

# CvB stukken voor agenda Universiteitsraad

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Bijgevoegde stukken : Concept Spring Memorandum 2020-2023

Betrokken concerndirectie: FIN  
Secretaris: Wichman  
Portefeuillehouder: Bult-Spiering

paraaf: 

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## **1. Status agendapunt:**

Rol URaad:

- Ter informatie
- Ter advisering
- Ter instemming
- Anders:

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## **2. Eerder behandeld in:**

## **3. Toelichting/samenvatting:**

We present to you the Spring Memorandum 2020-2023. This Spring Memorandum represents the policy agenda and the strategic and financial framework for the period 2020-2023. This Spring Memorandum is the framework for the annual plan 2020 and the multi-annual budgets 2021-2023 of the units, which will be presented to you by the end of 2019. In the Spring Memorandum we elaborate on the composition of the "1e geldstroom" budget (government funding plus tuition fees) and its allocation to the various units within the UT for 2020 to 2023.

### *Reader's guide*

We are currently working on a new strategy. Therefore, this Spring Memorandum contains no new policy. This Spring Memorandum consists of six chapters. After an introduction, you will find the policy agenda, external and internal developments, the available budget 2020, the financial policy framework and finally instructions for the units how and when to draft their annual plans for 2020 and multi-annual budgets for 2020-2023.

To make the document more readable and more compact, only the annexes that are relevant to the UR are added. An integral set of annexes including further specifications will be sent separately.

### **1. Policy Agenda**

As reflected in our current Vision 2020 strategy and in accordance with our core values we remain: *socially committed, synergy-driven, entrepreneurial and internationally-oriented.*

Simultaneously with this Spring Memorandum we are working on our new strategy, called Shaping 2030. The themes and priorities of the previous Spring Memorandum are still relevant and will be incorporated in the process of Shaping 2030. This means that you will find many similarities compared to the previous Spring Memorandum. In case of additions or new paragraphs, this is noted in the text. (e.g. Sectorplans and revision of vision on research).

### *UT-wide collaboration*

In 2018 we defined 3 UT-policy priorities, these priorities will be incorporated in the process of Shaping 2030:

- Lifelong learning
- Modern University
- Digital transformation

## Key principles

The UT Vision 2020 key principles and ambitions are still relevant for this Policy Agenda. These key principles are:

- The UT is a modern research university
- The UT encourages an entrepreneurial attitude
- Our education model is based upon small scale education;
- Our student population contains a balanced mix in diversity
- Our education is top class and connected
- The UT wants to consolidate or increase our fair share in both available educational and re-search budgets.
- Strategic capacity planning; attract and preserve talent
- Increase cooperation with region and companies

In the Spring Memorandum the key principles are further explained in chapter 2.

## Quality agreements

The Dutch Government requested Higher Education Institutions to invest the financial resources, which are derived from the Student Loan Fund, in education in order to improve its quality. In 2018, the UT developed a Quality Agreement Plan that describes the aspired and required development of education for the period 2019 until 2024 to which the Student Loan Funds will contribute. This plan consists of five programmes:

1. Learning facilities,
2. Community building,
3. Teaching professionalization,
4. Talent development of students,
5. Global citizens.

Each programme has a long-term ambition in order to consolidate and focus the efforts that the UT will take in order to improve education and to foster innovation. These programmes match with university's educational profile, which is characterized by a small-scale and interactive learning environment, an entrepreneurial mindset of students and staff, and the drive to transcend borders between scientific disciplines, cultures, and the university and society. These programmes, as listed above, encompass the ideas and suggestions from students and staff to improve quality of education. The faculties structured their plans according to the five quality agreement programmes.

Faculties developed faculty-specific plans that fit within one or more of these programmes. Faculties are responsible to monitor their plans and to adjust/update their agreements in consultation with internal stakeholders. Annual Plans of faculties describe how the WSV-budget (Dutch abbreviation of wet studievoorschot) will be invested in the next calendar year. The UT Annual Budget explains how the central WSV-budget (20%) is used. Faculty Councils and the University Council have the right to annually approve the allocation of the WSV-budget.

OCW expects that Higher Education Institutions report on the progress of the quality agreements in their Annual Report. Faculties report on the realisation of their plans via the Management Report of December. This information will be included in the UT Annual Report.

The Quality Agreements of the UT will be assessed at the 18<sup>th</sup> of December 2019, as a trail of the Institutional Audit. Halfway the six years period, there will be a mid-term assessment. Based on the Annual Report of 2021 and a reflection of the participatory bodies, the NVAO will assess whether the UT realized sufficient progress and whether relevant stakeholders are sufficiently involved. The final assessment of the Quality Agreements will be organized parallel to the next Institutional Audit, approximately in 2025.

For the period 2020-2023 we have budgeted the following budgets per faculty:

### WSV budget

(amounts in k€)

unit	2018	2019	2020	2021	2022	2023
ET	462	448	529	915	1.141	1.187
EWI	393	391	515	827	1.038	1.096
TNW	588	539	630	1.080	1.349	1.430
BMS	694	659	787	1.350	1.669	1.749
ITC	0	17	17	27	35	36
ITC-UCT	0	28	36	69	97	133
CUTE	709	506	610	1.036	1.291	1.359
<b>total</b>	<b>2.846</b>	<b>2.588</b>	<b>3.124</b>	<b>5.304</b>	<b>6.620</b>	<b>6.990</b>

The central budget is the result of the 80/20 rule and will be spent based on plans of the service departments. The expenditure of these budgets will be scrutinized by the faculty councils as part of the quality agreements.

#### *Impact on and contribution of services and support processes*

Both internal and external developments have their impact on the services and supporting processes at the UT. We address a number of these developments and the way we want to contribute to our core activities and the realization of our ambitions. These form the basis for the transition of the service departments for the coming period and will be further explored in the process of Shaping 2030 in close connection and cooperation with the faculties. The UT has its own 'way of working'. The guiding principles in this way of working are:

- Collaboration as the standard approach: collaborating between services, faculties and students, collaboration as the standard approach.
- Continuous improvement: enduring working by the principles of continuous improvement (PDCA-cycle). For example for IT: visible and measurable performance improvements in terms of doing more with less people, first time right and less rework resulting in measurable quality improvements and internal customer satisfaction.
- Make room for experimenting and innovating: experimenting way of working for innovations to first (pilots) find out what fits best and when proved successful do a swift implementation.
- Involvement of students: encouraging student involvement in different ways: ask student's advice on UT policies/activities, support students in their own responsibility for organizing student activities. Supporting the Student Union, study & student associations, etc.
- Be entrepreneurial: encourage an 'agile, entrepreneurial and flexible' workforce. This means taking ownership and responsibility by our staff and the mindset of delegation amongst management. Self-managed multidisciplinary teams (like TELT) are a good example of internal entrepreneurship.
- The UT is a network university: knowledge building and active participation in meetings, work groups, projects and communities (e.g. 4TU, VSNU, SURF, ECIU) Exploring opportunities to create coalitions of the willing for innovation initiatives with other universities, companies and other (regional, national and international) parties.
- Be agile: uniform and flexible support processes to facilitate maximum agility in education, research and Knowledge transfer area.

## **2. Uncertainties: external and internal developments**

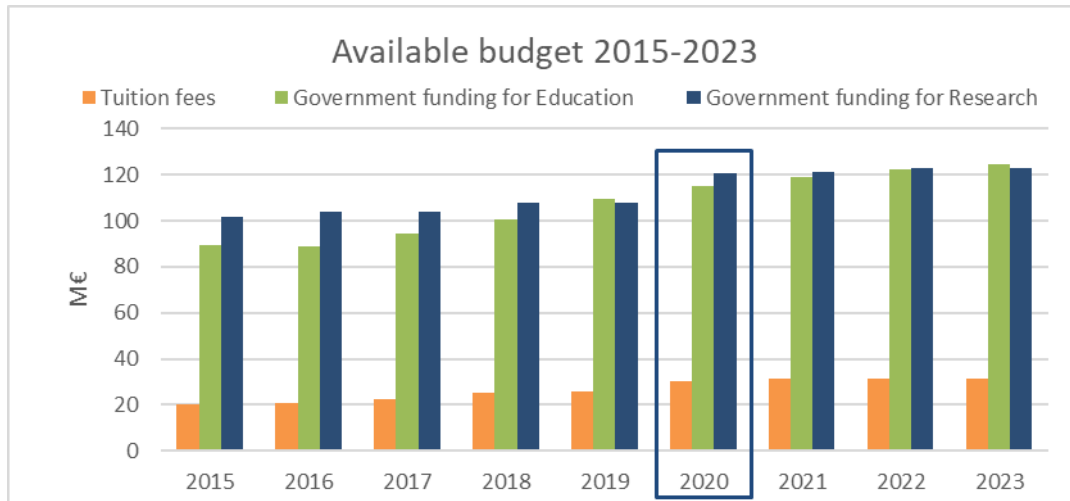
In this Spring Memorandum 2020-2023 we have identified financial uncertainties we see at this moment in time and will elaborate on the measures we have taken or will take to mitigate them.

<b>Risk description</b>	<b>Amount in M€</b>	<b>risk</b>	<b>weighing</b>	<b>Risk in €</b>
Wage- price indexation 2019	M€ 4.5	Medium	50%	M€ 2.3
Wage- price indexation 2020	M€ 4.9	Medium	50%	M€ 2.5
Referentieraming 2019	M€ 2.6	Medium	50%	M€ 1.3
Referentieraming 2020	M€ 1.7	Medium	50%	M€ 0.8
Sector plans*	M€ 8.9	Low	10%	M€ 0.9
Economizing target OCW	M€ 2.1	Medium	50%	M€ 1.0
<b>Weighed risk potential losses</b>				<b>M€ 8.8</b>

In the Spring Memorandum these uncertainties are further explained in chapter 3.

## **3. Total available '1e geldstroom budget**

The budget consists of the Government funding for education and research and the tuition fees. The total available budget in 2020 amounts to M€ 266.3



### 3.1 Government funding for Education

The Government funding for Education amounts to M€ 114.9 in 2020, an increase of M€ 6.6 compared to the previous calculated budget for 2020 in the Budget 2019.

Mutations in Government funding on Education compared to the Budget 2019-2022:

Analysis estimate government funding 2020-2023 vs 2019-2022	2020	2021	2022
<b>Education:</b>			
Government funding on Education 2019-2022	108,4	112,1	114,7
Government funding on Education 2020-2023	115,0	118,7	121,4
<i>difference</i>	6,5	6,5	6,7
growth in student numbers	2,8	2,8	2,9
decline in number of degrees	-0,3	-0,3	-0,3
Wage-price indexation 2020 (2.5%)	2,4	2,4	2,4
"Referentieraming 2020"	1,7	1,7	1,7
<b>total difference on education funding</b>	<b>6,5</b>	<b>6,5</b>	<b>6,7</b>

The higher number of (weighed) enrolments cause an increase in the budget. The number of degrees has declined. We have also incorporated a compensation for the rise in student numbers. Whether OCW will actually compensate the educational institutions for this growth is unclear. Finally, we have included compensation for wage- and price adjustments. This too is uncertain.

### 3.2 Government funding for Research

Government Research funding will amount to M€ 121.0 in 2020, an increase of M€ 12.3 compared to the previous calculated budget for 2020. Of this amount, M€ 95.6 is derived from our market share and therefore variable. This budget is (after deduction for central overheads) allocated through the UT research funding model. M€ 10.0 is budgeted for sector plans (of which M€ 8.9 for new Sectorplans).

Additionally, we receive M€ 7.1 for research within our ITC-faculty which we directly assign to the ITC after a deduction for central overheads. The "profielingsmiddelen onderzoek" ad M€ 5.6 will be added to the CSB - budget. The remaining M€ 2.6 is partly budgeted for the Max Planck Center and IVH.

Mutations in Government funding on research compared to the Budget 2019-2022:

Research:	2020	2021	2022
Government funding on Research 2019-2022	108,7	108,5	109,5
Government funding on Research 2020-2023	121,0	121,3	122,8
<i>difference</i>	<i>12,3</i>	<i>12,8</i>	<i>13,4</i>
new budget "Sectorplannen 2019-2025"	8,9	8,9	8,9
Wage-price indexation 2020 (2.5%)	2,5	2,5	2,5
decline in number of degrees	-0,4	-0,4	-0,4
number/price of promotions and Pdeng certificates	1,4	1,8	2,4
<b><i>total difference on research funding</i></b>	<b><i>12,4</i></b>	<b><i>12,8</i></b>	<b><i>13,4</i></b>

### Knowledge transfer

Because universities only receive government funding for two of their three legal core tasks: education and research, we are constantly exploring ways to generate structural income suitable for our knowledge transfer activities.

Until now the budgets for knowledge transfer were scattered over several annexes in the Spring Memorandum. In annex D we now have consolidated all research budgets related to knowledge transfer to emphasize our efforts in this field. Most of these budgets have been moved from the Central Strategic Budget and Central Budget.

### Sector plans

In 2019 new sector plans for the next six years are under construction. It is not yet certain which plans will be endorsed. Therefore it is not yet certain how much we will receive. We have incorporated the requested budgets from the sector plans into our government funding for research, amounting to M€ 8.9. When the actual budgets will be announced in May, we will, when necessary, adjust our estimates and subsequent allocation of these budgets to the faculties.

We aim to hire an additional 60 scientists for these sector plans. From NWO we expect funding for a similar number of PhD positions, although the allocation of these positions will be in open competition. Besides the six-year funding for these new positions, a one-off budget for investments in infrastructure is expected to be allocated in 2019. This budget could be used to furnish lab facilities for these new scientists. It has yet to be seen whether this budget will suffice to make the necessary investments. These investments will be incorporated into our 2019 update of the LTSH plan.

On top of the requested government funding, we expect these new scientists to attract additional third party income. It is still too early to calculate this third-party income with any degree of certainty. Scientists will have to build their networks before any third party income can be generated. This could take several years. In due course third-party income, generated by these sector plans, could grow by as much as M€ 10, depending on the multiplier. This additional third-party income can only be generated when we succeed in finding the appropriate researchers.

### *3.3 Tuition fees*

The estimated budget of the tuition fees (statutory and institutional) shows an increase of M€ 4.4 in 2020 compared to 2019. This is mainly due to an increase in the number of non-EER students in college year 2019-2020.

We will further improve the way we estimate our budgets for government funding and tuition fees in close cooperation with the faculties. This improvement will increase the quality of the multiannual estimations of registered EER and Non-EER students and the corresponding government funding and tuition fees.

We expect to finalize the new budgeting method by the end of June. It is therefore not yet incorporated into this Spring Memorandum. The outcome of the new method will be incorporated into the budget 2020-2023.

## **4. Central Budgets**

### *4.1 Central Strategic Budget*

The central strategic budget (CSB) is available for funding strategic projects and initiatives. This is a fixed annual budget deployed by the Executive Board, in consultation with the Strategic Counsel (SB), for crossovers and other strategic projects for Education and Research and talent development. Faculties and scientific directors are invited to jointly draw up "Shaping 2030 fit" plans for this budget and where possible incorporate these into the faculty annual plans as claims on the CSB. These plans

will be scrutinized by the Strategic Board and, when agreed upon, be incorporated into the multiannual CSB budget.

In preparation of the Shaping 2030 process, all existing CSB-commitments will be re-evaluated based on their fit with the outcome of Shaping 2030. The budgets in 2020-2023 presented in this Spring Memorandum are therefore preliminary and will be subject to review.

The *preliminary* CSB budget margin is M€ 0.4 in 2020 growing to M€ 3.3 in 2023. In comparison to Budget 2019-2022 the following adjustments have been incorporated in this Spring Memorandum.

(amounts in k€)

<b>Δ CSB Spring Memorandum 2020 - 2023 &lt; = &gt; Budget 2019 - 2022</b>	2019	2020	2021	2022	2023
<b>Mutation available budget:</b>					
Available budget CSB in Budget 2019 - 2022	9.334	10.732	10.738	10.743	10.743
Budgetshift allocation model Research; Designlab		-513	-513	-513	-513
Budgetshift allocation model Research; TPRC		-100	-100	-100	-100
Budgetshift Profileringsmiddelen OZ		-397	-397	-397	-397
Academic development (OW+O&O)		19	13	12	15
Available budget in Spring Memorandum 2020 - 2023	9.334	9.741	9.741	9.745	9.748
<b>A. Δ available budget:</b>	<b>0</b>	<b>-991</b>	<b>-997</b>	<b>-998</b>	<b>-995</b>
<b>B. Budgetmargin CSB in Budget 2019 - 2022</b>					
	<b>-765</b>	<b>825</b>	<b>2.414</b>	<b>3.019</b>	<b>3.019</b>
<b>Mutation budgets/reservations in Spring Memorandum 2020 - 2023:</b>					
Budgetshift allocation model Research; Designlab		-513	-513	-513	-513
Budgetshift allocation model Research; TPRC		-100	-100	-100	-100
Indexation budgets Student Grants		20	20	20	20
Reservation Roessingh R&D				200	200
Reservation Coöperation MST/ZGT, Pion. in Healthcare (2016-2020)			200	200	200
Reservation Coöperation Radboud TURBO-program (2018-2020)			80	80	80
Reservation COFUND - InnoSkills (2020-2023)		-65	-143	-143	-143
Reservation Pilot Ma-insert Designlab (sept 2019- sept 2022, 3 x k€ 54)		54	54	36	0
<b>Terminated budgets based on budget duration:</b>					
Depreciation equipment ET (2018-2022 of total 10 years)					-175
Zwaartekracht Organ on chip, CSB-matching (2018-2022)					-120
Photonics, MESA+ (2019-2022)					-275
Creating Intelligent Manufacturing Systems (CIMS), DSI (2019-2022)					-275
Reservation COFUND - Bits & Brains (2019-2022)					-138
<b>C. Total new budgets and reservations Concept-budget 2019-2022</b>		<b>-604</b>	<b>-402</b>	<b>-220</b>	<b>-1.239</b>
<b>Budgetmargin in Spring Memorandum (A+B-C)</b>	<b>-765</b>	<b>438</b>	<b>1.819</b>	<b>2.241</b>	<b>3.263</b>

#### 4.2 Central Policy Budget

Mutations in government funding and tuition fees will lead to a mutation of the budget for the service departments on the basis of 80/20. These budget mutations will be added to the central policy budget of the executive board. A limited budget margin of M€ 0.6 is available in 2020 but increases to M€ 2.3 in 2023.

Description	2020	2021	2022	2023
<b>Budget margin Budget 2019 - 2022 (after deduction reservations)</b>	<b>-1.353</b>	<b>-472</b>	<b>547</b>	<b>547</b>
20% extra Government funding	2209	2455	2618	3065
Reservation WSV budget margin	-90	-516	-771	-839
Reservation license fees	-230	-461	-558	-558
Indexation FOBOS	-9	-9	-9	-9
Cancelation reservation real estate management	100	100	100	100
<b>Budget margin Spring Memorandum 2020 - 2023 (after deduction reservations)</b>	<b>628</b>	<b>1.098</b>	<b>1.928</b>	<b>2.307</b>

### 5. Financial policy framework

We have incorporated the financial framework for Shaping 2030. On top of our current LTSH plan and investment program for Nanolab (M€ 15.5), we have the financial ability to invest. Although we have the ability to invest, we have to consider our future ability to repay these investments.

We also have to update our treasury policy in preparation of Shaping 2030. The planned investments and other short term liabilities will affect our current ratio. To continue to be able to invest, we will have to re-evaluate our long term liabilities as well.

As we have indicated in chapter 5 we have the sole financial ability to invest. For now, the outcome of Shaping 2030 is still unclear. We will have to answer some fundamental questions: which student population will we aim for, and what service level will we provide for these students? Which research will we aim for and how do we want to facilitate this ambition with e.g. labs, Ph.D.'s and researchers?

And how much of this research do we want to be funded by third parties? Whether we will have the ability to repay any investments because of Shaping 2030 depends largely on the answers on these questions and the risks we are willing to take in pursuit of our goals.

We ask the University Council approval on:

The key features of the UT-budget, including the change in the allocation model and the spending limits and scope of the Strategic budgets;

And

To give a positive advice on the non-key features.

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#### **4. (Voorgenomen) besluit CvB:**

Gezien

Gehoord

Overwegende

Besluit het CvB: de concept Kaderstelling 2020-2023 vast te stellen, onder voorbehoud van het advies van de UR en de goedkeuring van de RvT.

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#### **GRIFFIE URaad: (door griffie UR in te vullen)**

##### **Eerder in URaad aan de orde geweest?**

- Nee.
- Ja, op

Conclusie toen:

**Nadere toelichting:** (Voor als presidium/griffier vindt dat één van bovengenoemde punten nadere toelichting behoeft)

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# **Spring Memorandum 2020-2023**

FIN/CvB UIT - 3967  
(CvB 8 April 2019)



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# 1. Introduction

This Spring Memorandum represents the Policy Agenda and the strategic and financial framework for the period 2020-2023. The units prepare their annual plan 2020, based on the Policy Agenda and government funding in this Spring Memorandum. The units will also present their multi-annual budget for the period 2020-2023.

## Right of approval University Council

The University Council has the right of approval on the key features of the UT-budget. Additionally, the UC has the right of advice on the rest of the Spring Memorandum content.

A process has been started to explore different possibilities of strengthening the role of the Faculty Councils, ensuring more insight into the education and research topics at hand and the financial consequences for the faculty. Giving the Faculty Councils right of approval on the key features of the faculty budget -as proposed by the University Council- will be one of the possibilities to be considered. We aim to conclude this process in 2019.

## Shaping 2030

The UT is currently drafting its new mission: Shaping 2030. The outlines of this mission will become available in the latter half of 2019. In Chapter 5 we will explore the financial boundaries for the UT for realizing its new mission.

## Reader's guide

This Spring Memorandum consists of six chapters. Chapter 2 contains the Policy Agenda, which describes the ambitions of the UT in the next four years. In Chapter 3 elaborates on the external and internal developments that impact the financial framework. In Chapter 4 the expected available budget for 2019 is shown and the financial policy frameworks are outlined in Chapter 5. Finally, Chapter 6 elaborates on the contents of the UC right of approval and outlines the procedure for the preparation of the annual plans, unit budgets, and the multi-annual budget 2020-2023.

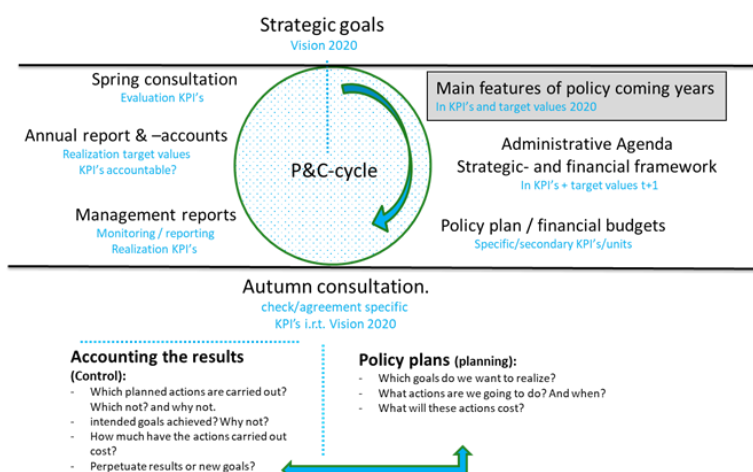
### 1.1 Planning & Control Process, Risk Management System

The risk management system of the UT is fully integrated into the P&C-cycle and is aimed at the structural and proactive management of risks. It complements existing business operations and as such is integrated into existing processes. A risk is defined as follows: "The probability of an event occurring with an effect on achieving the objectives. This effect can be both positive and negative. Thus, we can talk about an opportunity or a threat. The central objective is therefore to achieve the strategic objectives, which are determined as part of the Planning & Control Process (see graphic).

This means that policy outlines are formulated periodically based on the long-term vision (Vision 2020). These spearheads are the basis for strategic plans at the university and faculty level.

Periodically, a more or less fixed set of identified strategic risks is monitored through the management report (MARAP). The MARAP has its own accents per quarter. Based on this, it is determined whether risk-mitigating and/or other measures are necessary. Reliable, relevant and timely management information is important here. We distinguish as risk areas: education, research, personnel, finance, and knowledge transfer.

The risk management system of the UT is strategically embedded, provides steering mechanisms and is embraced by the Executive Board, Faculty Boards, University Council, and the Supervisory Board. Nevertheless, risk awareness and internal and external developments do require additional measures:



- The university's risk profile will be updated. This must show whether we are still monitoring the right risk indicators and how much risk the university is prepared to take (risk appetite) in relation to the opportunities and available resources.
- In addition to drawing up an up-to-date risk profile and a management system based on this, we are also developing a more explicit system of 'opportunity' management. This will be done simultaneously with drafting the updated UT reserve policy and investment plans.

Plans were drawn up in 2018 to further strengthen a more steering-oriented P&C-cycle:

- The HTT 2.0 policy framework: in this framework, policy principles have been formulated for the HTT B.V holding company, in which the private institutions affiliated with the university are accommodated. In the context of this framework, a CFO and controller were appointed within HTT in 2018/2019 and the P&C-cycle was further optimized (including quarterly reports to the Executive Board). This makes knowledge transfer activities within HTT B.V. and the results thereof, more explicitly included in the P&C cycle of the university from 2020.
- The development plan regarding the financial department: is, in particular, focused on operational excellence, strengthening financial policy advice and redefining and repositioning the function of business control within the university
- Review of the current strategy Vision 2020 into a new strategy for the coming years (Shaping 2030).
- Improve structure and design of the Budget 2019-2022, so that a better link can be made between policy and budget.
- Improve predictive analyses of the main drivers underlying the assessment of the long-term budgets for government funding and tuition fees as included in the Spring Memorandum 2020-2023 (strategic and financial framework).
- Implementation of Strategic Personnel Planning (SPP) UT-wide, in order to further improve the management of human capital resources.
- Improving management reporting (MARAP) by adding future-oriented information (scenario analyses).

## 2. Policy agenda

### 2.1 Introduction

As reflected in our current Vision 2020 strategy and in accordance with our core values we remain: *socially committed, synergy-driven, entrepreneurial and internationally-oriented*.

Simultaneously with this Spring Memorandum, we are working on our new strategy, called Shaping 2030. The themes and priorities of the last edition of the Spring Memorandum are still relevant and will be incorporated in the process of Shaping 2030. This means that there will be a large overlap with the last edition. In case of additions or new paragraphs, this is noted in the text. (e.g. sector plans and revision of vision on research)

### Shaping 2030

Vision 2020 focuses on the University of Twente's position in 2020. As that date is nearing rapidly, it is time to take our ambitions to the next level: Shaping 2030. With a world around us changing rapidly, and changes having a rather disruptive character, the question is: what is needed for a successful journey to 2030? That question will be the central question in forming a strategic vision for the period until 2030. In 2019 we will be working on a new strategy for the University of Twente. The process is titled Shaping 2030, as we will not only create an outlook of the future but discuss how we can be change leaders in shaping the coming decades.

We are finalizing both the Mission document and the Vision document of Shaping 2030. Both are based on inputs from our researchers, teachers, students, support staff, and external stakeholders and experts. We have collected insights in the world of 2030 in various meetings all over the campus and outside. After the opening of the academic year, the Shaping 2030 process will enter a new phase: drafting the Strategy. Unlike the Vision and the Mission, our Strategy focuses on what we need to do in the upcoming four years to reach our Mission. The results of this process will be input for the Spring Memorandum of 2021-2024.

### UT-wide collaboration

In 2018 we defined 3 UT-policy priorities, these priorities will be incorporated in the process of Shaping 2030:

**Lifelong learning** Traditionally, we define lifelong learning as all post-academic, non-subsidized education that can be taught part-time or in a short period to Dutch and non-Dutch students. Examples are summer schools, tailor-made programs, and programmes for professionals. However, in the future, the UT wants to broaden its perspective on lifelong learning, with a different approach on the permanent need for education by professionals now and in the future.

**Modern University** The UT wishes to profile itself as a modern university that distinguishes itself in the way it relates to society and how it is shaped internally and externally. Themes that play a role include Open Science (involving society), HRS4R, open innovation, linking education and research (teaching in interaction with companies and society), and social responsibility. Furthermore, the UT is an entrepreneurial university. We see this entrepreneurial attitude in the broadest sense of the word in our organization, employees, students and activities. Also, the UT has started to develop a framework for corporate social responsibility because of our ambition to be a socially responsible university. With not only sustainability in terms of environmental aspects but also attention to the social and economic aspects (people, planet, prosperity/profit). In the next period, the UT will start to elaborate on our sustainable development goals.

**Digital transformation** In order to speed up its digitization operations, the UT will redevelop its information strategy (i-strategy), from strong IT-governance up to a multi-year digitization agenda. Important guidelines in this process, are as follows. Digitization is of major importance for education, research and business operation at our university. In education, strong acceleration is needed in digitization, for instance in online learning, digital testing, blended learning, collaboration between students and learning analytics. The use of digital tools is also indispensable for lifelong learning, in which a blend of online and on-campus learning seems to be very promising. The use of digital tools in research itself is all pervasive. Furthermore, there is a growing need for digital tools for research data management, from the initial data management plan up to the storage and archiving of research data. In our daily business operation, we want business services to be easily accessible to our employees and students. The services should be easy to find and intuitive to use, preferably via self-service.

## **Key principles**

The UT Vision 2020 key principles and ambitions are still relevant for this Policy Agenda. These key principles are:

**The UT is a modern research university.** The UT chooses to profile itself as a modern university. The unique features of the UT are the way it relates to society and how it is shaped internally and externally. The European Commission is preparing to invest in the concept 'modern university' and has mentioned the UT as a good example. There is also a discussion within ECIU about the future of innovative universities. Important themes in this discussion are: open science (citizen science, co-creation, open data, but also appreciation of researchers according to alternative metrics), HRS4R (e.g. part-time appointments with industry), open innovation (role of university in ecosystem and role as investor), linking education and research (teaching in interaction with companies and society), and social responsibility (outreach, agenda setting in interaction with society, sustainability, lifelong learning).

**The UT encourages an entrepreneurial attitude.** Throughout the whole university, both staff and students, we facilitate and encourage students to take part in student activism and entrepreneurship in its broadest sense. We offer more than a degree by giving students all kinds of opportunities to develop themselves. (e.g. study and student associations, student teams, Student Union and Dreamteam Designlab). In addition, the employees also express their entrepreneurial attitude, which is highly valued. This is depicted by, for example, the large number of UT spin-offs.

**Our educational model is based on small scale education.** Staff and students are part of a learning community. The UT wants to educate students to be highly skilled professionals who are able to critically assess, combine and apply scientific knowledge and add new knowledge. According to the UT's vision on teaching students to achieve this by learning how to function in three roles: a researcher, a designer, and an organizer. The best way to do this is by integrating these roles through projects into the students' curriculum as soon as possible. Throughout their study, students can discover which role(s) suits them best. They become adept in a certain field of learning, but will also detect where their true strengths lie, both professionally and personally. This demands for small scale education: small groups of students, student guidance, many contact hours, etc.

**Our student population contains a balanced mix in diversity.** Beta-gamma, bachelor-master with an optimum of 12,000 students. Per October 1<sup>st</sup> 2018 our population is a little over 11,000 students. The UT wants to consolidate or increase its market share in both bachelor and master education by realizing a future proof growth in degrees and students. This will be done by collaborating with other (Dutch and foreign) universities for i.a. a well-balanced growth in students from EER and non-EER countries, attracting top talent, aligning our education with our research profile and developing programs in the context of lifelong learning. We maintain our premaster programs (without government funding) because of legal obligations, social responsibility but also because it has a positive effect on our master influx.

**Our education is top class and connected.** Our education and research are multi-disciplinary, innovative, developed in close connection and cooperation with our strategic partners and the regional and (inter)national networks of research funding agencies, industrial and governmental partners and has a focus on creating societal impact. Our core values are visible throughout all our activities and the way in which we collaborate with the partners around us.

**The UT wants to consolidate or increase its share in both the available educational and research budget.** The UT has a social and financial responsibility to consolidate or even increase its share. This requires an improvement of our reputation and increase our impact: clear UT profile and brand and increase acquisition with attention to our education and research capacity.

**Strategic capacity planning; attract and preserve talent.** Fostering the development and management of talents is a key ingredient in the UT's HR strategy. The UT puts more effort in acquiring prizes and memberships of prestigious academic organizations for talented UT researchers. Obtaining awards and memberships is of great importance for researchers' careers and strengthens the reputation of the UT as an excellent research and education institute.

**Increase cooperation with the region and companies.** Strategic partnerships are not an end goal but facilitate different strategic UT-wide goals. We have prioritized international strategic partnerships with partner universities in Europe, Asia and Latin America but also with companies and governments (e.g.

municipality of Enschede and Province of Overijssel) to support our internationalization goals and strengthen international research and education collaboration.

### **Trends and developments**

We foresee a number of trends and developments in the coming years:

- Continuous globalization and Internationalization
- Increasing emphasis on societal impact and sustainability
- Decline of public funding, necessity of finding alternative ways of financing
- Growing competition between knowledge institutions
- Increasing necessity for cooperation on regional, national and international level
- Rapid technological progress /developments and digitalization
- Rising complexity of legislation (regional, national, European, international)
- Growing attention to transparency and accountability of government (GRC)
- Increasing need for digital and physical security and safety measures
- Increasing diversification of incoming students, staff and their requirements

We have to constantly respond to these. Although the academic staff is often in the lead, service departments also have a gatekeeping role for the organization and regularly initiate, support and/or execute this responsibility. In paragraph 2.3 we will elaborate more on the actions needed from the service departments and supporting processes.

## **2.2 Institutional goals**

Our ambitions are specified within four strategic goals:

- Developing global citizens
- Making a real impact
- Stimulating an entrepreneurial mindset and behavior
- Experimenting, pioneering, innovating and Campus

### **2.2.1 Developing global citizens**

*Educating the professionals of the future in an international context. Outstanding students and staff who excel in their ability to combine high-quality knowledge to design such solutions to the questions of the future, along with companies/governments national and international. The focus is here on the core values: society-oriented, synergy driven, entrepreneurship and pioneering and internationally oriented.* UT aims to develop global citizens through high-quality education, staff and infrastructure, optimal educational processes and the optimal mix in our student population. In 2019, the UT will start with implementing a new vision on education, in close connection with successful past developments. Investments in infrastructure (digitization, class/project rooms, community building) will be part of our vision on education. By the end of 2019, the UT will have successfully conducted the Institutional Audit. (ITK)

### **Further growth/development**

#### ***Student appreciation***

The UT wants to further strengthen student appreciation. We focus on improving student participation by giving students an important role in programme committees. Furthermore, we also give a follow up on the recommendations we receive out of or surveys (e.g. NSE, NAE). In the plans of the Quality agreements, we also give strong attention to the participation of students and their needs in both curricula and facilities.

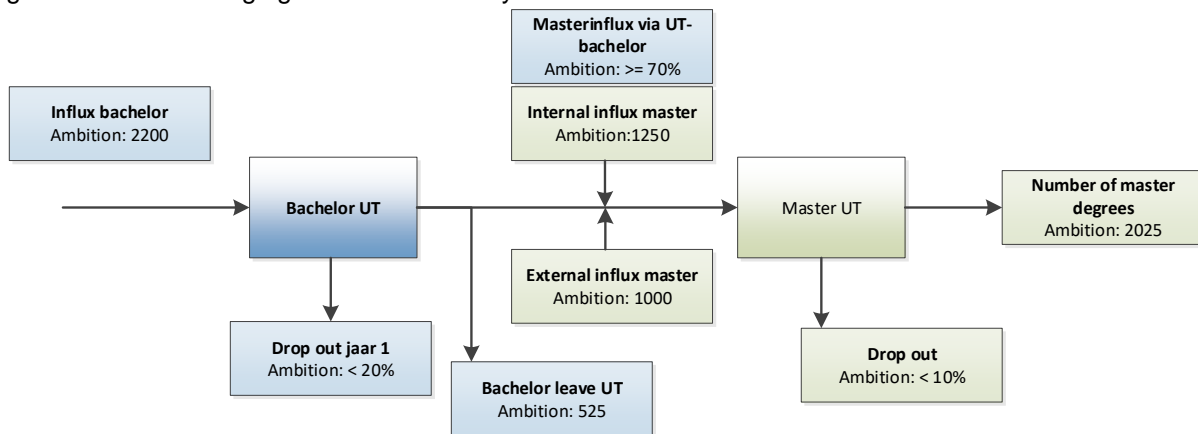
#### ***Future-proof growth in education***

For the bachelor programmes, our main priority is a qualitative increase of student enrolment, partially by accommodating heterogeneous (international) target groups. For the master programmes growth, a qualitative and quantitative increase in influx will be enhanced primarily by the combination or labeling of existing programs and new programs within the scientific focus areas. Therefore effective cooperation between our faculties is of great importance for the future growth of our master population.

An increasing student population is accompanied by the question of how we can optimally facilitate this growth in terms of infrastructure (housing, student facilities, etc.), staff and supporting processes. This issue will receive special attention in the coming years.

The UT prioritizes excellent research and education focusing on technology and its role in society (High Tech Human Touch). Society expects us to come up with engineering solutions. To achieve our educational goals, we further improve our bachelor educational model (TEM 2.0) and we keep investing in our programmes and facilities for our students.

For the coming years, we aim for the following numbers on the influx of our bachelor and master programmes and belonging indicators of study success.



## Innovation

### ***Attract new (inter) national top talents***

Excellent and innovative research and education depend on the quality of its staff. The UT not only wants to retain but also wants to attract and recruit the best talent. To position the UT as an employer of choice we are creating a compelling value proposition for current and potential employees, e.g. tenure track positions. The UT is also developing creative recruitment strategies for acquiring top talents or high potentials. Strategic HR is developed in line with our research and education portfolio.

### ***Connecting masters with our focus areas***

Another way to attract more master students is to develop and offer aligned master-PhD programmes. MSc education programmes and the graduate programme, in general, will focus on the themes relevant to the profiling of UT. It will also facilitate the design of MSc tracks as a pathway or as integrated tracks to a PhD degree in graduate education. And last but not least, the focus in the graduate program will help us clarify our profile for students, researchers, businesses, funding agencies, government bodies and other (knowledge) partners.

## Strengthen our basis

### ***Quality agreements (new)***

The Dutch Government requested Higher Education Institutions to invest the financial resources, which are derived from the Student Loan Fund, in education in order to improve its quality. In 2018, the UT developed a Quality Agreement Plan that describes the aspired and required development of education for the period 2019 until 2024 to which the Student Loan Funds will contribute. This plan consists of five programmes:

1. Learning facilities,
2. Community building,
3. Teaching professionalization,
4. Talent development of students,
5. Global citizens.

Each programme has a long-term ambition in order to consolidate and focus the efforts that the UT will take in order to improve education and to foster innovation. These programmes match with university's educational profile, which is characterized by a small-scale and interactive learning environment, an entrepreneurial mindset of students and staff, and the drive to transcend borders between scientific disciplines, cultures, and the university and society. These programmes, as listed above, encompass the ideas and suggestions from students and staff to improve the quality of education. The faculties structured their plans according to the five quality agreement programmes.

Faculties developed faculty-specific plans that fit within one or more of these programmes. Faculties are responsible to monitor their plans and to adjust/update their agreements in consultation with internal stakeholders. Annual Plans of faculties describe how the WSV-budget (Dutch abbreviation of wet studievoorschot) will be invested in the next calendar year. The UT Annual Budget explains how the central WSV-budget (20%) is used. Faculty Councils and the University Council have the right to annually approve the allocation of the WSV-budget.

OCW expects that Higher Education Institutions report on the progress of the quality agreements in their Annual Report. Faculties report on the realization of their plans via the Management Report of December. This information will be included in the UT Annual Report.

The Quality Agreements of the UT will be assessed at the 18<sup>th</sup> of December 2019, as a trail of the Institutional Audit. Halfway the six years period, there will be a mid-term assessment. Based on the Annual Report of 2021 and a reflection of the participatory bodies, the NVAO will assess whether the UT realized sufficient progress and whether relevant stakeholders are sufficiently involved. The final assessment of the Quality Agreements will be organized parallel to the next Institutional Audit, approximately in 2025.

For the period 2020-2023 we have budgeted the following budgets per faculty:

#### WSV budget

(amounts in k€)						
unit	2018	2019	2020	2021	2022	2023
ET	462	448	529	915	1.141	1.187
EWI	393	391	515	827	1.038	1.096
TNW	588	539	630	1.080	1.349	1.430
BMS	694	659	787	1.350	1.669	1.749
ITC	0	17	17	27	35	36
ITC-UCT	0	28	36	69	97	133
CUTE	709	506	610	1.036	1.291	1.359
<b>total</b>	<b>2.846</b>	<b>2.588</b>	<b>3.124</b>	<b>5.304</b>	<b>6.620</b>	<b>6.990</b>

The central budget is the result of the 80/20 rule and will be spent based on plans of the service departments. The expenditure of these budgets will be scrutinized by the faculty councils as part of the quality agreements.

#### Monitoring

In the table below the key performance indicators for 'Developing global citizens' are shown at UT level. The indicators provide the basis for the ambitions of each faculty. In the next period further development on the indicators will take place in close cooperation with the faculties. In the process of Shaping 2030 these indicators and target values will be reviewed.

Key Indicators	2020	2021	2022	2023
Influx bachelor	2,400*	2,400	2,400	2,400
Influx master	2,250	2,250	2,250	2,250
Total population	12,000	12,000	12,000	12,000
% international population (ba/ma)	30 / 35	30 / 35	30 / 35	30/35
Study success				
Drop out	< 20%	< 20%	< 20%	< 20%
Switch	< 10%	< 10%	< 10%	< 10%
Pass rate	> 70%	> 70%	> 70%	> 70%
Market share in the Netherlands				
Bachelor	3,7%	3,7%	3,7%	3,7%
Master	3,0%	3,0%	3,0%	3,0%

### 2.2.2 Making a real impact

*UT stands out in its education and research through the combination of disciplines, where technology and the role of technology in the society key factors are: High Tech - Human Touch.*

To remain a leader in this field and to guarantee the excellent quality of the study-programs the UT focusses on her priorities: Science for Industry and Society. For integral research agendas, which require a technological and social scientific approach, we are the preferred partner for public and private organizations.

#### Further growth/development

##### ***Our vision on research reassessed (new)***

At the University of Twente, we pioneer in fusing technology, science and engineering with social sciences to impact the world around us. The challenges of our time are greater than before: global resilience, the digitalization of society, the improvement and personalization of healthcare, the reshaping



of the world with smart materials and intelligent manufacturing. These challenges fit the University of Twente perfectly, because of our systemic and integrative approach. We combine technology, science and engineering with social sciences to initiate change, progress, renewal. By merging fundamental technological and social science research with systematic solution designing, we present an engineering approach to societal challenges. We call this: 'high tech human touch'. And we believe it is more relevant today than ever before. We bring researchers, industrialists, and policymakers closer together in a design and multidisciplinary setting in order to arrive at prototypes and proof of concepts of possible solutions (range of Technology Readiness Levels). We strive for the optimal balance in the involvement of researchers from different faculties, disciplines and institutes, the application of theories and methods, and the expectancy of impact and relevance. Out of an entrepreneurial mindset and global awareness our scientists move beyond differences, disciplines, borders. This bridges the classic opposition between fundamental and applied research, and between disciplines, social science and the technical and natural sciences. This brings forth a Twente way of working which is pragmatic and integrative. The cross- and multidisciplinary and design-oriented way of working that characterizes the University of Twente opens up possibilities.

In order to align with and be able to act upon current trends and actual developments in science and in society, it is necessary to reassess our vision on research. The UT wants to relate to and have an impact on the following larger societal developments.

- Digitalization and a changing labour market and social economy: New technologies have an impact on the labour market and on social economy. There is an uneven distribution in the costs of digitalization, because of the skills biased nature of technological change. So the challenge of the future lies in coping with rising inequality from technological change (STOA Study EU 2018).
- Social divide and diversity: Bridging the digital and the technological divide means accommodating diversity (the conversation.com). It is our responsibility to design technologies, applications and services that are universally available, accessible, affordable and accommodate diversity, both technical and human.
- Sustainability: This is the process of maintaining change in a balanced environment, in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations (Globalfootprints.org). The United Nations Sustainable Development Goals (SDGs) are a guiding framework.

Technology has a leading role to play in providing solutions for complex societal challenges worldwide. The University of Twente is actively engaging to enable these technologies for the greater good. In the forthcoming period, a vision on research will be developed in compliance with Shaping 2030 which will crosslink our research and knowledge transfer with these larger societal developments. Our research is aimed at making a difference in today's society.

### ***Sector plans Engineering and Beta (new)***

The University has filed 2 sector plans, one in Beta and one in Engineering. The ambitions of the plans can be summarized as follows:

#### Engineering

Engineering education and research are in the faculties of Engineering Technology (Civil Engineering and Mechanical Engineering) and Electrical Engineering, Mathematics and Computer Science (Electrical Engineering). Disciplinary excellence is required to achieve innovation in the triple helix. Within the discipline Mechanical Engineering we do research that shapes the scientific theme 'Creating Intelligent Manufacturing Systems' and significantly contributes to the themes 'Shaping our world with smart materials' and 'Improving healthcare by personalized technologies'. The research in the discipline Civil Engineering shapes the theme 'Engineering for a Resilient World' and significantly contributes to the theme 'Engineering our digital society'. The research in the discipline Electrical Engineering shapes the themes 'Improving healthcare by personalized technologies' and 'Engineering our digital society' and significantly contributes to 'Creating intelligent manufacturing systems'. For the UT, important ambitions in the sector plan Techniek are training more (female) engineers, increase the number of female researchers and expansion of leading fundamental research and facilities. This requires staff reinforcement within the scientific foundations.

The UT excels in merging fundamental technological and social science research with systematic problem-solving. This is demonstrated in the internationally renowned centres that settled at the UT, such as the ThermoPlastic Composites Research Center and the Fraunhofer Project Center for Complex High Tech Systems. Both centres are due for expansion and research enhancement. Above all, our excellently equipped and world-renowned Nanolab offers fertile ground for material and manufacturing

technology research. The development of Techbase Twente also offers the opportunity to expand the unique proposition for the establishment of large-scale research facilities. In this, the university focuses on centres for maintenance engineering, soft metamaterials, smart materials, energy storage and power electronics.

### Beta

The significant investment in our fundamental and core strengths in Mathematics, Computer Science, Physics, and Chemistry will stimulate research and education that profoundly impacts our society. A total of 30 new positions are proposed that will enhance our research capacity and contribute to diversity within our scientific staff. They will stimulate new collaborations in- and outside the university and will further uphold our already high level of (teacher)-education in these disciplines, while student numbers are growing. They will become leaders in discovering innovative solutions for future problems in energy, sustainability, and health.

Overall, the plans and the intended investments of the Sector plan funds are related to activities that are at the interface of (sub-)disciplines, such as low-power electronics, materials for green chemistry, new concepts for imaging (data science, physics), materials for energy harvesting and computational research for nanomaterials. With short lines between the disciplines, cooperation across borders is typical for the University of Twente. Further, the investments in the Sector plan are aligned with our strategies regarding the large scale infrastructure. An example is the NanoLab. The University of Twente invests heavily in shared infrastructures to create a synergistic situation, also in providing matching for external investments.

### **Funding**

In 2020, Faculties and Institutes will have improved their earning capacity significantly in the direction of the KPI of 50%.  $(\text{revenue external funding}) / ((\text{total governmental funding (OW en OZ)} + (\text{revenue external funding}))$  Faculties and Institutes work together closely to achieve this goal. Strategic Business Development will improve communicating on funding opportunities and linking them to researchers. Acquisition efforts within the UT-portfolio will receive intensive support. A portfolio approach between Faculties, Institutes and SBD will help to align these activities.

### **PDEng**

The practical oriented professional doctorate in engineering (PDEng) and its tailor-made approach suit the direct needs of industry. High-tech companies need professionals who can design and develop complex new products and processes and offer innovative solutions. In close conjunction with the other TU's and CCTO, the UT is developing a pilot for a more generic PDEng program. The clearer profile, without losing its flexibility in programming, benefits the industry. It will also facilitate certification by the CCTO and quality assessment.

### **Innovation**

#### ***Programs on e-health, smart materials, robotics and sensing***

The innovation programs are the prelude to the strategic research programming in the coming years. These programs are set up as an investment program (multi-staged approach) and have the character of a 'seed fund' for new initiatives that reinforce or complement our expertise. It establishes a link between the strengths of the UT and the societal challenges, the funds and subsidy programs (e.g. the NWA) on a national and on EU level. We expect the current innovation programs to be self-sufficient in a few years and that the ongoing process of strategic development and innovation demands for new seedlings.

#### ***Talented high-profile researchers***

High potentials will make an immediate difference in the success and impact of the university, local and global. Talent management for high potentials is focused on the person and pro-active. To retain and attract high profile researchers the University must offer attractive, digital and globally oriented research and study environments, combined with an academic culture and infrastructure that can accommodate international talents and offer the best conditions for developing and pursuing new ideas. In the coming period, the UT will attract more talented high-profile researchers. The UT will not only have attention to the talented high professional researchers but emphasizes the development of our staff (academic and support) in the broadest sense. Everyone has a need for further development of their talents.

### **Strengthen our basis**

#### ***Research Data Management***

In dealing with research data the UT strives for integrity, sustainability and transparency. Due to the growing attention to the proper handling of research data in scientific practice, the increasing amount of

(digital) data, and the growing demand of integrity and open science, the UT-data policy has been updated and action plans have been described. This includes additional measures to stimulate the formulation and implementation of data policy and to support good data management at the UT. It comprises of:

- the UT research data policy, which is mainly formulated in general terms, and in terms of responsibilities at different levels
- faculty research data policy and
- data policy of research groups

### **Twente Graduate School (TGS)**

TGS is currently a service department for the registration, administration and monitoring of PhD. A refit in accordance with the new organization of research at the UT is needed. Furthermore, TGS has a major role in the quality assessment of PhD programs. This quality assessment will be strengthened in the coming period. In addition, (inter)national developments in strategy and policy for graduates, such as a broader categorization of PhD (e.g. societal, industrial doctorates), new collaborations with industry (PDEng), or additional financial and jurisdictional issues (Pilot studentpromovendus, international PhD students), ask for a university broad approach and proceeding.

### **Scientific integrity**

External developments (e.g. new European and Dutch codes of conduct) and the UT's own high standards regarding professional and responsible conduct in research and education, induce the UT to strengthen its policies regarding scientific integrity. Relevant scientific integrity policies include training of PhD students (TGS), Research Data Management (LISA and Faculties), research ethics and code of conduct(s).

### **Monitoring**

In the table below the key performance indicators for 'Making a real impact' are shown at UT level. The indicators provide the basis for the ambitions of each faculty. In the process of Shaping 2030 these indicators and target values will be reviewed.

Key Indicators	2020	2021	2022	2023
Influx PhD	250	250	250	250
Influx PDEng	40	40	40	40
Pass rate < 5 yrs (employee PhD)	>75%	>75%	>75%	>75%
Earning capacity	45%	48%	50%	50%
Collaboration with industry	>20%	>20%	>20%	>20%
International collaboration	60-80%	60-80%	60-80%	60-80%

## **2.2.3 Stimulating an entrepreneurial mindset & behavior**

*Appreciation for successful creative and original innovation in Education, Research and knowledge transfer. Especially with innovative and applicable knowledge, a unique educational, excellent support.* UT has maintained its position as most entrepreneurial university. The UT has a leading position in the Netherlands and Europe as an entrepreneurial university. We will continue to develop this position in order to stay an example for others and strengthen our own position. In order to benefit even more from this leading position, we will pay specific attention to obtaining external recognition for our efforts. The UT encourages an entrepreneurial mindset in both staff and students. We facilitate and encourage students to take part in student activism and entrepreneurship in the broadest sense: we offer more than a degree by giving them all kinds of opportunities to develop themselves. (e.g. study and student associations, student teams, Student Union and Dreamteam Designlab)

### **Further growth/development**

#### **Portfolio**

UT has built a clear portfolio for executing and building on UT-entrepreneurship. This portfolio consists of private and public activities with a focus on economic impact, and will also lead to societal impact. Strategic Business Development (SBD) will facilitate the maintenance of a portfolio of themes that are developing into potential areas of impact for the UT. The Strategic Board determines the content of the portfolio and the portfolio is leading in determining the focus of SBD-support. The portfolio contains "mature" topics in which the UT already works together effectively with public and private partners, but also contains topics that we are still developing.

## Innovation

### **ECIU University (new)**

The UT has filed an application to pilot with the concept of the ECIU university on behalf of the ECIU alliance. The alliance is willing to establish, within 2025, a new pan-European university concept overarching the 11 participating Higher Education Institutions, where learners, researchers, enterprises, local bodies and citizens are enabled to co-create original educational pathways and relevant innovative solutions for challenges to the advancement of society.

During the pilot phase of the project, the alliance focuses its activities on topics related to the UN Sustainable Development Goal 11, with the ambition of creating a model adaptable to any future societal development objective. The mission of the alliance is gradually reached, after the pilot implementation, thanks to: a) its challenge-based approach, b) its challenge-based learning pedagogy; c) its flexible and open innovative education pathways and d) its accompanying measures (i.e. joint structures, embedded mobility).

When the European Commission accepts the proposal the pilot will be coordinated and steered by the UT. The presidents and rectors of ECIU have also indicated that we will even start with the pilot if it is not immediately funded. For the UT, the ECIU university is an excellent opportunity to experiment with challenge-based education, the unbundling of graduate courses and offering them by theme, focusing education and research on (societal) challenges, offering life long learning concepts and intensify collaboration with industry and public stakeholders.

### **Cooperation with partners**

The UT works together with one or more partners for specific activities. These collaborations enable the UT to bring forward the education, research and innovation agendas and increase impact on society-at-large. Depending on the activity and the number of interactions, selected partnerships will be labeled “strategic”.

### **Strengthen our basis**

Through our combination of academic excellence, entrepreneurial spirit and international orientation, the UT will generate greater societal impact by 2020 than before. To accomplish this, we have formulated ambitions and set objectives regarding internationalization (among others). To reach these a change program is required to connect the vision of internationalization “educating the global citizen” to operational execution in faculties and on a central level. The program aims to consider internationalization as “going concern” by 2021.

The program consists of five action lines, overarching topics are an integral approach and collaboration between faculties and services departments on the tactical layer.



The language policy will be a part of the program of internationalization within the action line international curriculum. We believe that using English as the main language ensures that people will eventually have the possibility to excel and collaborate in an international community. Language is a mean, a powerful tool - becoming an inclusive university is not a goal in itself: it should support us in reaching our ambitions. A detailed plan is available and will be implemented before the summer of 2019 under the umbrella of the program Internationalization. Activities are focused on the English level of support staff, quality of the English language in teaching and the use of English on campus, in communication and within governance. At the UT there is a broad need for linguistics: we also have to provide a Dutch offer for foreigners as well as our native students.

#### **2.2.4 Experimenting, pioneering, innovating & Campus**

*Students and staff are focused on the ability to innovate, experimenting, pioneering, take risks and seek limits.*

Providing open innovation centers where there is room for creativity and innovation, where meeting each other, development and connectivity is central. A place where education and research join Sports and Culture, where experience is central.

A strong and reliable infrastructure is key to a successful university. Central equipment, utilities, and buildings are all components of the campus infrastructure at the UT that will support, enable, and enhance the work of its faculty, staff, and students. In-depth, cutting-edge research and education requires access to high-quality and state-of-the-art research infrastructures, e.g. laboratories, experimental equipment, ICT, databases, and libraries. We stimulate interdisciplinary collaboration and maintain a strong focus on knowledge transfer and exchange with society, industry and business sector. The strengthening of our infrastructure is of fundamental significance for top-level research and education. To realize our vision, we want to attract and retain all of the talent available. We strive for a UT culture where everyone feels welcome, regardless of gender, age, sexual orientation, cultural background or limitation. One of the focus areas is our ambition to increase the number of female full professors to over 20% in 2020. This requires creativity, attention in the line and an inspiring booster function from our HRdepartment. Spotting and developing talent has our continuous attention, especially with regard to nominations for prizes and awards. This process is addressed more systematically. It is an integral part of a targeted talent policy. The growth and future prospects of the UT is highly dependent on the quality and skills of the employees we are able to recruit. The competition is hard. In this the profile of our scientists and the criteria for our talent assessment are crucial. What do we need to be able to realize the program and profile now and for the future? The selection and recruitment of talents/scientists are now mainly based on scientific quality and productivity (impact). But what we need is a spread over the entire spectrum from fundamental, applied to translational in research and in teaching, while preserving excellence.

### **Further growth/development and innovation**

#### ***Investments***

Investments in our infrastructure need to be seen from a broad perspective, not only (new) large scale infrastructure, but also deferred maintenance in our current infrastructure. The past years we have invested more in capacity than in maintenance/renewal of our infrastructure. New investments are needed in order to secure a state-of-the-art infrastructure necessary for a high quality of research and education. In financial terms, we need to balance our funding between maintenance and strategic investments. We have to keep in mind that investments in our education cannot be made at the cost of research, also by attracting talent. (e.g. UD)

#### ***Increasing diversification (new)***

Diversity (age, gender, cultural, ethnic background) in a research environment is a powerful incentive for creativity and talent development and brings together different perspectives and opinions. Research is an international playing field, which is clearly reflected in the variety of ethnic and cultural backgrounds of both tenured and non-tenured staff that are employed at the UT. Besides, it is important to have a good mix of experience and young top talent. All disciplines show a healthy balance in cultural, ethnic and age diversity in the current staff (tenured and non-tenured), as well as in the requested reinforcements (senior and junior positions) of the separate disciplines. The UT actively carries out a gender diversity policy since 2009, with the objective to employ more female scientists, leaders and professionals. The policy is based on three objectives: 1) to create a working environment which is attractive for women to follow education or to pursue a career, 2) transparency in procedures and criteria in selection and recruitment and 3) women are individually supported with concrete possibilities for career development, such as training, mentoring and network activities. The UT has a coordinator 'gender diversity'. The UT has been named a "Striking Example Talent to the Top Monitor 2013". In the Education and Research sector in the Netherlands, the UT has received the best scores when it comes to successfully embedding gender diversity in the organization. We want to maintain our position and active role in this matter.

The UT has different active networks working on different aspects of diversity. The Female Faculty Network Twente (FFNT) is the professional network of female academic staff members at the UT. Their vision is to establish and maintain the culture and the practices of diversity in our university. The ambassador's network advises the executive board of the University of Twente on diversity policies. This includes gender policy, but also diversity in other aspects. Beside extra efforts in the search for female talent for 'regular' vacancies, the Hypatia chairs have been introduced to further increase the number of female talent in academic top positions. A Hypatia chair is a unique opportunity for female professors to shape the way in which their specific research can be facilitated within the University of Twente, in close collaboration with fellow researchers within the faculties. For the UT, the Hypatia chairs are a unique opportunity to increase diversity within the organization, leading to better results, more innovation, equal opportunities and an attractive proposition to the labour market. Hence, the UT has a vibrant ecosystem in place to attract and bind female top talent to our disciplines. Therefore we are convinced that we will succeed in recruiting at more female top talent in the future.

## Strengthen our basis

### **Action plan work pressure**

The UT invests into improved management of work pressure. For this aim, the UT developed several initiatives for supporting the resilience of employees. Resilience is an important factor in maintaining and increasing work-life balance and performance. In the next years, UT's work pressure management focuses on the following initiatives:

- Attention for local issues (faculties and services) and specific target groups
- Leadership (development and support)
- Cultural change
- Focus on teams
- Environmental developments impact on the work floor
- UT central-level choices and decision impact on (non-)scientific employees

Together with the local participation council and the faculty board's action plans will be developed. Monitoring of the progress made will be in our regular PDCA cycle.

### **Management and governance**

Business Intelligence and timely, high quality and relevant business information in our organization are of great importance in order to identify deviations from our goals and the identification and monitoring of business trends in order to adapt quickly to our changing environment. To further improve the decisionmaking processes at all levels of management within the UT we keep investing in our BI-infrastructure. In order to ensure the availability of the necessary information we will also refine our KPI-set for the UT together with faculties, institutes, services and the Executive Board.

### **Monitoring**

To create a diverse and inclusive community at the UT, we have to attract personnel with a diverse background. To monitor the progress the following indicators and ambitions are defined.

Key Indicators	2020	2021	2022	2023
Female professors *	20%	>20%	>20%	>20%

\* excluding 'Westerdijk' assignments

## **2.3 Impact on and contribution of services and support processes (new)**

Both internal and external developments have their impact on the services and supporting processes at the UT. In this paragraph, we address a number of these developments and the way we want to contribute to our core activities and the realization of our ambitions. These form the basis for the transition of the service departments for the coming period and will be further explored in the process of Shaping 2030 in close connection and cooperation with the faculties. The UT has its own 'way of working'. The guiding principles in this way of working are:

- Collaboration as the standard approach: collaborating between services, faculties and students, collaboration as the standard approach.
- Continuous improvement: enduring working by the principles of continuous improvement (PDCA-cycle). For example for IT: visible and measurable performance improvements in terms of doing more with fewer people, first time right and less rework resulting in measurable quality improvements and internal customer satisfaction.
- Make room for experimenting and innovating: an experimenting way of working for innovations to first (pilots) find out what fits best and when proved successful do a swift implementation.
- Involvement of students: encouraging student involvement in different ways: ask student's advice on UT policies/activities, support students in their own responsibility for organizing student activities. Supporting the Student Union, study & student associations, etc.
- Be entrepreneurial: encourage an 'agile, entrepreneurial and flexible' workforce. This means taking ownership and responsibility by our staff and the mindset of delegation amongst management. Self-managed multidisciplinary teams (like TELT) are a good example of internal entrepreneurship.
- The UT is a network university: knowledge building and active participation in meetings, workgroups, projects and communities (e.g. 4TU, VSNU, SURF, ECIU) Exploring opportunities to create coalitions of the willing for innovation initiatives with other universities, companies and other (regional, national and international) parties.
- Be agile: uniform and flexible support processes to facilitate maximum agility in education, research and Knowledge transfer area.

### **Diversity in supporting activities**

In general, the current trend of increasing diversification in target groups/stakeholders demands a different way of delivering services. This will demand (extra) capacity of almost all service departments of the UT. For example in view of lifelong learning: unbundling current courses, a different form of interaction with stakeholders and their involvement in delivering education, flexible ways of admission, deliverance of education on a need basis, tutoring of teachers in a new and more intensive form, the launching and push of a new (co)brand and a flexible ICT platform, for collaboration between different stakeholders.

We will further focus on just-in-time and relevant information for potential (online marketing) and current students and employees (student and employee information platforms/tooling), alumni and partners. This requires a more data-driven approach (CRM, Business Intelligence tooling), further develop digital and physical products at a higher pace.

In the coming years, emphasis will be given to further internationalize support processes. Next to that attention will be given to the exchange ambitions of the educational programmes, the concept of the international classroom, professionalizing the handling of international delegations and language.

To be able to accommodate an increasing number of (international) students and a more diverse student population, it is needed to invest in support of student well-being.

More standardization and harmonization in “non-differentiating processes” will create opportunities to be more flexible in the area’s where we really can make the difference.

### **Talent management**

Looking at coming years, The UT will aim at more quality and diversity of students (BSc, MSc and PhD) and also of scientific and support staff. This requires the development of an HR strategy in which sustainability and the relevant SDG’s are a guiding principle (to be recognized in inclusiveness, community building, recruitment, employer branding, talent management, development-oriented). Based on a clear UT vision on talent smart recruiting strategies will be developed. To create and catalyze collaboration across UT departments and beyond attention will be given to the development of support staff. The UT has to invest in the professionalization of its staff members, to increase ‘digital awareness’ to facilitate the digital transformation. Furthermore, continuous improvement of inclusiveness / English language is needed, as well as an increase in the demand for languages courses. Support for intercultural communication and translations is expected, which requires more focus on coordination for this type of support.

### **Increase and strengthen partnerships**

Investing in a more structural form of stakeholder management at UT level is needed. Community building and stakeholder management require a UT-wide effort focused on concrete actions as increasing the service orientation (CRM). The coming years the UT will further expand and strengthen its network of (international) partners, the business community, governments at regional, national and international level.

To further improve the study success of pupils and students we will strengthen the connection between different educational systems. [Regionaal ambitieplan VO-HO Regio Oost-Nederland 2018-2021]

Various activities will be developed with regional partners like Saxion, Enschede municipality, Novel-T and various companies to encourage them to accept more (international) interns and/or employees. The ‘Regiodeal’ is to provide funding for a sustainable approach. The Career Service within CES will be further developed.

The new programme Mechanical Engineering together with VU requires structural additional capacity for support and more generally how to expand this and other partnerships beyond this initiative.

In making good connections with all these parties, the UT can make use of the alumni network more in its stakeholder management than is currently the case.

### **Digitalization is key**

Digitalization and more specifically the digital transformation will bring many new opportunities, which implies that services and facilities will change. Consequently, the role of support staff will change (for example the use of IT to support (financial) audits). As an HTHT-university, it is necessary to pace up digitalization efforts to meet or even exceed the expectations of (new) digital-minded target groups. With a fair share of Self Service, easy to find, intuitive to use. With hands-on support at first use. With challenging support to add strategic value.

Continuous improvement of current systems and implementation of new systems in compliance with the digital architecture principles of the UT is needed. This will lead to more investments in IT; we have to take more account of these rising costs (including license costs). More efficiency can be achieved by influencing the direction and development of shared facilities by SURF. Facility sharing with a shared IT-infrastructure (e.g. for data storage) and the development of commonly used tools for Research data management are aspects which will be addressed.

## **Sustainability**

The SDG's will encompass the policy-making and implementation in a wide area of subjects. The UT campus is a centre of open innovation where university, technological innovations and society meet. A place where researchers test their research and technology in real life situations. A place where students and staff can work both disciplinary and cross-disciplinary; where community building is essential.

Campus facilities should encourage and enable experimentation, pioneering innovation, and inclusive community building in collaboration with stakeholders such as Business & Science Park. Our facilities should facilitate growth (and decline) of student and staff numbers (inter alia (flexible) facilities for education, research, workplaces staff, student housing, faculty ITC on campus). At the same time safety and security demand more and more attention together with national government, municipality, police and other parties. A policy on sustainable operational management will be adopted followed by the integration of the sustainability goals within the organizational structure (for example the introduction of Green Office Twente).

The university will take steps to meet the CO2 neutral and circular economy ambitions of the national government through its participation of the climate agreement roadmap.



### **3. External and internal developments**

#### **3.1 External developments**

The UT is a relatively young and small Dutch university with limited impact on the national policy agenda. In the 4TU federation we have joined forces with our colleague technical universities of Delft, Eindhoven and Wageningen to be better represented in national discussions. In the last three years the focus was on promoting the case of the rapidly increasing population of technical students and lagging funding. In 2018 the Van Rijn committee was established by OCW to investigate the funding of higher education in The Netherlands. This committee will report to the minister in spring 2019. At this moment no information on the possible outcome related to the Van Rijn committee is available. Therefore, we did not include the effect of this possible outcome on our funding in this Spring Memorandum. Also, possible budget cuts (efficiency cuts) from OCW, which we still see as a strong possibility, are not included.

In this paragraph, we show the external developments and how we incorporated these in our financial framework 2020-2023 as presented in this Spring Memorandum.

- We have incorporated the new sector plans for beta and technology in our funding, although it is still not certain which budget will become available. In March 2019 the Sector plan proposals were sent to OCW for the total amount of M€ 8.9. In December 2019 the actual granted amounts for the Sector Plans will be made available to the UT. Therefore, at the moment the in this Spring Memorandum incorporated amounts are still uncertain. It is possible the actual 6-year budgets will differ from the budgets now incorporated. In that case, the actual budgets will be allocated to the faculties, without subtraction for central overheads. The sector plans will be commented on in a separate paragraph.
- OCW is investigating whether the National funding model needs to be updated and has asked the Van Rijn committee to issue its report in spring 2019. At this moment we have not included any possible financial effects as a result of this report in this Spring Memorandum
- OCW still has a significant economizing target. We have no information if OCW will translate these targets into budget cuts for Higher Education Institutes. Therefore, we did not incorporate possible budget cuts in this Spring Memorandum.
- Negotiations on a new labor agreement for universities from 2020 are currently going on. These negotiations are too premature for us to incorporate its outcome in this Spring Memorandum.
- Currently, negotiations for the spending of the approved “Regiodeals” are taken place. We have not included any additional funding for these deals into the Spring Memorandum. The outcome of these negotiations will be included in the budget 2020-2023.
- The growing economic pressure on the Twente region also has an effect on the UT. The region is increasingly looking to the UT for skilled new workers and collaborations on many levels: from shared projects to life long learning.

#### **3.2 Internal developments - Modifications to the UT allocation model**

The UT allocation model conforms to the government funding model as much as possible. Which means that there are two main budget flows: education and research. Besides these two main flows, budgets are also allocated directly to units in case of specific government subsidies, to the service departments and to the Central Strategic Budget. The budgets are allocated by the Executive Board to the faculties, service departments and a single strategic budget for education, research, and talent development.

There have been no changes to the allocation model in this spring memorandum.

To further enhance the legibility of the budgeting model we have added subtotals in Annex D for sector plans and knowledge transfer. This is merely an adjustment in the presentation and has no effect on any unit budget.

#### **3.3 Uncertainties**

In this paragraph, you will find the uncertainties incorporated in this Spring Memorandum 2020-2023 as far as we can identify at this moment and the measures we have taken or will take to mitigate them.

##### **3.3.1 Financial uncertainties**

- In this memorandum we have included Government funding which is far from certain. In all government budgets we have accounted for expected wage and price indexation for the years 2019 (2.27%) and 2020 (2.5%). The indexation for 2018 is expected to be communicated by OCW in June 2019. In this way, the university is facing a cumulated risk for both the current- and the coming budget year of M€ 13.7.

- The calculated risk for 2019 amounts to M€ 7.1 (more clarity on this in June 2019)
- The calculated risk for 2020 amounts to M€ 6.6.
- The annual “referentieraming” is under growing pressure. OCW seems to be unable to fully compensate the universities for the growing number of students. Although we still expect to be fully compensated for the rising numbers, the financial risk is growing. This is why we have increased the risk probability from low to medium (see table below).
- For the beta/technology sector plans, we have included M€ 8.9 in the Government funding. This amount is based on the requested budgets from the relevant faculties. The sector plans will be assessed in 2019 by an external committee. The final budget will then be determined. Also, the conditions under which the faculties receive the funds are not yet fully clear. Furthermore, these budgets will be allocated for an initial period of six years. Please see paragraph [Sector plans](#) for more information
- Unexpectedly for the universities, OCW imposed a budget cut for 2019 in connection with "OCW issues 2019". However, this budget cut does not yet resolve the OCW budget deficit. This deficit increases from M€ 114 in 2020 to M € 161 in 2023. Further ongoing efficiency cuts on higher education institutions budgets seem to be a real risk. However, we have not included any possible budget cuts in this Spring Memorandum.
- The government intends to link research funding more closely to research efforts, scientific quality and social impact. Special attention is paid to the technical sciences and research groups that have to deal with high costs. The Minister set up the Committee Van Rijn to investigate alternatives (zero-sum) and the (redistribution) effects within the existing Government funding model. The final report of the committee is expected in spring 2019. The financial effects for the UT are yet unknown and are therefore not incorporated in the Government funding.
- In September 2019 the first students will enroll in our new bachelor course Mechanical engineering in Amsterdam. We have incorporated the business case into this Spring Memorandum. Please see the paragraph [Mechanical Engineering @VU](#) for more information. The UT is in the process of setting up an Amsterdam branch with the Vrije Universiteit for an engineering course. This is a direct response to the increasing demand for qualified engineers nationwide. We hope to eventually enroll 200 new students in this course every year from September 2020 onwards. These students will partially be based in Amsterdam, partially in Enschede. The curriculum and business case are still under construction. The first students have already pre-enrolled.

Risk description	Amount in M€	risk	weighing	Risk in €
Wage- price indexation 2019	M€ 4.5	Medium	50%	M€ 2.3
Wage- price indexation 2020	M€ 4.9	Medium	50%	M€ 2.5
Referentieraming 2019	M€ 2.6	Medium	50%	M€ 1.3
Referentieraming 2020	M€ 1.7	Medium	50%	M€ 0.8
Sector plans*	M€ 8.9	Low	10%	M€ 0.9
Economizing target OCW	M€ 2.1	Medium	50%	M€ 1.0
<b>Weighed risk potential losses</b>				<b>M€ 8.8</b>

\* sector plans will initially be awarded for a period of six years

### 3.3.2 Environmental uncertainties

- The number of enrolments, especially in our master courses remain a risk. The original target of 10,000 students from Vision 2020 has already been achieved. Based on the available capacity with regard to personnel, finances and infrastructure, it has been determined that an optimum will be achieved at a population of 12,000 students. Scenarios related to growth, stability and contraction (expected from 2023) will be worked out in the context of Shaping 2030. Because the influx of students has also grown nationwide, our market share (determining the share in Government funding) remains at a level of around 3.5%. The intake of master's students (between 1,500 and 1,700), however, lags behind our objectives (2,200 students). The flow of students from bachelor- into the master courses moves around 70%. International students, in particular, have a lower transfer rate; for example, of the bachelor students with German nationality remain between 40-45% at the UT to follow a master course. Various measures are being taken to improve this rate. The maximum and diversity (internationalization) of the student population will also be an important topic in the process of setting up a new vision 2030 ('Shaping 2030') for the university.
- The Max Planck Center and Fraunhofer Center at the UT have established the UT as the main hub for scientific collaboration between The Netherlands and Germany. The many stakeholders such as the Province, Twente region, Saxion, and the ministries of OCW and EZ have supported these initiatives. For both Max Planck Center and Fraunhofer Center the first five year period is coming to

an end shortly. Our cross border scientific intentions have to be part of our research strategy in Shaping 2030. It has to be investigated whether both MPC and FPC can become autonomous institutes as envisioned in the original cooperation agreements.

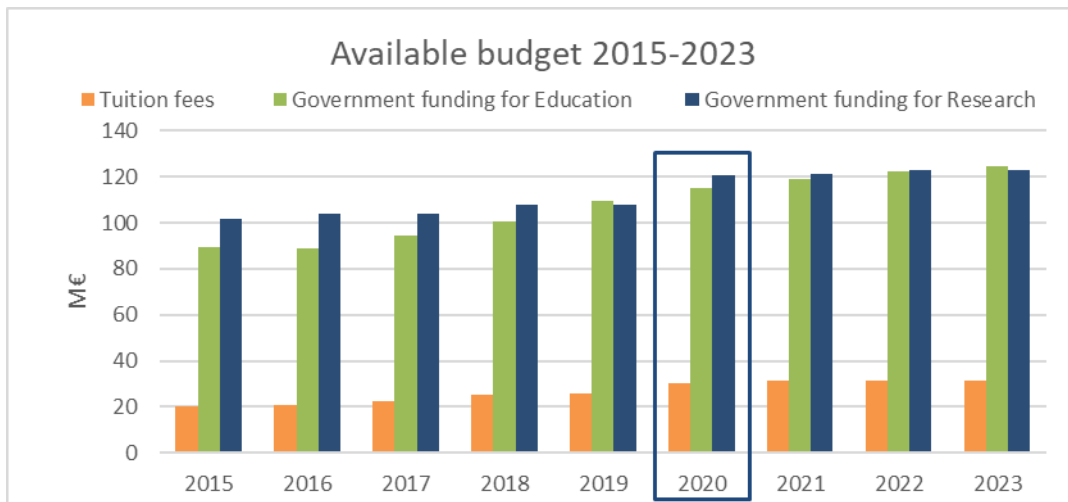
- Our earning capacity defined as total revenue from third parties divided by the total government funding amounts around 37% while our goal has been set at 50% (average Dutch universities). In particular Research funding is under growing strain. The UT is searching for additional sources of funding. The focus from the UT2020 program is on enlarging research funding through Strategic Business Development (amongst others the “Top Technology Twente” program), the EU-program Horizon2020 and NWO programs.

### **3.3.3 Operational uncertainties**

- Increasing competition for basic financing and earmarked budgets for new activities are associated with additional costs. This puts quality and people under pressure. On the one hand, it remains difficult for the University to fill vacancies. On the other hand, there is high mobility (departure) of the academic staff. Faculties have drawn up plans to complete filling vacancies.
- The BMS faculty has drawn up a plan (BMS under steam) to modernize this faculty. Besides an educational and scientific change in focus, the faculty organization is also in transition. The growing strain on the BMS budgets will possibly affect “Under steam”.
- The growing digitization of our society and more specifically ICT in education demand changes from the UT. Technical developments will, where necessary, be incorporated into our courses. To meet these challenges our I-strategy is implemented along four tracks: education, research, support and infrastructure. In each of these tracks the input from within the faculties and institutes is paramount. The budget needed for implementing our I-strategy is not yet included in the Financial Framework as presented in this Spring Memorandum.
- The (minority) shares in HTT can bring financial implications. Participations in start-ups are by definition volatile. Through BDT we meticulously monitor the business cases and proposed management of the new enterprises. The UT preferably avoids risks by not contributing financially, but by contributing the scientific knowledge. Where we do contribute financially, like Cottonwood or TTF, we conduct thorough risk analysis and conduct risk management using knowledgeable partners. We do not contribute directly, but through funds after a thorough risk analysis.
- Several housing adjustments are currently underway or are being prepared (LTSH). This will put a significant strain on our regular business. Any build will have to be synchronized with our running business.

## 4. Available budget 2020

The available budget consists of the Government funding for education and research and the tuition fees. The available budget in 2020 amounts to M€ 266.3. Before commenting on the UT budgeting model in detail, we first show a breakdown of the available budget.



*Not visible in this graph is the ever-growing part of the research budget that is needed for matching of 2<sup>nd</sup> and 3<sup>rd</sup> funding stream projects. The freely available budget for research has declined significantly over the years while matching costs have increased.*

### 4.1 Government funding

In this paragraph, we estimate the government funding for 2020-2023. For this purpose, we use several assumptions. We examine the regular parameters, such as performance indicators, our market share and the effects of earlier or known future changes in the government funding and adjust our budget accordingly. For the years after 2020 we estimate the development of our student numbers. We fix our market share on the level of 2020, with which we then calculate our expected budget. For some parts of the government funding we incorporate the national budget (e.g. ITC and Sector plans).

This estimate is based on the most recent information about the national budget: the concept first budgeting letter 2019 and the “bekostigingsfoto” 2020 (Funding picture). The “bekostigingsfoto” 2020 shows the number of enrolled students and degrees per 1 October 2018.

### 4.2 Government funding for Education

The government funding for education is determined by OCW based on funded enrolments and degrees, a fixed budget and a budget for performance agreements and profiling. Along with the tuition fees this forms the ‘1<sup>e</sup> geldstroom’ education funds. This budget is allocated through the UT allocation model.

Some specific budgets are allocated from the education budget, e.g. the budget for ITC (=the ODA budget received from OCW, less a proportionate part of the central overhead), fixed budgets for small technical courses and the course Technical Medicine and the costs of generic classrooms (COV).

The variable education budgeting model consists of two elements: a Bachelor and a Master part:

- the Bachelor programs are budgeted according to the TOM model. This is based on the weighed funded registrations and degrees. The internal compensation for TOM education from faculty to faculty is based on the shares of the different tutors and chairs in the modules of a program.
- the Master programs are budgeted using EC’s. Premasters are registered as master EC’s.

The Government funding for Education amounts to M€ 114.9 in 2020, an increase of M€ 6.6 compared to the previously calculated budget for 2020 in the Budget 2019. Of this budget M€ 95.1 is derived from our “market share” and thus variable. Together with the tuition fees of M€ 27.7 this is entirely distributed through the UT-educational budgeting model. For our bachelor tracks we adopt the Government funding in which the available budget for Education (after deduction for central overheads) is distributed on the basis of government funded enrolments and degrees (bekostigingsfoto). For our master tracks the budget is distributed to the units based on the EC’s they have produced.

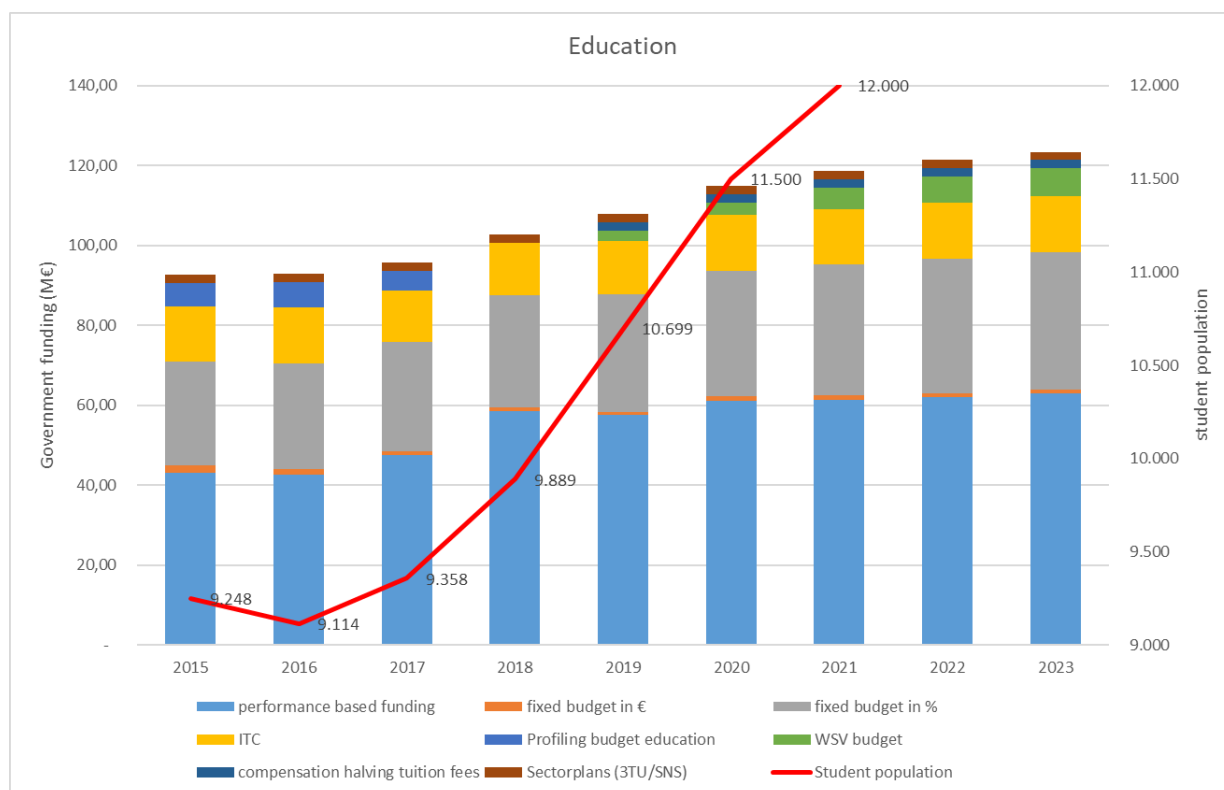
Additionally, we receive M€ 13.6 for education within our ITC-faculty which we directly assign to the ITC after a deduction for central overheads.

Of the remaining M€ 5.9 of the Government funding for Education M€ 2.3 is labeled for “sector plans”, which is directly assigned to the appropriate units.

*Mutations in Government funding on Education compared to the estimates for 2020-2022 in the Budget 2019-2022:*

Analysis estimate government funding 2020-2023 vs 2019-2022	2020	2021	2022
<b>Education:</b>			
Government funding on Education 2019-2022	108,4	112,1	114,7
Government funding on Education 2020-2023	115,0	118,7	121,4
<i>difference</i>	6,5	6,5	6,7
growth in student numbers	2,8	2,8	2,9
decline in number of degrees	-0,3	-0,3	-0,3
Wage-price indexation 2020 (2.5%)	2,4	2,4	2,4
"Referentieraming 2020"	1,7	1,7	1,7
<b>total difference on education funding</b>	<b>6,5</b>	<b>6,5</b>	<b>6,7</b>

The higher number of (weighed) enrolments cause an increase in the budget. The number of degrees has declined. We have also incorporated a compensation for the rise in student numbers. Whether OCW will actually compensate the educational institutions for this growth is unclear. Finally, we have included compensation for wage- and price adjustments. This too is uncertain.



The graph above shows the different components of our government funding and the development of the number of enrolments. The number of enrolments is kept steady at the level of 1 October 2018 in this graph. For the budget 2020-2023, we will change the way we calculate our government funding, by incorporating expected student numbers by the faculties and adjusting the government funding and tuition fees accordingly.

#### 4.2.1 Mechanical Engineering @VU

In 2019 the first year of our joint bachelor course Mechanical Engineering with the VU in Amsterdam will commence. Although we are very early into the registration season for 2019-2020, the number of enrolment requests look promising. We have incorporated the business case for ME@VU into this Spring Memorandum. The Spring Memorandum only shows the allocation model for government funding and tuition fees. Expenditure of central reserves and external funding will be added when drafting the budget for 2020-2023 in the fall of 2019.

Because ME@VU is a UT course, the government funding and tuition fees will be allocated to the UT. We have therefore incorporated 100% of these estimates. As agreed, a part of this income will be allocated to the VU to cover their share of the expenses. The VU share can be found as negative budgets in Annex B:

##### Business case:

(amounts in M€)

Mechanical Engineering @VU	2019	2020	2021	2022	2023
Mechanical Engineering @VU enrolments			0,406	1,444	2,256
Mechanical Engineering @VU degrees					0,142
Mechanical Engineering @VU; other income		0,200	0,250	0,250	0,250
Mechanical Engineering @VU; investment from Central reserves		1,350	1,407	1,035	0,595
Mechanical Engineering @VU; VU share		-0,060	-0,262	-0,847	-1,324
Mechanical Engineering @ VU tuition fees		0,500	0,774	0,956	0,962
Mechanical Engineering @ VU tuition fees VU share		-0,150	-0,310	-0,478	-0,481
<b>total budget for UT</b>	-	<b>1,840</b>	<b>2,265</b>	<b>2,360</b>	<b>2,400</b>
Share ET faculty (80%)	-	1,472	1,812	1,888	1,920
Share central overheads (20%)	-	0,368	0,453	0,472	0,480

The figures in the table above, marked in blue, can be found in this Spring Memorandum (annexes B, C and D). The unmarked lines will be added in the budget 2020-2023 because the deployment of reserves or third party income is not allocated through the UT allocation model.

#### 4.2.1 Sector plans

Because of the ever-increasing subdivision of the government funding, we have now consolidated the budgets for sector plans in annex D into a subparagraph. In our education funding two sector plans have been incorporated: the sector plan for physics and chemistry and the sector plan Technology, also known as the 3TU sector plan. All sector plan budgets are exempt from the 80/20 rule, because of funding legislation.

All sector plan budgets are directly allocated to faculties, except for the sector plan Technology 2011, which is withheld centrally, to be allocated during a year based on actual costs.

### 4.3 Government funding for Research

The Government funding for Research is determined by OCW based on funded degrees, a number of PhDs and PDEngs and a fixed budget. OCW expects knowledge transfer activities (Knowledge transfer) to be funded by the available Research Government Funding. Some specific budgets are allocated from the research budget, e.g. contribution Nanolab, TGS- and PDEng coordination and a supplement for mathematics research. The budgets for sector plans and Knowledge transfer are summarized separately.

The variable research budgeting model consists of three elements:

- O&O component, which is distributed using bachelor- and master degrees,
- PhD- and PDEng bonuses, which are distributed using PhD and PDEng degrees,
- The primary research budget, which is distributed using agreed upon percentages per faculty,

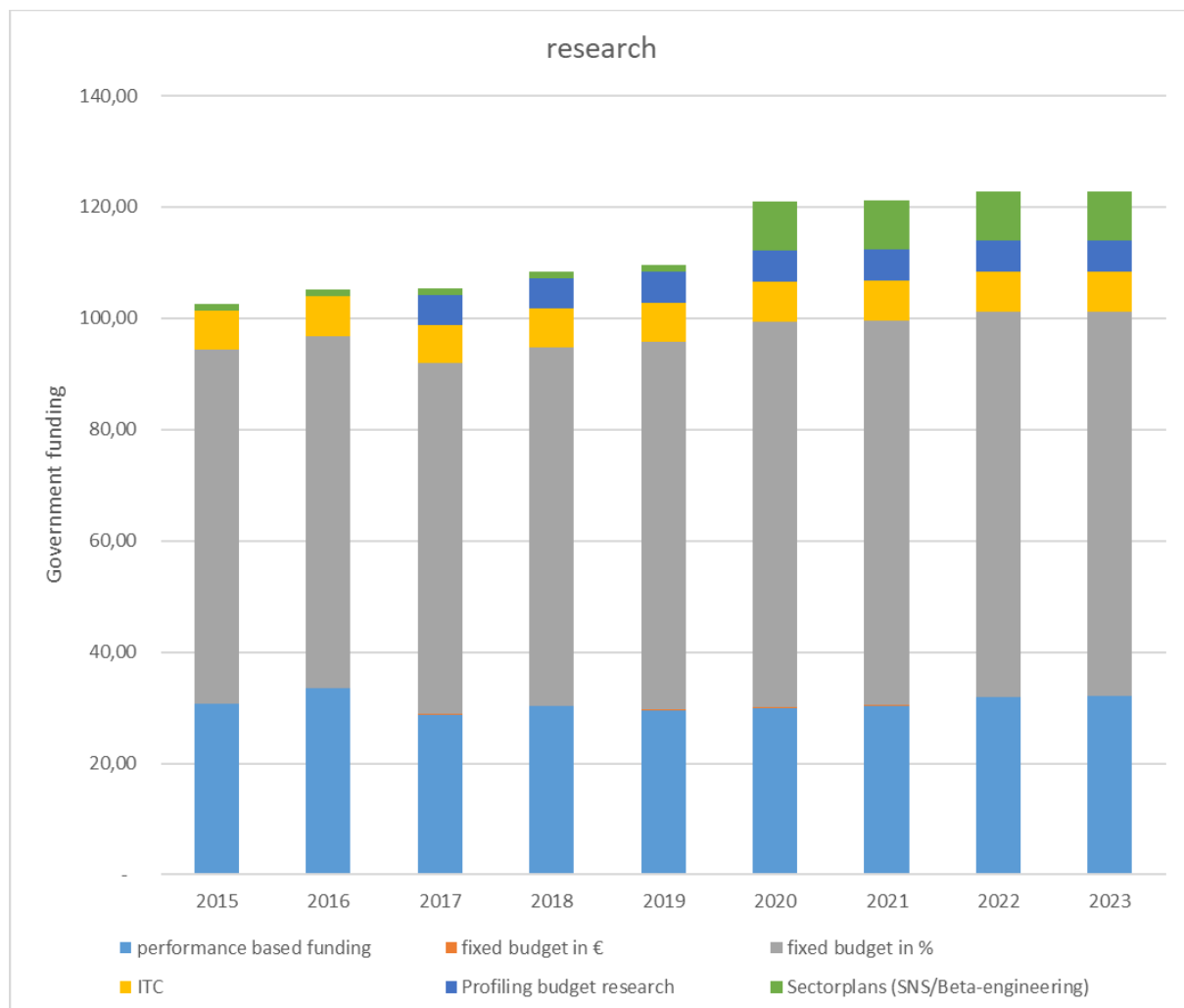
Government Research funding will amount to M€ 121.0 in 2020, an increase of M€ 12.3 compared to the previously calculated budget for 2020. Of this amount, M€ 95.6 is derived from our market share and

therefore variable. This budget is (after deduction for central overheads) allocated through the UT research funding model. M€ 10.0 is budgeted for several sector plans.

Additionally, we receive M€ 7.1 for research within our ITC-faculty which we directly assign to the ITC after a deduction for central overheads. The “profilingsmiddelen onderzoek” ad M€ 5.6 will be added to the CSB - budget. The remaining M€ 2.6 is partly budgeted for the Max Planck Center and IVH.

*Mutations in Government funding on research compared to the Budget 2019-2022:*

Research:	2020	2021	2022
Government funding on Research 2019-2022	108,7	108,5	109,5
Government funding on Research 2020-2023	121,0	121,3	122,8
<i>difference</i>	<i>12,3</i>	<i>12,8</i>	<i>13,4</i>
new budget "Sectorplannen 2019-2025"	8,9	8,9	8,9
Wage-price indexation 2020 (2.5%)	2,5	2,5	2,5
decline in number of degrees	-0,4	-0,4	-0,4
number/price of promotions and Pdeng certificates	1,4	1,8	2,4
<b>total difference on research funding</b>	<b>12,4</b>	<b>12,8</b>	<b>13,4</b>



The figure above shows the development in research funding. From 2016 to 2017 the total amount was almost equal, but a new component was introduced: profiling budget research. This was subtracted from the performance-based funding (PhD and PDeng bonuses). The growth of the budget from 2016 onward is mainly caused by the Sector plans.

### 4.3.1 Knowledge transfer

Because universities only receive a government grant for two of the three core legal tasks, namely for education and research, alternatives are constantly being explored to generate structural income that fits in with private activities.

Until now the budgets for knowledge transfer were scattered over several annexes in the Spring Memorandum. In annex D we now have consolidated all research budgets related to knowledge transfer to emphasize our efforts in this field. Most of these budgets have been moved from the Central Strategic Budget and Central Budget.

### 4.3.2 Sector plans

In 2019 new sector plans for the next six years are under construction. It is not yet certain which plans will be endorsed. Therefore it is not yet certain how much we will receive. We have incorporated the requested budgets from the sector plans into our government funding for research, amounting to M€ 8.9. When the actual budgets will be announced in May, we will adjust our estimates and subsequent allocation of these budgets to the faculties.

Sector plans 2019-2024	ET	EWI	TNW	total annual budget	fte
requested annual budget Mechanical engineering	€ 2.100.000			€ 2.100.000	14,0
requested annual budget Electrical engineering		€ 1.430.000		€ 1.430.000	9,0
requested annual budget Civil engineering	€ 907.500			€ 907.500	8,0
requested annual budget Computer science		€ 1.080.000		€ 1.080.000	8,0
requested annual budget Mathematics		€ 756.000		€ 756.000	6,2
requested annual budget Physics			€ 1.285.000	€ 1.285.000	8,0
requested annual budget Chemistry			€ 1.305.000	€ 1.305.000	7,0
<b>subtotal requested budget</b>	<b>€ 3.007.500</b>	<b>€ 3.266.000</b>	<b>€ 2.590.000</b>	<b>€ 8.863.500</b>	<b>60,2</b>

*NB: these are the requested budgets; in May 2019 the actual budgets will be allocated*

All sector plan budgets are exempt from the 80/20 rule, because of funding legislation. It is yet uncertain how we will have to account for the execution of these new sector plans. The faculty controllers are in the process of setting up a uniform registration method for these budgets.

The UT aims to hire an additional 60 scientists for these sector plans. From NWO we expect funding for a similar number of PhD positions, although the allocation of these positions will be in open competition. Besides the six-year funding for these new positions, a one-off budget for investments in infrastructure is expected to be allocated in 2019. This budget could be used to furnish lab facilities for these new scientists. It has yet to be seen whether this budget will suffice to make the necessary investments. These investments will be incorporated into our 2019 update of the LTSH plan.

On top of the requested government funding, we expect these new scientists to attract additional third party income. It is still too early to calculate this third-party income with any degree of certainty. Scientists will have to build their networks before any third party income can be generated. This could take several years. In due course third-party income, generated by these sector plans, could grow by as much as M€ 10, depending on the multiplier. This additional third-party income can only be generated when we succeed in finding the appropriate researchers.

## 4.4 Tuition fees

The estimated budget of the tuition fees (legal and institutional) show an increase of M€ 4.4 in 2020 compared to 2019. This is mainly due to the increase of institutional tariffs as of the college year 2019-2020. As of 2019, the faculty budgets will be raised in January of each year, in case the tuition fees (legal and institutional) show a substantial positive deviation from the calculated budget.

As will be explained in § 4.5, these budgets should be regarded as temporary.

## 4.5 Improvement budgeting method government funding and tuition fees

The estimated budgets for government funding and tuition fees in this Spring Memorandum will be adjusted in the coming Budget 2020-2023. This adjustment is necessary to increase the quality of the multiannual estimations of registered EER and Non-EER students and the corresponding government funding and tuition fees. These insights should support the Shaping 2030 process.

In the coming months, SP, FIN and the controllers of the faculties will work together in the development of a coherent database. In this database registered EER / Non-EER students and realized degrees are predicted, based on a combination of (i) historical intake and performance data and (ii) intake predictions by the faculties for the coming years. This database ensures the alignment of multiannual target figures



for student numbers in the Annual plans of the faculties with the budgeted “1e geldstroom” income, at faculty level as well as at UT level.

We expect to finalize this new budgeting method by the end of June, which will be too late to incorporate the outcome in the Spring Memorandum. The OW budgets Government funding and tuition fees in this Spring Memorandum should, therefore, be regarded as temporary and will be replaced by the adjusted budgets 2020-2023. The faculties will base their budgets on the adjusted figures.

#### 4.6 Funding service departments

Standing policy regarding changes in the sum of government funding and tuition fees is that 80% is directly allocated to the faculties through the allocation model and 20% is added to the central budgets. From the educational budget and the research budget, a fixed budget for the central overhead is deducted. Mutations in government funding and tuition fees will lead to mutation of the budget for the service departments on the basis of 80/20 (political deliberation). The Executive Board also has an annual investment budget available for e.g. UT wide (ICT) project portfolio (M€ 0.7), for graduation support for students (M€ 0.8) and for strategic Human Resources policy (M€ 0.4). The Policy Budget EB has a limited budget margin of M€0.1 in 2020.

#### 4.7 Central Strategic Budget (CSB)

For funding strategic projects, the UT has a central strategic budget (CSB) available. This is a fixed annual budget deployed by the Executive Board, in consultation with the Strategic Counsel (SB), for crossovers and other strategic projects for Education and Research and other incentives like talent development. Faculties and scientific directors are invited to cooperatively draw up “Shaping 2030 fit” plans for this budget and where possible incorporate these into the faculty annual plans as claims upon the CSB. These plans will be scrutinized by the Strategic Board and, when agreed upon, incorporated into the multiannual CSB budget.

*In preparation of the Shaping 2030 process, all existing CSB-budgets as of 2020 will be reviewed. In order to maximize the available budget margin for Shaping 2030, the continuation of the budget, period and budget amount depend on its alignment with Shaping 2030. The budgets in 2020-2023 as presented in this Spring Memorandum are therefore preliminary and will be subject to review.*

The preliminary CSB budget margin is M€ 0.4 in 2020 growing to M€ 3.3 in 2023. Compared to the Budget 2019-2022 the following mutations are incorporated in this Spring Memorandum.

(amounts in k€)

Δ CSB Spring Memorandum 2020 - 2023 < => Budget 2019 - 2022	2019	2020	2021	2022	2023
<b>Mutation available budget:</b>					
Available budget CSB in Budget 2019 - 2022	9.334	10.732	10.738	10.743	10.743
Budgetshift allocation model Research; Designlab		-513	-513	-513	-513
Budgetshift allocation model Research; TPRC		-100	-100	-100	-100
Budgetshift Profileringsmiddelen OZ		-397	-397	-397	-397
Academic development (OW+O&O)		19	13	12	15
Available budget in Spring Memorandum 2020 - 2023	9.334	9.741	9.741	9.745	9.748
<b>A. Δ available budget:</b>	<b>0</b>	<b>-991</b>	<b>-997</b>	<b>-998</b>	<b>-995</b>
<b>B. Budgetmargin CSB in Budget 2019 - 2022</b>	<b>-765</b>	<b>825</b>	<b>2.414</b>	<b>3.019</b>	<b>3.019</b>
<b>Mutation budgets/reservations in Spring Memorandum 2020 - 2023:</b>					
Budgetshift allocation model Research; Designlab		-513	-513	-513	-513
Budgetshift allocation model Research; TPRC		-100	-100	-100	-100
Indexation budgets Student Grants		20	20	20	20
Reservation Roessingh R&D				200	200
Reservation Coöperation MST/ZGT, Pion. in Healthcare (2016-2020)			200	200	200
Reservation Coöperation Radboud TURBO-program (2018-2020)			80	80	80
Reservation COFUND - InnoSkills (2020-2023)		-65	-143	-143	-143
Reservation Pilot Ma-insert Designlab (sept 2019- sept 2022, 3 x k€ 54)		54	54	36	0
<b>Terminated budgets based on budget duration:</b>					
Depreciation equipment ET (2018-2022 of total 10 years)					-175
Zwaartekracht Organ on chip, CSB-matching (2018-2022)					-120
Photonics, MESA+ (2019-2022)					-275
Creating Intelligent Manufacturing Systems (CIMS), DSI (2019-2022)					-275
Reservation COFUND - Bits & Brains (2019-2022)					-138
<b>C. Total new budgets and reservations Concept-budget 2019-2022</b>		<b>-604</b>	<b>-402</b>	<b>-220</b>	<b>-1.239</b>
<b>Budgetmargin in Spring Memorandum (A+B-C)</b>		<b>-765</b>	<b>438</b>	<b>2.241</b>	<b>3.263</b>

Annex E offers a specification of CSB budget source and individual budgets and reservations.

For presentation purposes we have moved some budgets from CSB to our research allocation model (see annex D):

(amounts in k€)

<i>Researchbudget UT-allocationmodel</i>	Unit	2019	2020	2021	2022	2023
<b>Valorisation</b>						
Quick Strategic Budget SBD (pending plan).	AZ		100	100	100	100
Contribution HTT/INVL (pending plan).	AZ		130	130	130	130
Contribution INVL Business development Team (Pending plan)	AZ		535	535	535	535
TPRC (pending evaluation 2019)	ET		100	100	100	100
Designlab (indexed)	EWI-DL		526	526	526	526
<b>Total</b>		<b>0</b>	<b>1.391</b>	<b>1.391</b>	<b>1.391</b>	<b>1.391</b>

These budgets concern our knowledge transfer efforts, the third core mission of our University. By simultaneously reducing the Research contribution to CSB and moving the budgets for Designlab and TPRC to the regular research allocation model this has no effect on any unit budget or the CSB budget margin.

Newly visible in our research allocation model are the budgets for quick strategic budget SBD and contribution HTT/INVL. These budgets with a total of M€ 0.8 were allocated to AZ as CSB budgets, only in 2019. To limit the effect of these new budgets on the Primary research budgets of the faculties, we have decreased the contribution of the “profileringsmiddelen onderzoek” to the CSB by M€ 0.4.

It should be noted that these three budgets will only become available to SBD and INVL after evaluation by the Executive Board, based on SBD and INVL plans.

## 5. Financial policy framework 2020-2023

### 5.1 Reserve policy and financial ratios

Important sections of the reserve policy are:

- The central reserves will only be used as a temporary incentive to realize UT goals.
- A reserve can only be used for temporary impulses. The impulse must pay off eventually. No structural budgets can be charged to the reserves.
- Faculty setbacks are covered by Faculty reserves and cannot be passed on to the central reserves.
- Faculties can use their reserves for:
  - investment decisions with start-up losses; such as the start of a new course or a new research group;
  - investments in Faculty Infrastructure needed for research and education based on a multi-annual Faculty Infrastructure Investment Plan
  - unforeseen incidental fluctuations in annual costs and benefits

In order to evaluate the financial position of the UT, we have to monitor the UT financial framework. Therefore, planned expenses must be checked by the Executive Board against the UT standards for solvency, liquidity and effects on operating results and cash flows. The Executive Board will have to approve any use of reserves.

#### *Intra-faculty reserve policy*

The Faculties have their own responsibility regarding the use of intra-faculty reserves within the UT financial framework. This commitment is limited by multi-annual operating results. Provided that the Faculties maintain a balanced budget each year of their regular activities, as determined by the Executive Board.

The UT reserve policy includes key figures, ranges and targets to ensure the organization stays financially healthy. UT uses the following ratios, ranges and targets:

- a range of 30 to 40% for the solvency, with a target of 35%;
- maintaining a liquidity minimum of M€ 25;
- a bandwidth of 0.5 to 1.5, with a target value of 1 for the current ratio.

These indicators only have added value when the (individual and composite) multi-annual operating results and projections are reliable and budget discipline is maintained. The Executive Board plans to enhance the budget discipline within the university.

#### *Budget discipline*

Budget discipline throughout the UT is constantly monitored. As 2017 results have shown, we have made significant improvements in being in control.

#### *Solvency*

At year-end 2018 the solvency of the UT is 37.2%. OCW and the NCA (Algemene Rekenkamer) apply the solvency 2 ((equity + provisions) / total capital) instead of 1 solvency (equity / total assets) as a control number. At year-end, 2018 solvency 2 of the UT is 40.2%.

With this solvency ratio, the UT falls well within the range for this indicator set by the supervisory board. For solvency 2 it is exceeding the range.

Our goal is to spend all available budgets during the budget year and therefore maintaining the solvency at the same level it is at right now. Since our solvency ratio is well over our threshold ratio and there is a possibility to invest as described in our policy agenda.

#### *Bank and cash funds*

At year-end 2018 the banks and cash funds of the UT amount to M€ 116.7. This is well above the threshold of M€ 25. The UT has obtained an overdraft arrangement with the Ministry of Finance for a maximum of M€ 21. The overdraft arrangement will be used by the UT if there is a need for additional cash for a short time (several days to several weeks). Given the actual high level of liquidity of the university, it is not likely that we need to utilize this facility any time soon.

### The current ratio

For the current ratio (the ratio of current assets and current liabilities) the UT uses a bandwidth of 0.5 to 1.5 (with a target value of 1). At years end of 2018, the current ratio was 1.1.

The strategic board has recently advised to proceed with a significant re-investment into equipment in our Nanolab of M€ 15.5 in the next five years. This investment will have to be repaid by additional external funding. The faculties TNW and EWI have committed themselves to these investments by guaranteeing the necessary additional funds when additional external funds turn out to be insufficient. In return, EWI and TNW will have a stronger say in the way Nanolab is being managed. This investment is incorporated into our projected solvency and liquidity ratios shown above.

## 5.2 Financial framework for Shaping 2030

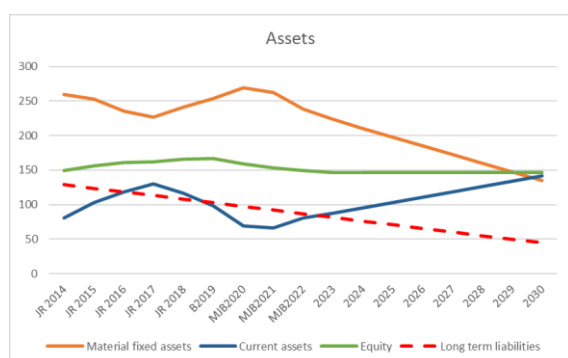
This paragraph is aimed at setting the financial framework for Shaping 2030. This is why this is a quite financially technical paragraph. When Shaping 2030, the financial framework in this paragraph will be used to evaluate whether the UT can financially support the new vision.

Our ratios for solvency and current ratio are part of a larger financial policy framework. To explore the boundaries of our financial capabilities we have to look at the larger picture. Please note that any significant investment will have to be approved by the Supervisory Board and University Council.

Key financial performance indicators + thresholds		JR 2016	JR 2017	JR 2018	B2019	MJB2020	MJB2021	MJB2022	2023	2024	2025	2026
Solvency II	30% minimum	41,1%	41,1%	40,2%	40,9%	40,3%	40,0%	40,0%	40,0%	40,6%	41,1%	41,6%
Current ratio	50% minimum	127,4%	129,9%	110,1%	98,3%	80,0%	78,1%	87,7%	92,0%	96,8%	101,7%	106,6%
Housing ratio	15% maximum	12,3%	12,0%	11,7%	11,6%	11,8%	11,5%	11,3%	11,3%	11,3%	11,3%	11,3%
Resilience	5% minimum	50,6%	51,2%	50,2%	47,6%	45,4%	43,0%	41,3%	40,4%	40,4%	40,4%	40,3%
Profitability	-10% minimum	1,9%	0,3%	1,2%	0,7%	-1,1%	-0,4%	0,0%	0,0%	0,0%	0,0%	0,0%

The Dutch Inspectorate of Education monitors universities on the following key performance indicators: solvency II (minimum 30%), current ratio (minimum 50%), housing ratio (maximum 15%), resilience (minimum 5%) and profitability (three year minimum zero%, two year minimum -5% and one year minimum -10%). We are well above any of the thresholds the Inspectorate uses to monitor Dutch universities. The table above is the baseline for the financial framework for Shaping 2030, the thresholds are the boundaries we have to observe. It should be noted, that these key indicators are interdependent. Changing one element will affect several KPI's.

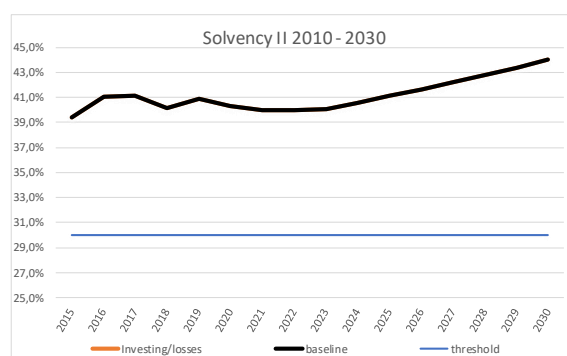
To determine our investment capabilities we will elaborate on all financial KPI's in the next paragraphs.

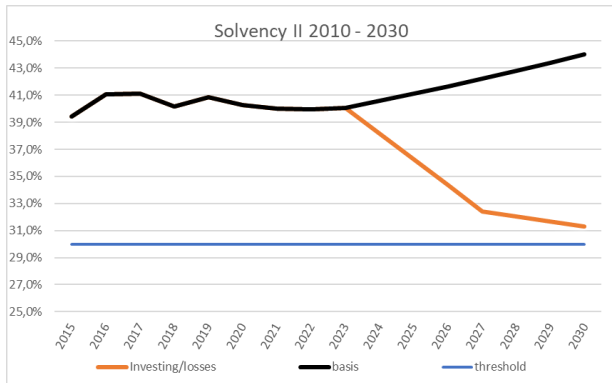


In the graph to the left, we show the main parts of our balance sheet: Assets and long term liabilities. Equity is roughly the difference between assets and liabilities. As you can see, our equity remains virtually unchanged, while our assets are declining in value. This decline is caused by depreciation. The reason our equity doesn't change is because the effect of the depreciation is compensated by the repayment of our long term liabilities. Our equity would increase if we wouldn't repay loans.

### 5.2.1 Solvency

As shown in the graph to the right our solvency continues to grow, even with the currently planned investments in LTSH and Nanolab (based on multi-annual budget 2019-2022 plus Nanolab-investments). This is our baseline (shown as a black line in the graphs in this paragraph). Any investment with own money will have little effect on our solvency, because our equity will not grow, nor will our total assets. However, when we invest with external funding, the image will change:





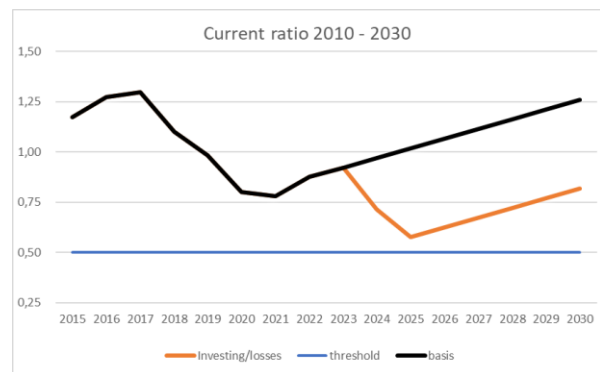
In the graph on the left, we have simulated the effect on our solvency of an additional investment of M€ 100 with external funding over a four year period (2024-2027). The black line is our baseline, the yellow line the simulation. We can conclude that a significant investment with external funding will have an effect on our solvency, but will keep us above the 30% threshold.

So far we see possibilities to invest; we have to look at our current ratio situation for more clarity:

### 5.2.2 Current ratio

After a dip in our current ratio, because of the before mentioned investments with our own means, this ratio continues to rise too.

Investments with own funds have little impact on our solvency and even after the investments in LTSH (M€ 115) and Nanolab (M€ 15,5) the UT has the ability to additionally invest of approximately M€ 70 (yellow line) before reaching the bottom current ratio boundary.



We are however not limited by this current ratio (the money in the bank) for investments, as we saw in the solvency paragraph. Because of the rapid repayment of loans, combined with the currently extremely low-interest rates, it could be investigated whether we should continue to limit ourselves to funding investments only with own cash. It would be sensible to explore the benefits of externally funding new buildings or infrastructure, thus enlarging our total investment capacity, because this has no effect on the current ratio.

Based on our solvency and current ratio the UT has possibilities to invest in housing and infrastructure. To investigate the boundaries for investing in Shaping 2030 we have to look at our capacity to pay for any investments:

### 5.2.3 Resilience, Profitability and Housing ratio

As we have shown in the previous paragraphs, a major investment in infrastructure could be possible when only looking at the effects this investment would have on our solvency and current ratio. There is however a major restriction for any investment with external money, which is the ability to pay the extra costs of depreciation plus interest and the running costs (like cleaning and maintenance) of these new infrastructures. This ability is monitored by the Inspectorate with three KPI's: resilience, profitability and housing ratio.

Resilience is determined by dividing equity by total income, thus giving an indication of our ability to cope with financial risks using our reserves. Our current score of 45.4% is well above the threshold of 5% used by the Inspectorate. When deploying our reserves this KPI can become a limiting factor.

Profitability is determined by dividing the annual result by total income. Because of the threshold of the Inspectorate we cannot have a negative result of more than 10% (approximately M€ 35) of our annual income in one year, or 5% over two years. Over a three year period profitability should be zero. This KPI limits our possibilities to spend more than we earn in any given year. Investments can therefore only lead to negative results for a limited period in time, supporting the need for well-balanced business cases.

Both Resilience and Profitability do in advance not seem too restricting for any investments in Shaping 2030. The housing ratio however may well be:

The housing ratio is determined by dividing housing costs by the total costs. This ratio is now at 11.8% well below the threshold of the Inspectorate, which is 15%. This means that a maximum of 15% of our

annual income could be spent on housing. A major investment of M€ 100 would increase our depreciation costs by roughly M€ 5 per year. On top of that maintenance and running costs would also increase, for this calculation let's suppose this would cost an additional M€ 1 per year. So to be able to pay for an investment of M€ 100, our annual income would have to grow by at least M€ 6 divided by 15% = M€ 40 per year. So our ability to repay an investment of M€ 100 additionally into infrastructure seems highly unlikely.

To determine the maximum possible investment we have to look at our resilience and profitability. As we have shown in paragraph 4 our income is rising significantly in the coming years. Not only because of growing student numbers in the last few years, but also because of the sector plans. We have for now not included any possible extra income because of the Van Rijn report, which is due shortly.

The growth in the budget will mainly be used to finance extra expenditure for personnel and giving them a working- or lab space. Also, student facilities will have to be upgraded to accommodate their growing numbers. Because government funding is increasing, we should be able to fund extra costs caused by investments. However, this is a risk because we do not have any direct influence on the number of students enrolling. There is also the question for which number of students we will have to build new facilities. Do we account for growth, and if so, which growth, or will we anticipate declining numbers of students because of demographics?

In research, we see similar uncertainties: the new sector plan budgets will be allocated for six years, without the guarantee of continuation. On top of these sector plans we already have a growth ambition for our third-party funding for research, which will also require additional personnel and facilities.

**Scenario:**

Supposing we would receive M€ 11 from Van Rijn and the M€ 9 for Sector plans (and also supposing this would be a structural budget). This would increase our annual budget for housing costs by (M€ 20 \* 15%) = M€ 3. This annual amount would enable us to build an additional infrastructure of roughly M€ 50 with external funding to allow further growth, on top of the investments we could do with our own money (see the paragraph on the current ratio for this). Please note that these figures are very rough and dependent on many variables. We can only present this rough estimate here. Any actual investment decision should be based upon a solid business case in which all elements will have to be scrutinized in great detail.

#### **5.2.4 Conclusion**

We are already facing challenges in staffing and housing for our education and research, which is our current baseline. The actualization of LTSH in 2019 will have to update this baseline.

In Shaping 2030 we will have to answer some fundamental questions: which student population will we aim for, and what service level will we provide for these students? Which research will we aim for and how do we want to facilitate this ambition with e.g. labs, PhD's and researchers? And how much of this research do we want to be funded by third parties? Only when we have answers to these questions we can explore investing above our current baseline.

As we have shown in this chapter we have the sole financial ability to invest. For now, the outcome of Shaping 2030 is still unclear. Whether we will have the ability to repay any investments because of Shaping 2030 depends largely on the choices we make and the risks we are willing to take in pursuit of our goals.

## 6. Continuation process Multi-annual budget 2020-2023

### 6.1 General guidelines

In this Spring Memorandum, which is the start of our Planning and Control cycle 2020-2023, we match policy with (available) budget. Based on the information from this Spring Memorandum 2020-2023 units can prepare their Annual Plan 2020, the executive summary, the translation into the multi-annual budget 2020-2023.

A format for the Annual Plan 2020 will be presented in June. The services-departments will prepare a joint annual plan for 2020. In addition, all service departments will draw up an operational plan for their own use, which is based on the full annual plan.

An electronic version of the budget templates for the Budget 2020 and the Multi-annual budget 2021-2023 will be sent to the controllers on **12 April 2019**.

### 6.2 Right of approval University Council

The University Council has the right of approval on the key features of the UT-budget. Additionally, the University Council has the right of advice on the rest of the Spring Memorandum content.

Key features of the UT budget concern the allocation to the faculties and service departments, resources for investments and investment plans (including real estate), and the financial policy, including reserves- and risk policy. This right of approval is described in the University Council statutes and elaborated in the Spring Memorandum, Budget, Annual real estate plan and Long-term real estate plan.

*Right of approval, elaboration Spring Memorandum:*

- Substantial change in the budget during the budget year. Specifically: in case of deviations in government funding exceeding 1%.
- Allocation principles of changes in government funding:
  - Wage and price adjustments are allocated to the units according to UT-allocation model
  - Regular changes in government funding: allocation to the units according to UT-allocation model
  - Earmarked changes/budgets: full amount to the concerned unit.

The above subject to consideration of the Executive Board, for example in case of UT-wide financial setbacks.

Spending limits and scope of the strategic budgets in the areas of education, research and talent development with an explanation of large amounts (above k€ 500). The explanation contains, as far as possible, the (proposed) Executive Board decisions, the objectives, substantiation and duration of the relevant project. The strategic budgets are shown in the Central Strategic budget (CSB).

### 6.3 Planning

#### ➤ Planning education budgets

As explained in § 4.5, the OW budgets Government funding and tuition fees in this Spring Memorandum are temporary and will be replaced by adjusted budgets 2020-2023, based on a (in May/June) newly developed database with student information per program.

In our allocation of budgets per faculty, this will have consequences for the allocation of the *Variable OW budget Ba* (including *Academic Competences* and *Profiling modules*) and *Ma* (allocation per EC) and for the *O&O Ba-* and *Ma-budgets* of which the amount depend on these OW-budgets.

The new budgets will be determined in collaboration with the Faculty controllers in the first week of June 2019, after which the FB will be formally informed. The faculties will then prepare their multiannual budget on the basis of these new budgets.

#### ➤ Planning redirection education budgets and internal billing

For a timely preparation of the (multi-year) budgets, multi-annual agreements should be made between the faculties and the study-programs about the allocation of the Education budgets not later than **June 21**. Long-term agreements are also to be made between faculties and services-departments about the height of the internal billing. In order to accommodate the alignment of these processes, FIN will provide the controllers and administrators with an alignment matrix. The fully completed matrix has to

be submitted no later than **June 18** to FIN. The alignment matrix and the internal calculation matrix should balance. Any remaining differences will be resolved by FIN shortly after.

The internal billing will be coordinated through the alignment matrix. After completion in June, this matrix will be fixated and used for the remuneration of the internal services in 2020. Any positive and negative deviations will not be corrected for the budget year 2020 neither in prices or in amounts.

➤ **Planning budget submission and subsequent budgeting process**

The submission date for the Multi-annual budget 2020-2023, the executive summary and the templates for the Multi-annual budget 2020-2023 is **13 September 2019**. We urgently request to respect this submission date, because this date is tightly linked to the “autumn consultations” which are planned only four weeks later. In these four weeks, the board has to consolidate the unit budgets and deliberate about possible claims or deficits these may cause in the total UT budget in preparation of the autumn consultations.

The Annual Plan 2020, the notes to the 2021-2023 multi-annual budget and the management summary are to be sent by mail in MS-Word files to the secretariat of the directorate Finance (Secretariaat-fin@utwente.nl). The submission of electronic templates must be in MS Excel format also to be sent to Secretariaat-fin@utwente.nl.

After the submission of the unit budgets, the ‘autumn’ consultations follow in the week of 7 to 11 October 2019. The schedule with further instructions and planning will follow.

After the autumn consultations the Executive Board will decide on the budget 2020-2023, after consulting the Strategic Council (SB). The results are set out in the Draft Budget 2020-2023. In November, this draft will be submitted to the University Council for advice and/or approval and will be finalized by the Supervisory Board in December.

In January 2020 the budget will be published for both external and internal use, accompanied by a supplement, which is intended for internal use only. The budget includes the policy and the long-term budget of the UT. The supplement to the budget will include the unit budgets with the elaboration of the funds and the way they are distributed to the units.

In the management reports 2020 the execution of the annual plans will be monitored and debated in the Strategic Council (SB), University Council and Supervisory Board.

## **6.4 Budget instructions**

*While drafting the budget 2020-2023, the faculties and service departments have to take into account the following instructions:*

➤ **Claims, positive and negative outcomes**

The faculties and service departments are not allowed to incorporate any **claims** into their Multi-annual budgets 2020-2023 without an accompanying detailed plan in which goals, alignment with UT2020/Shaping 2030, measures and (temporary) budget claims are elaborated; claims may concern the CSB (faculties), CB (service departments) or the deployment of reserves. Every faculty claim will be evaluated and weighed by the Strategic Council and also weighed against the UT financial targets, before approval by the Executive Board.

➤ **Annual budget targets**

With some units annual budget targets have been agreed upon. Each unit is expected to achieve at least the results listed below in its long-term budget. These targets are included in the letter that was sent to the units in January 2019.



**Resume budget targets 2019-2022**

	2019	2020	2021	2022
- ET	-397	-122	0	0
- EWI	227	-561	-443	-400
- EWI-nanolab	185	164	-98	-239
- EWI-designlab	-97	0	0	0
- TNW excl Sectorplan	-1.019	-1.528	-876	-33
- BMS	-1.689	-1.567	-700	-615
- ITC	-488	-296	-142	-22
- ITC-UCT	-372	-383	-208	-84
- ITC-PreU	0	0	0	0
<b>Result Faculties excl. Sectorplan</b>	<b>-3.650</b>	<b>-4.293</b>	<b>-2.467</b>	<b>-1.393</b>
- TNW-sectorplan result	1.000	500		
<b>Totaal budget targets</b>	<b>-2.650</b>	<b>-3.793</b>	<b>-2.467</b>	<b>-1.393</b>

Any deviations from these targets have to be thoroughly substantiated.

➤ **Sector plan Technology (4TU)**

The faculties should incorporate their estimated multi-annual share in Sector plan Technology (4TU) into their Budget 2020-2023 as “expected strategic budget”.

➤ **Housing costs**

In the context of ‘Lange Termijn Strategisch Huisvestingsplan’, the RT coded housing rates have been set for more transparency and fair share in the assigned costs.

In drafting their budget 2020-2023 it is important that the units’ estimates of housing costs not only take into account existing housing but also moving plans and newbuilds in alignment with LTSH.

➤ **Semi-integral rates in 2020**

The structure and method of calculating the semi-integral rates in recent years have remained the same.

➤ **Staff costs 2020-2023**

- In PPST the new labour agreement 2018 has been incorporated to assist the units in their calculation of the personnel costs for their annual plans. The units will have to take into account the salary level 2019 as shown in PPST, plus 2.5% indexation for 2020 in anticipation of the new labour agreement for 2020.
- In 2020 the uniform level of social security is 54.9%, with the exception of PhDs, PDEng and researchers for which a separate percentage is set at 54.7%. The reason for the two social security percentages is the ‘transitievergoeding’. Transition costs of PhDs, PDEng and researchers are estimated individually and registered directly as project costs. Transition costs of all other employees contracted on a temporary basis are paid centrally, out of the uniform surcharge of 0.2% paid by the units.
- Employees with a pensionable salary higher than k€ 105, will not accrue pension on the part above k€ 105. As of 2019, these employees receive compensation for the missed pension accrual as part of the gross salary. As this individual compensation is not part of the regular salary estimation in PPST, this means the units will have to take these additional costs into account when drawing up their budget.

*For questions about this Spring Memorandum please contact your account manager from S&P (annual plans in substance) or Finance (financial budget).*

# **ANNEX**

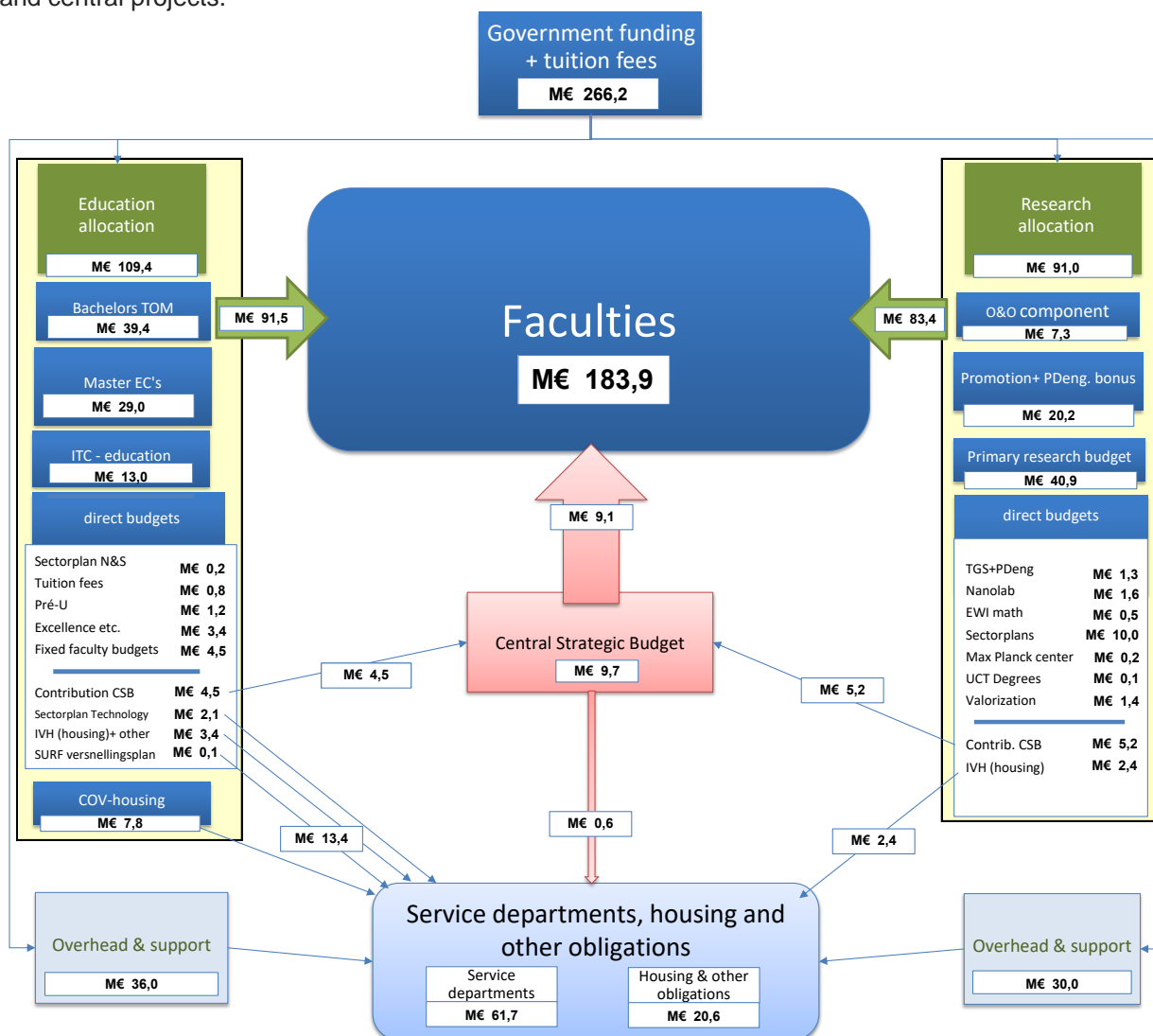
## **Spring Memorandum 2020-2023**

FIN/CvB UIT - 3962

Detailed description of the UT allocation model, budgetary period 2020-2023

1) UT allocation model

The '1<sup>e</sup> geldstroom' funding of the UT (Government funding and tuition fees) is divided primarily into three blocks: (i) funding for education, (ii) funding for research and (iii) the resources for service departments and central projects.



Although the allocation model stops at the level of the budget holders, in the allocation model guidelines are included for the distribution of the budgets among the units.

In this annex, the allocation via the UT allocation model is described. There were no model changes in comparison to Budget 2019-2022.

2) Education

The UT education budget consists of three parts: student dependant Variable OW-budget (63%), direct budgets (37%) including Sector plan education.

**Direct Educational budgets:**

Some initiatives are funded directly from the educational budget. Partly because OCW has labeled these budgets and partly as a result of internal UT choices:

Labeled by OCW/students	UT choices
Government funding ITC, after deduction CB/TCB	Teacher training courses (BMS)
Sector plan Natuur & Scheikunde (TNW)	Mathematics intensive (EWI)
Tuition fees ITC / UCT / Mechanical Engineering @ VU tuition fees	Central Strategic Budget (CSB)

Labeled by OCW/students	UT choices
Fixed budget clinical internships TM (TNW)	Pre-U (ITC/Pre-U)
	Honours Programme
	Coord. Continuous learning/Academic competences
	Fixed budgets EWI, TNW
	Central Educational Facilities

### **Variable OW-budget<sup>1</sup>:**

Student dependant funding by the Government is based on the funding registration t-2 by DUO. The number of enrolments and degrees per program are recorded, which have been registered by us in OSIRIS. These numbers form the basis for the student-related funding in year t. Net Government funding OW is divided into a Bachelor and a Master-part. Besides the student dependant funding the UT receives direct budgets, e.g. for ITC and sector plans. Also, a fixed share in the macro budget is allocated to the UT. Finally, funds are awarded as compensation for the performance agreements with OCW.

### ***Tuition fees***

All tuition fees are directly allocated to the bachelor- and master budgets. The basis for allocation of the estimated revenue of Tuition fees in the years 2020-2023 is a forecast of the revenue for each program in the academic year 2018/2019 on the basis of the students enrolled by March 2019. Please note that pre-master related tuition fees are not allocated to the Ba but the Ma-budget. Starting the year 2019 the faculty budgets will be raised in January of each year when the tuition fees show a substantial positive deviation from the calculation.

The UT allocation model supports professional and performance-oriented control (budget control) of Education. The budgeting is two-fold: the bachelor programs are funded in the way the UT receives funding from the Ministry, the master programs are funded using a UT-wide fixed price per European Credit (EC). The dean is responsible for the content and form of the programs and calibrates this with his departments. Departments tend to education within the programs. The dean is responsible for adequate funding of the departments.

The variable Education budget is mainly intended for the funding of the costs the faculties can control:

- a) Direct costs of programs (teaching costs).
- b) General faculty overheads.
- c) Specific Infrastructure and personnel costs on education (Teaching Labs/practicums and other Education-spaces for exclusive use).
- d) Costs educational support (such as internship coordinators and student advisors).

The education budget is divided between Bachelor (Ba) and Master (Ma) programs.

### **Budget allocation Bachelor programs**

The budgets for the Bachelor programs are allocated to the coordinating faculty. These funds are then used to pay for their own costs of the program and teacher deployment. The Profiling modules are funded using the registrations into these modules (t-2).

### ***Shared programs***

The Executive Board has decided to fund the coordination of the shared programs separately. The total budget of k€ 150 is allocated as follows: k€ 100 is awarded to the shared Mathematics program and k€ 50 for the shared Academic competences program. For Academic competences 10/180 (10 EC) is taken from the Educational budget. This budget is re-allocated to the departments or programs who provide the Academic competence programs.

### **Redistribution bachelor budgets**

The starting point in the TOM allocation model is the funding for the educational efforts of the teachers. The program director (OLD) distributes the TOM budget to the education providing departments using the following steps:

1. Gross to net TOM budget: Gross TOM budget is given in the Spring Memorandum. The real overhead is deducted, with a maximum of 30% + 50% surcharge factor (if applicable).
2. The program director divides the total net budget over the three years of study and then the modules per year, based on numbers of students for example, the intensity of teaching and other insights.
3. The budget for each module can be divided by the Education-rate to get an indication of the number of possible compensating hours. The program director tests this standardized indication by comparing it with the number of actual hours.
4. The program director determines the percentage per department of the Education effort per module.

<sup>1</sup> "OW"; Dutch abbreviation for "Onderwijs" = Education

5. Allocation of net budget to education providing departments in accordance with a percentage per module.
6. O&O Bachelors follows the allocation of teacher deployment.

In the context of a more professional and performance-oriented control (budget control) of education and research, the TOM-allocation model is designed for the Bachelor programs. This model focuses on the financing of the programs. The deans control the content and form of the programs and make agreements about this with the departments. Departments carry out education within the programs. The dean is and remains responsible for adequate funding for the departments.

### **Budget allocation Master-programs**

The total budget for the Master programs is distributed using a uniform price per EC. The allocation per Master programs is therefore only used to calculate the total Master-budget.

Pre-masters must be enrolled as bachelor students according to regulations. These students are typically not funded by OCW. The UT regards these pre-master students as an investment in the Master, therefore it is decided to incorporate the EC-realization of these students into the allocation of the EC budget for the Masters. The tuition fees for these students will also be added to the available Master budget.

### **3) Research**

The UT research budget consists of two parts: Primary research budget (45%), direct budgets (55%) including Sector plan research and direct knowledge transfer budgets:

#### **Direct research budgets:**

Some initiatives are funded directly from the research budget. Partly because OCW has labeled these budgets and partly as a result of internal UT choices.

Labeled by OCW	UT strategic consideration
	Fixed budget technical infrastructure Nanolab
Sector plan Natuur & Scheikunde (TNW)	Supplement Research funds Mathematics (EWI)
Contribution Max Planck Center	Central Strategic Budget (CSB)
	Twente Graduate School (TNW/TGS)
	PDEng-coordination (ET)

#### **Variable research budgets:**

- O&O component (bachelor and master allocated separately)
- PhD- and PDEng-bonus
- Primary Research budget

#### **O&O component**

OCW allocates the O&O component using the degrees issued to students in the college year t-2. This is the same number of degrees used for the allocation of the student dependant funding in the education model. In research, however, a master degree is counted twice. The national price per degree is derived by dividing 15.5% of the macro budget for research in the Dutch universities by the weighted number of degrees.

Allocation in the UT allocation model is aligned with the Government Funding, by using the Ba and the Ma degree component in the Government OZ-funding, reduced by the relative share of Research allocated central budgets.

The part of the O&O component that is based on bachelor's degrees, will be distributed to the faculties per program. The allocation to the programs is in proportion to the share of the program in the variable Ba-Education budget. The part of the O&O component for the Master degrees will be distributed to the faculties using the acquired Master ECs in t-2.

Although the component is allocated using the same degrees as the educational budget, this budget is intended for research purposes. This is where the national university allocation model differs from the allocation model for the universities for applied sciences (Hogescholen).

#### **PhD- and PDEng bonus**

OCW allocates the PhD- and PDEng bonuses using a three-year average. The national price per PhD and PDEng is derived by dividing 20% of the macro budget for research in the Dutch universities by the three-year average number of PhD dissertations. The UT allocation model is an exact copy of the allocation by

the Ministry, using the same numbers and prices. 100% of the bonuses earned by the UT are redistributed to the faculties.

Because of the sudden impact of the national maximization of the bonuses in 2017 and the subsequent drop in prices, the UT has decided to supplement the bonuses until 2019. Thus easing the drop in the budget for the groups to an extent. This temporary supplementation is financed using the profiling budget for research.

241 PhDs and 25 PDEngs have successfully graduated in 2018 for whom the UT receives a bonus.

#### **Primary Research budget**

The Executive Board in consultation with the SB determines the allocation of the primary research resources to the faculties as stated in this Spring Memorandum. The primary research budget enables the dean and faculty board to assign the available resources to the clusters within the faculty. The relative share of the faculties in this budget is guaranteed for the current budgeting period (2020-2023). Changes in the relative shares will not be made until the budget for 2024. Currently, we develop a strategic research program. In the next Spring Memorandum (2021-2024) the relative shares for 2021-2023 will be the same as in this Spring Memorandum but can be altered for 2024 if needed. This system will enhance stability for the faculties in their research budgets.

This does not mean that the UT research is set in stone for the next four years, no matter what the outcome of Shaping 2030 will be. New research initiatives can already be implemented starting 2020 using the CSB and CSB-research reserve. It must be clear, however, that strategic choices financed with the CSB are temporary and could, in the long run, affect the relative allocation of the primary research budget over the faculties.

#### **4) Central support**

The budget for the Central support (Service departments and Central projects) is fixed. No more than 20% of a mutation in the '1<sup>e</sup> geldstroom' budget will be allocated to the Central budgets and only if there is a reason to do so. The in- or decrease of the total Central budget will be allocated to the service departments/central projects based on specific considerations. Should an increase in the funding not be added for the whole 20% (policy considerations) to the overhead and support, the remainder will be added to the allocation model for education and research.

In the calculation of the 20% the ITC's contribution to the central support is not included, this contribution is based on specific agreements.

Compared to budget 2019, the Central Budget 2020 of M€ 65.9 shows an increase of M€ 2.3 as a result of the increased Education budget. In the following years, the budget shows an extra increase of M€ 1.8, resulting in a total budget in 2023 of M€ 67.7.

## Available "1e geldstroom" budget: Government funding and tuition fees

annex B

(amounts in M€)

Concept budget 2019-2022	2019	2020	2021	2022	2023	Δ '20-'19	Δ '23-'20
<b>Education (primary budget)</b>							
Student funding: enrolments (excl. UCT)	39,2	44,5	44,0	44,0	44,6	5,3	0,1
Student funding: degrees (excl. UCT)	15,0	15,6	16,2	16,6	16,9	0,6	1,4
Base funding Education, percentages	27,2	28,6	29,9	30,8	31,5	1,5	2,9
Government funding, unallocated	3,0	0,0	0,0	0,0	0,0	-3,0	-
Estimate budget from "Wet Studievoorschot"	2,6	3,1	5,3	6,6	7,0	0,6	3,9
Compensation halving tuition fees	2,1	2,1	2,1	2,1	2,1	-	-
Government funding ITC OW	13,6	13,9	13,9	13,9	13,9	0,3	-
<b>Gov. funding Education (primary budget)</b>	<b>102,6</b>	<b>107,9</b>	<b>111,3</b>	<b>114,1</b>	<b>116,1</b>	<b>5,2</b>	<b>8,3</b>
<b>Education (earmarked)</b>							
Student funding UCT	1,0	1,0	1,2	1,4	1,4	0,1	0,4
Compensation halving tuition fees UCT		0,0	0,0	0,0	0,0	0,0	-
Sectorplan Techniek 2011 en verder	2,1	2,1	2,1	2,1	2,1	-	-
Sectorplan Physics and Chemistry	0,2	0,2	0,2	0,2	0,2	-	-
Mechanical Engineering @VU enrolments	-	0,0	0,4	1,4	2,3	-	2,3
Mechanical Engineering @VU degrees	-	0,0	0,0	0,0	0,1	-	0,1
Mechanical Engineering @VU; minus VU share		0,0	-0,2	-0,7	-1,2	-	-1,2
Innovation grant SURF	0,2	0,2	0,2	0,2	0,2	-	-
Watertechnology	0,1	0,1	0,1	0,1	0,1	-	-
Matching OC&W Holland Scholarship Fund	0,0	0,0	0,0	0,0	0,0	0,0	-
IVH	2,1	2,1	2,1	2,1	2,1	-	-
Operating margin Education	0,3	0,3	0,3	0,3	0,3	-	-
Regional Coöperation VO-WO	0,2	0,1	0,2	0,0	0,0	-0,0	-0,1
Redemption BaMa-compensation	0,7	0,7	0,7	0,7	0,7	0,0	-
"Versnellingsplan onderwijsinnovatie" -> SURF		0,1	0,1	0,1		0,1	-0,1
ZVVO	0,1	0,1	0,1	0,1	0,1	-	-
<b>Gov. funding Education (earmarked)</b>	<b>6,9</b>	<b>7,1</b>	<b>7,6</b>	<b>8,1</b>	<b>8,5</b>	<b>0,1</b>	<b>1,4</b>
<b>Total Government funding on education</b>	<b>109,6</b>	<b>114,9</b>	<b>118,9</b>	<b>122,1</b>	<b>124,6</b>	<b>5,3</b>	<b>9,7</b>
<b>Research (primary budget)</b>							
PhD bonus	17,0	19,1	19,2	20,7	20,7	2,2	1,5
PDeng bonus	0,6	1,0	1,3	1,5	1,6	0,4	0,5
Ba- degrees research	3,7	3,1	3,1	3,1	3,1	-0,6	-0,0
Ma- degrees research	6,4	6,5	6,5	6,5	6,5	0,2	-0,0
Base funding Research, percentages	63,5	65,6	65,6	65,6	65,5	2,1	-0,0
"Profileringsmiddelen Onderzoek"	5,6	5,6	5,6	5,6	5,6	-	-
Government funding ITC OZ	7,1	7,3	7,3	7,3	7,3	0,2	-
<b>Gov. funding Research (primary budget)</b>	<b>103,8</b>	<b>108,3</b>	<b>108,6</b>	<b>110,3</b>	<b>110,2</b>	<b>4,4</b>	<b>2,0</b>
<b>Research (earmarked/strategic)</b>							
Sectorplan ET (=estimate; actual budget will be allocated)	-	3,0	3,0	3,0	3,0	3,0	-
Sectorplan EWI (=estimate; actual budget will be allocated)	-	3,3	3,3	3,3	3,3	3,3	-
Sectorplan TNW (=estimate; actual budget will be allocated)	-	2,6	2,6	2,6	2,6	2,6	-
Sectorplan Physics and Chemistry	1,1	1,1	1,1	1,1	1,1	-	-
Degrees UCT	0,1	0,1	0,1	0,1	0,1	-	0,0
Watertechnology	0,1	0,1	0,1	0,1	0,1	0,0	-
Bijdrage aan Max Planck center (t/m 2021)	0,2	0,2	0,2	0,0	0,0	-	-0,2
IVH	2,3	2,3	2,3	2,3	2,3	-	-
ZVVO	0,1	0,1	0,1	0,1	0,1	-	-
<b>Gov. funding Research (earmarked/strategic)</b>	<b>3,8</b>	<b>12,7</b>	<b>12,7</b>	<b>12,6</b>	<b>12,6</b>	<b>8,9</b>	<b>-0,1</b>
<b>Total Government funding on research</b>	<b>107,7</b>	<b>121,0</b>	<b>121,3</b>	<b>122,8</b>	<b>122,8</b>	<b>13,3</b>	<b>1,9</b>
Statutory tuition fees	16,5	17,7	17,9	17,9	17,9	1,1	0,2
Institutional tuition fees	6,1	9,2	9,6	9,6	9,6	3,2	0,4
UCT tuition fees	0,6	0,7	0,7	0,8	0,8	0,1	0,1
MEEM tuition fees	0,3					-0,3	-
Mechanical Engineering @ VU tuition fees	-	0,5	0,8	1,0	1,0	0,5	0,5
Mechanical Engineering @ VU tuition fees VU share		-0,2	-0,3	-0,5	-0,5	-0,2	-0,3
ITC tuition fees	2,5	2,5	2,6	2,7	2,7	-	0,2
<b>Total Tuition fees</b>	<b>26,0</b>	<b>30,4</b>	<b>31,3</b>	<b>31,5</b>	<b>31,5</b>	<b>4,4</b>	<b>1,1</b>
<b>Total available budget</b>	<b>243,2</b>	<b>266,3</b>	<b>271,5</b>	<b>276,4</b>	<b>279,0</b>	<b>23,1</b>	<b>12,7</b>

I Budget OW and OZ -/- central budget	2019	2020	2021	2022	2023	Δ '20-'19	Δ '23-'20
Government funding Education (primary budget)	83.959	91.836	95.274	98.024	100.100	7.877	8.264
Government funding Compensation halving tuition fees	2.097	2.097	2.097	2.097	2.097	0	0
Government funding, unallocated	3.000	0				-3.000	0
Government funding ITC OW	13.587	13.931	13.931	13.931	13.931	344	0
Government funding Education (earmarked budget)	6.923	7.051	7.580	8.081	8.483	128	1.432
Statutory tuition fees	16.547	17.672	17.921	17.921	17.920	1.125	248
Institutional tuition fees	6.080	9.249	9.645	9.645	9.645	3.169	396
ITC tuition fees	2.500	2.500	2.600	2.650	2.700	0	200
UCT tuition fees	568	657	716	765	791	89	134
Mechanical Engineering @ VU tuition fees, UT-share		350	464	478	481	350	131
MEEM tuition fees	302	0	0	0	0	-302	0
<b>Total primary budget OW</b>	<b>135.563</b>	<b>145.343</b>	<b>150.228</b>	<b>153.592</b>	<b>156.148</b>	<b>9.780</b>	<b>10.805</b>
PhD-bonus	16.988	19.144	19.245	20.661	20.674	2.156	1.530
PDeng-bonus	610	1.044	1.254	1.540	1.572	434	528
Ba-degrees OZ	3.719	3.127	3.116	3.086	3.087	-592	-40
Ma-degrees OZ	6.359	6.532	6.532	6.533	6.528	173	-4
Government funding ITC OZ	7.081	7.260	7.260	7.260	7.260	179	0
Base funding Research, percentages	63.506	65.596	65.595	65.597	65.547	2.090	-49
Profilingmiddelen OZ	5.575	5.575	5.575	5.575	5.575	0	0
Government funding Research (earmarked budget)	3.827	12.692	12.692	12.575	12.583	8.865	-109
<b>Total primary budget OZ</b>	<b>107.665</b>	<b>120.970</b>	<b>121.269</b>	<b>122.827</b>	<b>122.826</b>	<b>13.305</b>	<b>1.856</b>
<b>3 Subtotal: Primary budget OW+OZ</b>	<b>243.228</b>	<b>266.313</b>	<b>271.497</b>	<b>276.419</b>	<b>278.974</b>	<b>23.085</b>	<b>12.661</b>
<i>Primary budget OW B2020-2023 excl. ITC</i>	119.476	128.912	133.697	137.011	139.517		
<i>Primary budget OW B2019--2022 excl. ITC</i>	109.897	118.840	122.595	125.293	125.293		
<i>Increase / decrease Primary budget OW relative to B2019-2022</i>	6.579	10.072	11.102	11.718	14.224		
<i>CB-FCB deducted from OW-budget (excl. ITC) was in B2019-2022</i>	29.405	31.139	31.836	32.370	32.370		
20% of increase/decrease OW-budget 20,0%	1.309	2.007	2.208	2.326	2.822		
ITC contribution OW to CB/FCB	2.921	2.806	2.831	2.864	2.838		
<b>4 Total contribution OW to CB/FCB</b>	<b>33.635</b>	<b>35.952</b>	<b>36.875</b>	<b>37.560</b>	<b>38.030</b>	<b>2.317</b>	<b>2.078</b>
<i>Primary budget OZ B2020-2023 excl. ITC and PhD/PDeng bonus</i>	82.986	93.522	93.510	93.366	93.320		
<i>Primary budget OZ B2019-2022 excl. ITC and PhD/PDeng bonus</i>	81.816	82.988	83.034	82.919	82.919		
<i>Correction for Sectorplan ET EWI, TNW</i>		-8.864	-8.864	-8.864	-8.864		
<i>Increase / decrease Primary budget OZ relative to B2019-2022</i>	1.170	1.670	1.612	1.583	1.537		
<i>CB-FCB deducted from OZ-budget (excl. ITC) was in B2019-2022</i>	28.206	28.186	27.940	27.917	27.917		
20% of increase/decrease OZ-budget 20,0%	234	334	322	317	307		
ITC contribution OZ to CB/FCB	1.523	1.463	1.475	1.492	1.479		
<b>4 Total contribution OZ to CB/FCB</b>	<b>29.963</b>	<b>29.983</b>	<b>29.737</b>	<b>29.726</b>	<b>29.703</b>	<b>20</b>	<b>-280</b>
<b>4 Total Central budget</b>	<b>63.598</b>	<b>65.935</b>	<b>66.612</b>	<b>67.286</b>	<b>67.733</b>	<b>2.337</b>	<b>1.798</b>
<b>5 Total budget OW &amp; OZ via allocation model</b>	<b>179.630</b>	<b>200.378</b>	<b>204.885</b>	<b>209.133</b>	<b>211.241</b>	<b>20.748</b>	<b>10.863</b>

II Budget per Compartment UT-allocationmodel	2019	2020	2021	2022	2023	Δ '20-'19	Δ '23-'20
<b>OW-budget</b>							
Government funding OW + tuition fees	135.563	145.343	150.228	153.592	156.148	9.780	10.805
Minus: contribution to CB/FCB	-33.635	-35.952	-36.875	-37.560	-38.030	-2.317	-2.078
<b>Net budget OW</b>	<b>101.928</b>	<b>109.391</b>	<b>113.353</b>	<b>116.032</b>	<b>118.118</b>	<b>7.463</b>	<b>8.727</b>
<b>OZ-budget</b>							
Government funding OZ	107.665	120.970	121.269	122.827	122.826	13.305	1.856
Minus: contribution to CB/FCB	-29.963	-29.983	-29.737	-29.726	-29.703	-20	280
<b>Net budget Oz</b>	<b>77.702</b>	<b>90.987</b>	<b>91.532</b>	<b>93.101</b>	<b>93.123</b>	<b>13.285</b>	<b>2.136</b>
<b>Total budget OW &amp; OZ via allocation model</b>	<b>179.630</b>	<b>200.378</b>	<b>204.885</b>	<b>209.133</b>	<b>211.241</b>	<b>20.748</b>	<b>10.863</b>



**UT-allocationmodel per component**
**annex D**

Unit	2019	2020	2021	2022	2023	Δ '20-'19	Δ '23-'20
<b>A. Ow-compartment</b>	<b>101.928</b>	<b>109.391</b>	<b>113.353</b>	<b>116.032</b>	<b>118.118</b>		
Excellence Programmes (specification, see below)	683	683	683	683	683	0	0
Honours Programme	200	200	200	200	200	0	0
Watertechnology	64	64	64	64	64	0	0
Institutional tuition fees MEEM	302	0	0	0	0	-302	0
Studium Generale (indexed)	260	267	267	267	267	7	0
Teacher training courses (indexed)	388	398	398	398	398	10	0
Teacher training courses (ELAN budgetclaim april 2019)		PM	PM	PM	PM		
Mathematics Intensive (indexed)	300	308	308	308	308	8	0
Coordination Contin. learning (100), Acad.compet. (50)(indexed)	150	154	154	154	154	4	0
OCW Student funding UCT	952	1.003	1.239	1.422	1.422	51	419
Tuition fees UCT	568	657	716	765	791	89	134
Fixed budget UCT	500	500	500	500	500	0	0
Pré-U (indexed)	1.118	1.146	1.146	1.146	1.146	28	0
Regional Coöperation VO-WO	90	90	111	160	0	0	-90
"Versnellingsplan onderwijsinnovatie" -> SURF		75	75	75	0	75	-75
Fixed budget Klinische stages TM	2.500	2.800	3.200	3.300	3.300	300	500
Fixed budget EWI	500	500	500	500	500	0	0
Fixed budget TNW	1.000	1.000	1.000	1.000	1.000	0	0
Ba ME@VU government funding+tuition fees, excl. CB -20%		280	566	960	1.344	280	1.064
ITC OCW funding +Tuition fees, excl. CB/CSB	12.526	12.985	13.060	13.077	13.153	459	168
ITC Contribution CSB	640	640	640	640	640	0	0
Central Educational Facilities (CEF)	6.950	7.836	7.885	7.968	8.058	886	222
CSB earmarked; Matching OC&W Holland Scholarship Fund	45	46	46	46	46	1	0
Central Strategic Budget (CSB)	3.680	3.680	3.680	3.680	3.680	0	0
Redemption BaMa-compensation+Innovation grant SURF	730	737	737	737	737	7	0
ZVVO	100	100	100	100	100	0	0
IVH	2.070	2.070	2.070	2.070	2.070	0	0
Operating margin Education	300	300	300	300	300	0	0
Government funding, unallocated	3.000	0				-3.000	0
<b>Subtotal</b>	<b>39.616</b>	<b>38.519</b>	<b>39.645</b>	<b>40.520</b>	<b>40.861</b>	<b>-1.097</b>	<b>2.342</b>
<b>Sectorplan education</b>							
Sectorplan Techniek 2011	2.100	2.100	2.100	2.100	2.100	0	0
Sectorplan Natuur- en scheikunde	191	191	191	191	191	0	0
<b>Subtotal</b>	<b>2.291</b>	<b>2.291</b>	<b>2.291</b>	<b>2.291</b>	<b>2.291</b>	<b>0</b>	<b>0</b>
<b>Variable OW-budget</b>	<b>60.021</b>	<b>68.581</b>	<b>71.417</b>	<b>73.221</b>	<b>74.966</b>	<b>8.560</b>	<b>6.385</b>
<b>OW-budget via allocationmodel</b>	<b>101.928</b>	<b>109.391</b>	<b>113.353</b>	<b>116.032</b>	<b>118.118</b>	<b>7.463</b>	<b>8.727</b>
<b>B. Oz-compartment</b>	<b>77.702</b>	<b>90.987</b>	<b>91.532</b>	<b>93.101</b>	<b>93.123</b>		
ZVVO	100	100	100	100	100	0	0
IVH	2.330	2.330	2.330	2.330	2.330	0	0
OCW-funding Degrees UCT	59	59	59	99	107	0	48
Watertechnology	60	61	61	61	61	1	0
Technical infrastructure Nanolab (indexed)	1.529	1.567	1.567	1.567	1.567	38	0
Supplement Researchbudget Mathematics (indexed)	450	461	461	461	461	11	0
OCW-budget Max Planck center (t/m 2021)	100	100	100	0	0	0	-100
OCW-budget Max Planck center (t/m 2021)	50	50	50	0	0	0	-50
TGS (indexed)	646	662	662	662	662	16	0
PhD/PDeng 10 EC Course budget	545	545	545	545	545	0	0
PDeng-coordination (indexed)	100	103	103	103	103	3	0
O&O Ba-component	2.684	2.352	2.352	2.339	2.340	-332	-12
O&O Ma-component	4.589	4.913	4.930	4.952	4.949	324	36
PhD-bonus	18.319	19.144	19.245	20.661	20.674	825	1.530
PDeng-bonus	676	1.044	1.254	1.540	1.572	368	528
Central Strategic Budget (CSB)	1.820	1.207	1.207	1.207	1.207	-613	0
Profilingmiddelen OZ, contribution CSB	3.000	4.000	4.000	4.000	4.000	1.000	0
<b>Subtotal</b>	<b>37.057</b>	<b>38.698</b>	<b>39.026</b>	<b>40.627</b>	<b>40.678</b>	<b>1.641</b>	<b>1.980</b>
<b>Knowledge transfer</b>							
Quick Strategic Budget SBD (pending plan).		100	100	100	100	100	0
Contribution HTT/INVL (pending plan).		130	130	130	130	130	0
Contribution INVL Business development Team (Pending plan)		535	535	535	535	535	0
TPRC (pending evaluation 2019)		100	100	100	100	100	0
Designlab (indexed)		526	526	526	526	526	0
Designlab (Impuls proposal, May 2019)		PM	PM	PM	PM		
<b>Subtotal</b>	<b>0</b>	<b>1.391</b>	<b>1.391</b>	<b>1.391</b>	<b>1.391</b>	<b>1.391</b>	<b>0</b>
<b>Sectorplan research</b>							
Sectorplan 2019-2024	0	3.008	3.008	3.008	3.008	3.008	0
Sectorplan 2019-2024	0	3.266	3.266	3.266	3.266	3.266	0
Sectorplan 2019-2024	0	2.590	2.590	2.590	2.590	2.590	0
Sectorplan Physics and Chemistry	1.121	1.121	1.121	1.121	1.121	0	0
<b>Subtotal</b>	<b>1.121</b>	<b>9.985</b>	<b>9.985</b>	<b>9.985</b>	<b>9.985</b>	<b>8.864</b>	<b>0</b>
<b>Primary Researchbudget ITC (OCW-funding)</b>	<b>5.558</b>	<b>5.797</b>	<b>5.785</b>	<b>5.768</b>	<b>5.781</b>	<b>239</b>	<b>-16</b>
<b>Primary Researchbudget ET, EWI, TNW, BMS</b>	<b>33.966</b>	<b>35.116</b>	<b>35.345</b>	<b>35.330</b>	<b>35.288</b>	<b>1.150</b>	<b>172</b>
<b>OZ-budget via allocationmodel</b>	<b>77.702</b>	<b>90.987</b>	<b>91.532</b>	<b>93.101</b>	<b>93.123</b>	<b>13.285</b>	<b>2.136</b>
<b>Total budget OW &amp; OZ via allocation model</b>	<b>179.630</b>	<b>200.378</b>	<b>204.885</b>	<b>209.133</b>	<b>211.241</b>	<b>20.748</b>	<b>10.863</b>

<b>Index percentage various budgets in allocation model and CSB</b>	<b>0,0%</b>	<b>2,5%</b>	<b>0,0%</b>	<b>0,0%</b>	<b>0,0%</b>
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(amounts in k€)

<i>Excellence programmes, specification</i>	Unit	2019	2020	2021	2022	2023
Honours Dean (structural, 0,4 fte)	EWI	71	71	71	71	71
Week of inspiration (k€50, anniversary year 2016 k€80)	EWI	50	50	50	50	50
Extension Honoursprogramme (structural, complementary to k€200 allocation mod	EWI	30	30	30	30	30
Honours programmes; Star-programmes	EWI	200	200	200	200	200
Honours programmes; Star-programmes Coordination (temporarily)	EWI	15	15	15	15	15
Ba- honours progr. "Process of Change" (pilot, 2019 a.f. pending eval.)	BMS	96	96	96	96	96
Ba- honours progr. "Philosophy" (pilot, 2019 a.f. pending evaluation)	BMS	48	48	48	48	48
Honours programme; Masterprogrammes	EWI	144	144	144	144	144
Honours programme; Masterprogr. Coordination (0,1 fte)	BMS	10	10	10	10	10
Honours programme; Masterprogr. Coordination (0,2 fte)	EWI	19	19	19	19	19
<b>Total budget Excellence programmes</b>		<b>683</b>	<b>683</b>	<b>683</b>	<b>683</b>	<b>683</b>

# Central Strategic Budget (CSB)

annex E

(amounts in k€)

CSB total		Unit	2019	2020	2021	2022	2023
	Total budget CSB Education		3.725	3.726	3.726	3.726	3.726
	Total budget CSB Research		1.820	1.207	1.207	1.207	1.207
	Total budget Profileringsmiddelen OZ		3.000	4.000	4.000	4.000	4.000
	Academic development (OW+O&O), undivided budget		149	168	169	173	175
	Total Contribution ITC to CSB		640	640	640	640	640
	<b>A. Total available CSB</b>		<b>9.334</b>	<b>9.741</b>	<b>9.742</b>	<b>9.746</b>	<b>9.748</b>
	<b>B. Total reservations and budgets CSB</b>		<b>10.099</b>	<b>9.306</b>	<b>7.920</b>	<b>7.502</b>	<b>6.283</b>
	<b>Budgetmargin CSB</b>		<b>0</b>	<b>435</b>	<b>1.822</b>	<b>2.244</b>	<b>3.465</b>
	<b>Result CSB</b>		<b>-765</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

(amounts in k€)

Budgets and reservations CSB		Unit	2019	2020	2021	2022	2023
1	Tenuretracks women (round 3) start 1-1-2015 (clean up)	EWI					
1	Tenuretracks women (round 4) start delayed, now 1-1-2017 / 1-7-2019	ET	30				
1	Tenuretracks women (round 4) start delayed, now 1-1-2017 / 1-7-2020	TNW	30				
1	Tenuretracks women (round 4) CvB 29-8; Start-up package 2 additional tracks)	CE	60				
1	Tenuretracks women (round 5) (4 tracks, 2.5 yr, start 1-7-'19)	CE	120	240	240		
1	Tenuretracks women (round 6) (4 tracks, start 1-1-'22)	CE				240	240
<b>1</b>	<b>1</b>	<b>Total Tenuretracks women</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>240</b>	<b>240</b>
2	Travelbudget, policy stimulation, compensation faculties	S&B	50	50	50	50	50
2	Int.projects (Progr.manager 1,0 fte 13.2, work budget k€ 5/yr, 8-2018 / 8-2021)	S&B	108	108	63		
2	Contribution International School Twente (k€ 8, 2017-2019)	S&B	8				
2	Country coordination faculties, 5 x k€ 15	S&B	85	75	75	75	75
2	Summerschool / CuriousU	S&B	226	200	200	200	200
2	1 fte support internationalisation (2017-2019, 2020 a.f. pending evaluation).	S&B	85	85	85	85	85
2	Intern. Strat. Partners, support cooperation initiatives	CE	200	200	200	200	200
<b>2</b>	<b>2</b>	<b>Subtotal Internationalisation</b>	<b>762</b>	<b>718</b>	<b>673</b>	<b>610</b>	<b>610</b>
2	CSB - Internationalisation; budget margin	CE	0	36	57	120	120
<b>2</b>	<b>2</b>	<b>Total Internationalisation Budget</b>	<b>762</b>	<b>754</b>	<b>730</b>	<b>730</b>	<b>730</b>
3	Orange Tulip Scholarship (OTS) (2017 t/m 2019, evaluation in 2019)	CE	200	PM	PM	PM	PM
3	University Twente Scholarship (UTS) (annual evaluation)	CE	783	803	803	803	803
3	Mutation budget UTS (Temporary budget transfer for OTS (2017 - 2019))	CE	-50				
3	Twente mobility Fund (TMF) (structural, annual evaluation)	CE	100	103	103	103	103
3	Matching HS (structural, matching OCW-contribution)	CE	45	46	46	46	46
<b>3</b>	<b>1</b>	<b>Total budget Student Grants (indexed)</b>	<b>1.078</b>	<b>951</b>	<b>951</b>	<b>951</b>	<b>951</b>
4	College chair; Lohse	TNW	150	150	150	150	150
4	College chair; Van den Berg	EWI	150	150	150	150	150
4	College chair; Nauta	EWI	150	150	150	150	150
4	College chair; Verbeek	BMS	150	150	150	150	150
4	Chief Scientific Ambassador; Blank	AZ	120				
<b>4</b>	<b>1</b>	<b>Total University chairs</b>	<b>720</b>	<b>600</b>	<b>600</b>	<b>600</b>	<b>600</b>
5	2 ThermoPlastic Research Centre (TPRC).	ET	100				
6	2 Fraunhofer Project Center-matching in kind contribution (until 2021)	ET	250	250	250	0	0
7	2 Correction for unwanted effect 3year average Pdeng-bonusses	ET	606	249	0	0	0
8	5 Depreciation equipment ET (2018-2022 of total 10 years)	ET	175	175	175	175	0
9	2 1/2 Tenure Track A. vd Berg (6 yr, 2015-2020)	EWI	55	55	0	0	0
10	2 Zwaartekracht Organ on chip, CSB-matching (2018-2022)	EWI	120	120	120	120	0
11	2 Max Planck Center (2016 k€ 0, 2017 t/m 2021)	EWI	50	50	50	0	0
12	4 Brinksmas Innovation Grant 2018 (0,2 fte + k€ 2,5)	EWI	21				
13	4 Designlab (indexed 2,5%, 2020 a.f. UT-allocationmodel)	EWI-DL	513				
14	4 Designlab Marketing & Comm. (2017 k€ 50, 2018 k€ 100, 2019 k€ 50)	EWI-DL	50				
15	2 Max Planck Center (2016 k€ 0, 2017 t/m 2021)	TNW	100	100	100	0	0
16	2 St.Achmea G. project, Contribution ±. 50% Aio, mid 2016- mid 2020	TNW	35	18	0	0	0
17	2 Contribution funding group Bijkerk, XUV, (up to and including 2020)	TNW	250	250	0	0	0
18	4 Roessingh R&D	TNW	200	200	200	PM	PM
19	4 Coöperation MST/ZGT, Pioneers in Healthcare (2016-2020)	TNW	200	200	PM	PM	PM
20	2 Coöperation Radboud TURBO-program (2018-2020)	TNW	80	80	PM	PM	PM
21	2 Cooperation with hospitals (Radboud, UMCU, UMC) (2018-2022)	TNW	200	200	200	200	0
22	2 Contribution Tech Your Future (2017-2020)	BMS	50	50	0	0	0
23	2 Strategic budget ITC	ITC	770	770	770	770	770
24	2 WOTRO; BILEWS project, matching CSB 2019 t/m 2023.	ITC	25	25	25	25	25
25	2 WOTRO; INECIS project. Matching CSB 2019 t/m 2023.	ITC	25	25	25	25	25
26	2 How the West was won (2017-2019) 2018 evaluation	ITC-PreU	43				
27	1 Pré-U-Summerschool Inspire-U (pilot 2018, 2019 a.f. pending evaluation)	ITC-PreU	PM	PM	PM	PM	PM

## (continued) annex E

(amounts in k€)

Budgets and reservations CSB		Unit	2019	2020	2021	2022	2023
28	1 Professional Tutoring (after 2019: budget faculty)	CES	17	0			
29	2 Open acces (2019 only)	LISA	60	0			
30	5 MISUT, 1 fte 2017-2019, (2020 a.f. pending evaluation)	S&B	75	0			
31	1 Educational quality (1 fte 2017-2019. 2020 a.f. pending evaluation).	S&B	90	0			
32	5 Organisation development, (1 fte 2017-2019, 2020 a.f. pending evaluation)	HR	78	0			
33	2 Quick Strategic Budget SBD (2019 only, UT-allocationmodel 2020-.. Pending plan.	AZ	100				
34	2 Contribution HTT/INVL (2019 only, UT-allocationmodel 2020-.. Pending plan).	AZ	130				
	Contribution INVL Business development Team (2019 only, UT-	AZ	535				
35	2 allocationmodel 2020-.. Pending plan).						
36	3 Contribution Solar Team (annual evaluation)	AZ	55	55	55	55	55
37	4 Open Courseware (continuation 2020 a.f. pending evaluation 2019)	CE	100	100	100	100	100
38	5 Scientific integrity (2019 only)	CE	125				
38	2 Bonus HBO Phd vouchers	CE	275	275	275	275	275
39	2 Quick strategic budget DSI	CE	100	100	100	100	100
40	2 Quick strategic budget MESA+	CE	100	100	100	100	100
41	2 Quick strategic budget TechMed	CE	100	100	100	100	100
42	2 Robotics Science&Technology, DSI (2017-2020)	CE	275	275			
43	2 Sensing Science&Technology, MESA+ (2017-2020)	CE	275	275			
44	2 Smart Materials Sc.&Techn., MESA+ (2017-2020)	CE	275	275			
45	2 Personalizing Healthcare Techn., TechMed (2017-2020)	CE	275	275			
46	2 Photonics, MESA+ (2019-2022)	CE	275	275	275	275	
47	2 Creating Intelligent Manufacturing Systems (CIMS), DSI (2019-2022)	CE	275	275	275	275	
48	2 Resilience (possible continuation to be discussed in 2019)	CE	75				
49	2 TopFit (possible continuation to be discussed in 2019)	CE	75				
50	2 Technology and AI for early detection of diseases (possible continuation 1	CE	75				
51	2 Health Tech implementation program (possible continuation to be discuss	CE	75				
52	2 Artificial Intelligence; Neuromorphic computing/brain inspired computing.	CE	75				
<b>Total budgets</b>			<b>10.683</b>	<b>7.742</b>	<b>5.716</b>	<b>5.116</b>	<b>4.071</b>
53	5 Reservation Diversity; 10 female professors, k€ 25/yr x 5 years.	CE	75	175	250	250	250
54	5 Reservation Diversity; Recruitment / Campaign	CE	200	200			
55	4 Reservation Brinksma Innovation Grant (salary 0,2 fte + k€ 2,5)(EWI 2019)	CE	0	22	22	22	22
56	2 Reservation COFUND - Bits & Brains (2019-2022)	CE	138	138	138	138	
57	2 Reservation "Zwaartekracht" proposals 2018	CE	125	125	125	125	125
58	2 Reservation INS plans 2019-2022	CE	85	850	1.335	1.335	1.135
59	4 Reservation Roessingh R&D	CE				200	200
60	4 Reservation Coöperation MST/ZGT, Pioneers in Healthcare (2016-2020)	CE			200	200	200
61	2 Reservation Coöperation Radboud TURBO-program (2018-2020)	CE			80	80	80
62	2 Reservation Cooperation with hospitals (Radboud, UMCU, UMC) (2018-2022)	CE					200
63	1 Reservation (matching) ECIU-University	CE		PM	PM	PM	PM
64	1 Reservation Pilot Ma-insert Designlab (sept 2019- sept 2022, 3 x k€ 54)	CE		54	54	36	
65	5 Expected underspending CSB	CE	-1.207				
<b>Total reservations</b>			<b>-584</b>	<b>1.564</b>	<b>2.204</b>	<b>2.386</b>	<b>2.212</b>
<b>Total budgets and reservations CSB</b>			<b>10.099</b>	<b>9.306</b>	<b>7.920</b>	<b>7.502</b>	<b>6.283</b>

**Explanation Strategic budgets  
+ Financial outlines UCT**

**Overview Strategic budgets ≥ k€ 500**

(amounts in k€)

Ref. nr	Description, UT-budget	Most recent Executive Board decision	Period	Policy goal / explanation	2020	2021	2022	2023
<i>Central Strategic Budgets</i>								
2	Internationalisation	Preparation Concept-budget 2016-2018.	Structural, changing amounts	This budget is intended to give substance to the goals of the UT-vision on internationalisation. The budget is used for internationalization projects on exchange services, language policy and internationalizing the curriculum. It helps to assist faculties to give substance to Education and Research activities with strategic partners and further development of the target country policy. And it helps in organizing the UT-summer school CuriousU.	754	730	730	730
3	<i>Student grants</i>	Preparation Conceptbudget 2018-2021	UTS and TMF structural, yearly evaluation, OTS 2017-2019, continuation depends on evaluation, HS structural.	The <i>University Twente Scholarship</i> (UTS) is a UT scholarship for excellent students from both EU/EEA and non-EU/EEA countries, applying for a Master's programme at the University of Twente. The <i>Holland Scholarship</i> (HS) is a scholarship for excellent students from non-EU/EEA countries, applying for a study programme at the University of Twente, as well as UT-students who want to do their study, internship or research outside the European Economic Area (EEA). This programme is 50:50 financed by the ministry (OCW) and Dutch higher education institutions. The <i>Orange Tulip Scholarship</i> (OTS) programme is a collection of scholarships offered by Dutch higher education institutions, multinationals and government institutes. The scholarships are administered by Nuffic and managed and promoted by Nuffic Neso offices in 9 participating countries. Each year UT decides in which country scholarships will be offered. The <i>Twente Mobility Fund</i> (TMF) is a UT scholarship fund which offers all students the possibility to study or do an internship abroad outside the EEA for a period of 8 to 52 weeks.	951	951	951	951
4	University chairs		Basically, for the duration of the appointment of university professors	In view of their scientific achievements and earnings for the University of Twente, Lohse, Van den Berg and Nauta are appointed as University Chair and Blank as a University Chair / Chief Scientific Ambassador (CSA). Each University Chair receives an annual budget k€ 150.	600	600	600	600
23	Strategic budget ITC	Preparation Conceptbudget 2016	Structural	ITC contributes separately to the CSB-budget and is in return granted a strategic budget. For 2019-2022, the budget will mainly be used for development and startup costs Spatial Engineering, Female TT, Phd's theme Plouwen.	770	770	770	770
<b>Subtotal budgets / reservations ≥ k€ 500</b>					<b>3.075</b>	<b>3.051</b>	<b>3.051</b>	<b>3.051</b>
1	Tenure Tracks Women	CVB 19 september 2016	Structural, changing amounts. UTwist round 4, reservation four female TT, 2,5 year, start 2016. After that, continuation of budgetreservation for four tracks. UT added 2 extra Utwist positions in round 4	The UTwist arrangement is one of the measures within the diversity agenda. The UTwist arrangement encourages faculties to appoint talented female scientists on tenure track positions.	240	240	240	240
6	Fraunhofer Project Center-matching in kind contribution (until 2021)	Preparation Spring Memorandum 2018-2021		Fraunhofer Project Center: a temporary budget has been allocated to the faculty ET for the UT in kind contribution for the FPC@UT. As agreed upon with Fraunhofer Germany and Saxion the UT will contribute staff (managing director, business developer and support staff), housing and support services to this center. The Province will match the contributions of the partners for 50% with a maximum of M€ 4 over the first 5 year period.	250	250	0	0
7	Correction for unwanted effect 3year average Pdeng-bonusses	Preparation Spring Memorandum 2018-2021		OCW has decided to base its allocation of the 2018 PDeng bonus on a 3 year-average. A temporary budget (2018-2020) has been allocated to ET to compensate the faculty for the negative effect of this OCW allocation change.	249	0	0	0
8	Depreciation equipment ET (2018-2022 of total 10 years)	CvB 26-6-2017	2018-2022	Insufficient regular funding of ET in recent years has led to a maintenance backlog for equipment used for education. Because of continuity and safety problems and ever increasing expenditure on maintenance, investment in new equipment cannot be postponed any further. As part of a reconsideration of the funding of Engineering within the UT, it was decided to centrally fund the depreciation of this vital equipment for a period of 5 years. ET will have to fund the second five years of the depreciation.	175	175	175	0
10	Zwaartekracht Organ on chip, CSB-matching (2018-2022)		2018-2022	Creating 'organ-on-a-chip' systems will be a decisive step toward personalized health care. Five partners including the University of Twente receive a prestigious 'Zwaartekracht' grant for this, of 19 million euros. The partners are: University of Twente, Leiden University Medical Centre, University Medical Centre Groningen, Delft University of Technology and the Hubrecht Institute. The new research programme, led by developmental biologist Christine Mummery (LUMC and University of Twente) targets at living cell and tissue culture outside the human body. The chip, for this research will be provided by Prof Albert van den Berg with his BIOS group. The University of Twente will be receiving between M€ 3 and 4 from the M€ 19 grant.	120	120	120	0

Overview Strategic budgets ≥ k€ 500

(amounts in k€)

Ref. nr	Description, UT-budget	Most recent Executive Board decision	Period	Policy goal / explanation	2020	2021	2022	2023
11 \ 15	Max Plank center	CvB 13-9-2016	2017-2021	On March 3th 2017 the Max Planck Society and the UT will establish a Max Planck Center in Complex Fluid Dynamics in Twente. The center can be seen as the formalization and strengthening of the collaboration between the groups of Bodenschatz (MPI Göttingen) and Lohse (PoF, MESA+). The new Max Planck Center in Twente will be one of its kind. The research in 'Complex Fluid Dynamics' is world-class. It will provide an international anchor point in the field of fluid dynamics in the Netherlands. The combination of top science and top scientists with the name and fame of the MPG will provide an extremely strong international presence, visibility and profile in this area for the University of Twente and the Netherlands. It can become an focal point for scientific talent and top scientists. It will also strengthen competitiveness and create a strong foundation for international cooperation with other institutes and industry. The MPC will reinforce the pivotal role between Germany and the Netherlands, both scientifically and in the High Tech Systems. The collaboration has great potential when it comes to open innovation and economic cooperation. The budget is a contribution to the costs of three Tenure tracks.	150	150	0	0
17	Contribution funding group Bijkerk, up to and including 2020	Decision 2013	2013 - 2020	The High tech sector Systems and Materials is a focus of provincial economic policy. This sector will create 10.000 jobs in Twente over a period of 15 years. In addition to the UT and the province of Overijssel (invest five million euros), the FOM Foundation and various industrial partners, including Carl Zeiss SMT, ASML, PANalytical, Demcon, VIRO engineering and Norma Group contribute financially.	250	0	0	0
18	Roessingh R&D	Collaboration Roessingh R&D, 3-11-2016	2017-2021	On November 3th 2016 the agreement with Roessingh RRD was renewed. RRD / Roessingh is an experienced strategic partner with extensive experience in the field of (pre) clinical research in the field of healthcare technology. By combining care and technology expertise the collaboration strengthens our research on health technology and is a prime example of our High Tech Human Touch-approach. It further strengthens the position of the UT within the research programs and funding opportunities in this area (e.g. IMDI's SPRINT, CCTR and Neuro Control).	200	200	PM	PM
19	Coöperation MST/ZGT, Pioneers in Healthcare (2016-2020)	CvB18-1-2016, addendum 20-11-2017	2016-2020	In 2014 MST, ZGT and UT have initiated the 'Pioneers in Health Care Innovation fund' to start a sustainable cooperation between researchers from the UT and medical specialists from MST and ZGT. Vouchers for a maximum of k€ 50 are available for innovative research proposals on the cutting edge of medicine and technology. In 2015 Menzis joined the fund, and in 2017 Saxion and Deventer Ziekenhuizen (DZ) joined in a pilot. Annually k€ 650 has been allocated by the parties: MST and ZGT each k€ 100; Menzis k€ 100; DZ k€ 50 (will be k€ 100 in 2018); Saxion k€ 100; UT k€ 200. A considerable share of these vouchers will be awarded to UT groups. About half of the budget (k€ 330) was awarded to UT groups in 2017.	200	PM	PM	PM
21	Cooperation with hospitals (Radboud, UMCU, UMC) (2018-2022)	CvB 2-10-2017	2018-2022	Collaboration in research on advanced biomanufacturing (Academic Medical Center Utrecht (UMCU)). Initially, the collaboration will focus on the progress in the UT research in the field of 'musculoskeletal regeneration', 'single cell analysis for personalized medicine' and the development of a wearable artificial kidney. Funding for additional projects is expected from industry and charities (within 5 years). Exploration of joint research on Nanomedicine, Imaging and Medical Robotics will be undertaken with Academic Medical Center Radboud (RadboudUMC). Funding for additional projects is expected from the EU and national government (within 5-10 years). In 2018 the UT and RadboudUMC started an initiative together with Radboud University and Wageningen University called TopFit; a regional impact programme in the crossover of Technology, Healthcare and Food. TechMed Centre is investing k€ 60 in 2018 to set up this initiative.	200	200	200	0
37	Open Courseware	CvB, 27-6-2016	Structural, pending future evaluations.	MOOCs are a good addition to the palette of open and online education. For profiling of our institution, but also for the internal incentive function for digitization in our education. They also play a stimulating role for greater international master inflow, although this is a long-term effect. In the past three years the following MOOCs have been developed: Ultrasound Imaging in the Medical Practice, Supply Chain Innovation, E-Health: Integrating Psychology and Technology for Health, GeoHealth, Philosophy of Technology, Nanotechnology. After an initial run, these MOOCs are also re-run – which takes little effort. The following MOOCs are currently under development: How to become an Entrepreneur and Philosophy of Science.	100	100	100	100
38	Bonus Phd vouchers	Allocation HBO-Phd vouchers, 13 may 2008.	Structural	Since 2008, OCW assigned earmarked funds (vouchers) for promotion of HBO teachers to the UT. Five years later, this earmarking expired, but the university chose to continue subsidizing HBO PhD, for the reasons: - Increasing the level of university teachers. - Strengthening the ties with our colleagues from HBO. - The PhD's are for the UT financially attractive (low cost, high income through promotional premium and vouchers). - Increasing the number of UT promotions. - Increasing the diversity within the PhD population. - Through granting vouchers to the groups they have the resources to support these candidates well and to acquire necessary infrastructure.	275	275	275	275
40	Reservation Quick strategic budget institutes, 3 x k€ 100	CvB 27-03-2018	Structural	To enable the Scientific Directors of our Institutes to react quickly to sudden opportunities a budget of k€ 100 per institute is reserved. The Scientific Director can call upon this budget without consulting the Board or SB beforehand.	300	300	300	300
42	Robotics	CvB 02-07-2018	2017-2020	Initiation costs for the collaboration with TNO to open a joint Innovation Centre for Interaction robotics. This centre shall consist of a physical facility where Researchers and Industry work together, where lab experiments can be conducted, where a unique Robotic Control Centre will realized and from there, field trials can be coordinated at existing infrastructure in the region and beyond.	275	0	0	0
43	Sensing	CvB 02-07-2018	2017-2020	Initiation costs for making the UT prime centre for basic and applied sensor science and technology Integrating modern design concepts with advanced nanotechnology, ICT, humanities, and social sciences realizing smart sensor solutions in industrial, environmental and medical applications.	275	0	0	0

**Overview Strategic budgets ≥ k€ 500**

(amounts in k€)

Ref. nr	Description, UT-budget	Most recent Executive Board decision	Period	Policy goal / explanation	2020	2021	2022	2023
44	Smart materials	CvB 02-07-2018	2017-2020	Initiation costs to develop a UT roadmap for Smart and Advanced Materials by bringing together researchers (composites, polymer science, bioinspired materials, advanced thin film materials, nanomaterials etc.), establishing a link to existing UT initiatives (FPC @ UT, TPRC, MESA + materials research etc.), and the realization of new initiatives.	275	0	0	0
45	Personalizing healthcare technologies	CvB 16-04-2018	2017-2020	Initiation costs for using the advances in technology to create innovative personalised eHealth services that substantially contribute to a sustainable, efficient and effective healthcare for all citizens, especially for those with chronic conditions. In 5 years, we aim to be THE centre for eHealth Technology in the Netherlands and one of the major centres in Europe, covering the whole translational chain from development towards contributing to sustainable implementation in daily care.	275	0	0	0
46	Photonics	SB september 2018	2019-2022	Initiation costs for the UT part in the <b>National initiative Photon Delta</b> ; Experts from different disciplines work together in research and development of (components for) optical chips, the development of microscopic techniques and the application of optics in sensing, manufacturing and imaging. Theory, experiment and application go together.	275	275	275	0
47	Creating Intelligent Manufacturing Systems (CIMS)	SB september 2018	2019-2022	Initiation costs for integrating new digital information, new products, application of new materials, new production technologies and communication technology in the entire supply chains while having full control over the process. UT is uniquely positioned in the Netherlands by doing top notch research on the three pillars of Smart Industry (CPS and data science, production technology and business modelling), and being able of integrating the expertise in these three pillars into challenging cross-- disciplinary and societal relevant research areas.	275	275	275	0
Various projects/activities < k€ 100					384	461	643	807
53	Reservation Diversity; 10 female professors, k€ 25/yr x 5 years.	Preparation Spring Memorandum 2017-2020	2019-2025 (3 positions starting in decembre 2018, 4 in 2019, 3 in 2020)	This budget is meant as an incentive to achieve one of the goals of the diversity agenda, the appointment of 10 extra female professors.	175	250	250	250
54	Reservation Diversity; Recruitment / Campaign	Preparation Spring Memorandum 2017-2020	2019, 2020.	Reservation of a budget for costs of recruitment and UT-campaign related to the goal to appoint 10 extra female professors.	200	0	0	0
56	Reservation COFUND - Bits & Brains (2019-2022)	Preparation Spring Memorandum 2017-2020	2019-2023	TNW has applied for a EU Cofund program for the Bits&brains project. This budget is the maximum contribution from CSB if the project subsidy is granted (in 2018).	138	138	138	0
57	Reservation "Zwaartekracht" proposals 2018		2019-2023	The UT has applied for 5 projects as project coördinator in the NWO 2018 "zwaartekracht" call. If all projects would be allowed, a cofunding of M€ 6,4 would be needed from the UT. This is highly unlikely. We have made a reservation for the "most expensive" project. Funding will take 10 years, where the first 5 years will be cofunded for 50% from CSB. If none of the proposals are accepted, this budget will be free to use for other initiatives from CSB. The applications were tendered by the faculties EWI, TNW and BMS.	125	125	125	125
58	Reservation INS plans 2019-2022		2019-2022	In the INS plans a number of additional plans was presented. These plans were not tangible enough to fund as seeding budget (k€ 75 for one year) or initiation budget (k€ 275 for four years). Further elaboration will be needed to determine whether these plans will be presented to the SB. For now we have reserved a portion of the estimated costs to enable these new initiatives.	850	1.335	1.335	1.135
<b>Subtotal budgets &lt; k€ 500 / reservations</b>					<b>6.231</b>	<b>4.869</b>	<b>4.451</b>	<b>3.232</b>
<b>Total budgets / reservations Central Strategic Budget</b>					<b>9.306</b>	<b>7.920</b>	<b>7.502</b>	<b>6.283</b>

**Financial outlines UCT, 2020-2023**

(amounts in k€)

	2018	2020	2021	2022	2023
Strategic budget CSB	500	500	500	500	500
HR Compensations		90	30	30	30
Tuition fees	577	568	623	697	763
Government Funding	684	1.011	1.139	1.369	1.555
<b>Total UCT budget</b>	<b>1.761</b>	<b>2.169</b>	<b>2.292</b>	<b>2.596</b>	<b>2.848</b>
<b>Outcome targets according UT-Budget businesscase 2019</b>	<b>-283</b>	<b>-372</b>	<b>-383</b>	<b>-208</b>	<b>-84</b>
Should UCT have to contribute to the Central Budgets in the same way as all other UT-programs, this contribution would amount to :					
<b>Theoretical contribution UCT to Central budgets</b>	<b>25%</b>	<b>328</b>	<b>388</b>	<b>433</b>	<b>507</b>

(amounts in k€)																			(M€)	
Unit	Strategic budget			Primary budget												Total budget 1st 'geldstroom' 2020	Total budget 1st 'geldstroom' 2019	Δ '20-'19		
	Toekenningen:		Total Strategic budgets	UT-allocation model; education					UT-allocation model; research					CB/TCB	Total Primary budget					
	Centr. Strat. budget (CSB)	Ear-marked funding		Fixed Educ. budgets	Var.OW-budget TOM (Ba)	EC (Ma)	CSB OW	Total Alloc. model OW	Fixed OZ budgets	O&O- component	PhD / PDeng bonus	Primary OZ budget	CSB Pr.OZ + OZ-Model						Total Alloc. model OZ	Total Central Budget
1	2	3= 1-2	4	5	6	7	8= 4-7	9	10	11	12	13	14= 9-13	15	16= 14 + 15	17= 3 + 16				
ET	674	-	674	280	7.298	7.748	-	15.326	3.211	1.897	3.533	4.640	-	13.281	-	28.607	29.281	24.108	5.173	
EWI	525	-	525	1.640	8.415	6.166	-	16.221	3.777	1.667	4.500	9.655	-	19.599	-	35.820	36.345	29.690	6.655	
EWI-Nanolab	-	-	-	-	-	-	-	-	1.567	-	-	-	-	1.567	-	1.567	1.567	1.529	38	
EWI-DL	-	-	-	-	-	-	-	-	526	-	-	-	-	526	-	526	526	563	-37	
TNW	1.198	-	1.198	4.055	11.968	4.540	-	20.563	5.079	1.570	6.273	16.027	-	28.949	-	49.512	50.710	45.931	4.779	
BMS	200	-	200	870	11.542	10.616	-	23.028	-	2.118	4.271	4.794	-	11.183	-	34.211	34.411	31.789	2.622	
ITC	820	-	820	12.985	68	61	-	13.114	5.797	4	1.611	-	-	7.412	-	20.526	21.346	20.254	1.092	
ITC-UCT	-	-	-	2.160	-	-	-	2.160	59	-	-	-	-	59	-	2.219	2.219	2.079	140	
ITC-PreU	-	-	-	1.236	-	-	-	1.236	-	-	-	-	-	-	-	1.236	1.236	1.251	-15	
<b>Total faculties</b>	<b>3.417</b>	<b>-</b>	<b>3.417</b>	<b>23.226</b>	<b>39.291</b>	<b>29.131</b>	<b>-</b>	<b>91.648</b>	<b>20.016</b>	<b>7.256</b>	<b>20.188</b>	<b>35.116</b>	<b>-</b>	<b>82.576</b>	<b>-</b>	<b>174.224</b>	<b>177.641</b>	<b>157.194</b>	<b>20.447</b>	<b>20,4</b>
LISA	-	-	-	-	-	-	-	-	-	-	-	-	-	17.471	17.471	17.471	17.511	-40		
CES	-	-	-	-	-	-	-	-	-	-	-	-	-	8.126	8.126	8.126	8.160	-34		
SU	-	-	-	-	-	-	-	-	-	-	-	-	-	1.393	1.393	1.393	1.393	0		
CFM	-	-	-	7.836	-	-	-	7.836	-	-	-	-	-	10.620	18.456	18.456	17.590	866		
S&B	518	-	518	-	-	-	-	-	-	-	-	-	-	2.542	2.542	3.060	3.276	-216		
M&C	-	-	-	-	-	-	-	-	-	-	-	-	-	7.609	7.609	7.609	7.629	-20		
FEZ	-	-	-	-	-	-	-	-	-	-	-	-	-	3.503	3.503	3.503	3.512	-9		
HR	-	-	-	-	-	-	-	-	-	-	-	-	-	3.951	3.951	3.951	3.987	-36		
AZ	55	-	55	-	-	-	-	-	765	-	-	-	-	765	5.205	5.970	6.025	6.156	-131	
CvB	-	-	-	-	-	-	-	-	-	-	-	-	-	1.255	1.255	1.255	1.257	-2		
<b>Total Servicedep.</b>	<b>573</b>	<b>-</b>	<b>573</b>	<b>7.836</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>7.836</b>	<b>765</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>765</b>	<b>61.675</b>	<b>70.275</b>	<b>70.848</b>	<b>70.470</b>	<b>378</b>	<b>0,4</b>
CHRM	-	-	-	-	-	-	-	-	-	-	-	-	-	520	520	520	520			
CE	5.316	-	5.316	5.428	159	-	4.320	9.907	2.430	9	-	-	5.207	7.646	3.741	21.294	26.610	25.143		
<b>Centr. Projects</b>	<b>5.316</b>	<b>-</b>	<b>5.316</b>	<b>5.428</b>	<b>159</b>	<b>-</b>	<b>4.320</b>	<b>9.907</b>	<b>2.430</b>	<b>9</b>	<b>-</b>	<b>-</b>	<b>5.207</b>	<b>7.646</b>	<b>4.261</b>	<b>21.814</b>	<b>27.130</b>	<b>25.663</b>	<b>1.467</b>	<b>1,5</b>
<b>Total UT allocated</b>	<b>9.306</b>	<b>-</b>	<b>9.306</b>	<b>36.490</b>	<b>39.450</b>	<b>29.131</b>	<b>4.320</b>	<b>109.391</b>	<b>23.211</b>	<b>7.265</b>	<b>20.188</b>	<b>35.116</b>	<b>5.207</b>	<b>90.987</b>	<b>65.935</b>	<b>266.313</b>	<b>275.619</b>	<b>253.327</b>	<b>22.292</b>	<b>22,3</b>

Reallocated budgets *		0	-46	-159	-4.320	-4.525	-9	-5.207	-5.216	0	-9.741	-9.741	-9.334	-407	-0,4
Budgetmargin	435	435										435	-765	1.200	1,2
<b>Total UT available 1st geldstroom budget</b>	<b>9.741</b>	<b>0</b>	<b>9.741</b>						<b>85.771</b>	<b>65.935</b>	<b>256.572</b>	<b>266.313</b>	<b>243.228</b>	<b>23.085</b>	<b>23,1</b>

\* Re-allocated budget: The Central Strategic Budget is subtracted from the primary budget and subsequently used to fund CSB-acknowledgements. Primarily this budget is thus counted twice. To reconcile the budget with the available budget this reallocated budget is subtracted from the total allocated budget.



Concept budget 2019-2022		B2019	B2020	B2021	B2022	B2023	'20-'19	'23-'20	Js2020	Js2021	Js2022
<b>Faculty</b>											
<b>01 ET</b>											
<i>Allocationmodel</i>											
<b>OW</b>	45 Ba ME@VU 1e gs funding, excl. CB -20%		280	566	960	1.344	280	1.064	280	566	960
	55 TOM-Variable OW-budget	5.992	6.774	6.941	7.304	7.525	782	751	732	678	941
	56 TOM-Profiling modules	454	500	521	531	545	46	45	35	38	37
	58 Ma-budget EC	6.819	7.724	8.081	8.256	8.406	905	682	784	869	841
<b>OW Total</b>		<b>13.265</b>	<b>15.278</b>	<b>16.109</b>	<b>17.051</b>	<b>17.820</b>	<b>2.013</b>	<b>2.542</b>	<b>1.831</b>	<b>2.151</b>	<b>2.779</b>
<b>OZ</b>	41 Sectorplan ET		3.008	3.008	3.008	3.008	3.008	0	3.008	3.008	3.008
	66 O&O-Ba component	503	435	430	437	438	-68	3	-66	-65	-52
	67 O&O-Ma component	1.371	1.462	1.467	1.474	1.473	91	11	81	81	83
	68 PhD-bonus	2.812	2.625	3.155	3.832	4.313	-187	1.688	18	318	561
	69 PDeng-bonus	608	908	1.039	1.191	1.078	300	170	45	140	14
	70 PDeng-coordination	100	103	103	103	103	3	0	3	3	3
	79 TPRC		100	100	100	100	100	0	100	100	100
	83 Primary Researchbudget	4.288	4.640	4.888	4.886	4.881	352	241	108	105	99
<b>OZ Total</b>		<b>9.682</b>	<b>13.281</b>	<b>14.190</b>	<b>15.031</b>	<b>15.394</b>	<b>3.599</b>	<b>2.113</b>	<b>3.297</b>	<b>3.690</b>	<b>3.816</b>
<b>Allocationmodel Total</b>		<b>22.947</b>	<b>28.559</b>	<b>30.299</b>	<b>32.082</b>	<b>33.214</b>	<b>5.612</b>	<b>4.655</b>	<b>5.128</b>	<b>5.841</b>	<b>6.595</b>
<i>Strategic</i>											
<b>Div</b>	86 Central strategic budget	1.161	674	425	175	0	-487	-674	-100	-100	-100
<b>Div Total</b>		<b>1.161</b>	<b>674</b>	<b>425</b>	<b>175</b>	<b>0</b>	<b>-487</b>	<b>-674</b>	<b>-100</b>	<b>-100</b>	<b>-100</b>
<b>Strategic Total</b>		<b>1.161</b>	<b>674</b>	<b>425</b>	<b>175</b>	<b>0</b>	<b>-487</b>	<b>-674</b>	<b>-100</b>	<b>-100</b>	<b>-100</b>
<b>01 ET Total</b>		<b>24.108</b>	<b>29.233</b>	<b>30.724</b>	<b>32.257</b>	<b>33.214</b>	<b>5.125</b>	<b>3.981</b>	<b>5.028</b>	<b>5.741</b>	<b>6.495</b>
<b>02 EWI</b>											
<i>Allocationmodel</i>											
<b>OW</b>	26 Honours Programme	200	200	200	200	200	0	0	0	0	0
	27 Mathematics intensive	300	308	308	308	308	8	0	8	8	8
	28 Coordination Continuous learning Mathemat	100	103	103	103	103	3	0	3	3	3
	32 Excellence Programmes	529	529	529	529	529	0	0	0	0	0
	47 Fixed budget EWI	500	500	500	500	500	0	0	0	0	0
	55 TOM-Variable OW-budget	6.217	7.906	8.168	8.618	9.188	1.689	1.282	1.586	1.555	1.715
	56 TOM-Profiling modules	446	481	501	511	524	35	43	24	27	26
	58 Ma-budget EC	5.013	6.147	6.431	6.570	6.690	1.134	543	1.045	1.130	1.119
<b>OW Total</b>		<b>13.305</b>	<b>16.174</b>	<b>16.740</b>	<b>17.339</b>	<b>18.042</b>	<b>2.869</b>	<b>1.868</b>	<b>2.666</b>	<b>2.723</b>	<b>2.871</b>
<b>OZ</b>	42 Sectorplan EWI		3.266	3.266	3.266	3.266	3.266	0	3.266	3.266	3.266
	63 Supplement Research funds Mathematics	450	461	461	461	461	11	0	11	11	11
	66 O&O-Ba component	520	503	500	509	526	-17	23	-18	-20	-19
	67 O&O-Ma component	1.008	1.164	1.168	1.173	1.172	156	8	149	150	151
	68 PhD-bonus	4.386	4.455	4.333	4.239	4.124	69	-331	498	409	356
	69 PDeng-bonus	23	45	68	180	292	22	247	5	-12	82
	72 OC&W-budget Max Planck center	50	50	50	0	0	0	-50	0	0	0
	83 Primary Researchbudget	9.402	9.655	9.649	9.645	9.633	253	-22	267	258	246
<b>OZ Total</b>		<b>15.839</b>	<b>19.599</b>	<b>19.495</b>	<b>19.473</b>	<b>19.474</b>	<b>3.760</b>	<b>-125</b>	<b>4.178</b>	<b>4.062</b>	<b>4.093</b>
<b>Allocationmodel Total</b>		<b>29.144</b>	<b>35.773</b>	<b>36.235</b>	<b>36.812</b>	<b>37.516</b>	<b>6.629</b>	<b>1.743</b>	<b>6.844</b>	<b>6.785</b>	<b>6.964</b>
<i>Strategic</i>											
<b>Div</b>	86 Central strategic budget	546	525	470	420	300	-21	-225	0	0	0
<b>Div Total</b>		<b>546</b>	<b>525</b>	<b>470</b>	<b>420</b>	<b>300</b>	<b>-21</b>	<b>-225</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Strategic Total</b>		<b>546</b>	<b>525</b>	<b>470</b>	<b>420</b>	<b>300</b>	<b>-21</b>	<b>-225</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>02 EWI Total</b>		<b>29.690</b>	<b>36.298</b>	<b>36.705</b>	<b>37.232</b>	<b>37.816</b>	<b>6.608</b>	<b>1.518</b>	<b>6.844</b>	<b>6.785</b>	<b>6.964</b>
<b>04 EWI-Nanolab</b>											
<i>Allocationmodel</i>											
<b>OZ</b>	62 Fixed budget technical infrastructure Nanola	1.529	1.567	1.567	1.567	1.567	38	0	38	38	38
<b>OZ Total</b>		<b>1.529</b>	<b>1.567</b>	<b>1.567</b>	<b>1.567</b>	<b>1.567</b>	<b>38</b>	<b>0</b>	<b>38</b>	<b>38</b>	<b>38</b>
<b>Allocationmodel Total</b>		<b>1.529</b>	<b>1.567</b>	<b>1.567</b>	<b>1.567</b>	<b>1.567</b>	<b>38</b>	<b>0</b>	<b>38</b>	<b>38</b>	<b>38</b>
<i>Strategic</i>											
<b>Div</b>	86 Central strategic budget	0	0	0	0	0	0	0	0	0	0
<b>Div Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Strategic Total</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>04 EWI-Nanolab Total</b>		<b>1.529</b>	<b>1.567</b>	<b>1.567</b>	<b>1.567</b>	<b>1.567</b>	<b>38</b>	<b>0</b>	<b>38</b>	<b>38</b>	<b>38</b>
<b>05 EWI-DL</b>											
<i>Allocationmodel</i>											
<b>OZ</b>	80 Designlab (indexed)		526	526	526	526	526	0	526	526	526
<b>OZ Total</b>			<b>526</b>	<b>526</b>	<b>526</b>	<b>526</b>	<b>526</b>	<b>0</b>	<b>526</b>	<b>526</b>	<b>526</b>
<b>Allocationmodel Total</b>			<b>526</b>	<b>526</b>	<b>526</b>	<b>526</b>	<b>526</b>	<b>0</b>	<b>526</b>	<b>526</b>	<b>526</b>
<i>Strategic</i>											
<b>Div</b>	86 Central strategic budget	563	0	0	0	0	-563	0	-513	-513	-513
<b>Div Total</b>		<b>563</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-563</b>	<b>0</b>	<b>-513</b>	<b>-513</b>	<b>-513</b>
<b>Strategic Total</b>		<b>563</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-563</b>	<b>0</b>	<b>-513</b>	<b>-513</b>	<b>-513</b>
<b>05 EWI-DL Total</b>		<b>563</b>	<b>526</b>	<b>526</b>	<b>526</b>	<b>526</b>	<b>-37</b>	<b>0</b>	<b>13</b>	<b>13</b>	<b>13</b>
<b>06 TNW</b>											
<i>Allocationmodel</i>											
<b>OW</b>	16 Sectorplan Natuur- en scheikunde	191	191	191	191	191	0	0	0	0	0
	17 Waternet	64	64	64	64	64	0	0	0	0	0
	46 Fixed budget clinical internships TNW TG,	2.500	2.800	3.200	3.300	3.300	300	500	0	200	200
	49 Fixed budget TNW	1.000	1.000	1.000	1.000	1.000	0	0	0	0	0
	55 TOM-Variable OW-budget	10.680	11.507	11.781	12.168	12.317	827	810	865	639	527
	56 TOM-Profiling modules	359	422	439	450	461	63	39	64	67	64
	58 Ma-budget EC	3.968	4.526	4.735	4.838	4.926	558	400	488	539	524
<b>OW Total</b>		<b>18.762</b>	<b>20.510</b>	<b>21.410</b>	<b>22.011</b>	<b>22.259</b>	<b>1.748</b>	<b>1.749</b>	<b>1.417</b>	<b>1.445</b>	<b>1.315</b>
<b>OZ</b>	16 Sectorplan Natuur- en scheikunde	1.121	1.121	1.121	1.121	1.121	0	0	0	0	0
	17 Waternet	60	61	61	61	61	1	0	1	1	1
	43 Sectorplan TNW		2.590	2.590	2.590	2.590	2.590	0	2.590	2.590	2.590
	66 O&O-Ba component	861	713	703	704	692	-148	-21	-135	-142	-154
	67 O&O-Ma component	798	857	860	863	863	59	6	54	54	54
	68 PhD-bonus	6.140	6.182	5.570	5.718	5.634	42	-548	358	285	305
	69 PDeng-bonus	45	91	136	135	112	46	21	-9	-24	-41
	72 OC&W-budget Max Planck center	100	100	100	0	0	0	-100	0	0	0

Concept budget 2019-2022		B2019	B2020	B2021	B2022	B2023	'20-'19	'23-'20	Js2020	Js2021	Js2022
<b>OZ</b>	73 TGS	646	662	662	662	662	16	0	16	16	16
	74 TGS PhD/PDeng 10 EC OW-budget	545	545	545	545	545	0	0	0	0	0
	83 Primary Researchbudget	15.608	16.027	16.017	16.010	15.992	419	-35	439	426	407
<b>OZ Total</b>		<b>25.924</b>	<b>28.949</b>	<b>28.365</b>	<b>28.409</b>	<b>28.272</b>	<b>3.025</b>	<b>-677</b>	<b>3.314</b>	<b>3.206</b>	<b>3.178</b>
<b>Allocationmodel Total</b>		<b>44.686</b>	<b>49.459</b>	<b>49.775</b>	<b>50.420</b>	<b>50.531</b>	<b>4.773</b>	<b>1.072</b>	<b>4.731</b>	<b>4.651</b>	<b>4.493</b>
<i>Strategic</i>											
<b>Div</b>	86 Central strategic budget	1.245	1.198	650	350	150	-47	-1.048	0	0	0
<b>Div Total</b>		<b>1.245</b>	<b>1.198</b>	<b>650</b>	<b>350</b>	<b>150</b>	<b>-47</b>	<b>-1.048</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Strategic Total</b>		<b>1.245</b>	<b>1.198</b>	<b>650</b>	<b>350</b>	<b>150</b>	<b>-47</b>	<b>-1.048</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>06 TNW Total</b>		<b>45.931</b>	<b>50.657</b>	<b>50.425</b>	<b>50.770</b>	<b>50.681</b>	<b>4.726</b>	<b>24</b>	<b>4.731</b>	<b>4.651</b>	<b>4.493</b>
<b>07 BMS</b>											
<i>Allocationmodel</i>											
<b>OW</b>	19 Institutional tuition fees MEEM	302	0	0	0	0	-302	0	-310	-310	-310
	20 Studium Generale	260	267	267	267	267	7	0	7	7	7
	21 Teacher training courses	388	398	398	398	398	10	0	10	10	10
	30 Coordination Continuous learning Acad.com	50	51	51	51	51	1	0	1	1	1
	32 Excellence Programmes	154	154	154	154	154	0	0	0	0	0
	33 Dean educational innovation	0	0	0	0	0	0	0	0	0	0
	55 TOM-Variable OW-budget	7.892	8.952	9.568	9.432	9.556	1.060	604	638	894	581
	56 TOM-Profiling modules	1.317	1.588	1.657	1.688	1.729	271	141	240	256	255
	57 TOM-Academic competences	832	968	1.015	1.030	1.061	136	93	116	131	126
	58 Ma-budget EC	9.830	10.584	11.072	11.310	11.517	754	933	578	675	620
<b>OW Total</b>		<b>21.025</b>	<b>22.962</b>	<b>24.182</b>	<b>24.330</b>	<b>24.733</b>	<b>1.937</b>	<b>1.771</b>	<b>1.280</b>	<b>1.664</b>	<b>1.290</b>
<b>OZ</b>	66 O&O-Ba component	784	688	706	676	671	-96	-17	-121	-100	-121
	67 O&O-Ma component	1.412	1.430	1.435	1.442	1.441	18	11	8	8	9
	68 PhD-bonus	3.700	4.271	4.258	4.525	4.447	571	176	333	329	482
	69 PDeng-bonus		0	11	34	90	0	90	0	11	34
	83 Primary Researchbudget	4.668	4.794	4.791	4.789	4.782	126	-12	134	129	123
<b>OZ Total</b>		<b>10.564</b>	<b>11.183</b>	<b>11.201</b>	<b>11.466</b>	<b>11.431</b>	<b>619</b>	<b>248</b>	<b>354</b>	<b>377</b>	<b>527</b>
<b>Allocationmodel Total</b>		<b>31.589</b>	<b>34.145</b>	<b>35.383</b>	<b>35.796</b>	<b>36.164</b>	<b>2.556</b>	<b>2.019</b>	<b>1.634</b>	<b>2.041</b>	<b>1.817</b>
<i>Strategic</i>											
<b>Div</b>	86 Central strategic budget	200	200	150	150	150	0	-50	0	0	0
<b>Div Total</b>		<b>200</b>	<b>200</b>	<b>150</b>	<b>150</b>	<b>150</b>	<b>0</b>	<b>-50</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Strategic Total</b>		<b>200</b>	<b>200</b>	<b>150</b>	<b>150</b>	<b>150</b>	<b>0</b>	<b>-50</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>07 BMS Total</b>		<b>31.789</b>	<b>34.345</b>	<b>35.533</b>	<b>35.946</b>	<b>36.314</b>	<b>2.556</b>	<b>1.969</b>	<b>1.634</b>	<b>2.041</b>	<b>1.817</b>
<b>08 ITC</b>											
<i>Allocationmodel</i>											
<b>OW</b>	51 ITC Government funding/Tuition fees, excl. C	12.526	12.985	13.060	13.077	13.153	459	168	331	343	310
	56 TOM-Profiling modules	64	68	70	72	74	4	6	2	2	2
	58 Ma-budget EC		61	64	66	67	61	6	61	64	66
<b>OW Total</b>		<b>12.590</b>	<b>13.114</b>	<b>13.194</b>	<b>13.215</b>	<b>13.294</b>	<b>524</b>	<b>180</b>	<b>394</b>	<b>409</b>	<b>378</b>
<b>OZ</b>	66 O&O-Ba component	5	4	4	4	4	-1	0	-1	-1	-1
	67 O&O-Ma component	0	0	0	0	0	0	0	0	0	0
	68 PhD-bonus	1.281	1.611	1.929	2.347	2.156	330	545	356	630	935
	83 Primary Researchbudget	5.558	5.797	5.785	5.768	5.781	239	-16	224	205	188
<b>OZ Total</b>		<b>6.844</b>	<b>7.412</b>	<b>7.718</b>	<b>8.119</b>	<b>7.941</b>	<b>568</b>	<b>529</b>	<b>579</b>	<b>834</b>	<b>1.122</b>
<b>Allocationmodel Total</b>		<b>19.434</b>	<b>20.526</b>	<b>20.912</b>	<b>21.334</b>	<b>21.235</b>	<b>1.092</b>	<b>709</b>	<b>973</b>	<b>1.243</b>	<b>1.500</b>
<i>Strategic</i>											
<b>Div</b>	86 Central strategic budget	820	820	820	820	820	0	0	0	0	0
<b>Div Total</b>		<b>820</b>	<b>820</b>	<b>820</b>	<b>820</b>	<b>820</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Strategic Total</b>		<b>820</b>	<b>820</b>	<b>820</b>	<b>820</b>	<b>820</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>08 ITC Total</b>		<b>20.254</b>	<b>21.346</b>	<b>21.732</b>	<b>22.154</b>	<b>22.055</b>	<b>1.092</b>	<b>709</b>	<b>973</b>	<b>1.243</b>	<b>1.500</b>
<b>09 ITC-UCT</b>											
<i>Allocationmodel</i>											
<b>OW</b>	15 OCW Student funding UCT	952	1.003	1.239	1.422	1.422	51	419	-66	-29	-27
	18 Tuition fees UCT	568	657	716	765	791	89	134	34	19	2
	48 Fixed budget EWI-UCT	500	500	500	500	500	0	0	0	0	0
<b>OW Total</b>		<b>2.020</b>	<b>2.160</b>	<b>2.455</b>	<b>2.687</b>	<b>2.713</b>	<b>140</b>	<b>553</b>	<b>-32</b>	<b>-10</b>	<b>-25</b>
<b>OZ</b>	39 OCW-funding Degrees UCT	59	59	59	99	107	0	48	-11	-41	-7
<b>OZ Total</b>		<b>59</b>	<b>59</b>	<b>59</b>	<b>99</b>	<b>107</b>	<b>0</b>	<b>48</b>	<b>-11</b>	<b>-41</b>	<b>-7</b>
<b>Allocationmodel Total</b>		<b>2.079</b>	<b>2.219</b>	<b>2.514</b>	<b>2.786</b>	<b>2.820</b>	<b>140</b>	<b>601</b>	<b>-43</b>	<b>-51</b>	<b>-32</b>
<b>09 ITC-UCT Total</b>		<b>2.079</b>	<b>2.219</b>	<b>2.514</b>	<b>2.786</b>	<b>2.820</b>	<b>140</b>	<b>601</b>	<b>-43</b>	<b>-51</b>	<b>-32</b>
<b>10 ITC-PreU</b>											
<i>Allocationmodel</i>											
<b>OW</b>	22 PréU	1.118	1.146	1.146	1.146	1.146	28	0	28	28	28
	24 Regional Coöperation VO-WO	90	90	111	160	0	0	-90	-21	-49	108
<b>OW Total</b>		<b>1.208</b>	<b>1.236</b>	<b>1.257</b>	<b>1.306</b>	<b>1.146</b>	<b>28</b>	<b>-90</b>	<b>7</b>	<b>-21</b>	<b>136</b>
<b>Allocationmodel Total</b>		<b>1.208</b>	<b>1.236</b>	<b>1.257</b>	<b>1.306</b>	<b>1.146</b>	<b>28</b>	<b>-90</b>	<b>7</b>	<b>-21</b>	<b>136</b>
<i>Strategic</i>											
<b>Div</b>	86 Central strategic budget	43	0	0	0	0	-43	0	0	0	0
<b>Div Total</b>		<b>43</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-43</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Strategic Total</b>		<b>43</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-43</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>10 ITC-PreU Total</b>		<b>1.251</b>	<b>1.236</b>	<b>1.257</b>	<b>1.306</b>	<b>1.146</b>	<b>-15</b>	<b>-90</b>	<b>7</b>	<b>-21</b>	<b>136</b>
<b>Faculty Total</b>		<b>157.194</b>	<b>177.427</b>	<b>180.983</b>	<b>184.544</b>	<b>186.139</b>	<b>20.233</b>	<b>8.712</b>	<b>19.225</b>	<b>20.440</b>	<b>21.424</b>
<b>Service-department</b>		<b>70.470</b>	<b>70.848</b>	<b>70.428</b>	<b>70.140</b>	<b>70.230</b>	<b>378</b>	<b>-618</b>	<b>1.245</b>	<b>1.294</b>	<b>1.377</b>
<b>CUTE Total</b>		<b>25.663</b>	<b>27.344</b>	<b>28.007</b>	<b>29.237</b>	<b>28.888</b>	<b>1.681</b>	<b>1.545</b>	<b>1.562</b>	<b>1.999</b>	<b>2.343</b>
<b>UT Total</b>		<b>253.327</b>	<b>275.619</b>	<b>279.417</b>	<b>283.921</b>	<b>285.257</b>	<b>22.292</b>	<b>9.638</b>	<b>22.032</b>	<b>23.733</b>	<b>25.144</b>

Concept budget 2019-2022	B2019	B2020	B2021	B2022	B2023	'20-'19	'23-'20	Js 2020	Js 2021	Js2022
<b>Faculty</b>	157.194	177.427	180.983	184.544	186.139	20.233	8.712	19.225	20.440	21.424
<b>Service-department</b>										
<b>18 CFM</b>										
54 Central Educational Facilities (CEF)	6.950	7.836	7.885	7.968	8.058	886	222	516	565	648
85 CB / TCB	10.640	10.620	10.599	10.558	10.558	-20	-62	0	0	0
<b>18 CFM Total</b>	<b>17.590</b>	<b>18.456</b>	<b>18.484</b>	<b>18.526</b>	<b>18.616</b>	<b>866</b>	<b>160</b>	<b>516</b>	<b>565</b>	<b>648</b>
<b>15 LISA</b>										
85 CB / TCB	17.451	17.471	17.418	17.398	17.398	20	-73	0	0	0
86 Central strategic budget	60	0	0	0	0	-60	0	0	0	0
<b>15 LISA Total</b>	<b>17.511</b>	<b>17.471</b>	<b>17.418</b>	<b>17.398</b>	<b>17.398</b>	<b>-40</b>	<b>-73</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>16 CES</b>										
85 CB / TCB	8.143	8.126	8.112	8.062	8.062	-17	-64	0	0	0
86 Central strategic budget	17	0	0	0	0	-17	0	0	0	0
<b>16 CES Total</b>	<b>8.160</b>	<b>8.126</b>	<b>8.112</b>	<b>8.062</b>	<b>8.062</b>	<b>-34</b>	<b>-64</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>17 SU</b>										
85 CB / TCB	1.393	1.393	1.393	1.393	1.393	0	0	0	0	0
<b>17 SU Total</b>	<b>1.393</b>	<b>1.393</b>	<b>1.393</b>	<b>1.393</b>	<b>1.393</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>19 S&amp;B</b>										
85 CB / TCB	2.549	2.542	2.534	2.484	2.484	-7	-58	0	0	0
86 Central strategic budget	727	518	473	410	410	-209	-108	-36	-36	-36
<b>19 S&amp;B Total</b>	<b>3.276</b>	<b>3.060</b>	<b>3.007</b>	<b>2.894</b>	<b>2.894</b>	<b>-216</b>	<b>-166</b>	<b>-36</b>	<b>-36</b>	<b>-36</b>
<b>20 M&amp;C</b>										
85 CB / TCB	7.629	7.609	7.597	7.572	7.572	-20	-37	0	0	0
86 Central strategic budget	0	0	0	0	0	0	0	0	0	0
<b>20 M&amp;C Total</b>	<b>7.629</b>	<b>7.609</b>	<b>7.597</b>	<b>7.572</b>	<b>7.572</b>	<b>-20</b>	<b>-37</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>21 FEZ</b>										
85 CB / TCB	3.512	3.503	3.495	3.477	3.477	-9	-26	0	0	0
<b>21 FEZ Total</b>	<b>3.512</b>	<b>3.503</b>	<b>3.495</b>	<b>3.477</b>	<b>3.477</b>	<b>-9</b>	<b>-26</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>22 HR</b>										
85 CB / TCB	3.909	3.951	3.783	3.705	3.705	42	-246	0	0	0
86 Central strategic budget	78	0	0	0	0	-78	0	0	0	0
<b>22 HR Total</b>	<b>3.987</b>	<b>3.951</b>	<b>3.783</b>	<b>3.705</b>	<b>3.705</b>	<b>-36</b>	<b>-246</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>23 AZ</b>										
76 Quick Strategic Budget SBD		100	100	100	100	100	0	100	100	100
77 Contribution HTT/INVL		130	130	130	130	130	0	130	130	130
78 Contribution INVL Business development Team		535	535	535	535	535	0	535	535	535
85 CB / TCB	5.216	5.205	5.065	5.043	5.043	-11	-162	0	0	0
86 Central strategic budget	940	55	55	55	55	-885	0	0	0	0
<b>23 AZ Total</b>	<b>6.156</b>	<b>6.025</b>	<b>5.885</b>	<b>5.863</b>	<b>5.863</b>	<b>-131</b>	<b>-162</b>	<b>765</b>	<b>765</b>	<b>765</b>
<b>24 CvB</b>										
85 CB / TCB	1.257	1.255	1.254	1.250	1.250	-2	-5	0	0	0
<b>24 CvB Total</b>	<b>1.257</b>	<b>1.255</b>	<b>1.254</b>	<b>1.250</b>	<b>1.250</b>	<b>-2</b>	<b>-5</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Service-department Total</b>	<b>70.470</b>	<b>70.848</b>	<b>70.428</b>	<b>70.140</b>	<b>70.230</b>	<b>378</b>	<b>-618</b>	<b>1.245</b>	<b>1.294</b>	<b>1.377</b>
<b>CUTE</b>										
<b>26 CHRM</b>										
85 CB / TCB	520	520	520	520	520	0	0	0	0	0
<b>26 CHRM Total</b>	<b>520</b>	<b>520</b>	<b>520</b>	<b>520</b>	<b>520</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>27 CE</b>										
02 3TU-budget / Sectorplan Techniek	2.100	2.100	2.100	2.100	2.100	0	0	0	0	0
03 Redemption BaMa-compensation+contribution	730	951	951	951	951	221	0	221	221	221
04 ZVVO	200	200	200	200	200	0	0	0	0	0
05 CSB earmarked; Matching OC&W Holland Sch	45	46	46	46	46	1	0	1	1	1
06 IVH	4.400	4.400	4.400	4.400	4.400	0	0	0	0	0
07 Correction IVH- M€-3,0 budgets	0					0	0	0	0	0
08 Guarantee TTT	0					0	0	0	0	0
108 Government funding, unallocated	3.000					-3.000	0	0	0	0
13 20% van perf. based funding fac., 80-20.	0					0	0	0	0	0
14 Operating margin Education	300	300	300	300	300	0	0	0	0	0
23 "Versnellingsplan onderwijsinnovatie" -> SURF		75	75	75	0	75	-75	75	75	75
52 ITC Contribution CSB	640	640	640	640	640	0	0	0	0	0
53 Central strategic budget OW	3.680	3.680	3.680	3.680	3.680	0	0	0	0	0
57 TOM-Academic competences	138	159	159	163	166	21	7	20	14	13
65 Central strategic budget OZ	1.820	1.207	1.207	1.207	1.207	-613	0	-613	-613	-613
66 O&O-Ba component	11	9	9	9	9	-2	0	-2	-2	-2
82 "Profileringmiddelen" OZ: policy oriented	3.000	4.000	4.000	4.000	4.000	1.000	0	-397	-397	-397
85 CB / TCB	1.380	3.741	4.843	5.824	6.271	2.361	2.531	2.209	2.455	2.618
86 Central strategic budget	3.699	5.316	4.877	5.122	4.398	1.617	-918	48	245	427
<b>27 CE Total</b>	<b>25.143</b>	<b>26.824</b>	<b>27.487</b>	<b>28.717</b>	<b>28.368</b>	<b>1.681</b>	<b>1.545</b>	<b>1.562</b>	<b>1.999</b>	<b>2.343</b>
<b>CUTE Total</b>	<b>25.663</b>	<b>27.344</b>	<b>28.007</b>	<b>29.237</b>	<b>28.888</b>	<b>1.681</b>	<b>1.545</b>	<b>1.562</b>	<b>1.999</b>	<b>2.343</b>
<b>UT Totaal</b>	<b>253.327</b>	<b>275.619</b>	<b>279.417</b>	<b>283.921</b>	<b>285.257</b>	<b>22.292</b>	<b>9.638</b>	<b>22.032</b>	<b>23.733</b>	<b>25.144</b>

## Abbreviations list

## Annex J

### Faculties:

BMS	→	Faculty of Behavioural, Management and Social sciences
ET	→	Faculty of Engineering Technology
EWI / EEMCS	→	Faculty of Electrical Engineering, Mathematics and Computer Science
ITC	→	Faculty of Geo-Information Science and Earth Observation
Pre-U (TA)	→	Pre University program (previously: Twente Academy)
TNW	→	Faculty of Science and Technology
UCT / ATLAS	→	University College Twente / Ba programme Academy of Technology and Liberal Arts & Sciences

### Institutes:

IDS (previously: CTIT)	→	Digital Society Institute
MESA+	→	Micro Electronics, Materials engineering, Sensors & Actuators, Institute for Nanotechnology
Techmed (previously: Mira)	→	Technical Medical Centre

### Service departments:

AZ	→	General Affairs
CES	→	Centre for Educational Support
CFM	→	Campus & Facility Management
CvB/EB	→	Executive board
FIN	→	Finance
HR	→	Human Resources
LISA	→	Library, ICT-Services & Archive
M&C	→	Marketing and Communications
SU	→	Student Union
SP	→	Strategy & Policy

### Central Budgets:

CE	→	Central Equalization budget UT
CHRM	→	Central HR budgets
CSB	→	Central Strategic Budget
CSL	→	Central Subsidies and memberships
CUTE	→	Central UT-unit (contains CHRM and CE)
(T)CB	→	(Temporary) Central budget

### Consultative bodies:

Executive Board-D	→	Executive Board and Deans
FB	→	Faculty Board
SB	→	Strategisch Beraad / Strategic Council
UC	→	University Council
UCB	→	Universitaire Commissie Bedrijfsvoering / University Operations Committee
UCO	→	Universitaire Commissie Onderwijs / University Education Committee

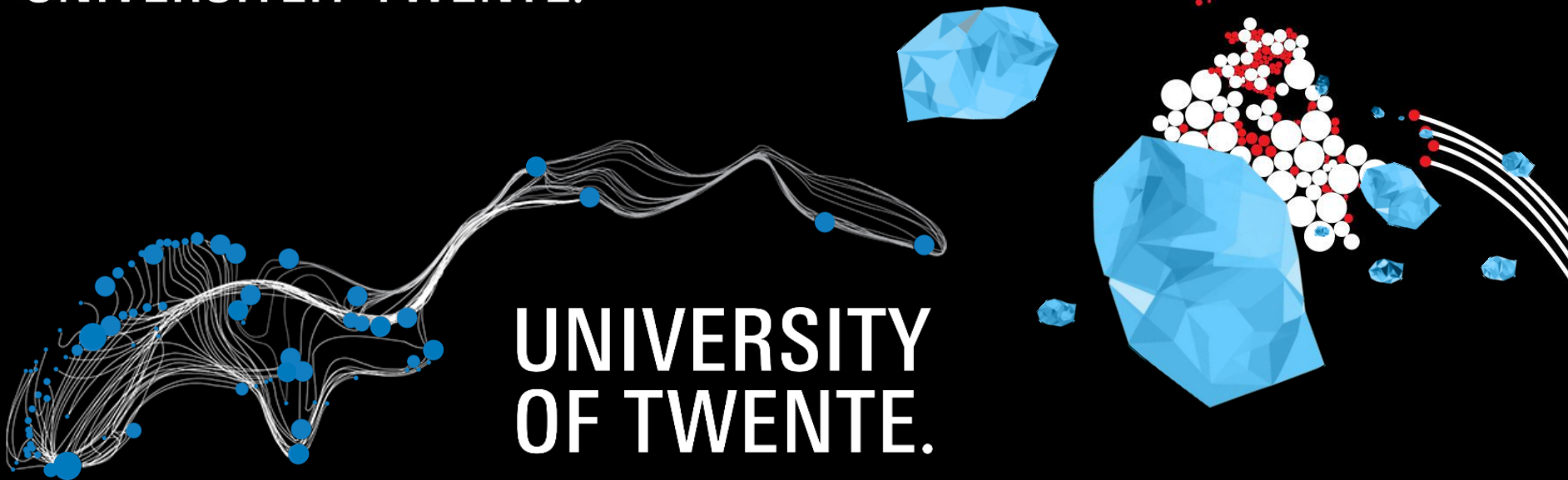
### Miscellaneous:

Ba	→	Bachelor
BDT	→	Business Development Team
BI	→	Business Intelligence
BSc	→	Bachelor of Science
CCTO	→	Committee that certifies PDEng studies
CFO	→	Chief Financial Officer
COV	→	Central Education Facilities

CRM	→	Customer Relationship Management
EC	→	European Credit
ECIU	→	The European Consortium of Innovative Universities
(non) EER	→	(non) European Economic Area
EU	→	European Union
EZ	→	Ministry of Economic Affairs and Climate Policy
FFNT	→	Female Faculty Network Twente
FPC	→	Fraunhofer Center
GRC	→	Governance, Risk- and Compliance
HR(M)	→	Human Resources (Management)
HRS4R	→	Human Resources Strategy for Researchers
HTHT	→	High Tech Human Touch
HTT	→	Holding Technopolis Twente
ICT	→	Information and Communication Technology
INVL	→	Innovation Lab
IT	→	Information Technology
ITK	→	Institutional Audit on Quality of Education
IVH	→	Integrale Verantwoording Huisvesting
I-strategy	→	Informatization strategy
KPI	→	Key Performance Indicators
LTSH	→	Long-term Strategic Housing Plan
Ma	→	Master
MARAP	→	Management reporting
ME@VU	→	Joint bachelor course Mechanical Engineering with the VU in Amsterdam
MPC	→	Max Planck Center
MSc	→	Master of Science
NAE	→	National Alumni Survey
NCA	→	Netherlands Court of Audit
NSE	→	National Student Survey
NVAO	→	Accreditation Organisation for The Netherlands and Flanders
NWA	→	Dutch National Research Agenda
NWO	→	Dutch Organization for Scientific research
(Ministry of) OCW	→	Ministry of Education, Culture and Science
ODA	→	Official Development Assistance
OW	→	Education
OZ	→	Research
O&O budget	→	One of the variable research budgets
PDCA	→	Plan, Do, Check, Act
PDEng	→	Professional Doctor of Engineering
PhD	→	Doctor of Philosophy
PPST	→	Personnel System
P&C	→	Planning and Control
RT (codes)	→	Room type (codes)
SBD	→	Strategic Business Development
SDGs	→	Sustainable Development Goals
SPP	→	Strategic Personnel Planning
STOA	→	Science and Technology Options Assessment
SURF	→	Collaborative organisation for ICT in Dutch education and research
TEM/TOM	→	Twente Education Model
TELT	→	Technology Enhanced Learning & Teaching
TGS	→	Twente Graduate School
TPRC	→	ThermoPlastic composites Research Center
TTF	→	Twente Technology Fund
UN	→	United Nations
UT	→	University of Twente
VSNU	→	Association of universities in the Netherlands

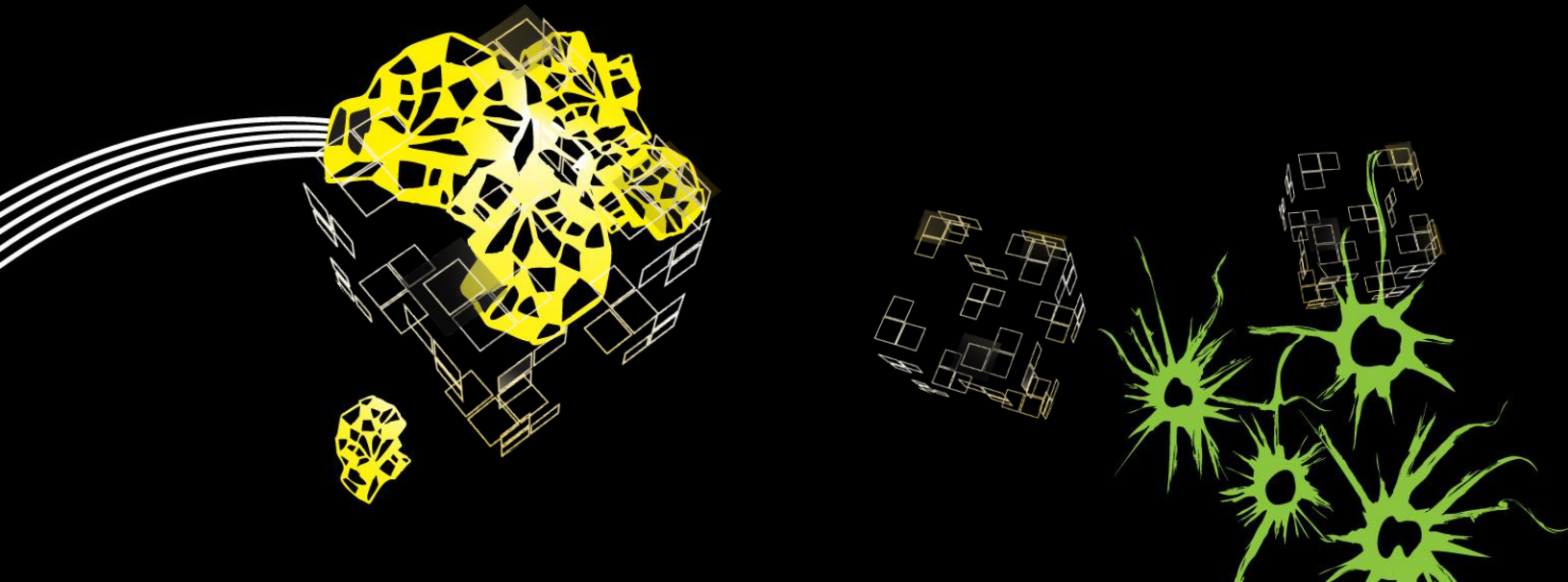
VU	→	Vrije Universiteit Amsterdam
WSV	→	Wet Studievoorschot (also see Dutch terms)
4TU	→	Federation of four technical universities (TU Delft, TU/e, UT and WU)
<u>Dutch terms:</u>		
Bekostigingsfoto	→	Presents OCW's estimate of the (government) funded student enrolment and degrees
Referentieraming	→	Presents OCW's estimate of the development of the number of students
Regiodeal	→	Partnership between central government and the region to tackle challenges in the region
Transitievergoeding	→	Financial compensation in case of dismissal
Wet Studievoorschot	→	Legislation on a reform of student finance in higher education
1e geldstroom	→	Government funding and tuition fees
2e geldstroom	→	NWO and KNAW grants

UNIVERSITEIT TWENTE.



# UNIVERSITY OF TWENTE.

Spring Memorandum 2020-2023





# WHATS NEW?

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- Core values remain: *socially committed, synergy-driven, entrepreneurial and internationally-oriented.*
- New strategy, Shaping 2030. The themes and priorities of the previous Spring Memorandum are still relevant and will be incorporated in the process of Shaping 2030. Additions or new paragraphs are:
  - Quality agreements
  - Our vision on research reassessed
  - Sectorplans Engineering and Beta
  - ECIU University
  - Increasing diversification
  - Impact on and contribution of service and support processes





# POLICY AGENDA 2020 – 2023

## KEY PRINCIPLES

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- The UT is a modern research university
- The UT encourages an entrepreneurial attitude
- Our education model is based upon small scale education;
- Our student population contains a balanced mix in diversity
- Our education is top class and connected
- The UT wants to consolidate or increase our fair share in both available educational and research budgets.
- Strategic capacity planning; attract and preserve talent
- Increase cooperation with region and companies

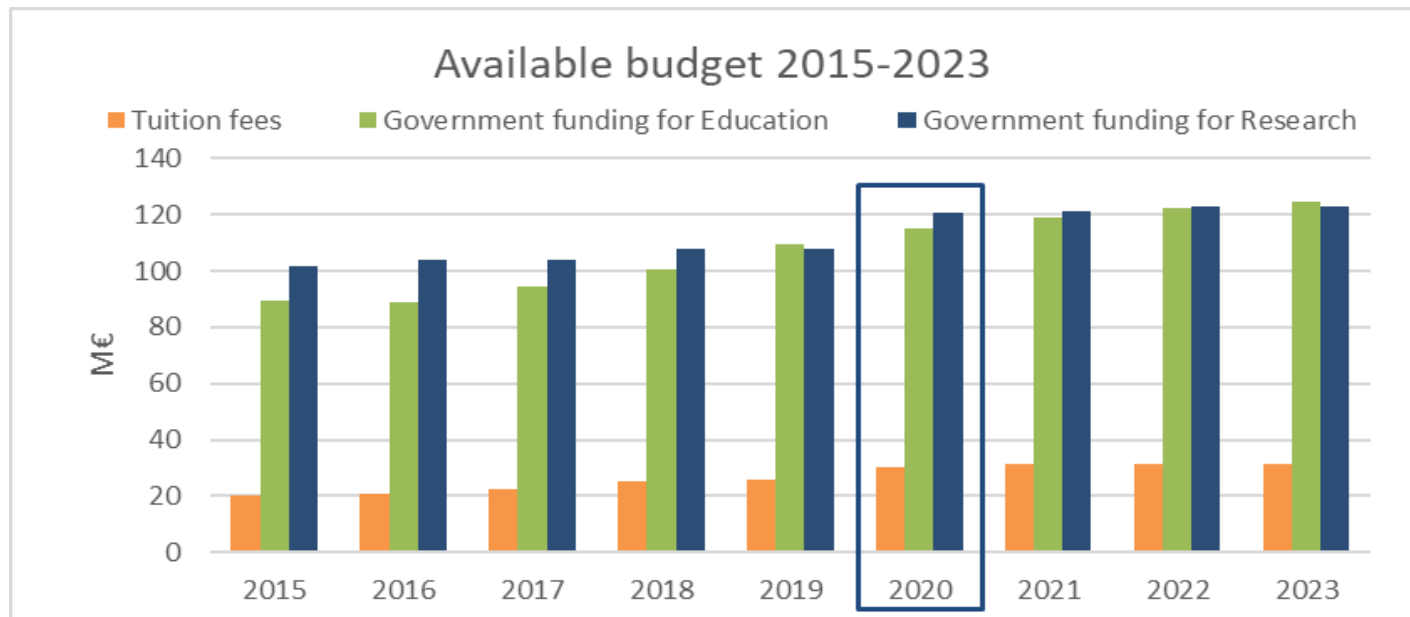


# UNCERTAINTIES

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Risk description	Amount in M€	risk	weighing	Risk in €
Wage- price indexation 2019	M€ 4.5	Medium	50%	M€ 2.3
Wage- price indexation 2020	M€ 4.9	Medium	50%	M€ 2.5
Referentieraming 2019	M€ 2.6	Medium	50%	M€ 1.3
Referentieraming 2020	M€ 1.7	Medium	50%	M€ 0.8
Sector plans*	M€ 8.9	Low	10%	M€ 0.9
Economizing target OCW	M€ 2.1	Medium	50%	M€ 1.0
<b>Weighed risk potential losses</b>				<b>M€ 8.8</b>

# AVAILABLE 1e GELDSTROOM BUDGET PERSPECTIVE



- Government funding for education shows an increase in 2020. This is caused by a lower number of degrees and a expected higher government funding per student.
- Budget tuition fees have increased because of growth in number of students and higher tuition fees.
- Government funding for research show an increase in 2020. This is mainly caused by Government funding for the Sectorplans and wage- and price compensations.

# GOVERNMENT FUNDING EDUCATION

Analysis estimate government funding 2020-2023 vs 2019-2022	2020	2021	2022
<b>Education:</b>			
Government funding on Education 2019-2022	108,4	112,1	114,7
Government funding on Education 2020-2023	115,0	118,7	121,4
<i>difference</i>	6,5	6,5	6,7
growth in student numbers	2,8	2,8	2,9
decline in number of degrees	-0,3	-0,3	-0,3
Wage-price indexation 2020 (2.5%)	2,4	2,4	2,4
"Referentieraming 2020"	1,7	1,7	1,7
<b><i>total difference on education funding</i></b>	<b>6,5</b>	<b>6,5</b>	<b>6,7</b>

- Expected higher budget per student/degree  
2019: € 4,878  
2020: € 5,017

# GOVERNMENT FUNDING

## WSV BUDGET PER FACULTY (indicative)

### *WSV budget*

(amounts in k€)

unit	2018	2019	2020	2021	2022	2023
ET	462	448	529	915	1.141	1.187
EWI	393	391	515	827	1.038	1.096
TNW	588	539	630	1.080	1.349	1.430
BMS	694	659	787	1.350	1.669	1.749
ITC	0	17	17	27	35	36
ITC-UCT	0	28	36	69	97	133
CUTE	709	506	610	1.036	1.291	1.359
<b>total</b>	<b>2.846</b>	<b>2.588</b>	<b>3.124</b>	<b>5.304</b>	<b>6.620</b>	<b>6.990</b>

# GOVERNMENT FUNDING RESEARCH

Research:	2020	2021	2022
Government funding on Research 2019-2022	108,7	108,5	109,5
Government funding on Research 2020-2023	121,0	121,3	122,8
<i>difference</i>	12,3	12,8	13,4
new budget "Sectorplannen 2019-2025"	8,9	8,9	8,9
Wage-price indexation 2020 (2.5%)	2,5	2,5	2,5
decline in number of degrees	-0,4	-0,4	-0,4
number/price of promotions and Pdeng certificates	1,4	1,8	2,4
<b><i>total difference on research funding</i></b>	<b>12,4</b>	<b>12,8</b>	<b>13,4</b>

- Higher price per PhD because of lower National numbers of PhD's  
2019: € 72,194  
2020: € 81,694
- Slightly higher numbers of PhD and PDEng degrees
- Sectorplans 2019-2025

# SECTOR PLANS 2019-2024

Sector plans 2019-2024	ET	EWI	TNW	total annual budget	fte
requested annual budget Mechanical engineering	€ 2.100.000			€ 2.100.000	14,0
requested annual budget Electrical engineering		€ 1.430.000		€ 1.430.000	9,0
requested annual budget Civil engineering	€ 907.500			€ 907.500	8,0
requested annual budget Computer science		€ 1.080.000		€ 1.080.000	8,0
requested annual budget Mathematics		€ 756.000		€ 756.000	6,2
requested annual budget Physics			€ 1.285.000	€ 1.285.000	8,0
requested annual budget Chemistry			€ 1.305.000	€ 1.305.000	7,0
<b>subtotal requested budget</b>	<b>€ 3.007.500</b>	<b>€ 3.266.000</b>	<b>€ 2.590.000</b>	<b>€ 8.863.500</b>	<b>60,2</b>

*NB: these are the requested budgets; in May 2019 the actual budgets will be allocated*



# TUITION FEES

## BUDGET

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Increase tuition fees M€ 4.4 compared to 2019

As a result of increase institutional tariffs



# IMPROVEMENT BUDGETING METHOD

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## **WHY?**

To increase the quality of the multiannual estimations of registered EER and Non-EER students and the corresponding government funding and tuition fees. These insights should support the Shaping 2030 process.

## **HOW?**

Develop a coherent database. In this database registered EER / Non-EER students and realized degrees are predicted, based on a combination of

- (i) historical intake and performance data and
- (ii) intake predictions by the faculties for the coming years.

This database ensures the alignment of multiannual target figures for student numbers in the Annual plans of the faculties with the budgeted “1e geldstroom” income, at faculty level as well as at UT level.

## **WHEN?**

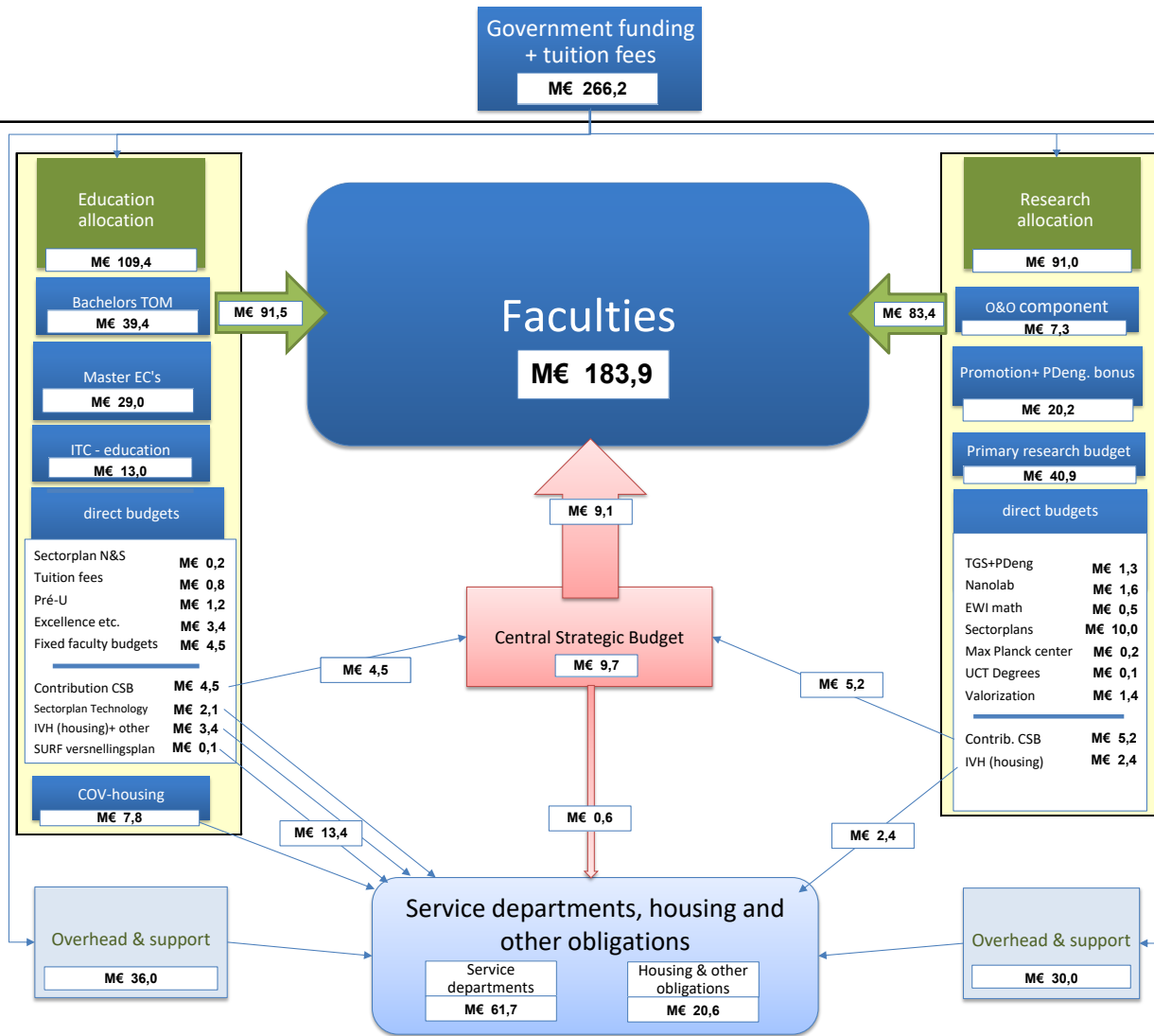
Finalize new budgeting method by the end of June.

The OW budgets Government funding and tuition fees are temporary and will be replaced by the adjusted budgets 2020-2023.

The faculties will base their budgets on the adjusted figures.

# UT ALLOCATION MODEL

2020





# ALLOCATION PER FACULTY

## 2020 compared to 2019

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### **ET (plus M€ 5.0)**

For ET we see a significant rise in student dependant funding (M€ 2.0), caused by the growth of student numbers in recent years. The number of bachelor degrees shows a slight decrease, the master degrees a slight growth.

For research, we see a new (provisional) budget of M€ 3 for the sector plans. The PhD- bonuses show a decrease (- M€ 0.2) because of fewer promotions (12) than planned for the year 2018. These lower numbers have a negative financial effect for the years 2020-2023. The PDeng bonuses continue to grow (M€ 0.3). Because of the indexation of the UT research budget, the primary research budget for ET grows by M€ 0.4. The budget for ET from CSB decreases (-M€ 0.4) because the temporary compensation for the unwanted effects of three-year mediation of the PDeng bonuses is scaled down in 2020. This is no change compared to the multi-annual estimate for 2020 in the Budget 2019.

### **EWI (plus M€ 6,6)**

For EWI we see a significant rise in student dependant funding (M€ 2.9), mainly caused by the growth of student numbers in recent years. The number of bachelor (M€ 1.7) and master (M€ 1.2) student and degrees show a growth.

For research, we see a new (provisional) budget of M€ 3.3 for the sector plans. Because of the indexation of the UT research budget, the primary research budget for EWI grows by M€ 0.2. Due to the rise in student dependant funding, we see also a rise of M€ 0.2 in the O&O-component.



# ALLOCATION PER UNIT

## 2020 compared to 2019

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### **TNW (plus M€ 4.8)**

For TNW we see a significant rise in student dependant funding (M€ 1.8), mainly caused by the growth of student numbers in recent years. The number of bachelor (M€ 0.9) and master (M€ 0.6) degrees show a slight growth. Because of the indexation of the Fixed budget for clinical internships grows by M€ 0.3.

For research, we see a new (provisional) budget of M€ 2.6 for the sector plans. Because of the indexation of the UT research budget, the primary research budget for TNW grows by M€ 0.4.

### **BMS (plus M€ 2.6)**

For BMS we see a rise in student dependant funding (M€ 2.0), mainly caused by the growth of student numbers in recent years. The number of bachelor (M€ 1.1) and master (M€ 0.8) students and degrees show a growth. The PhD-bonuses show an increase (M€ 0.6) because of an increase in promotions and has a positive financial effect for the years 2020-2023. Because of the indexation of the UT research budget, the primary research budget for BMS grows by M€ 0.1.

### **ITC (plus M€1.0)**

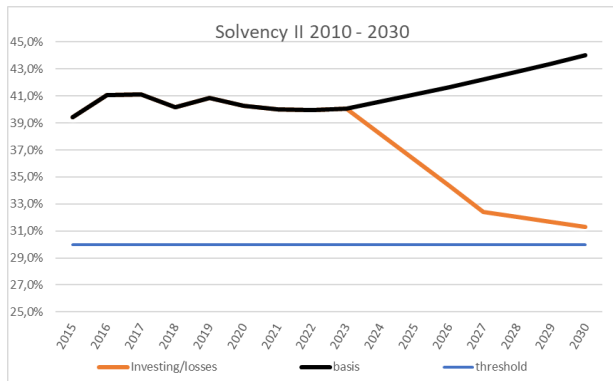
For ITC we see a relatively modest rise in the allocated education and research budget, mainly due to wage and price indexation of the ITC government funding (plus M€ 0,6). Additionally, the PhD-budget increases with M€ 0,4 in accordance with the 3,5 extra funded Ph.D.'s.

# CENTRAL STRATEGIC BUDGET

(amounts in k€)

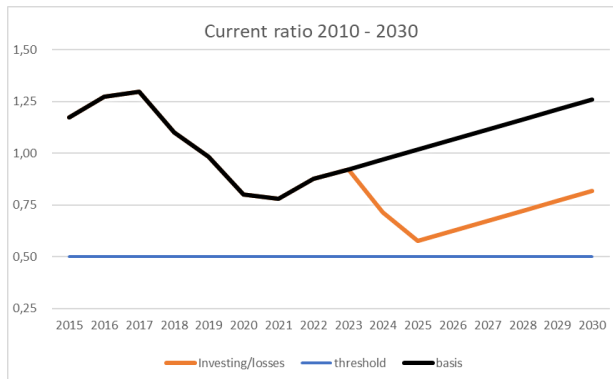
<b>Δ CSB Spring Memorandum 2020 - 2023 &lt; = &gt; Budget 2019 - 2022</b>	2019	2020	2021	2022	2023
<b>Mutation available budget:</b>					
Available budget CSB in Budget 2019 - 2022	9.334	10.732	10.738	10.743	10.743
Budgetshift allocation model Research; Designlab		-513	-513	-513	-513
Budgetshift allocation model Research; TPRC		-100	-100	-100	-100
Budgetshift Profileringsmiddelen OZ		-397	-397	-397	-397
Academic development (OW+O&O)		19	13	12	15
Available budget in Spring Memorandum 2020 - 2023	9.334	9.741	9.741	9.745	9.748
<b>A. Δ available budget:</b>	<b>0</b>	<b>-991</b>	<b>-997</b>	<b>-998</b>	<b>-995</b>
<b>B. Budgetmargin CSB in Budget 2019 - 2022</b>					
	<b>-765</b>	<b>825</b>	<b>2.414</b>	<b>3.019</b>	<b>3.019</b>
<b>Mutation budgets/reservations in Spring Memorandum 2020 - 2023:</b>					
Budgetshift allocation model Research; Designlab		-513	-513	-513	-513
Budgetshift allocation model Research; TPRC		-100	-100	-100	-100
Indexation budgets Student Grants		20	20	20	20
Reservation Roessingh R&D				200	200
Reservation Coöperation MST/ZGT, Pion. in Healthcare (2016-2020)			200	200	200
Reservation Coöperation Radboud TURBO-program (2018-2020)			80	80	80
Reservation COFUND - InnoSkills (2020-2023)		-65	-143	-143	-143
Reservation Pilot Ma-insert Designlab (sept 2019- sept 2022, 3 x k€ 54)		54	54	36	0
<b>Terminated budgets based on budget duration:</b>					
Depreciation equipment ET (2018-2022 of total 10 years)					-175
Zwaartekracht Organ on chip, CSB-matching (2018-2022)					-120
Photonics, MESA+ (2019-2022)					-275
Creating Intelligent Manufacturing Systems (CIMS), DSI (2019-2022)					-275
Reservation COFUND - Bits & Brains (2019-2022)					-138
<b>C. Total new budgets and reservations Concept-budget 2019-2022</b>		<b>-604</b>	<b>-402</b>	<b>-220</b>	<b>-1.239</b>
<b>Budgetmargin in Spring Memorandum (A+B-C)</b>	<b>-765</b>	<b>438</b>	<b>1.819</b>	<b>2.241</b>	<b>3.263</b>

# INVESTMENTS SHAPING 2030



The graph on the left show how the ratios develop if we invest on housing and equipment:

Solvency: If we invest with our own funds (current assets) there is little effect on our solvency (=black line). A significant investment with external funding (M€ 100) (yellow line) will have an effect on our solvency, but will keep us above the 30% threshold.



Current ratio: Investments with own funds have little impact on our solvency and even after the investments in LTSH (M€ 115) and Nanolab (M€ 15,5). The UT has the ability to additionally invest of approximately M€ 70 (yellow line) before reaching the bottom current ratio boundary.

Conclusion: Based on our solvency and current ratio the UT has possibilities to invest in housing and infrastructure. There is however a major restriction for any investment with external money, which is the ability to pay the extra costs of depreciation plus interest and the running costs of these new infrastructures. Any actual investment decision should be based upon a solid business case in which all elements will have to be scrutinized in great detail.

# PLANNING Spring Memorandum 2020-2023

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## *Spring Memorandum 2020 -2023*

- 29.5.2019           UR-cie/FPB   (discussion)
- 12.6.2019           UR            (approval/advice)
- 12.6.2019           RvT           (approval)
- 20.6.2019           Sending of the final note Spring Memorandum 2020-2023  
to all units, RvT and UR (incl. format annual plan 2020)

## *Annual plan & Multi-annual budget 2020-2023*

- 13.06.2019           Format annual plan (as appendix final Spring Memorandum)