

# TOP TECHNOLOGY TWENTE

## THE UNIVERSITY OF TWENTE IMPULSE PROGRAM

### 1. OBJECTIVE

The UT is committed to expanding and enhancing its partnership with the business community in the coming years. To that end, the UT is investing in scientific research programs with strong, concrete industrial interest that intersect the areas of expertise in which the university excels. These programs comprise a number of related research projects structured as doctoral research positions resulting in a PhD.

The instrument that will define the research programs is "Top Technology Twente: The UT Impulse Program". The total targeted investment of €40M will support 100 doctoral students: €20M from the university's Executive Board and institutional and departmental resources, and €20M from private parties. The funds will be invested in phases.

This document describes the criteria and selection process for call III, which comprises 18 PhD positions.<sup>1</sup> To aid clarity for our industrial partners, the UT will stick as closely as possible to the similar program being run by the Eindhoven University of Technology (TU/e) since 2013.

### 2. SELECTION AND AWARD

The Executive Board will select, review and award the PhD position funds using the following process:

#### Step 1: Submit proposals (deadline 20 May 2016)

The research institutes' scientific directors are invited to submit proposals -2 A4 maximum project plan and a PowerPoint sheet- covering the outline at the end of this document in the following research areas:

Research area	lead person	Institutes and faculties
advanced materials	Guus Rijnders	MESA+, MIRA, SBE
advanced manufacturing and mechatronics	Gerrit Brem	SBE, MESA+, MIRA
medical technology and devices	Albert van den Berg	MIRA, CTIT, MESA+, SBE, IGS
wireless and remote sensors	Maarten van Steen	CTIT
safety and security	Theo Toonen	IGS, CTIT

#### Step 2: Select proposals (deadline 27 June 2016)

The Executive Board will select a number of proposals. During the selection process the Board will determine whether the proposals meet the Top Technology Twente program criteria. The advisory committee strategic business development will advise the Board about the proposals. The scientific directors guarantee the scientific quality of the proposals.

The director strategic business development will present the selected proposals in September 2016 at the HTSM roadmap council<sup>2</sup> who will decide whether the proposals fit the roadmap. The board TKI HTSM has a decisive vote in granting the necessary TKI premium.

#### Step 3: Award funds (target October 2016)

The Executive Board will award funding to those proposals that, according to the board TKI HTSM, fit the HTSM topsector and thus are eligible for the TKI premium. The total funds (i.e. €307.500 per PhD position) will be made available once a contract has been signed with external partners and doctoral students have been recruited.

An advisory committee of representatives from industry (the majority) and academia has been appointed for the Top Technology Twente program. This committee will advise the Executive Board during its review of program proposals (steps 2 and 3), and will advise the team of scientific directors and the on program research and collaboration during a program's duration.

<sup>1</sup> This brings the total for phases I, II and III to 40 PhDs.

<sup>2</sup> All 17 HTSM roadmap leaders are member of this council. Roadmaps see <http://www.hollandhightech.nl/nationaal/innovatie/roadmaps>

Our intent is to award the call III positions by October 2016. If the total number of positions has not been awarded after completing the above steps, the Executive Board will issue a next invitation to submit proposals, followed by a repeat of the selection process.

### **3. CRITERIA**

Proposals will be eligible for funding if they meet all the following criteria:

- External funding: external private parties will finance the same number of doctoral positions as the UT is funding, in cash contributions that cover the total cost.
- Novel: the program must involve new research (possibly in the form of an extra work package for an already active study).
- Necessary: the doctoral positions to be funded by the UT are required in order to realize the external doctoral positions.<sup>3</sup>
- Strategic: the program is aligned with the university's strategy.
- Excellent: the research is of excellent quality.

### **4. COORDINATORS AND SUPPORT**

As soon as step 2 begins, the Executive Board will appoint a coordinator for each proposal. The coordinators are asked to manage their proposal's elaboration and the participation of the institutes and departments involved.

The UT's strategic business development program will provide guidance during proposal elaboration, aided by Kennispark Twente and UT Innovation Lab. This guidance is designed to guarantee a consistent approach to IP and other terms and conditions during negotiations with external partners. UT Innovation Lab will also indicate the type of contract that should be used.

### **5. RATES**

The UT employs uniform rates for its financial agreements. These rates are based on the doctoral student's labor costs and indirect costs. The indirect costs include such items as housing, facilities, infrastructure and corporate expenses. The total cost for a doctoral student (1 fte) is €410K for four years (the duration of a doctoral position), which is €102.5K per year or €72 per hour. The costs of instruction, materials, and the use of labs and office space are included. These figures are based on research taking place at the UT; other arrangements can be negotiated.

### **6. REPORTING**

Over the full course of the program, periodic reports will be made to the HTSM TKI; we will ask each project leader to provide the necessary input. Programs, projects and parties are asked to assist with external communication regarding program content.

### **7. INFORMATION**

For more information on "Top Technology Twente: The UT Impulse Program," please contact Marieke Hofste-Kuipers in the strategic business development program: [m.kuipers@utwente.nl](mailto:m.kuipers@utwente.nl)

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<sup>3</sup> Most projects financed by Horizon2020 (EU), the NWO and the STW do not meet this criterion, because UT doctoral positions are usually not a condition for the provision of the funding. Should UT doctoral positions be required in a special case, such projects will be individually considered to meet the external cofunding requirement.

## OUTLINE TO SUBMIT A PROPOSAL

A proposal exists of project proposal (A) and a PowerPoint sheet (B)

Both documents will be reviewed by the advisory committee strategic business development and the roadmap council TKI HTSM for the approval of the board TKI HTSM.

**(A):** As a general guideline, your proposal (2 A4 maximum) should contain the following information:

### 1. PROGRAM DETAILS

- a. name program
- b. submitters
- c. industrial partners
- d. number of PhDs
- e. total budget
- f. distinguishing research area
- g. mention the specific roadmap(s) of HTSM the proposal fits in, and indicate why

### 2. CONTENT

- a. Proposal summary, including the objective, the knowledge the project will generate, and whether it involves fundamental research, industrial research or experimental development
- b. Methodology and timetable
- c. Submitters' track records

### 3. CRITERIA

a short clarification to the criteria

- External funding
- Novel
- Necessary
- Strategic
- Excellent

**(B):** The detailed proposal comprises a PowerPoint presentation of one slide, which can also be presented to the HTSM TKI roadmap council to secure the approval of the HTSM TKI board. The format for the presentation will be sent to a submitter after sending an e-mail to [m.kuipers@utwente.nl](mailto:m.kuipers@utwente.nl). Below the example of the sheet.

**CONFIDENTIAL**

<b>6</b>	<b>Name of the project</b>	
<b>CONFIDENTIAL</b>	<b>Insert picture</b>	<b>Background:</b> Short summary of the industrial problem and challenges
		<b>Project Goal:</b> A short description of the research objectives and the project goal.
	<b>Industry partner:</b> <b>Insert logo</b>	<b>Utilization:</b> <ul style="list-style-type: none"><li>• Description of the utilisation from business perspective</li><li>• The project is related to HTSM roadmap: Insert</li><li>• Specific connection to the roadmap selected</li></ul>
	<b>Academic partner:</b> UNIVERSITY OF TWENTE.	
<b>Project size:</b> 2 PhD students		
<b>Duration:</b> 48 months		
<b>Budget:</b> 820 k€		

UNIVERSITY OF TWENTE.