

University College Twente

Business Case 2016: Operationalization and Added Value

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Summary: the Case for the College

This document presents a new business case for University College Twente (UCT), which houses the honours-level BSc programme Technology and Liberal Arts & Sciences (ATLAS). The bachelor programme comes full cycle this year, as its first students are about to graduate. The original business case for starting a University College at the UT is incompatible with the current realization in terms of educational concept, organization and growth.

The new business case incorporates lessons learned and highlights new opportunities. It is based on a detailed modeling of the didactical approach of ATLAS as well as the necessary framework for developing a UC curriculum and community in the middle of the UT. The added value and revenues are described, for the UCT as well as the UT as a whole.

In addition, opportunities for synergy with other UT initiatives are presented, starting with the Honours programmes. The natural overlap of ATLAS and Honours provides the foundation for supporting and fostering an extended community for excellence within the UT.

Motivation: Building an organization to match the vision

In its first years, UCT staff focused on developing a new programme, based on a radical vision on learning as well as on what it means to be a 'New Engineer'. This was never a drawing board exercise. The programme was developed largely on the fly, in continuous response to the behavior and demands of the first student cohorts. It is a way of working not unfamiliar to the engineer. In a sense, the team was prototyping.

UCT is now entering a new stage in its development, where the basic concept is established, and the focus can shift to meeting operational standards of quality and efficiency.

UCT will only be able to thrive if we get this straight. It is not just a question of marketing and branding but also of ensuring the operational excellence needed to deliver the promise. The new Business Case incorporates necessary changes in the structure, organization and facilities to achieve success.

Box 1. What's in a name?

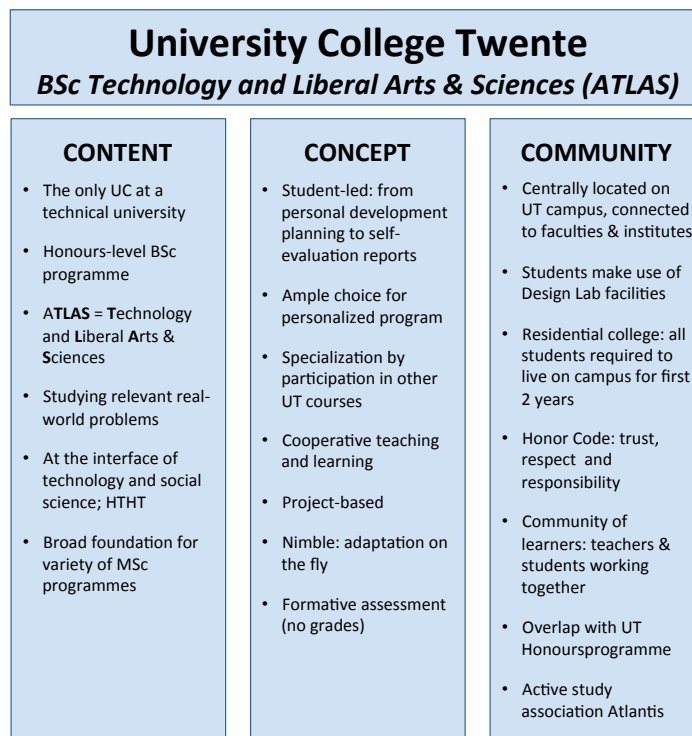
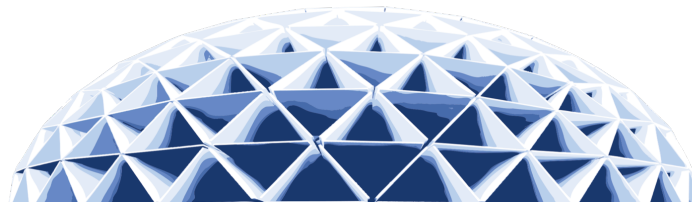
ATLAS originally stood for **A**cademy of **T**echnology and **L**iberal **A**rts & **S**ciences, and was the official name of the University College from 2012 – 2014. However, the name created confusion. Prospective students couldn't find it. Media coverage of Dutch University Colleges overlooked it. And the UT already had an Academy, with a very different target audience.

At the end of 2014, we decided to rebrand as **University College Twente (UCT)**, stressing the type of institution rather than the name of BSc degree programme and thereby aligning with the common practice of other University Colleges in the Netherlands. The name Academy was dropped, yet ATLAS remains the acronym for the degree programme Technology and Liberal Arts & Sciences. The A is now (silently) interpreted as simply awesome.



The Business Case: Characteristics and finances & organization

At the core of this new business case is a clear understanding of the University College Twente: what it is, where it is heading and what is needed to get there. The key characteristics of the College are captured in a detailed educational and organizational model (see accompanying Excel file) that forms the basis for the financial plan.



The UCT has strong foundation within the UT's Vision 2020: synergy driven, internationally oriented, and committed to socio-technical challenges. The pillars of the programme are the three C's—Content, Concept and Community—that describe the core values of the College and make it unique within the UT, the NL UC network, and the international community.

Characteristics of the College

- UCT has developed on the basis of a radical vision on learning (the **concept**) and the need for a new type of engineering education (**content**), under the premise that a strong **community** of learners is essential.
- The 3 pillars of content, concept and community embody the essence of UCT. While they appear as distinct pillars, seamless integration is the goal.
- The pillars together create not so much a curriculum or programme, but a distinctive learning and teaching experience. Each pillar is equally essential (in contrast to most other BSc programmes in which content dominates).

- As a UC, the UCT draws upon characteristics of all UC's: small scale and intensive, allowing for selective admission and a substantially higher tuition fee. This further enables motivation of students and allows for the right attitude needed for cooperative learning.
- Developing a programme based equally on these 3 pillars necessitates different didactical and educational choices that require special attention in both finance and organization:
 - i. **Admission:**
different from other programmes and universities; students are in the lead of their own learning; self-directed and cooperative learning has high demands and high gains; student readiness depends on more than university entry degree. Selective admission is needed to ensure that the students and programme not only match, but mutually enforce each other. Selective admission for BSc programmes is relatively new for UT.
 - ii. **Curriculum:**
educating the new engineer, new perspectives on curriculum content and development in a Liberal Arts & Sciences context. Basing curriculum development on individual learning goals rather than subject or degree requirements. Allows for students to personalize their learning not only in subject matter and combination of subjects but also skills and assessment. The ATLAS curriculum is thus more of a framework to help and guide students than a prescribed set of courses and educational experiences. Setting up a College in the middle of the UT ensures the accessibility to great variety of disciplines and research context. Yet the concept of "curriculum as framework" requires a different approach to learning and teaching.
 - iii. **Mentoring & guidance:**
creating community requires engaged and committed people, an atmosphere of trust and respect, teachers who really have insight in the student's development. All UCT students have a personal academic mentor whom they meet on a regular basis. An Honor Code promotes the values of academic integrity and trust.
 - iv. **Assessment:**
starts with the learning goals of the individual student (personal development plan) and ends with assessment of what the individual student has learned. Not standardized. Focused on the student's understanding of what they have learned.
 - v. **Learning and living environment (setting):**
people create the UCT community yet the College environment plays an essential role in realizing/fostering this. Drawing expertise from the entire spectrum of the UT offerings, the location of the UCT in the Citadel, the C in the middle of the UT, at the heart of the O&O plein, is essential for building community and integration within the UT. UCT is also a residential College. All 1st and 2nd year students live together on the UT campus. This is a crucial requirement for realizing the intensity of the programme and the sense of community amongst students.

Financial matters

- This new business case doesn't start from scratch, but is based on experience in running the programme for the past 3 years. In addition, it reflects the development experiences of other University Colleges as well a look at other relatively new BSc programmes at the UT.
- The development of UCT started with a radical vision on learning, enabling the education of a new kind of engineer. This vision materializes in the key characteristics of the teaching and learning concepts of UCT: assessment, curriculum, mentoring & guidance and setting.
- As a University College, UCT has acquired the NVAO quality label of "small scale and intensive" learning environment. Although this label refers to the learning experience of the students, it carries strong financial implications: being granted this label allows UCT to select students and to charge a substantial higher tuition fee. The College must account that this is money well spent by providing a high-quality learning experience.
- The requirements for the financial model follow from the choice of desired outcomes:
 - The model must be realistic – in terms of costs and benefits;
 - It needs to be flexible, to allow for moderations in view of strategic choices, wishes and needs of the College; and
 - It has to account for the learning philosophy.
- The model meets these requirements as it is firmly rooted in the educational reality at the College. It takes the learning philosophy and environment as its point of departure and is flexible that is the teaching hours relate to the number of students
- In addition, to underscore the added value of UCT for the UT, the model aims to show how money spent on the UCT can also "flow back" to different faculties. This flow will of course be more substantial as student numbers grow.
- Input for the financial model (see accompanying Excel file) is thus based on:
 - Allocating hours per semester (realistic) for all characteristics of the College teaching and learning experience
 - Aligning as many hours/costs as possible to the number of students (this is essential for a programme that is focused on personal development)
 - Spending money on the items that create most effect for the quality of the learning experience: e.g. assessment and mentoring and guidance
 - Using a curriculum and semester structure that aligns with the university where beneficial in quality and money (eg in academic calendar to make exchange of teaching and lectures possible) and taking our own route where needed and of added value (for example in time of the graduation).
 - Using realistic growth, retention, drop-out and graduation estimates.

- Considerations that have an effect on the running costs of the programme:
 - Make use of the positioning in a greater research university UT: personalization and breadth in the student's programme can be realized easily by making optimal use of the expertise available in the UT. UCT can hire staff from all over the university to cover all disciplines.

Managing risks

- This business case allows for a realistic financial and organizational plan to realize goals and characteristics of the College.
- Current development phase of the College is growth; it is beyond the introductory and exploratory periods yet far from mature.
- The educational concept is established, now the corresponding administrative and support organization needs to follow.
- This phase runs the risk of being too optimistic (potential for oversight) or too pessimistic (stagnation) – with a focus on too many or ineffective details.
- Below is an overview of conceivable risks, their probability, consequences and an assessment of possibilities for mitigation.

Risk	Probability high-med-low	Consequence	Mitigation
<i>Strategic</i>			
Number of incoming students lower than expected in business case	medium	Impact on finances / income UCT	<ul style="list-style-type: none"> - Invest in networks and in recruitment & marketing - Focus work on most effective processes and organization, e.g. warm contacts, student assistants - Use alumni as ambassadors of UCT - Continue close monitoring of overall recruitment process - Special attention for scholarships & housing
Difficulty in showing (financial) revenues of UCT for UT	medium	Decrease in commitment and support by UT community	<ul style="list-style-type: none"> - Develop clear agreements on administration and payment for 'aanschuifonderwijs' - Cooperation with honours programmes
<i>Tactical</i>			
Continuous adaptation to administrative systems UT	high	Quality assurance issues in organization with transcripts, schedules etc.	<ul style="list-style-type: none"> - Align with UT process where possible (e.g. academic calendar) - Clearly identify where this is not possible and plan alternatives
High work load for (teaching) staff	medium	Some teachers choose for research and education at 'own' faculty	<ul style="list-style-type: none"> - Improve planning and organization within UCT to allow lecturers to plan and balance workload - Offering opportunities in teaching, in line with UT ambitions: e.g. SKO, pilot EWI
Unclarity about positioning the College within the UT	medium	Continuously defining and redefining of the position in all processes; risk of being forgotten	<ul style="list-style-type: none"> - Find a suitable organizational solution which is supported by board of deans. - Clearly identify position and responsibilities in year cycles

Risk	Probability high-med-low	Consequence	Mitigation
<i>Operational</i>			
Timely development of operational and organizational structure executing the programme	high	Frustration of students & teachers	- Start a project in collaboration with CES for targeting problems and finding solutions
Residential setting, costs and quality of housing	medium	Admitted students decide not to come to UCT	- Facilitate appropriate and sufficient housing for UCT

Recognizing revenues and extended impact

University College Twente is well embedded in the middle of the UT, both literally and figuratively. Unlike most other UC's, which choose for autonomy and a remote location from their host University, the UCT stands central amidst the educational and research facilities and plays an important role in connecting the five UT faculties.

The benefits of the UCT for the UT that justify the initial investment and ongoing commitment of time, money and resources are:

- **strategic**—an embodiment of HTHT, it aligns with Vision 2020, enhances the reputation of the UT, and is necessary for maintaining a competitive position in Dutch higher education
- **innovative**—an educational sandbox for experimenting with new concepts for teaching and learning; the ATLAS programme is student-led, project-based, cooperative, reflective & with formative (no-grade) assessment
- **operational**—in developing new strategies and tools for recruitment and selection, assessment, rewarding teaching excellence, and internationalization

As of 2016, UCT will work closely alongside the Honours programmes. This development stems from the natural overlap of programme aims, and is advantageous due to the greater size of the resulting group of students and teachers, creating more visibility and focus on honours and excellence at the UT. In addition, it serves an important role in achieving the UT targets set in the prestatieafspraken with OCW.

Box 2 Prestatieafspraken OCW

As part of the prestatieafspraken with OCW, the UT committed to having 6% of the total bachelor student population enrolled in honours education in 2016. That target has been met, but just barely. The percentage is scheduled to grow to 10% in 2020.

The UCT bachelor programme ATLAS currently accounts for about 25% of the total population of UT honours students.

In the future, further opportunities for synergy could make the College the natural setting for hosting educational offerings beyond the standard degree programmes. While the added value can be difficult to quantify, opportunities are easy to spot:

- Individualized pathways: Free-choice BSc and MSc degrees
- HTHT modules (e.g. Solar Team Twente)
- Internationalization efforts
- Teaching career pathways
- Design Lab educational resources
- Twente Academy
- Talent development, i.e. entrepreneurship

In some cases, such as with the collaboration of the Honours programmes and the College, parts of the education and organization can be shared, allowing the possibility of direct financial gains. In others, the revenues and rewards take on other forms, such as enhancing the reputation of the UT and building community between students and teachers.

Appendix 1 UCT and the UT P&C cycle

This is a very short summary of the alignment of the UCT PDCA Cycle from the degree programme perspective to the UT P&C cycle. The UCT PDCA is currently being developed.

September - November: (emphasis on operations and tactical planning)

- a. Starting up new academic year: education and recruitment
- b. Evaluation UCT last academic year and preparing year plan UCT next year
- c. Preparing budget next year

December – January: (emphasis on long term planning)

- a. Gathering new ideas, looking at the future, coming years
- b. Rethinking and adjusting strategic plan UCT

February – March: (emphasis on long term planning)

- a. Evaluation first semester
- b. Contribution to annual report UT
- c. Contribution to multi-annual plan UT

April – May: (emphasis on tactical planning)

- a. Planning educational programme and recruiting staff next academic year

June – August: (emphasis on operations coming year)

- a. Intensive process enrollment new incoming students
- b. Evaluation second semester
- c. Evaluation recruitment process and preparation recruitment next year
- d. Preparing operations coming academic year