

Gender equality at  
Computer Science Department from  
the Faculty of Mathematics and Computer Science  
at West University of Timisoara

Promoters:

*Dean:* Prof. Dr. Dana PETCU

*Director of Computer Science Department:* Assoc. Prof. Flavia MICOTA

*Director of PhD studies in Computer Science:* Prof. Dr. Daniela ZAHARIE

**Note:** The submission can be considered as a runner up

## 1. Description of the initiative

In January 2022 was adopted by the Senate of the West University of Timisoara THE GENDER EQUALITY PLAN OF THE WEST UNIVERSITY OF TIMISOARA”<sup>1</sup>. The main promotor is Dr. Silvia Fierăscu<sup>2</sup>, specilized on network science an former researcher at Big Data Science laboratory of the Computer Science Department. Two other authors are Andreea Radu and Corina Verdea, from the team of “SupportTM Center” organized by the Computer Science Department.

The plan establish the aim for a gender balance in all levels of staff employed, including at supervisory and management level. The target is to promote more inclusive perspectives among employees, emphasizing the importance and benefits respecting the principles of gender equality (Article 2.1).

The objectives of the Gender Equality Plan propose their approach:

- mutual respect;
- the balance between professional life and private life;
- the gender dimension in the recruitment and selection process;
- gender balance in management departments;
- equal opportunities for UVT employees regarding career advancement;
- gender balance in management departments;
- the gender dimension in research and teaching content;
- gender-based violence (structural, physical, psychological), including sexual harassment

The Gender Equality Plan includes an action plan that have take place over the period 2022-2023, the activities being divided into four stages:

- 1) An audit phase (Feb-May 2022). Elements of this stage included the collection of data disaggregated by sex and/or gender by function of the indicators (Listing 1), and an analysis of the practices for identifying inequalities of gender and their causes.
- 2) A planning stage (Jun-Jul 2022). The objectives defined in the gender mainstreaming policy and established the objectives for the Plan gender equality were validated, along with a calendar of actions and measures. This stage resulted in the realization of the action plan, where the resources (logistics, human and financial resources) were included, the schedule of activities and expected results.
- 3) An implementation stage (Sep-Dec 2022). It has materialized through the implementation of activities within the UVT, including communication and training efforts to achieve understanding and awareness the importance of gender equality and to build capacity and support for the action plan within UVT, as well as to give visibility to this process.
- 4) A monitoring and evaluation phase (ongoing). Implementation of the gender equality action plan and progress made in relative to the objectives is periodically evaluated. Continuous assessment of progress provides room for learning and feedback to enable adjustments and improvements of interventions.

### Listing 1: Relevant indicators to be measured at the university level (Article 2.3)

#### SECTION I. LEADERS AND INSTITUTIONS

- 1.1 Monocratic role by gender (rector, general director)
- 1.2 Heads of department and study programs on gender
- 1.3 The gender composition of management structures at the faculty level

<sup>1</sup> <https://www.uvt.ro/wp-content/uploads/2022/01/Anexa-2-Planul-de-Egalitate-de-Gen-al-UVT.pdf>

<sup>2</sup> <https://sites.google.com/e-uvt.ro/silviafierascu/?pli=1>

<p>1.4 Existence of gender-sensitive language and imagery policies for institutional documents and official communication</p> <p>1.5 Existence of a person/group of persons/office for gender equality with a reference in the issues of gender equality</p> <p>1.6 Existence of gender awareness training policies for committee members of selection, recruitment and management of human resources, of decision-makers and officers of public communication or other staff members</p> <p>1.7 Regular collection of gender data and publication of an annual gender report</p> <p>1.8 Existence of representation objectives for women in boards and committees</p> <p>1.9 Existence of representation targets for women applying as managers or level staff</p> <p>1.10 Existence of a Sexual Harassment/Gender Based Violence Policy/Protocol</p> <p>1.11 Equality days/events or gender equality awareness efforts through materials, conferences, briefings, etc. addressed to a wider audience</p> <p>1.12 Existence of a gender equality or similar plan other than an affirmative action plan</p> <p>1.13 Gender equality is mentioned in official documents</p> <p>1.14 Support materials such as guides, manuals (generic or specific) available with respect to gender equality issues</p> <p>1.15 Resource directory: database of gender experts, lists of relevant reports, references extensive bibliography</p> <p><b>SECTION II. RECRUITMENT AND CAREER DEVELOPMENT FOR RESEARCHERS AND TEACHING STAFF</b></p> <p>2.1 Existence of mentoring programs</p> <p>2.2 Existing gender representation goals in selection committees</p> <p>2.3 Existence of a gender-balanced recruitment and/or careers policy for scientific staff (eg career schemes; leadership courses etc.)</p> <p>2.4 Gender distribution among teaching staff at different qualification levels (doctoral students, researchers, different levels of professors). The percentage of women in the total teaching staff.</p> <p>2.5 Existence of a gender-balanced staff recruitment and/or careers policy administrative (eg career schemes; leadership courses, etc.)</p> <p>2.6 Analyzes of pay differences for each professional level within the organization</p> <p>2.7 Average years at the same professional level by gender</p> <p>2.8 Pass rate by gender, field and level</p> <p><b>SECTION III. BALANCE BETWEEN PERSONAL AND PROFESSIONAL LIFE</b></p> <p>3.1 Existing employee work-life balance policies/services/measures</p> <p>3.2 Percentage of technical and administrative staff on leave for growth of the child, broken down by gender</p> <p>3.3 Percentage of teaching and research staff on leave for growth of the child, broken down by gender.</p> <p>3.4 Policies/services/measures related to COVID-19 aimed at supporting the categories most sensitive to the effects of the pandemic crisis (e.g. parents with children under 14, people with disabilities, etc.)</p> <p>3.5 Expenses for enrolling employees' children in nurseries</p> <p>3.6 Bonus Expenses for Employees' Children</p> <p>3.7 Legal arrangements and internal labor flexibility agreements</p> <p>3.8 Adapting meeting times to the needs of employees with childcare responsibilities (at the level of department or organization level)</p> <p><b>SECTION IV. RESEARCH ACTIVITY</b></p> <p>4.1 The number of doctoral theses defended annually, broken down by gender and research fields</p> <p>4.2 The number of gender-related grants awarded annually, by research field</p> <p>4.3 Number of annual scientific publications, broken down by genre and research fields</p> <p>4.4 Number of enabling courses for career progression, broken down by gender and research areas</p> <p>4.5 Number of research centers in gender and women's studies</p> <p>4.6 The number of research funding applicants and beneficiaries, broken down by gender, research fields and owner staff</p> <p>4.7 International Funding Success Rate Differences</p> <p>4.8 Differences in funding success rate across countries</p> <p><b>SECTION V. TEACHING ACTIVITY AND STUDENTS</b></p> <p>5.1 The situation of students enrolled in study programs, by gender</p> <p>5.2 The annual situation of the graduation of various study cycles, broken down by gender</p> <p>5.3 Number of courses focusing on sex and gender dimensions (Bachelor and Master)</p> <p>5.4 Number of master's theses, broken down by gender and research fields</p> <p>5.5 Gender-related learning activities by research area</p> <p>5.6 Master in Gender and Women's Studies</p>
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## 2. Evidence of the impact

According EUROSTAT<sup>3</sup>, in 2022, Romania ranks second (25.2%) among EU countries with the highest percentage of women among ICT specialists employed (after Bulgaria with 28.9%).

The number of female students enrolled in the study programmes of the Computer Science Department from the Faculty of Mathematics and Computer Science Department at West University of Timisoara is in line with the above mentioned percent, according to the data presented in Table 1 (almost constant percent in the last 5 years).

**Table 1: Number of students enrolled in the studies related to Computer Science**

Academic year	Undergraduate studies		Graduate studies		Ratio
	Girls	Boys	Girls	Boys	
	A	B	C	D	(A+C)/(A+B+C+D)
2018-2019	263	859	71	165	24.59 %
2019-2020	272	805	82	198	26.09 %
2020-2021	275	892	102	210	25.49 %
2021-2022	262	838	108	220	25.91 %
2022-2023	250	859	109	209	25.15 %

However, the Computer Science Department staff is aware about the role in mind settings of the future generations of ICT specialists. A strong presence of the female teachers in the department activities or in leadership positions or even in promotional materials is essential to provide raw models for the current or future students.

It is a clear fact that the percent of womens in the department structure is considerable higher than the one of the female students: 39% from the permanent positions, 36% from all positions (Table 2).

**Table 2: Number of the members of the Computer Science Department at the beginning of academic year 2022-2023**

Positions	Womens	Mens	Ratio
	A	B	A/(A+B)
Professor	3	1	75 %
Associate Professor	2	7	22 %
Lecturer	6	9	40 %
<b>Total/permanent positions</b>	<b>11</b>	<b>17</b>	<b>39%</b>
Assistant Professor	2	3	40 %
Research Assistant	1	0	100 %
PhD student	6	15	29 %
<b>Total</b>	<b>20</b>	<b>35</b>	<b>36 %</b>

A small increase of the percent of the womens on permanent positions is registered in the last three years (see Table 3).

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<sup>3</sup> [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=ICT\\_specialists\\_in\\_employment](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=ICT_specialists_in_employment)

**Table 3: Number of the members of the Computer Science Department – permanent positions**

Academic year	Womens	Mens	Ratio
	A	B	A/(A+B)
2020-2021	11	19	37 %
2021-2022	11	19	37 %
2022-2023	11	17	39 %

Another clear fact is that the leadership positions are currently dominated by females (Table 4).

**Table 4: Number of leadership positions in academic year 2022-2023**

Positions	Womens	Mens
Dean	1	0
Vice-dean representing Computer Science Domain	0	1
Director of Computer Science Department	1	0
Director of PhD studies in Computer Science	1	0
PIs of Research projects	3	3

Other initiatives that were/are organized in the academic year 2022-2023:

- bimonthly CoderDojo meetings for children under the leadership of a female lecturer<sup>4</sup>, an initiative for developing programming skills for young childrens
- Women in Data Science (WiDS) Timisoara 2023<sup>5</sup>, an initiative to gather the specialists in Data Science, a forum for creating professional networks

The first three phases of the university plan for gender equality have been taken into account the above mentioned data and the last phase is taking into account the best practices that have lead to these results.

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<sup>4</sup> <https://www.coderdojo.ro/coderdojouvt/>

<sup>5</sup> <https://www.eventbrite.com/e/women-in-data-science-wids-timisoara-2023-registration-625091163497>