorp

**Rikke Hvilshøj** CEO, Danish IT Society

Anders Peter Kierbye Johansen Global R&D HR Director, Unity BACHELOR IN SOFTWARE DEVELOPMENT (SWU)/ BACHELOR IN DATA SCIENCE (DS)/ CAND.IT., SOFTWARE DESIGN (SD) AND CAND.SCIENT. COMPUTER SCIENCE (CS):

**Christian Bjerre Nielsen (chairman)** Chief Product Officer, uQualio ApS

**Casper Hovard** Senior Engagement Manager, KSP Nordic

Lars Nørgaard Executive Vice President (EVP) for Professional Services, Omada A/S

Michael Nielsen Self-employed

Jesper Hollisch Poulsen Development Manager, Rational Tools & Engineering Processes, Danske Bank

**Niels Hallenberg** Vice President, Technical Foundation, SimCorp

Jacob Strange CEO & Partner, Nine A/S

Morten Zohnesen Managing Architect, Netcompany **Thomas Hartmann** Head of Enterprise Architecture, ATP

Henrik Hasselbalch Execute Partner & Country Manager, IBM

**Bodil Biering** Independent Consultant

Kaare Brandt Petersen Director of Learning Analytics, Laerdal Copenhagen

**Søren Ilsøe** Director, Insight Strategy, Analytics & Information Management, Deloitte

**Mikkel Muhldorff Sigurd** Optimization Manager, Maersk Line

Mille Østerlund Head of Civil Advice, CFCS – Center for Cybersecurity

#### Appendixes

Appendix 1 - Management Structure Appendix 2 - Members of the Employers' Panels Appendix 3 - The Data Protection Officer'S Status Over 2019

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

Laust Jørgensen (chairman) COO, Peytz & Co

Nanna Engberg Senior Consultant, Think! Digital

Andreas Petterson Partner, eCapacity

**Louise Wiktoria Klinker** Head of Strategy & UX, 1508

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## **APPENDIX 3**

## THE DATA PROTECTION OFFICER'S STATUS OVER 2019

In 2019, the focus has been to continue the work that started with the implementation of the General Data Protection Regulation (GDPR) in 2018 at the IT University.

This focus has been particularly aimed at getting the GDPR out to the employees at the university, which implies, among others, that all technical and administrative employees (TAP) have gone through an e-learning course with a final test. The last part of general guidelines for the processing of personal data at the IT University has been rolled out, and this information has been made easily accessible by a "Quick guide" on the intranet, other guides etc. A large part of the external personal data processors have entered into agreements and the remaining are in process. At the same time, the IT University's administrative processing activities as well as a large number of research projects involving personal data have been identified and risk assessed.

There have been 17 registered incidents, 79 registered inquiries about GDPR, ongoing teaching and guidance of employees, including a new PhD course on, among other, the rules on personal data and GDPR awareness campaigns.

In general, the level of knowledge and the observance of the data protection right have been increased in 2019 at the IT University, and thereby works closer to an appropriate level of personal data protection in accordance with the success criteria for the area.