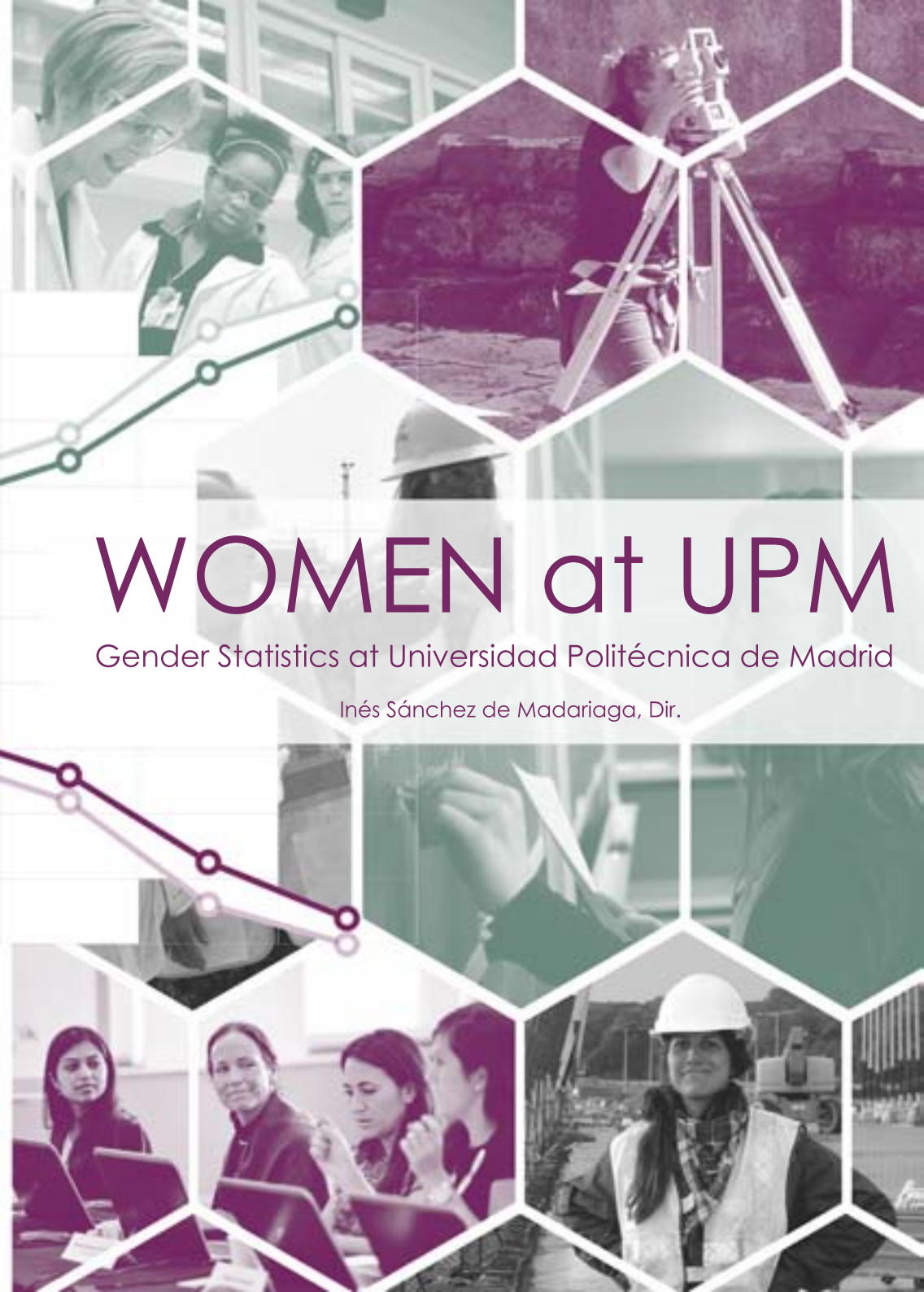
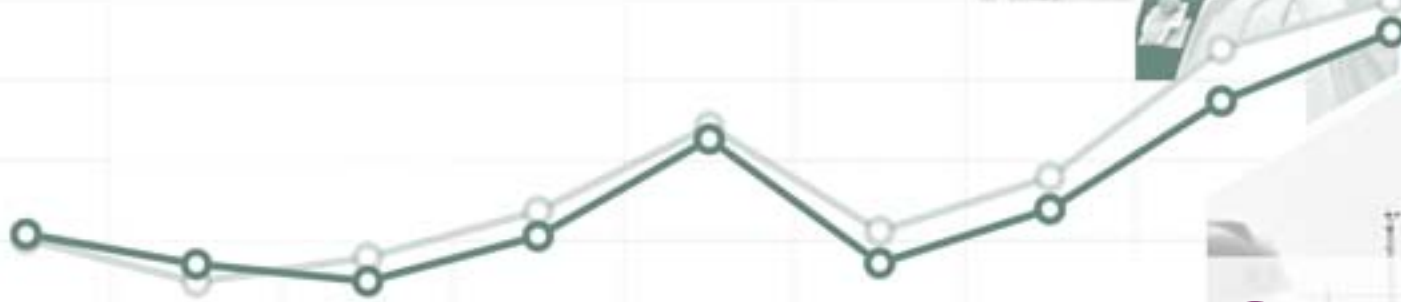


# WOMEN at UPM

Gender Statistics at Universidad Politécnica de Madrid

Inés Sánchez de Madariaga, Dir.



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*Publisher:* Fundación General de la Universidad Politécnica de Madrid  
Madrid, 2014

ISBN-10: 84-697-1712-X

ISBN-13: 978-84-697-1712-7



# INDEX

**\_Presentation.** Carlos Conde Lázaro, Rector UPM

**\_Executive Summary.** Inés Sánchez de Madariaga, PI TRIGGER Project UPM

## **\_CHAPTER 0\_ Background Indicators**

FIGURE 0.1\_ Percentage of female students (ISCED 5A), UPM, Spain, EU and USA.

FIGURE 0.2\_ Percentage of female graduates (ISCED 5A), UPM, Spain, EU and USA.

FIGURE 0.3\_ Percentage of female PhD students (ISCED 6), UPM, Spain, EU and USA.

FIGURE 0.4\_ Percentage of female PhD graduates (ISCED 6), UPM, Spain, EU and USA.

FIGURE 0.5\_ Percentage of female full professors (Grade A), UPM, Spain, EU and USA.

FIGURE 0.6\_ Glass Ceiling Index, UPM and Spain.

FIGURE 0.7\_ Percentage of women in decision making bodies, UPM and Spain.

FIGURE 0.8\_ Percentage of female full professors (Grade A), TRIGGER Pilot Schools, UPM, Spain, EU and USA.

## **\_CHAPTER 1\_ Students**

FIGURE 1.1\_ Students, distribution by sex and level, Universidad Politécnica de Madrid (2007 and 2013)

FIGURE 1.2\_ Students, distribution by sex and level, School of Agronomics Engineering (2008 and 2013)

FIGURE 1.3\_ Students, distribution by sex and level, School of Architecture (2009 and 2013)

FIGURE 1.4\_ Students, distribution by sex and level, School of Civil Engineering (2009 and 2013)

FIGURE 1.5\_ Students, distribution by sex and level, School of Industrial Engineering (2008 and 2013)

FIGURE 1.6\_ Students, distribution by sex and level, School of Mining Engineering (2007 and 2013)

FIGURE 1.7\_ Students, distribution by sex and level, School of Naval Engineering (2005 and 2013)

FIGURE 1.8\_ Students, distribution by sex and level, School of Telecommunications Engineering (2007 and 2013)

FIGURE 1.9\_ Students, distribution by sex and level, School of Computer Sciences (2006 and 2013)

FIGURE 1.10\_ Students, distribution by sex and level, Faculty of Sciences for Physical Activity and Sport (2010 and 2013)

FIGURE 1.11\_ Students, distribution by sex and level, School of Land Surveying, Geodesy and Mapping Engineering (2012 and 2013)

FIGURE 1.12\_ Students, distribution by sex and level, School of Forestry Engineering and Natural Resources (2004 and 2013)

FIGURE 1.13\_ Students, distribution by sex and level, School of Aeronautics and Space Engineering (2004-2013)

FIGURE 1.14\_ Students, distribution by sex and level, Technical School of Agriculture Engineering (2009 and 2013)

FIGURE 1.15\_ Students, distribution by sex and level, School of Building Engineering (2008 and 2013)

FIGURE 1.16\_ Students, distribution by sex and level, Technical School of Industrial Design and Engineering (2011 and 2013)

FIGURE 1.17\_ Students, distribution by sex and level, Technical School of Civil Engineering (2009 and 2013)

FIGURE 1.18\_ Students, distribution by sex and level, Technical School of Telecommunications Engineering (2010 and 2013)

FIGURE 1.19\_ Students, distribution by sex and level, Technical School of Computer Systems Engineering (2012 and 2013)

## **\_CHAPTER 2\_ Faculty**

### **CHAPTER 2.1\_ Women in Faculty**

FIGURE 2.1.1\_ Proportion of women in Faculty by grade, Universidad Politécnica de Madrid (2003-2013)

FIGURE 2.1.2\_ Proportion of women in Faculty by grade, School of Aeronautics Engineering (2003-2013)

FIGURE 2.1.3\_ Proportion of women in Faculty by grade, School of Agronomics Engineering (2003-2013)

FIGURE 2.1.4\_ Proportion of women in Faculty by grade, School of Architecture (2003-2013)

FIGURE 2.1.5\_ Proportion of women in Faculty by grade, School of Civil Engineering (2003-2013)

FIGURE 2.1.6\_ Proportion of women in Faculty by grade, School of Industrial Engineering (2003-2013)

FIGURE 2.1.7\_ Proportion of women in Faculty by grade, School of Mining Engineering (2003-2013)

FIGURE 2.1.8\_ Proportion of women in Faculty by grade, School of Forestry Engineering (2003-2013)

FIGURE 2.1.9\_ Proportion of women in Faculty by grade, School of Naval Engineering (2003-2013)

FIGURE 2.1.10\_ Proportion of women in Faculty by grade, School of Telecommunications Engineering (2003-2013)

FIGURE 2.1.11\_ Proportion of women in Faculty by grade, School of Computer Sciences (2003-2013)

FIGURE 2.1.12\_ Proportion of women in Faculty by grade, Faculty of Sciences for Physical Activity and Sport (2003-2013)

FIGURE 2.1.13\_ Proportion of women in Faculty by grade, School of Land Surveying, Geodesy and Mapping Engineering (2003-2013)

FIGURE 2.1.14\_ Proportion of women in Faculty by grade, Technical School of Aeronautics Engineering (2003-2013)

FIGURE 2.1.15\_ Proportion of women in Faculty by grade, Technical School of Agriculture Engineering (2003-2013)

FIGURE 2.1.16\_ Proportion of women in Faculty by grade, School of Building Engineering (2003-2013)

FIGURE 2.1.17\_ Proportion of women in Faculty by grade, Technical School of Forestry Engineering (2003-2013)

FIGURE 2.1.18\_ Proportion of women in Faculty by grade, Technical School of Industrial Design and Engineering (2003-2013)

FIGURE 2.1.19\_ Proportion of women in Faculty by grade, Technical School Civil Engineering (2003-2013)

FIGURE 2.1.20\_ Proportion of women in Faculty by grade, Technical School of Telecommunications Engineering (2003-2013)

FIGURE 2.1.21\_ Proportion of women in Faculty by grade, Technical School of Computer Systems Engineering (2003-2013)

## **CHAPTER 2.2\_ Women and men in a typical academic career**

FIGURE 2.2.1\_ Proportion of men and women in a typical academic career, students and academic staff, Universidad Politécnica de Madrid (2003-2013)

FIGURE 2.2.2\_ Proportion of men and women in a typical academic career, students and academic staff, UPM, Spain and EU.

FIGURE 2.2.3\_ Proportion of men and women in a typical academic career, students and academic staff, School of Agronomics Engineering (2003-2013)

FIGURE 2.2.4\_ Proportion of men and women in a typical academic career, students and academic staff, School of Architecture (2003-2013)

FIGURE 2.2.5\_ Proportion of men and women in a typical academic career, students and academic staff, School of Civil Engineering (2003-2013)

FIGURE 2.2.6\_ Proportion of men and women in a typical academic career, students and academic staff, School of Industrial Engineering (2003-2013)

FIGURE 2.2.7\_ Proportion of men and women in a typical academic career, students and academic staff, School of Mining Engineering (2003-2013)

FIGURE 2.2.8\_ Proportion of men and women in a typical academic career, students and academic staff, School of Naval Engineering (2003-2013)

FIGURE 2.2.9\_ Proportion of men and women in a typical academic career, students and academic staff, School of Telecommunications Eng. (2003-2013)

FIGURE 2.2.10\_ Proportion of men and women in a typical academic career, students and academic staff, School of Computer Sciences (2003-2013)

FIGURE 2.2.11\_ Proportion of men and women in a typical academic career, students and academic staff, Fac. of Sc. for Physical Activity and Sport (2009-2013)

FIGURE 2.2.12\_ Proportion of men and women in a typical academic career, students and academic staff, Sc. Land Surveying, Geodesy and Mapping Eng. (2003-2013)



FIGURE 2.2.13\_ Proportion of men and women in a typical academic career, students and academic staff, Sc. Forestry Eng. and Natural Resources (2003-2013)

FIGURE 2.2.14\_ Proportion of men and women in a typical academic career, students and academic staff, School of Aeronautics and Space Eng. (2003-2013)

FIGURE 2.2.15\_ Proportion of men and women in a typical academic career, students and academic staff, Technical School of Agriculture Eng. (2003-2013)

FIGURE 2.2.16\_ Proportion of men and women in a typical academic career, students and academic staff, School of Building Engineering (2009-2013)

FIGURE 2.2.17\_ Proportion of men and women in a typical academic career, students and academic staff, Technical Sc. Industrial Design and Eng. (2007-2013)

FIGURE 2.2.18\_ Proportion of men and women in a typical academic career, students and academic staff, Technical School Civil Engineering (2007-2013)

FIGURE 2.2.19\_ Proportion of men and women in a typical academic career, students and academic staff, Technical Sc. Telecommunications Eng. (2009-2013)

FIGURE 2.2.20\_ Proportion of men and women in a typical academic career, students and academic staff, Technical Sc. of Computer Systems Eng. (2003-2013)

### **CHAPTER 2.3\_Seniority.**

FIGURE 2.3.1\_ Proportion of men and women in Grade A and Grade B positions, by age (2013)

FIGURE 2.3.2\_ Proportion and number of men and women in Grade A and Grade B positions by School (2013)

FIGURE 2.3.3\_ Number of Grade-B researchers per each Grade-A position, by sex and field (2013)

FIGURE 2.3.4\_ Glass Ceiling Index (GCI) by Scientific Field, Universidad Politécnica de Madrid (2013)

FIGURE 2.3.5\_ Glass Ceiling Index (GCI) by School, Universidad Politécnica de Madrid (2013)

## **CHAPTER 3\_ Administrative Staff**

FIGURE 3.1\_ Participation of women in administrative staff, by level, civil servants. Universidad Politécnica de Madrid (2003-2013)

FIGURE 3.2\_ Participation of women in administrative staff, by level, non-civil servant personnel. U. Politécnica de Madrid (2003-2013)

## **CHAPTER 4\_ Setting the Agenda**

### **CHAPTER 4.1\_Decision making bodies**

FIGURE 4.1.1\_ Proportion of women and men in the Senate, Universidad Politécnica de Madrid (2003-2013)

FIGURE 4.1.2\_ Proportion of women and men in the Senate, by constituency type and sex, Universidad Politécnica de Madrid (2013)

FIGURE 4.1.3\_ Proportion of women and men in the Governing Council, Universidad Politécnica de Madrid (2003-2013)

FIGURE 4.1.4\_ Proportion of women and men in the Governing Council, by constituency type, Universidad Politécnica de MADrid (2013)

FIGURE 4.1.5\_ Proportion of women and men in the Rector's Council by sex, Universidad Politécnica de Madrid (2003-2013)

FIGURE 4.1.6\_ School Deans, distribution by sex, Universidad Politécnica de Madrid (2003-2013)

FIGURE 4.1.7\_ School Deputy Deans, distribution by sex, Universidad Politécnica de Madrid (2003-2013)

FIGURE 4.1.8\_ Department Heads, distribution by sex, Universidad Politécnica de Madrid (2003-2013)

FIGURE 4.1.9\_ Single-person Governing Bodies, distribution by type and sex, Universidad Politécnica de Madrid (2013)

### **CHAPTER 4.2\_ Research funding**

FIGURE 4.2.1\_ Distribution of women and men in research teams, projects granted under competitive calls, Universidad Politécnica de Madrid (2007-2013)

FIGURE 4.2.2\_ Distribution of Principal Investigators of R&D granted projects by sex, Universidad Politécnica de Madrid (2003-2013)

FIGURE 4.2.3\_ Research funding success rate, distribution by sex of PIs, European FP7 calls, Universidad Politécnica de Madrid (2007-2013)

## **METHODOLOGICAL NOTES**

## Presentation

At Universidad Politécnica de Madrid we strive to produce world quality research and to educate the best professionals in engineering, sports, and architectural fields. We are aware that women's participation in these fields is an asset that needs to be supported. An increased participation of women in Engineering, Sports and Architecture will provide for a more diverse and thriving workforce, in which the talent of all will contribute to create the infrastructures, buildings, products and services that our society demands. We are committed to develop programs and plans devised to increase and improve the participation of women in our University at all levels.

Up-to-date and systematic data are a prerequisite for the sound design, implementation and monitoring of plans and programs. The report *Women at UPM: Gender Statistics at Univesidad Politécnica de Madrid* that I am happy to present provides the basic statistical information that will allow us to develop the needed programs and plans. With this publication we not only contribute to implement legal requirements to publish gender statistics within the Spanish National Research and Development system. We also do it to the highest standards of quality, following the international categories and indicators defined by the European Commission and the OCDE. Additional context to the data provided in this report that can contribute to a better understanding of the reality described can be found in the national Spanish statistics, *Científicas en Cifras*, and in the European ones, *She Figures*.

This publication is part of the European fp7 funded project, TRIGGER, *Transforming Institutions by Gendering Contents and Gaining Equality in Research*. In this project UPM works together with universities from the UK, France, the Czeck Republic, and Italy, with the objective of promoting an integrated set of actions aimed at triggering structural-level change at the University, to be later incorporated in and made permanent through the Equality Action Plan. The actions will address different areas relevant to gender equality. Some of them will target the whole University, while three Schools –the Higher Technical School of Architecture/ETSAM; the University School of Building Engineering/ETSE; the Higher Technical School of Industrial Engineering/ETSII- will develop specifically tailored programs.

The data show certain improvement in many areas over the last few years, with some reductions of the gender gap. In some overall indicators the situation of our University is close to the European average. However, in certain areas, such as ICT, we see the gap increasing in significant ways. In specific categories such as Grade A positions –equivalent to our Cátedras- advance is very slow, suggesting that additional efforts need to be made. While Architecture has a majority of women among students, participation of women in the student body is below 30% in most Engineering schools, suggesting we should work to promoting vocations among young girls, with special emphasis in ICT.

I hope that this publication will be a helpful tool to our community. The data will help us define, implement and assess the Gender Equality Action Plan that our University is developing in accordance with the Law. It is my hope that subsequent editions of this report will show improvements. It is also my wish that our University becomes an attractive option for study and career for young women with an engineering vocation.

Carlos Conde Lázaro  
Rector

## Executive Summary

Inés Sánchez de Madariaga

This document offers a comprehensive statistical study of the situation of women at the Technical University of Madrid, UPM. It builds on an earlier compilation of data covering the period 2003-2009 that can still be consulted at [www.upm.es](http://www.upm.es). It is part of a research project funded by the European Commission entitled TRIGGER in which UPM is the Spanish partner. Its objective is to provide a systematic overview of the situation of women and men at UPM.

Because UPM is the largest university in Spain providing high quality education in the fields of engineering and architecture, the data provided in this study offer a highly significant contribution towards a better understanding of the situation of women in engineering and architecture in our country.

We hope that the publication of this report will be a useful tool that can be used by the academic community in its effort to promoting a better participation of women in technological fields.

For the sake of comparability, this report follows international standards of statistics in research and higher education set up by UNESCO, the OECD, and the European Commission. It covers the following areas: 0) background indicators; 1) students by level and school; 2) research and teaching staff, by level and school, including various indicators on seniority; 3) managerial staff; 4) setting the agenda, including decision making bodies and research funding. This structure covers some similar ground to that of recent national and international statistics of gender in research: the EC *She Figures; Gender in Research and Innovation* report; and the biannual publication *Científicas en Cifras*, published by the Spanish Secretary of State for Research and Innovation.

An introductory chapter presents some background statistics to understand the data on women students and professors at UPM in the national, European and US contexts through a selection of seven key indicators. Particularly relevant is the Glass Ceiling Index which, although still significantly above the average, shows a very positive evolution over the years. At 2,35 it shows a trend towards convergence with the Spanish average at 1,95 reflecting the glass ceiling for all fields of knowledge. Another relevant data from this chapter is that the

participation of women among students (30,6%) and among full professors (11%) at UPM is only slightly below the European average for Science and Technology fields (31% and 11,95%).

The first chapter addresses the situation of women students. For this, the International Standard Classification for Education (ISCED), the statistical framework maintained by the UNESCO, is used (see Methodological notes for a detailed description of equivalences with Spanish categories). This chapter contains 19 figures describing the distribution of students by sex and category in two specific moments -the years 2008 and 2013- for the whole of the University and for each of its 18 individual schools. For this chapter the so called *scissors diagram* has been used. The *scissors diagrams* allow for a clear visualization of gender differences at the various categories. By including the data of two different points in time spaced by five years, it also gives a fair idea of evolution in time, rather than a fixed picture.

Some significant data can be noted from this chapter. The number of women enrolled on the first year has slightly decreased by 0.5 points, at 29,20% in 2013. However, the rate of abandonment before graduation is higher among men than among women, and although this differential has decreased in the last five years, almost 33% of graduates are women. It is also significant to note that the percent of women among ISCED 5B graduates is 35,77% and that the number of women among PhD graduates has increased 3 points in the period up to 29,36%, a percent similar to the participation of women among first year students.

When we look at the distribution of first year students per school, the familiar pattern of horizontal segregation among fields of study becomes evident. Fields like agronomic engineering are close to parity; architecture is rapidly becoming a feminized field, with 60% of women; forestry is slightly over 31% and building engineering over 37%. In the majority of the remaining schools however the percentage of women among new students lies somewhere between 23 and 30%. The very significant exception is computer sciences with an extremely low participation of women at 11,57%. Different trends within the 5 year period are also observable, in some cases showing increase and in others decrease.

The second chapter addresses the situation of researchers/professors. The professional classification used for Teaching and Research staff follows again internationally agreed categories for research personnel –Grades A, B, C, from higher to lower. The charts at the end of the document show the equivalences

used in this report. This chapter shows the evolution of the participation of women in the different professional categories over a period of ten years from 2003 to 2013, for the whole of the university and for each individual school. A first significant data in this chapter is the steady increase, if still very low, of women among Grade A professors, equivalent to Catedráticas de Universidad, from 5,6% in 2003 to 11,95% in 2013. The increase in Grade B positions over the same period is much less significant, of only 2 points for the decade, from 25,20% to 27,7%.

The data show very significant differences among schools. These differences do not always relate to the number of women among students or among the overall number of women in research staff. These differences are also well illustrated by the scissors diagrams for the academic careers of research staff included in this chapter, for the whole of the university and for each school, years 2008 and 2013. The Glass Ceiling Index calculated for each school also shows great differences among them. Among the big school, it is particularly significant the bad indicator of the School of Architecture, over 8, almost three times higher than the average. This is a particular troubling data because Architecture is the only school with a feminized student body.

The third chapter addresses the situation of women among the Administrative Staff at UPM (Personal de Administración y Servicios, P.A.S ). Administrative Staff is classified in two main groups: civil servants (PAS Funcionario) and non-civil servants (PAS Laboral). These two categories are further subdivided into A, B, C and D categories, as explained in the methodological notes at the end of the document. This staff shows no gender vertical segregation, with women participation in the higher categories over 50%.

The last chapter "Setting the Agenda" addresses the participation of women in decision making positions in the scientific agenda and in research funding. The data show a steady although small increase participation of women in the University Senate, from 15 to 22% in the last decade. This participation is higher among students 29,6%, and lowest among teaching and research staff 20,9%. The participation of women in the Governing Council does not follow a clear trend over the last decades, and no positive evolution can be appreciated, with 10,9% in 2013 while in 2003 it was over 17%. The Rectors Council, however, shows a very positive evolution, from 0 in 2006 to 36,6% in 2013 reflecting the positive impact of the Law of Equality of 2007 which requires parity in these appointed positions. The number of women among deans of schools is also very low: the first women deans (three of them) were elected only in 2008, and since

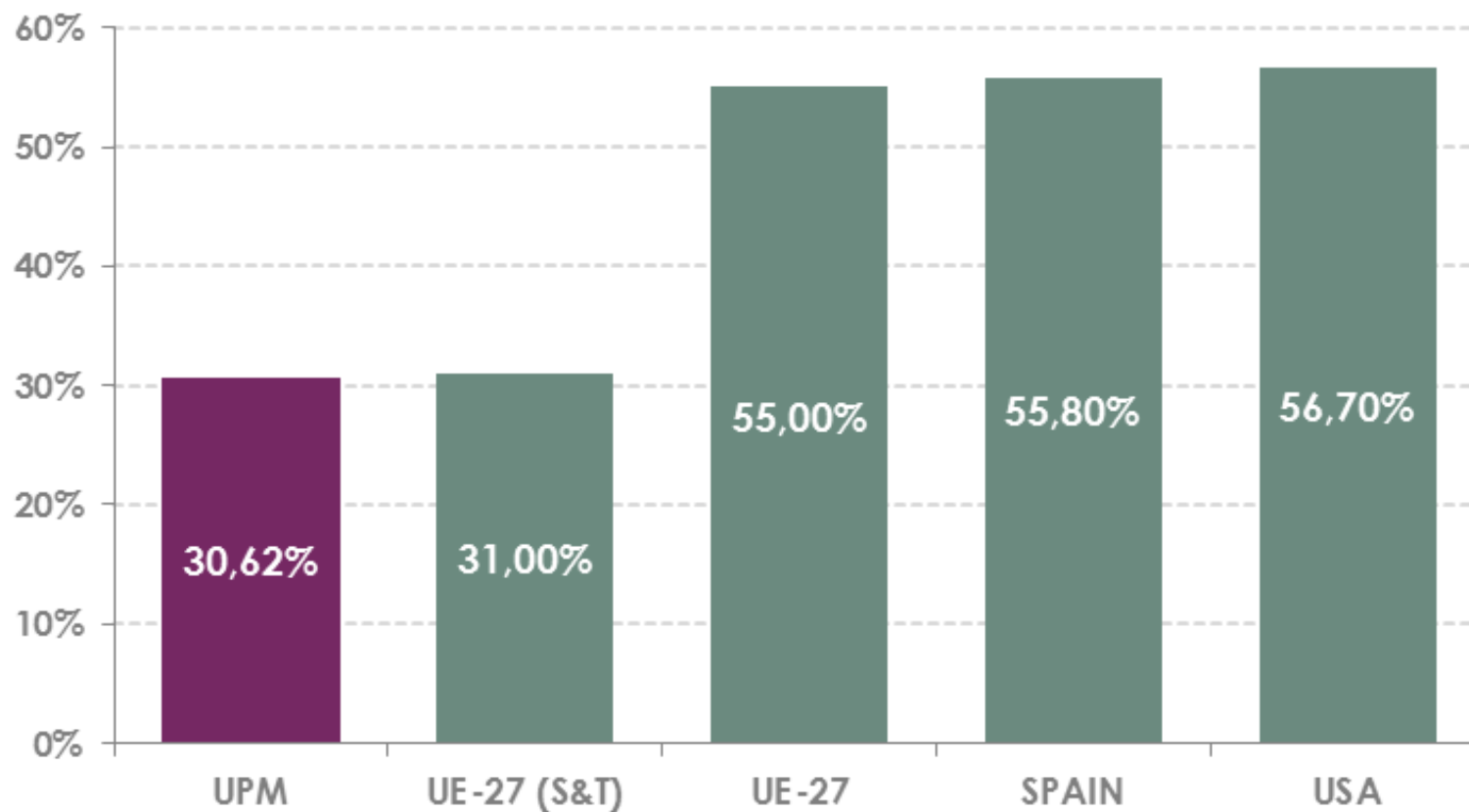
2012 there is only one remaining. Deputy Deans of schools however, who are nominated and not elected, show a better and positive evolution, up to 31% in 2013. The number of women heads of department, also elected positions, is also low, at 17% in 2013.

With respect to research funding, women represent almost half of team members, but only 18, 29% of principal investigators of projects granted under competitive calls from public European, National and Regional Programs. Women submit a significantly lower number of projects and also have a significantly lower rate of success. These data are consistent with national data on all fields published by the most recent edition of Científicas en Cifras 2012.



**CHAPTER 0.**  
**Background indicators**

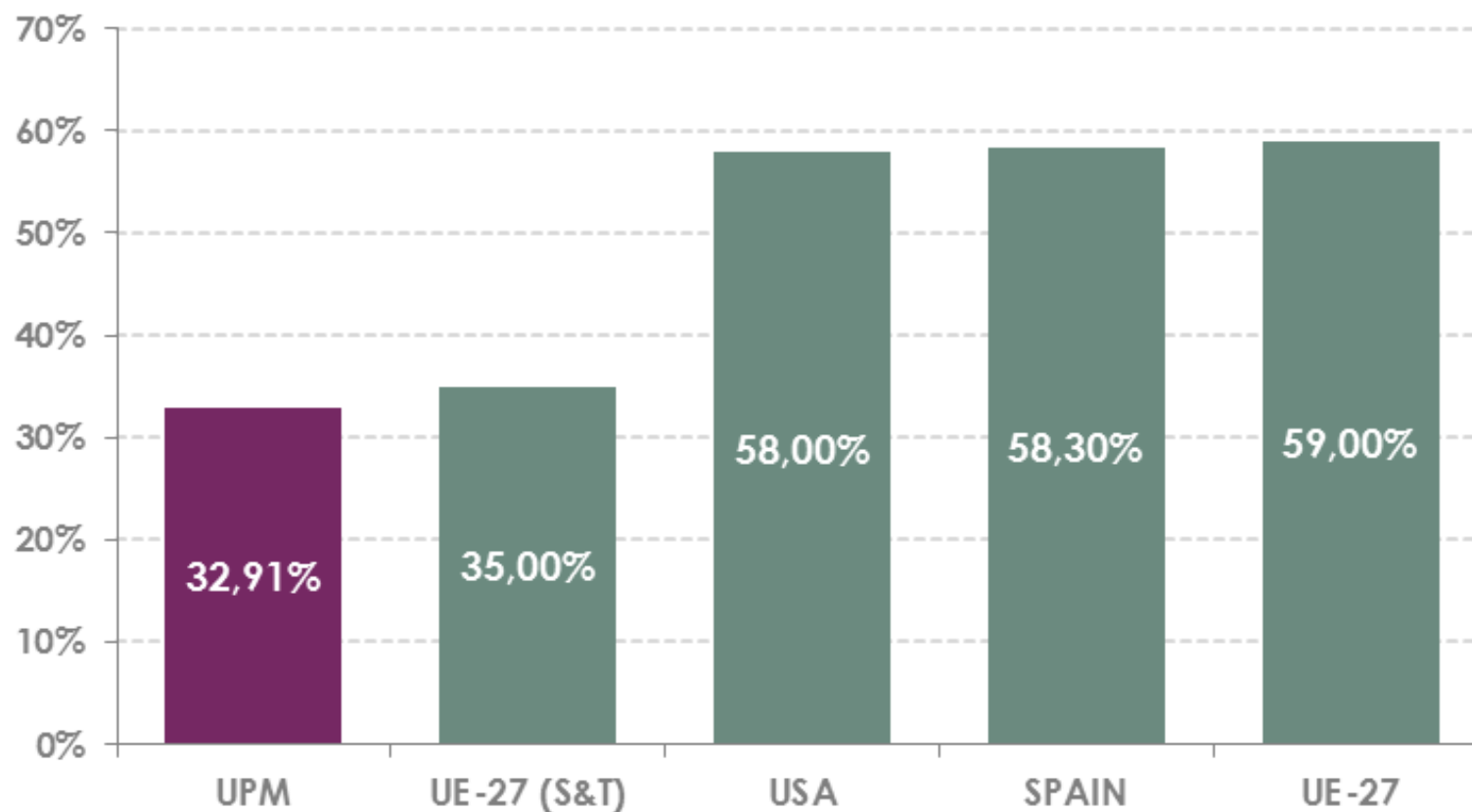
FIGURE 0.1\_ Percentage of female students (ISCED 5A), UPM, Spain, EU and USA.



**Source:** For USA: "Libro Blanco. Situación de las Mujeres en la Ciencia Española". For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** Data refer to year 2007 for USA, year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies.

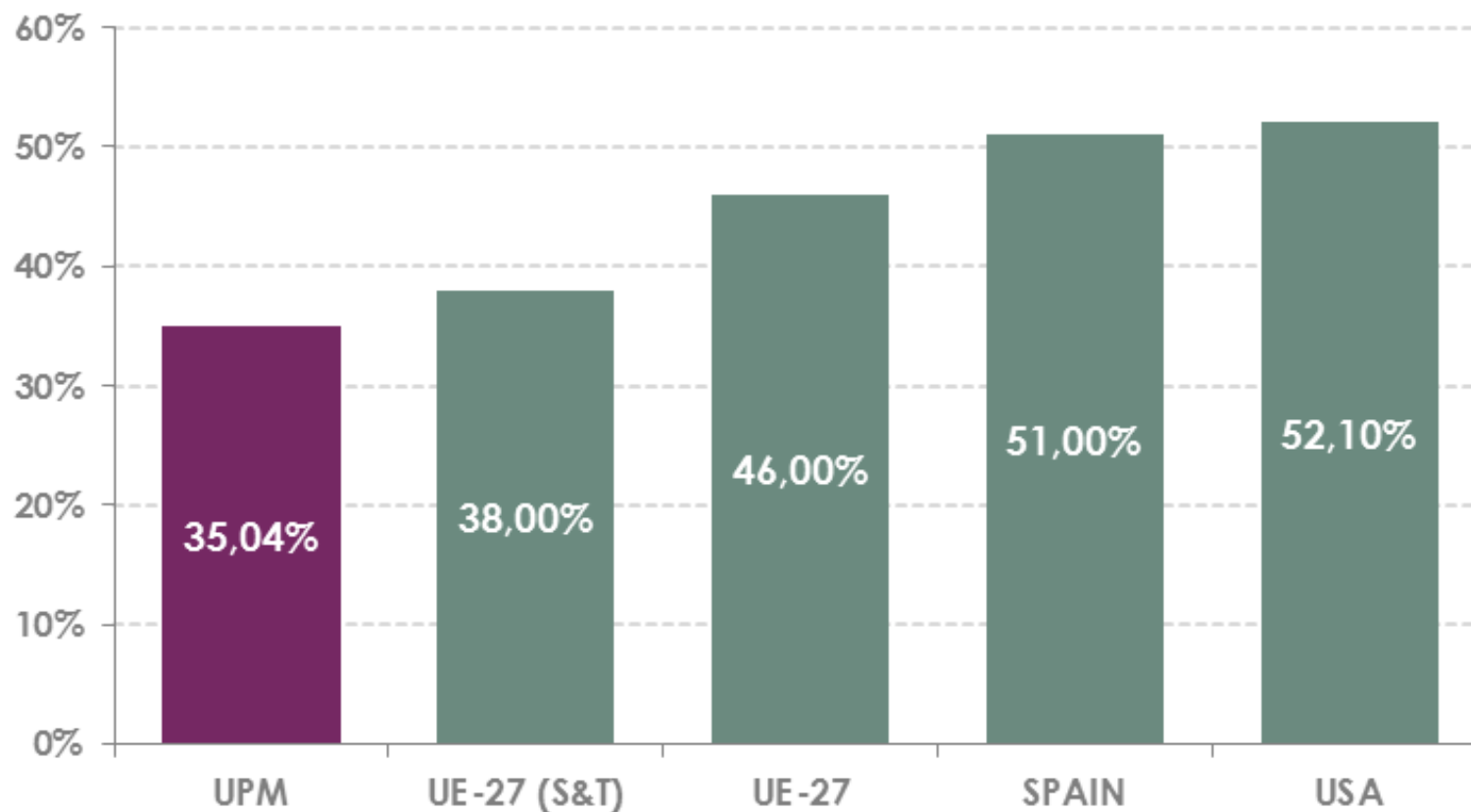
FIGURE 0.2\_ Percentage of female graduates (ISCED 5A), UPM, Spain, EU and USA.



**Source:** For USA: "Libro Blanco. Situación de las Mujeres en la Ciencia Española". For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** Data refer to year 2007 for USA, year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies.

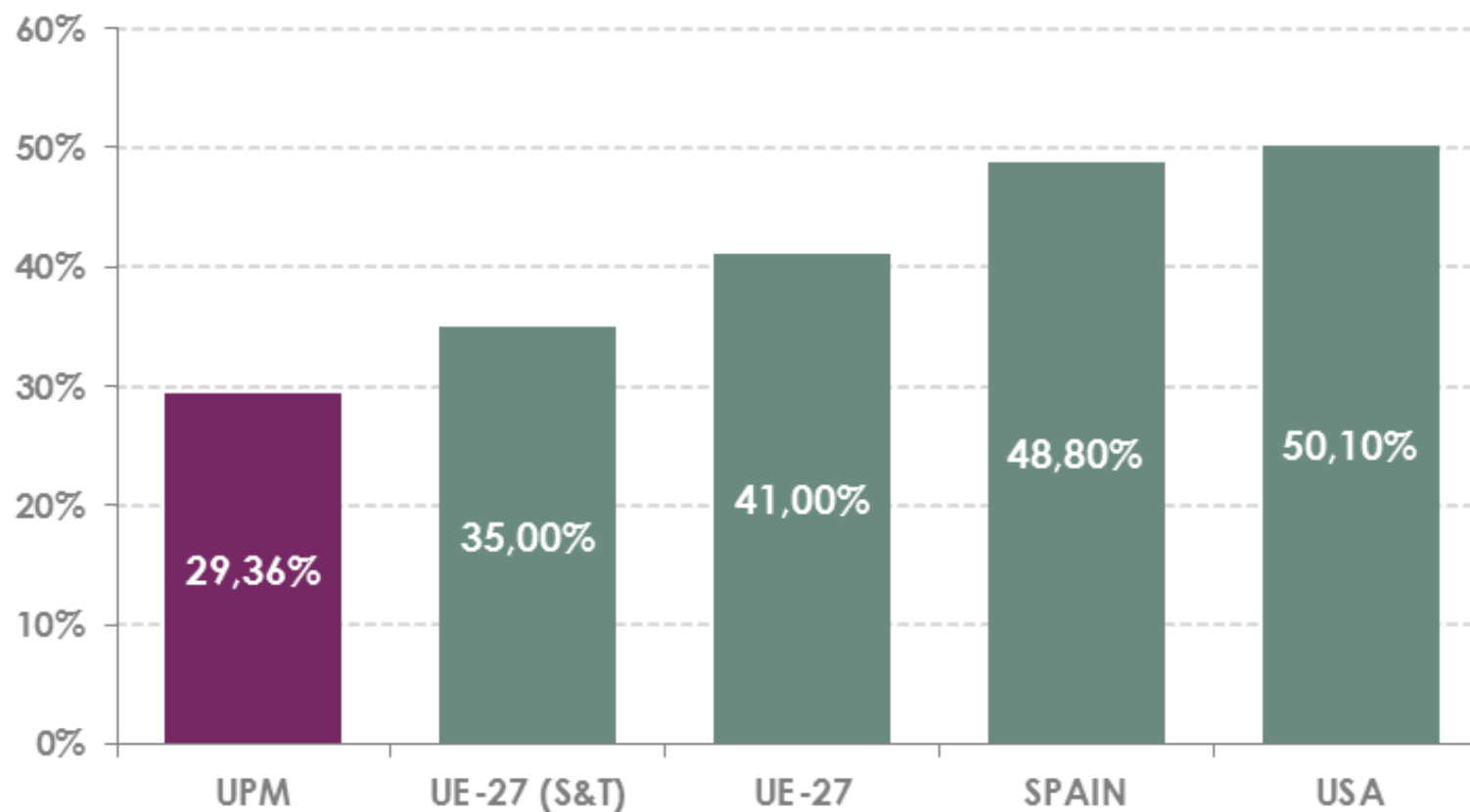
FIGURE 0.3\_ Percentage of female PhD students (ISCED 6), UPM, Spain, EU and USA.



**Source:** For USA: "Libro Blanco. Situación de las Mujeres en la Ciencia Española". For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** Data refer to year 2007 for USA, year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies.

FIGURE 0.4\_ Percentage of female PhD graduates (ISCED 6), UPM, Spain, EU and USA.

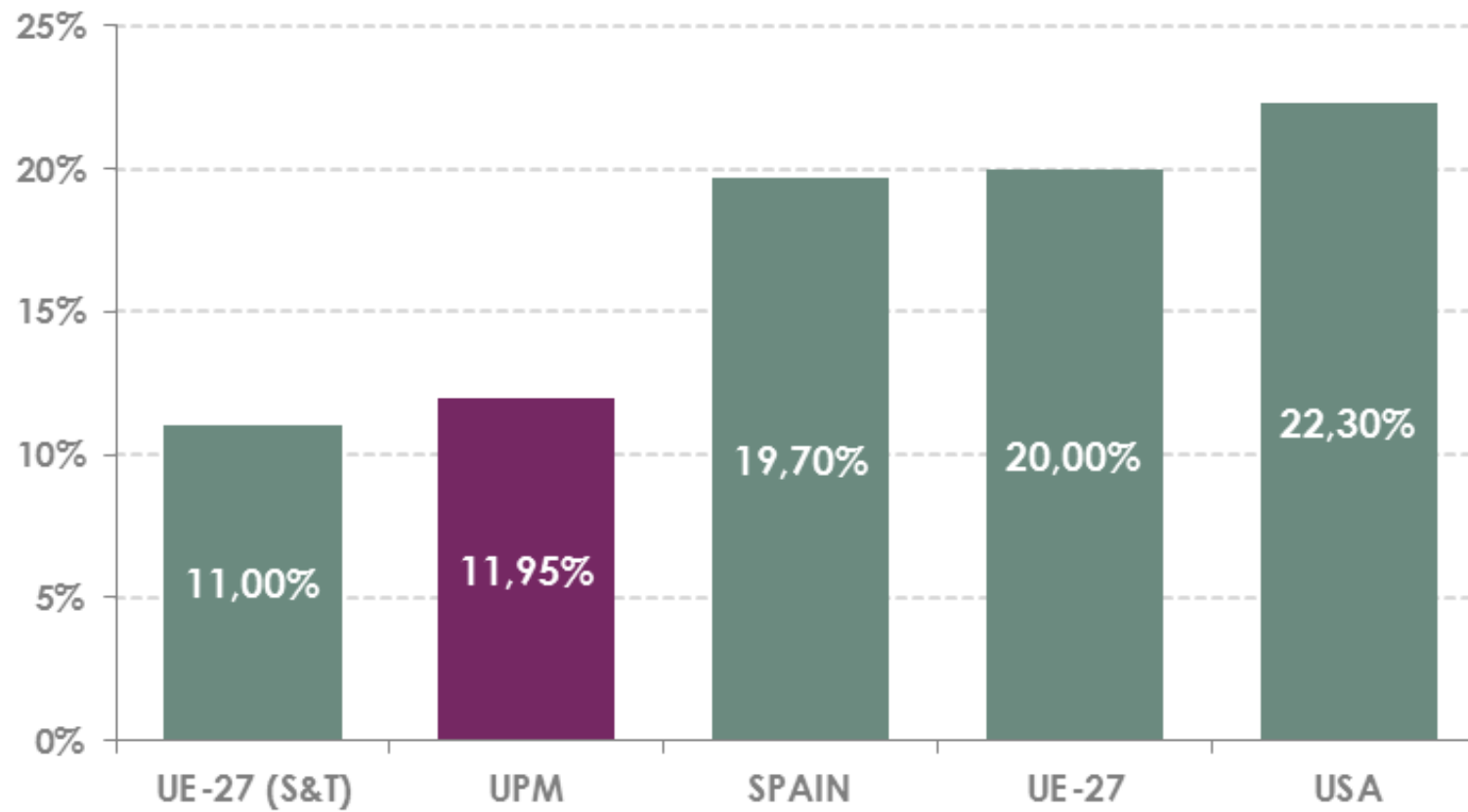


**Source:** For USA: "Libro Blanco. Situación de las Mujeres en la Ciencia Española". For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** Data refer to year 2007 for USA, year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies.



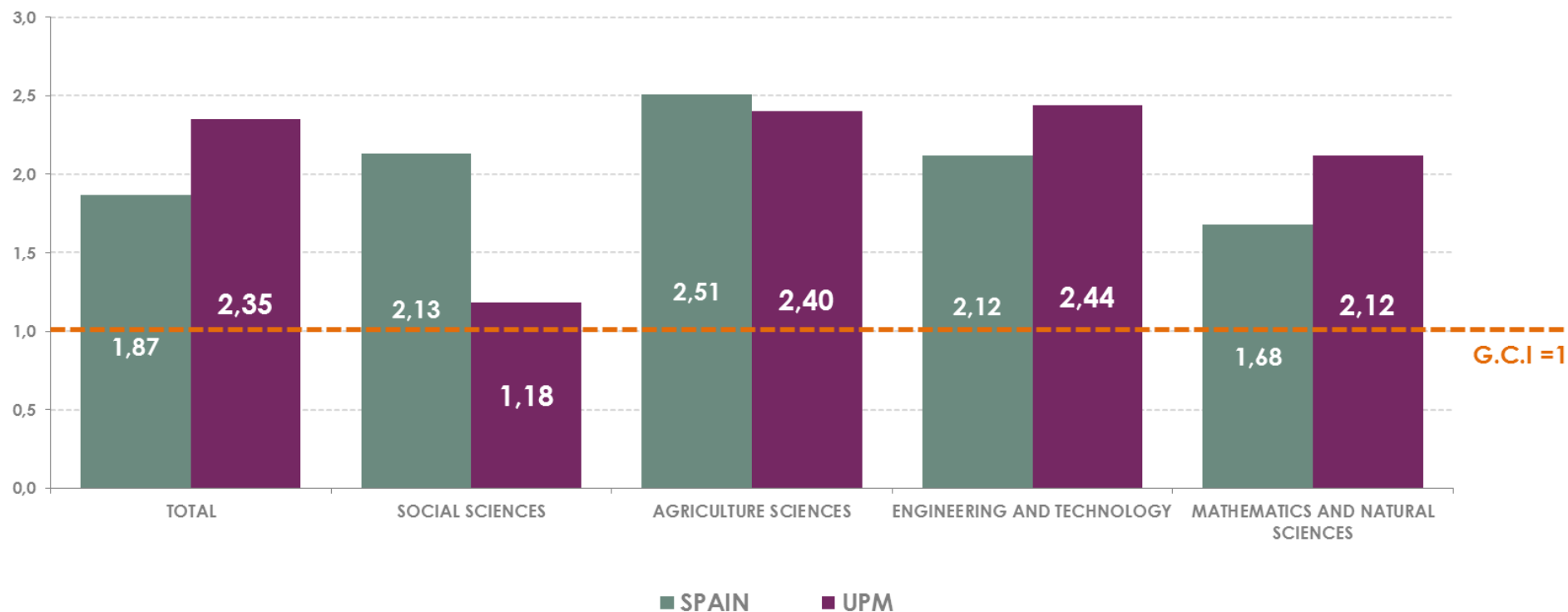
FIGURE 0.5\_ Percentage of female full professors (Grade A), UPM, Spain, EU and USA.



**Source:** For USA: NSF. For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** Data refer to year 2010 for USA, year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies.

**FIGURE 0.6\_ Glass Ceiling Index, UPM and Spain.**

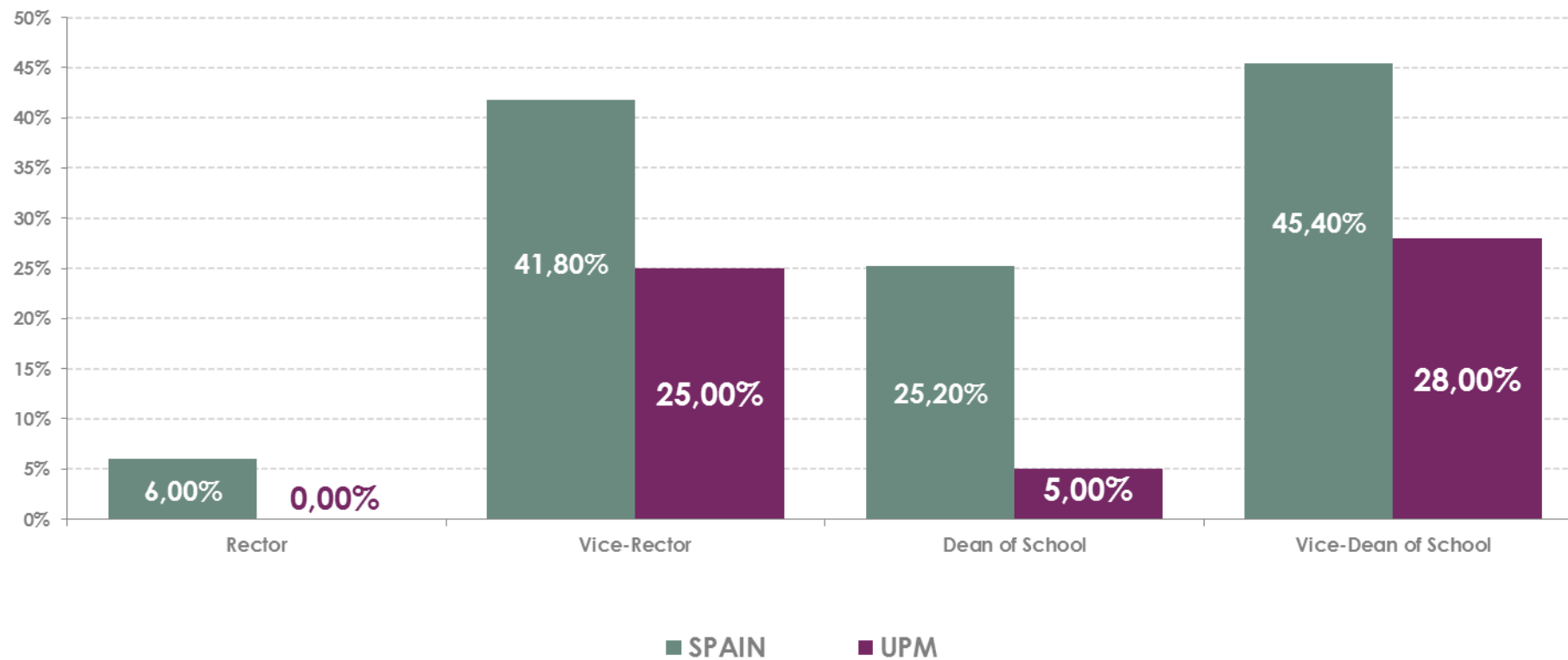


**Source:** For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** -Data refer to year 2012 for Spain and year 2013 for UPM.

-The Glass Ceiling Index (GCI) measures the relative chance for women, as compared with men, of reaching a top position. The GCI compares the proportion of women in grade A positions (equivalent to Full Professors in most countries) to the proportion of women in academia (grade A, B and C), indicating the opportunity, or lack of it, for women to move up the hierarchical ladder in their profession. A GCI of 1 indicates that there is no difference between women and men being promoted. A score of less than 1 means that women are over-represented at grade A level and a GCI score of more than 1 points towards a Glass Ceiling Effect, meaning that women are under-represented in grade A positions. In other words, the interpretation of the GCI is that the higher the value, the thicker the Glass Ceiling and the more difficult it is for women to move into a higher position. (*She Figures 2013: 95*)

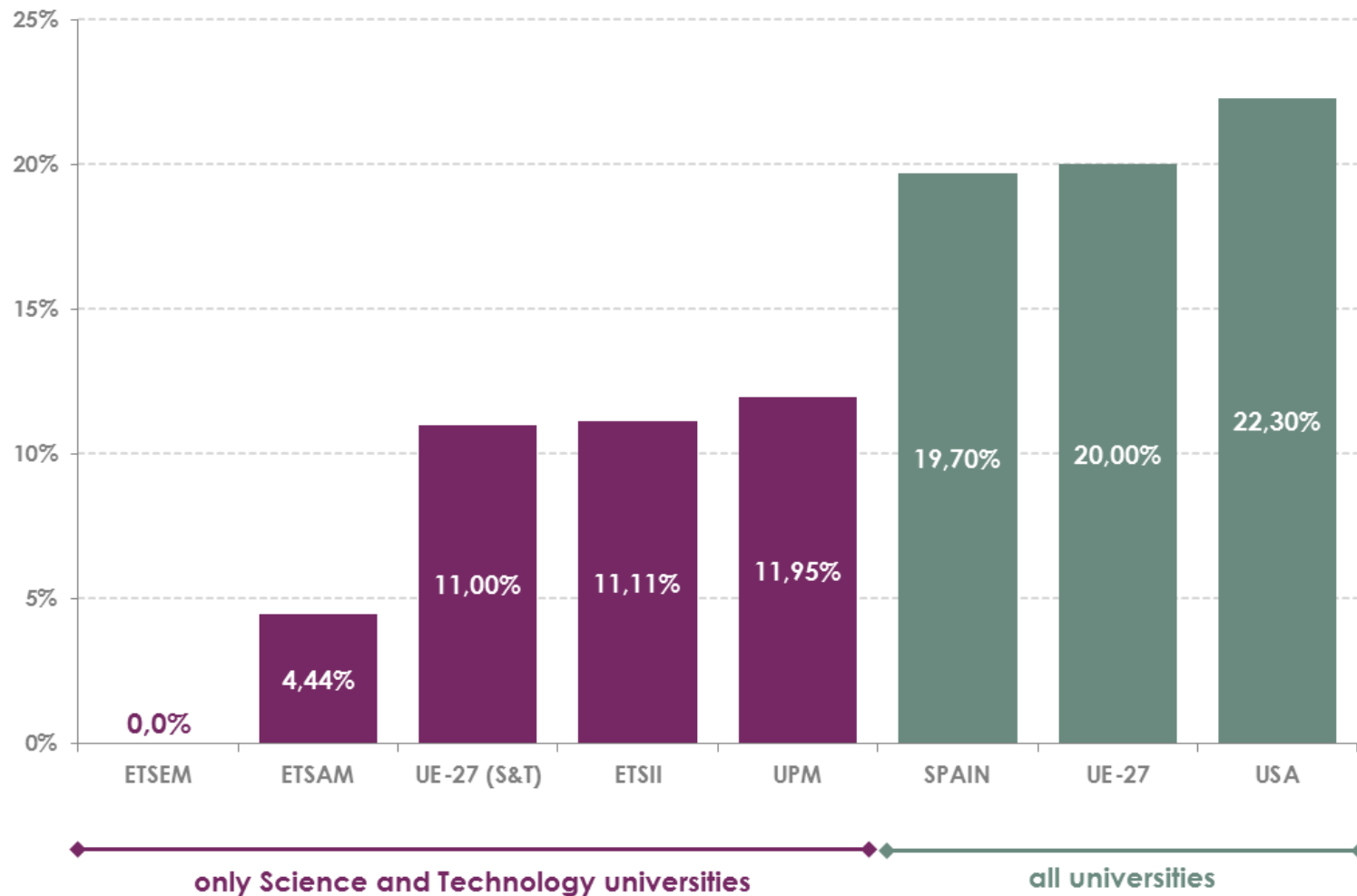
FIGURE 0.7\_ Percentage of women in decision making bodies, UPM and Spain.



**Source:** For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** Data refer to year 2012 for Spain and year 2013 for UPM.

**FIGURE 0.8\_ Percentage of female full professors (Grade A), TRIGGER Pilot Schools, UPM, Spain, EU and USA.**



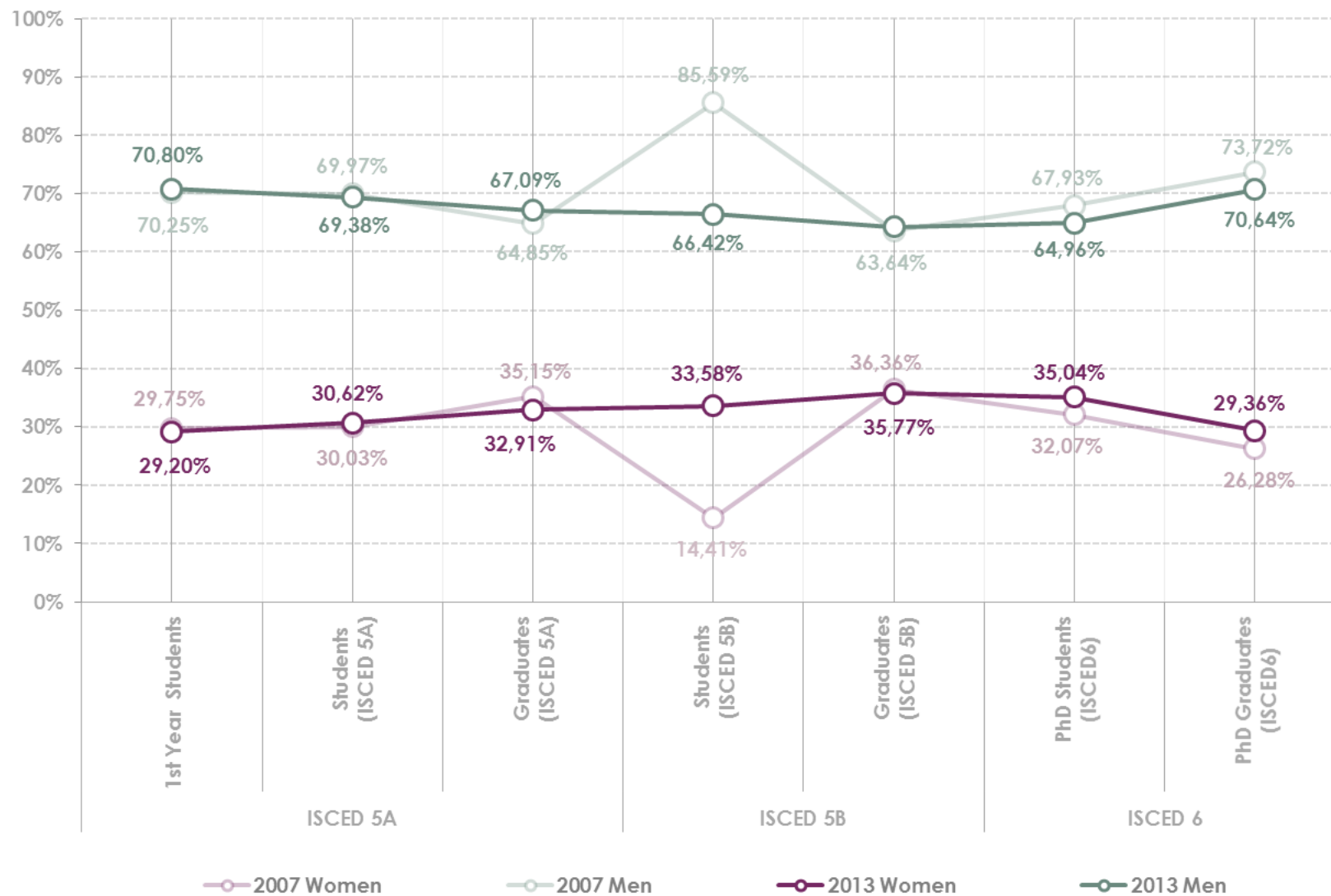
**Source:** For USA: NSF. For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM, ETSAM, ETSEM and ETSII: Observatorio Académico Database, UPM.

**Notes:** Data refer to year 2010 for USA, year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. ETSAM ( Graduate School of Architecture), ETSEM (Graduate School of Building Engineering) and ETSII (Graduate School of Industrial Engineering) are the three pilot schools participating at the TRIGGER project.

**CHAPTER 1.**  
**Students**



FIGURE 1.1\_ Students, distribution by sex and level, Universidad Politécnica de Madrid (2007 and 2013)



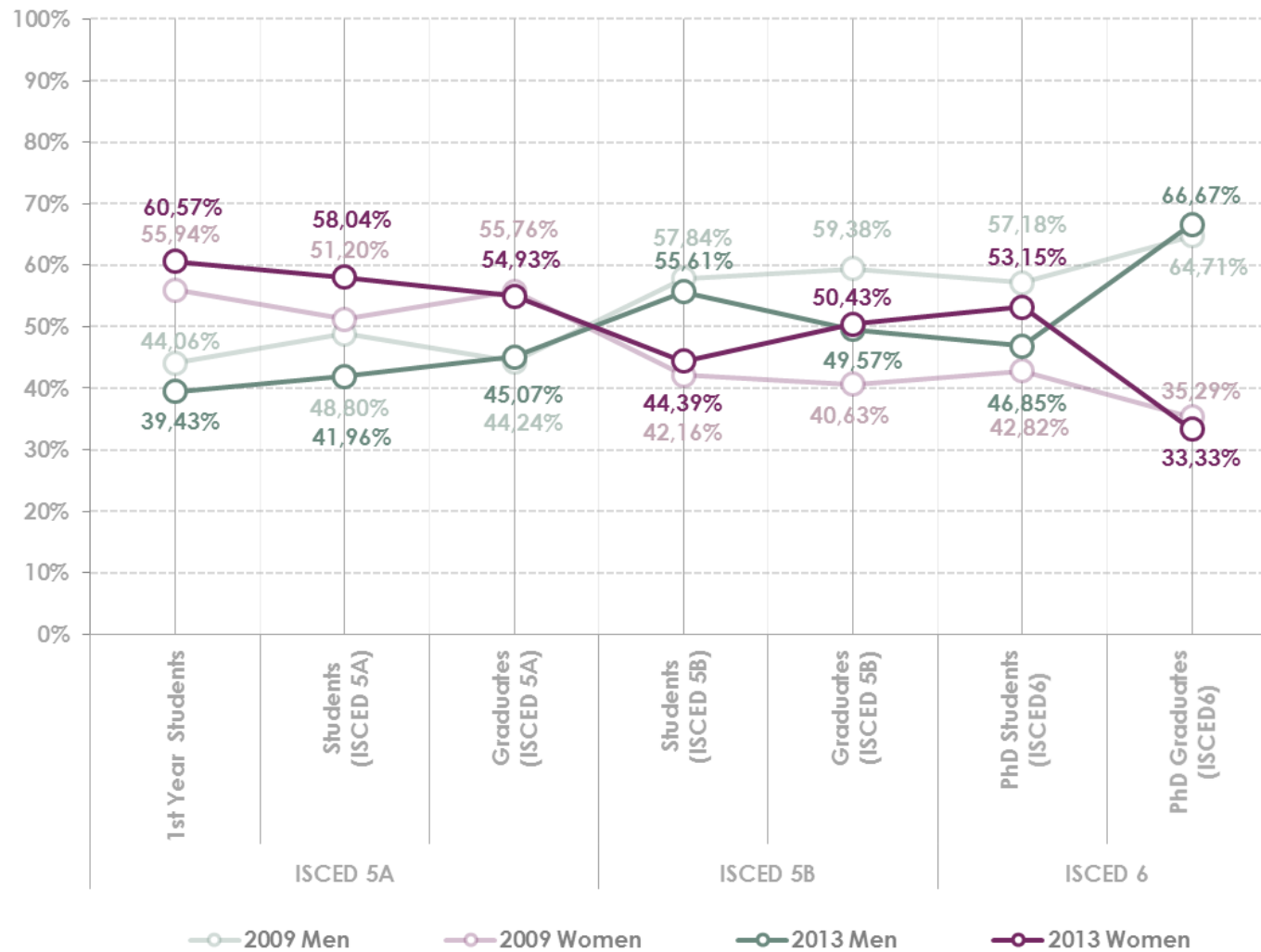
Source: Observatorio Académico Database, UPM

FIGURE 1.2\_ Students, distribution by sex and level, School of Agronomics Engineering (2008 and 2013)



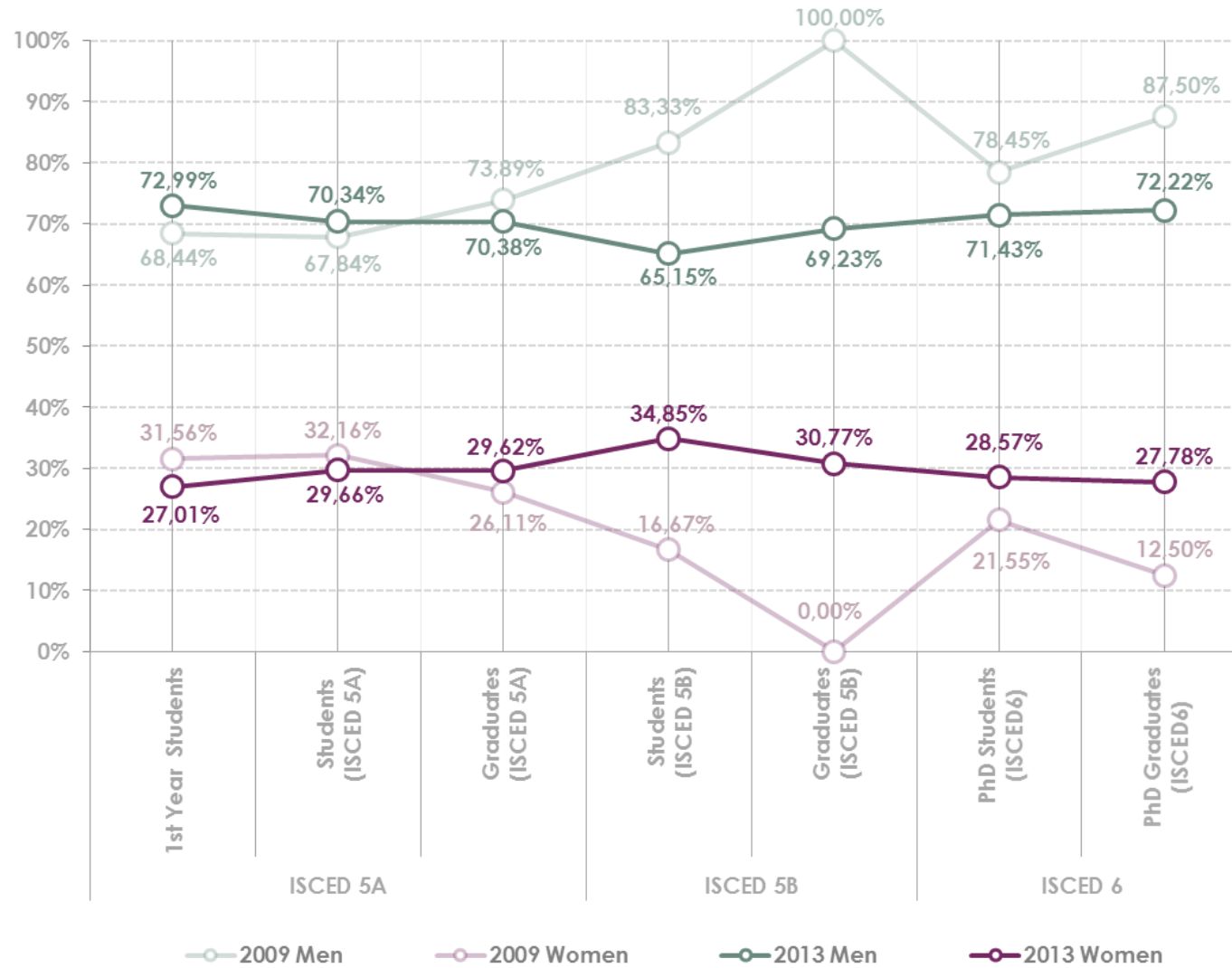
Source: Observatorio Académico Database, UPM

FIGURE 1.3\_ Students, distribution by sex and level, School of Architecture (2009 and 2013)



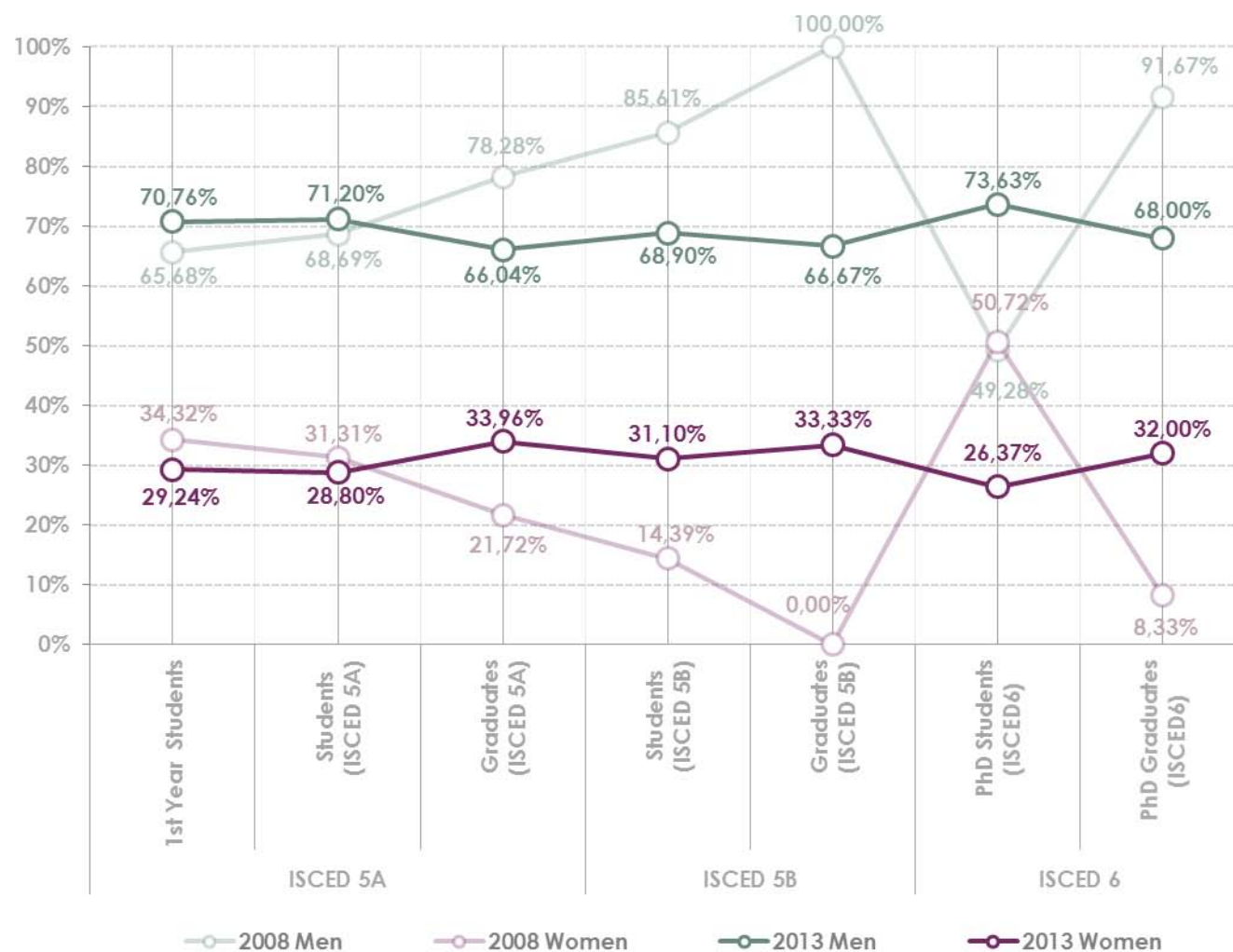
Source: Observatorio Académico Database, UPM

**FIGURE 1.4\_ Students, distribution by sex and level, Higher School of Civil Engineering (2009 and 2013)**



Source: Observatorio Académico Database, UPM

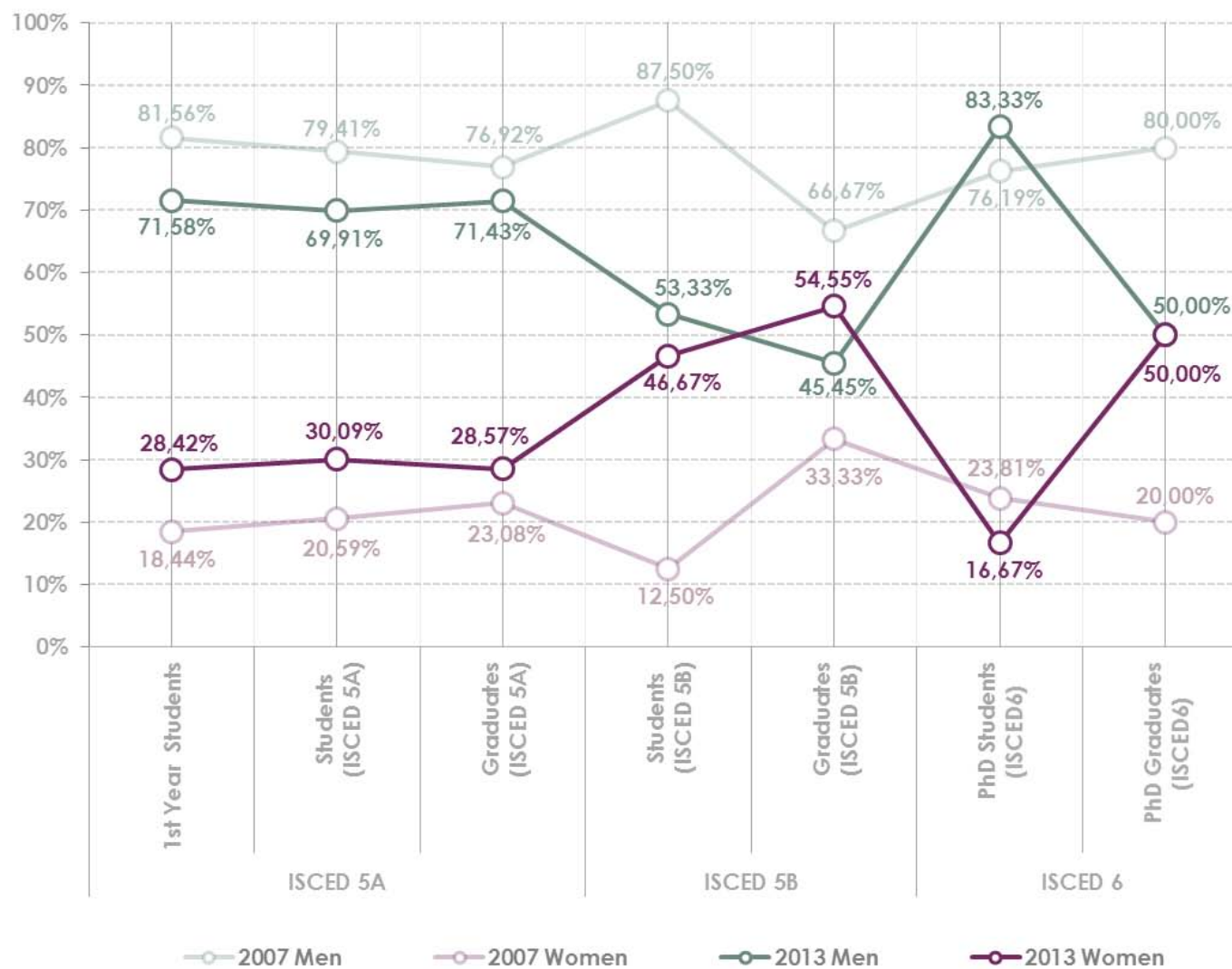
**FIGURE 1.5\_ Students, distribution by sex and level, School of Industrial Engineering (2008 and 2013)**



Source: Observatorio Académico Database, UPM

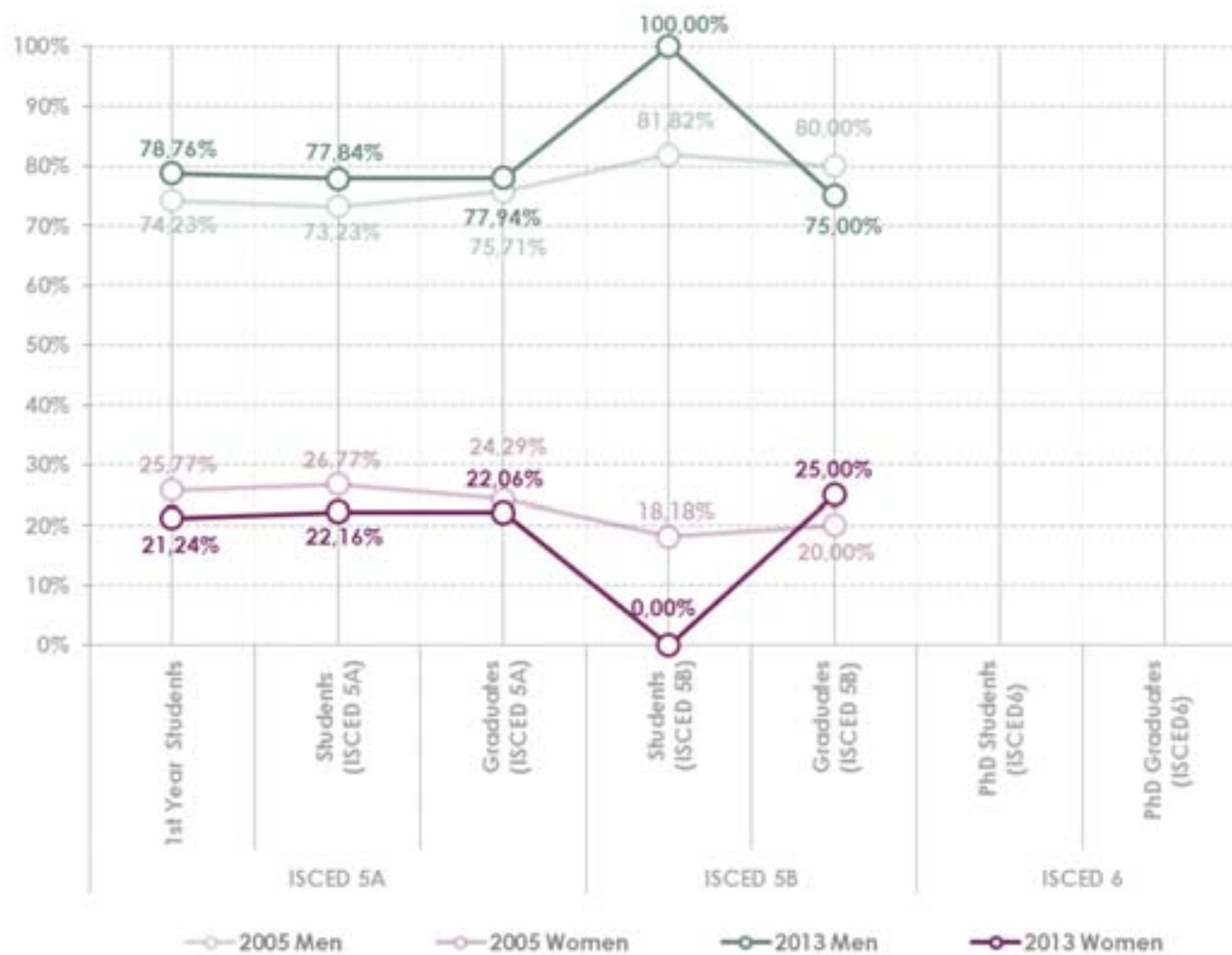


**FIGURE 1.6\_ Students, distribution by sex and level, School of Mining Engineering (2007 and 2013)**



Source: Observatorio Académico Database, UPM

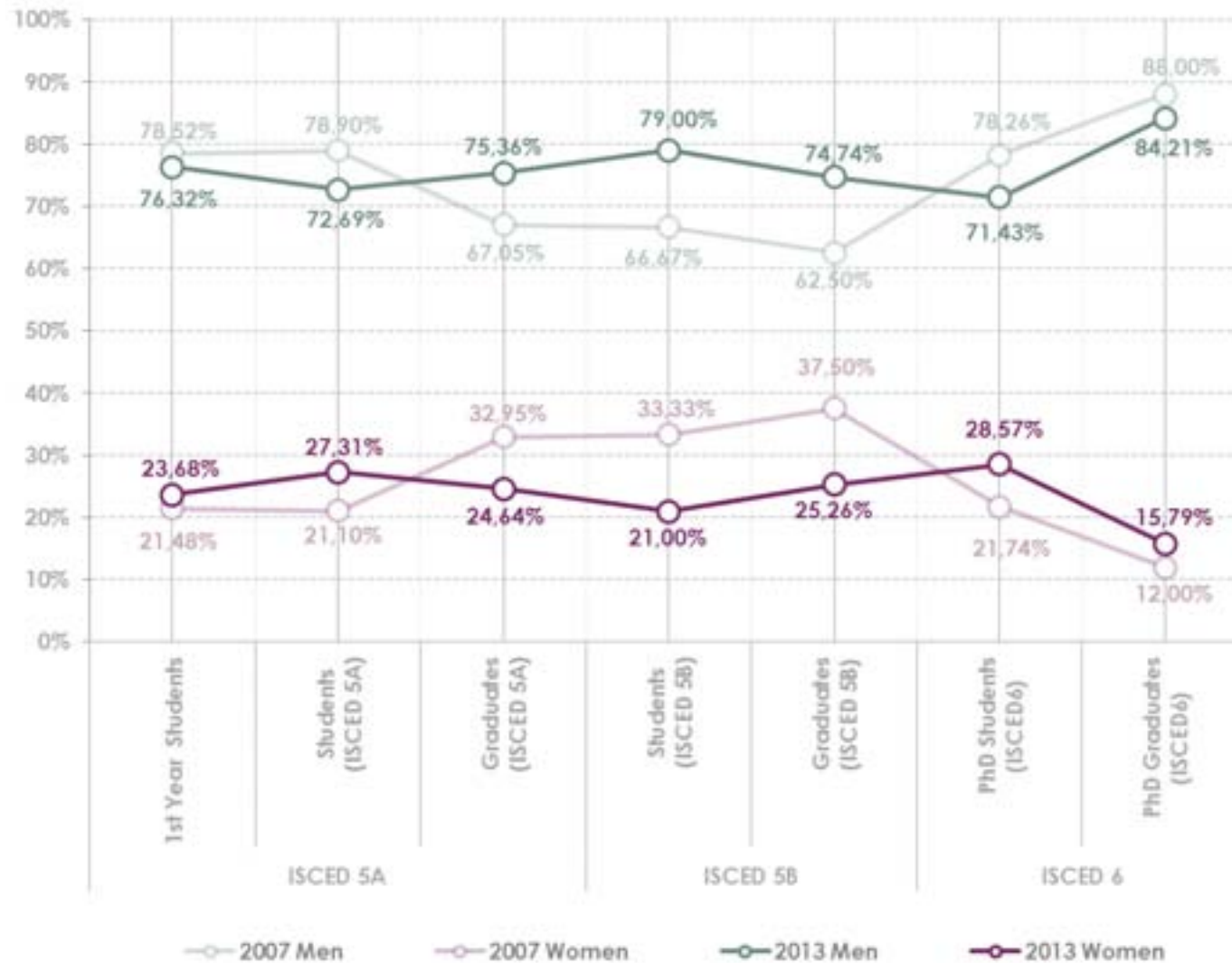
FIGURE 1.7\_ Students, distribution by sex and level, School of Naval Engineering (2005 and 2013)



Source: Observatorio Académico Database, UPM

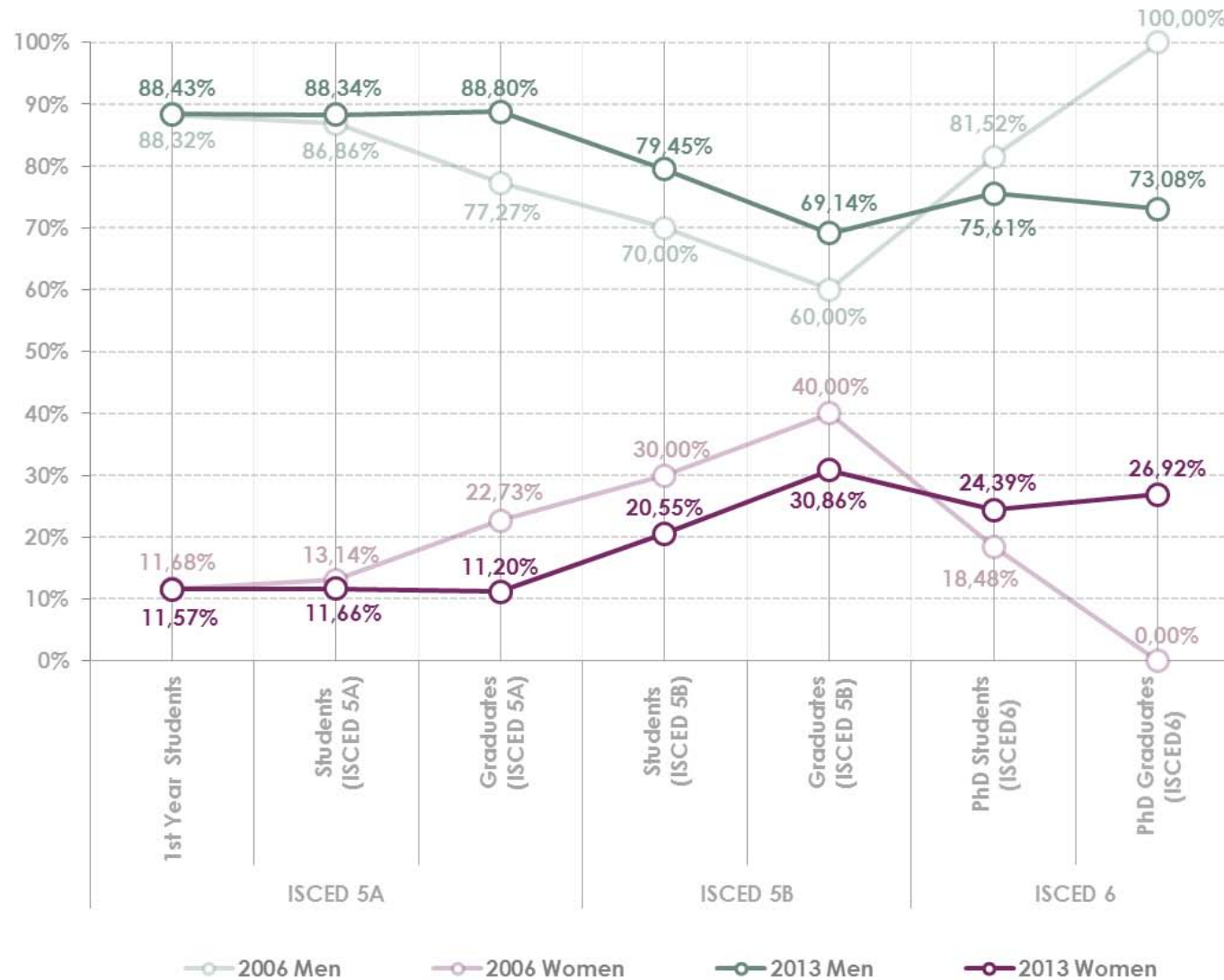
Note: This School does not offer PhD courses

FIGURE 1.8\_ Students, distribution by sex and level, Higher School of Telecommunications Engineering (2007 and 2013)



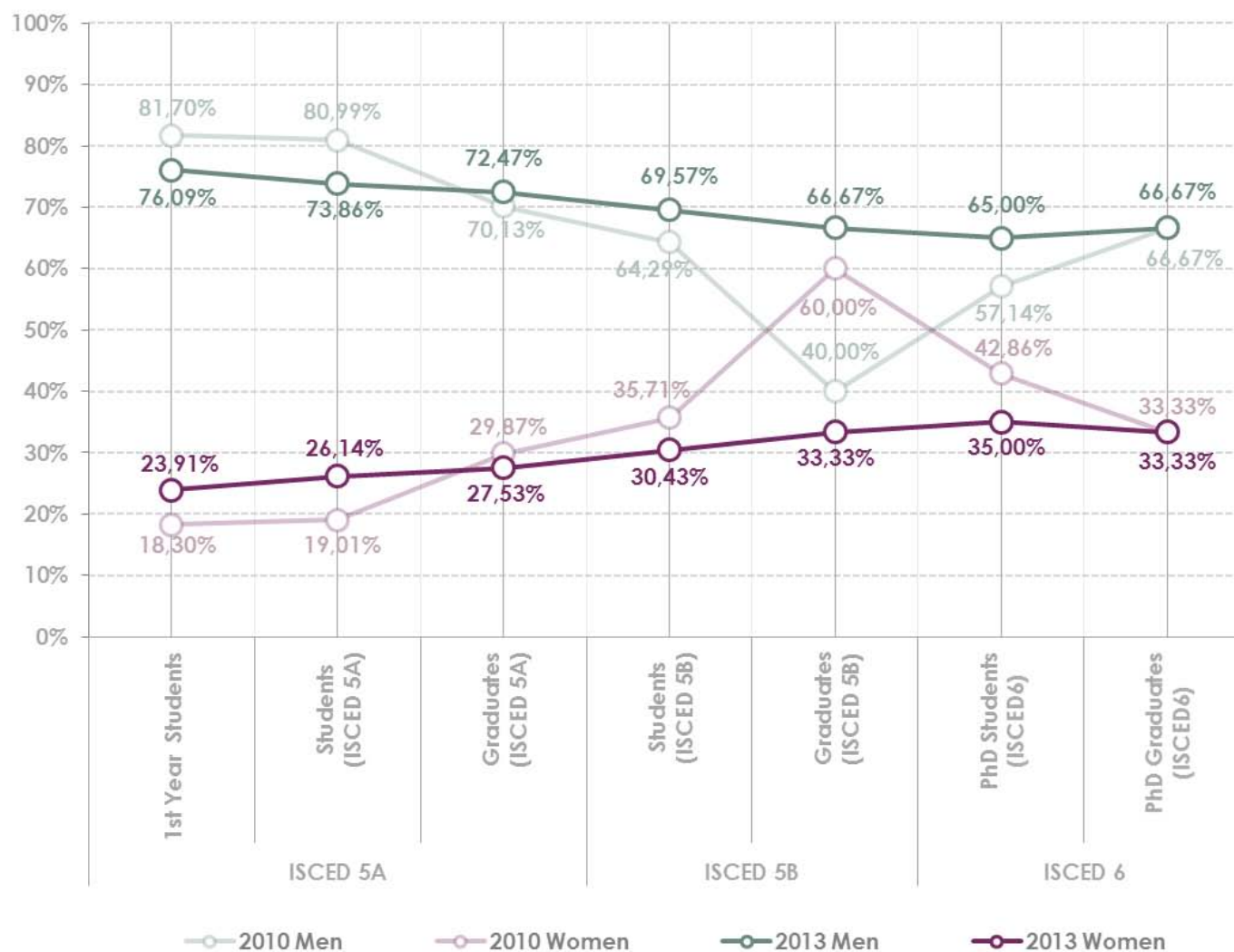
Source: Observatorio Académico Database, UPM

**FIGURE 1.9\_ Students, distribution by sex and level, Higher School of Computer Sciences (2006 and 2013)**



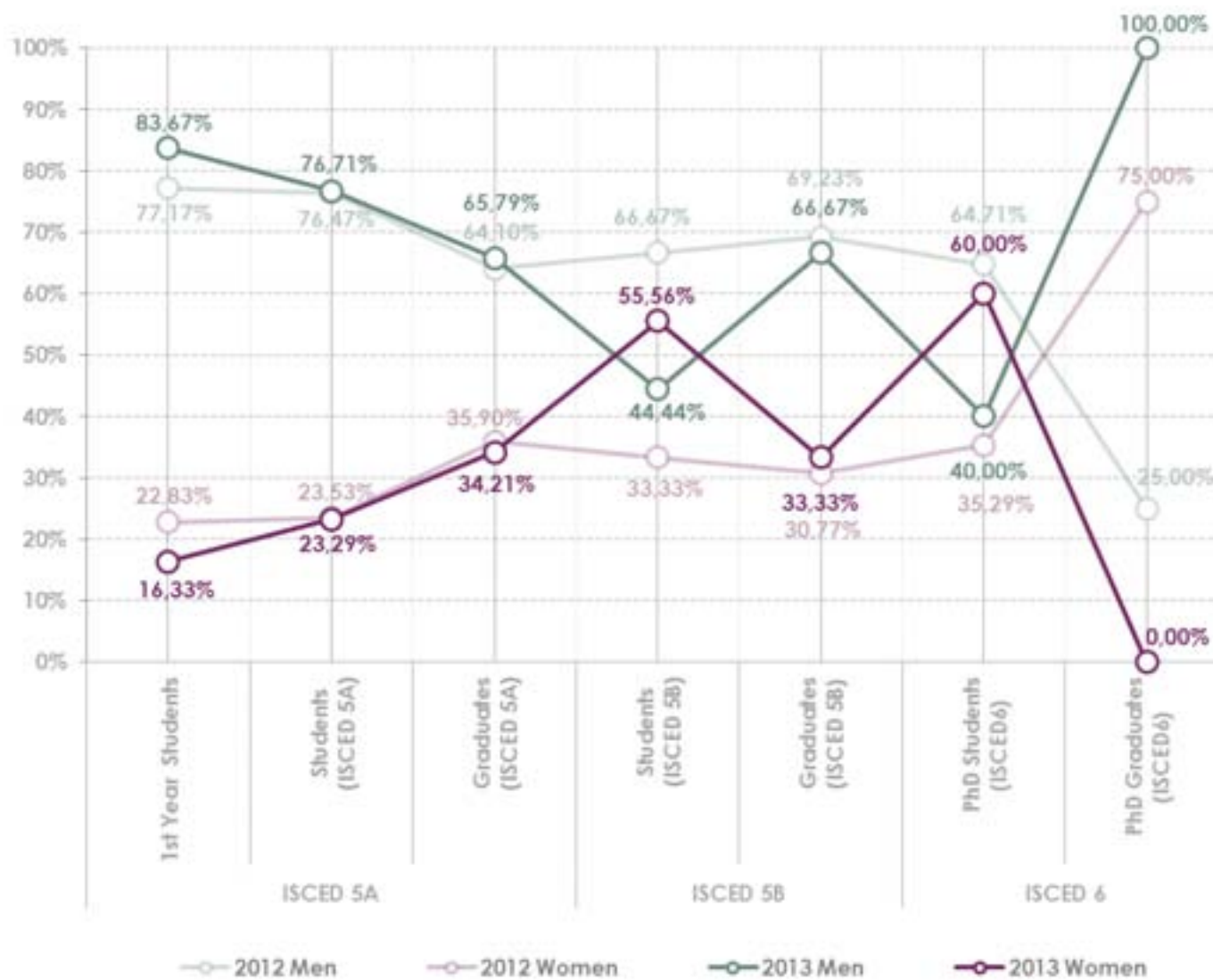
Source: Observatorio Académico Database, UPM

FIGURE 1.10\_ Students, distribution by sex and level, Faculty of Sciences for Physical Activity and Sport (2010 and 2013)



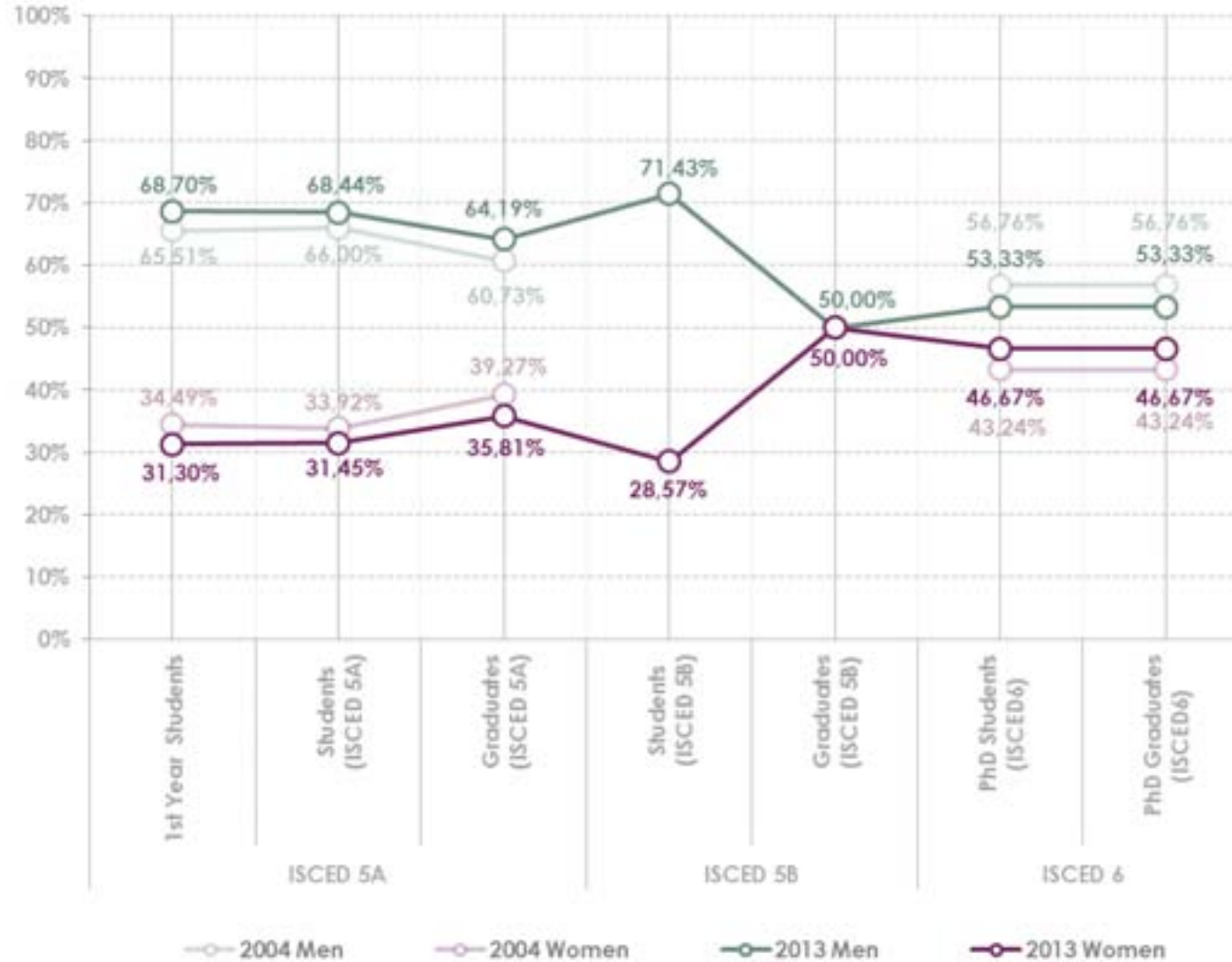
Source: Observatorio Académico Database, UPM

FIGURE 1.11\_Students, distribution by sex and level, School of Land Surveying, Geodesy and Mapping Engineering (2012 and 2013)



Source: Observatorio Académico Database, UPM

**FIGURE 1.12\_ Students, distribution by sex and level, School of Forestry Engineering and Natural Resources (2004, 2013)**

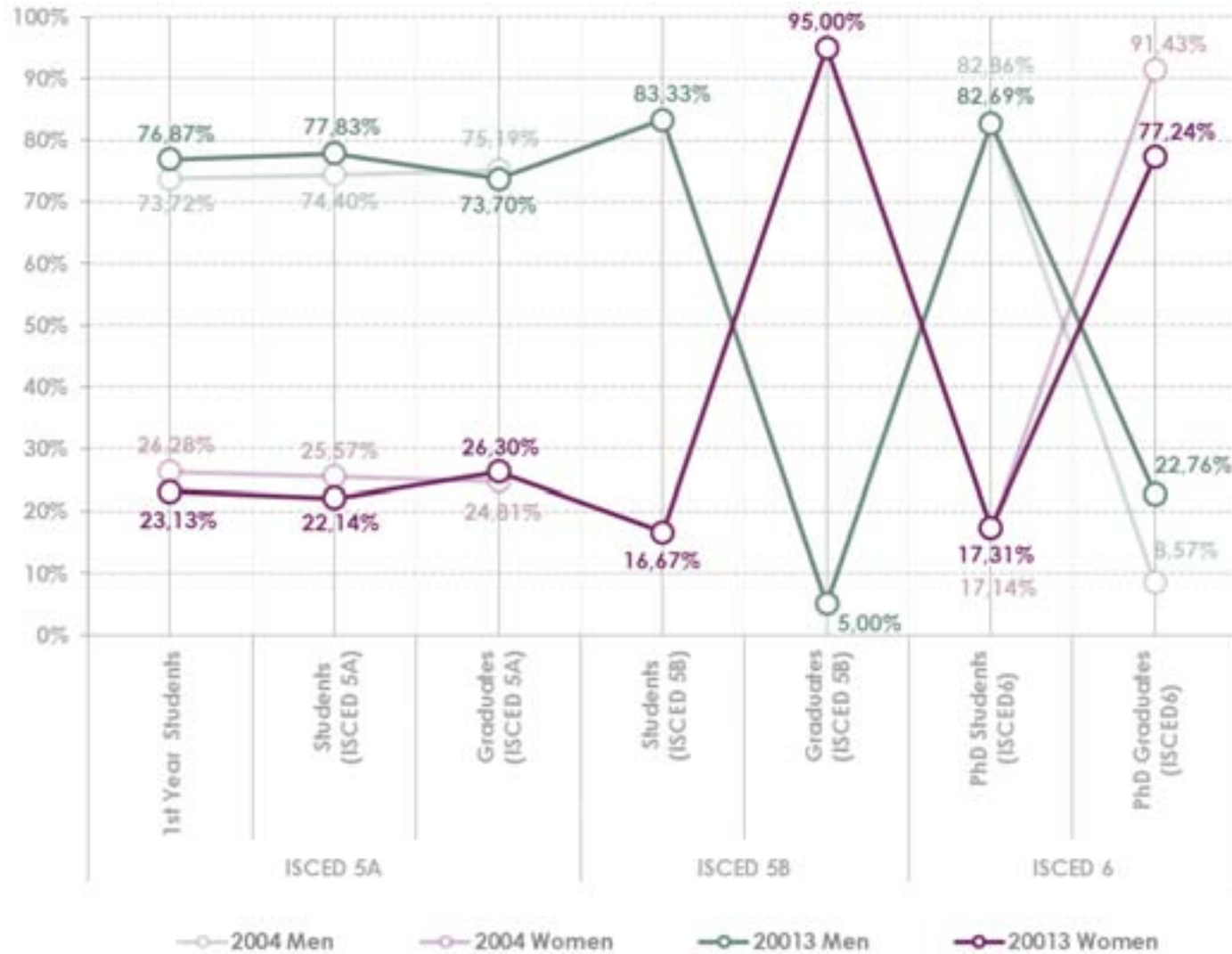


**Source:** Observatorio Académico Database, UPM

**Notes:** There were no ISCED 5B Students in 2004. This graph shows data reflecting the merging in school-year 2012-2013 of two previously existing schools (Higher School of Forestry Engineering and the Technical School of Forestry Engineering).



**FIGURE 1.13\_ Students, distribution by sex and level, School of Aeronautics and Space Engineering (2004-2013)**

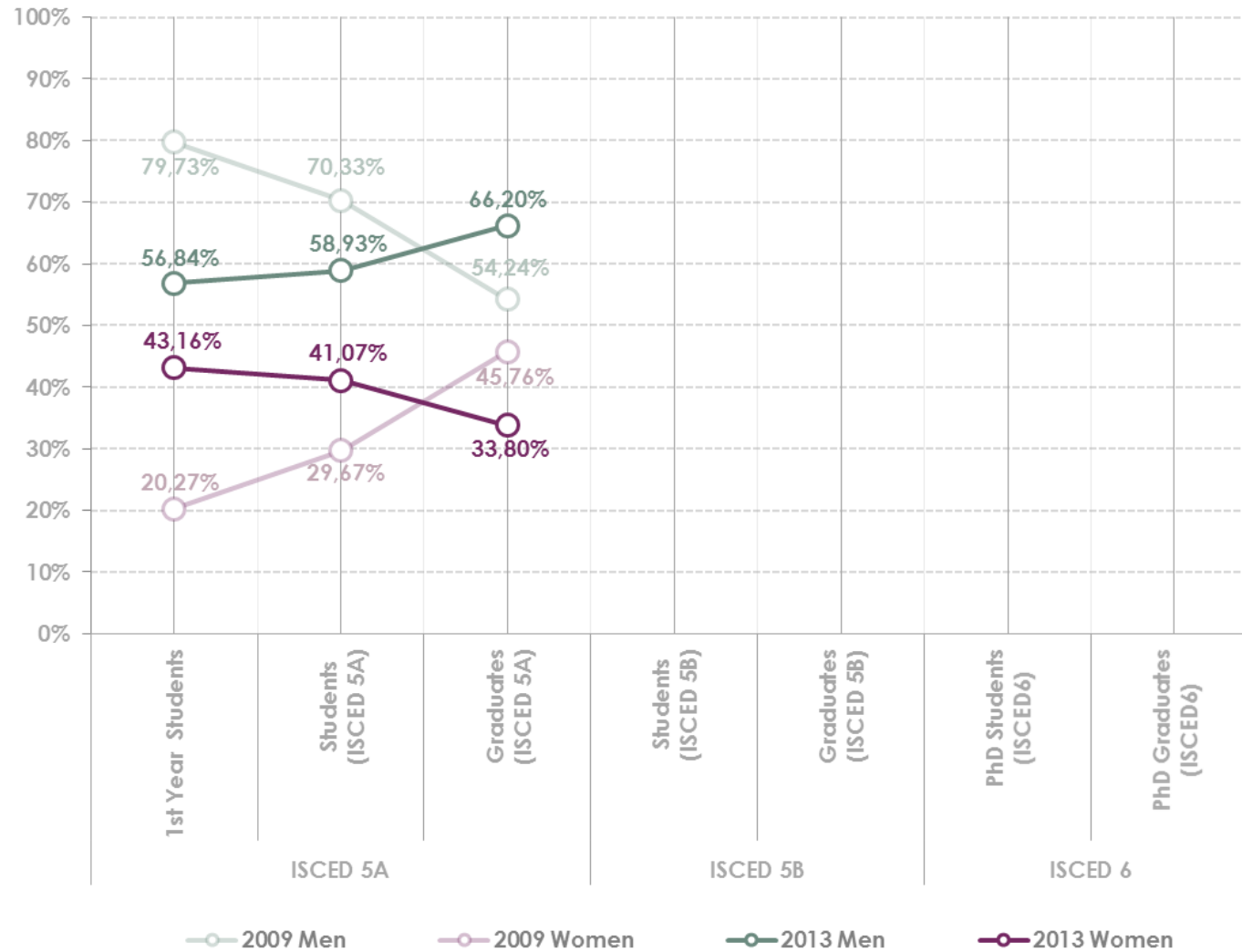


**Source:** Observatorio Académico Database, UPM

**Notes:** There were no ISCED 5B students or graduates in 2004. This graph shows data reflecting the merging of two previously existing Schools (Higher School of Aeronautics Engineering and Technical School of Aeronautics Engineering).



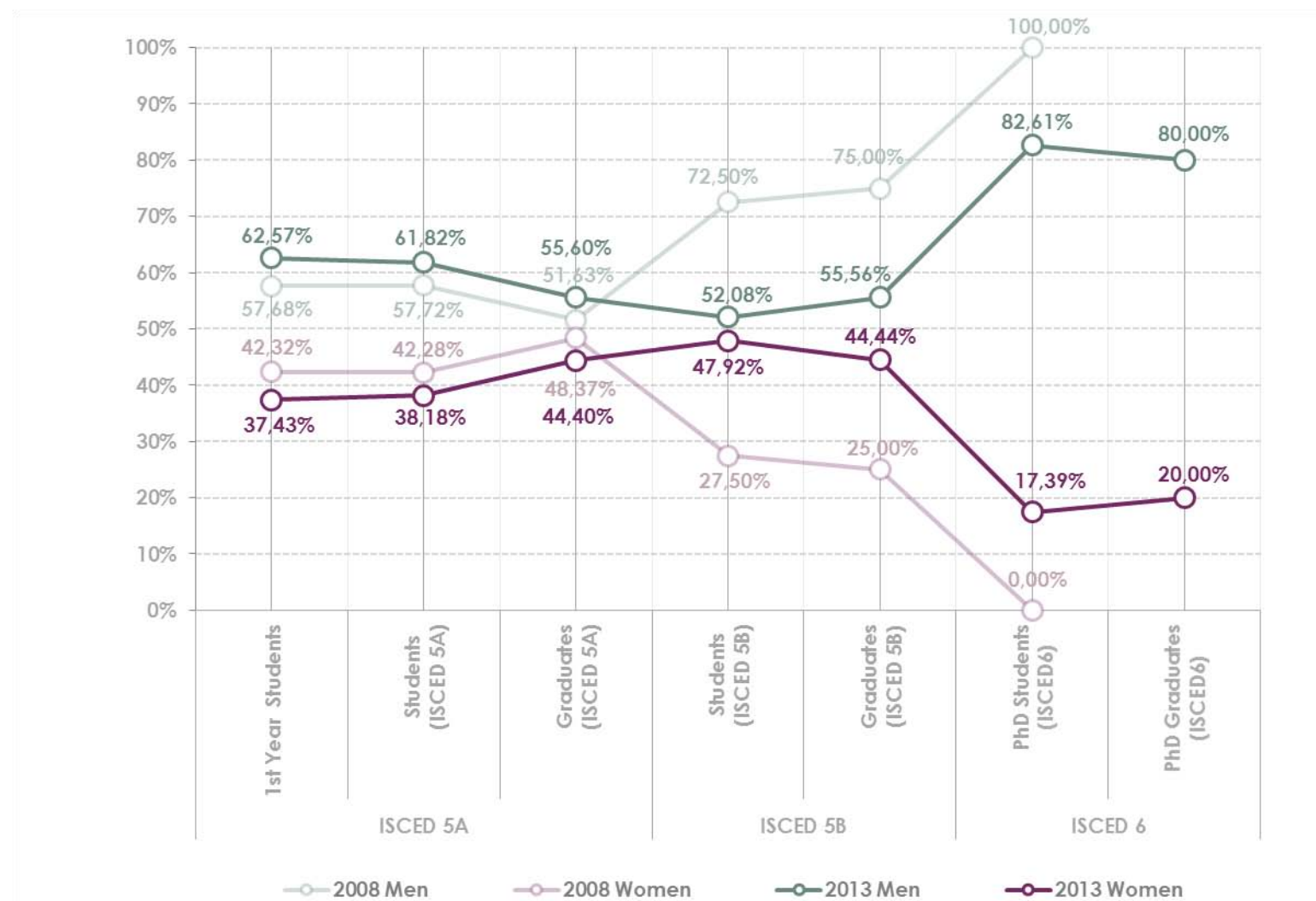
**FIGURE 1.14\_ Students, distribution by sex and level, Technical School of Agriculture Engineering (2009 and 2013)**



**Source:** Observatorio Académico Database, UPM

**Note:** This Schools has no ISCED 5B or PhD courses

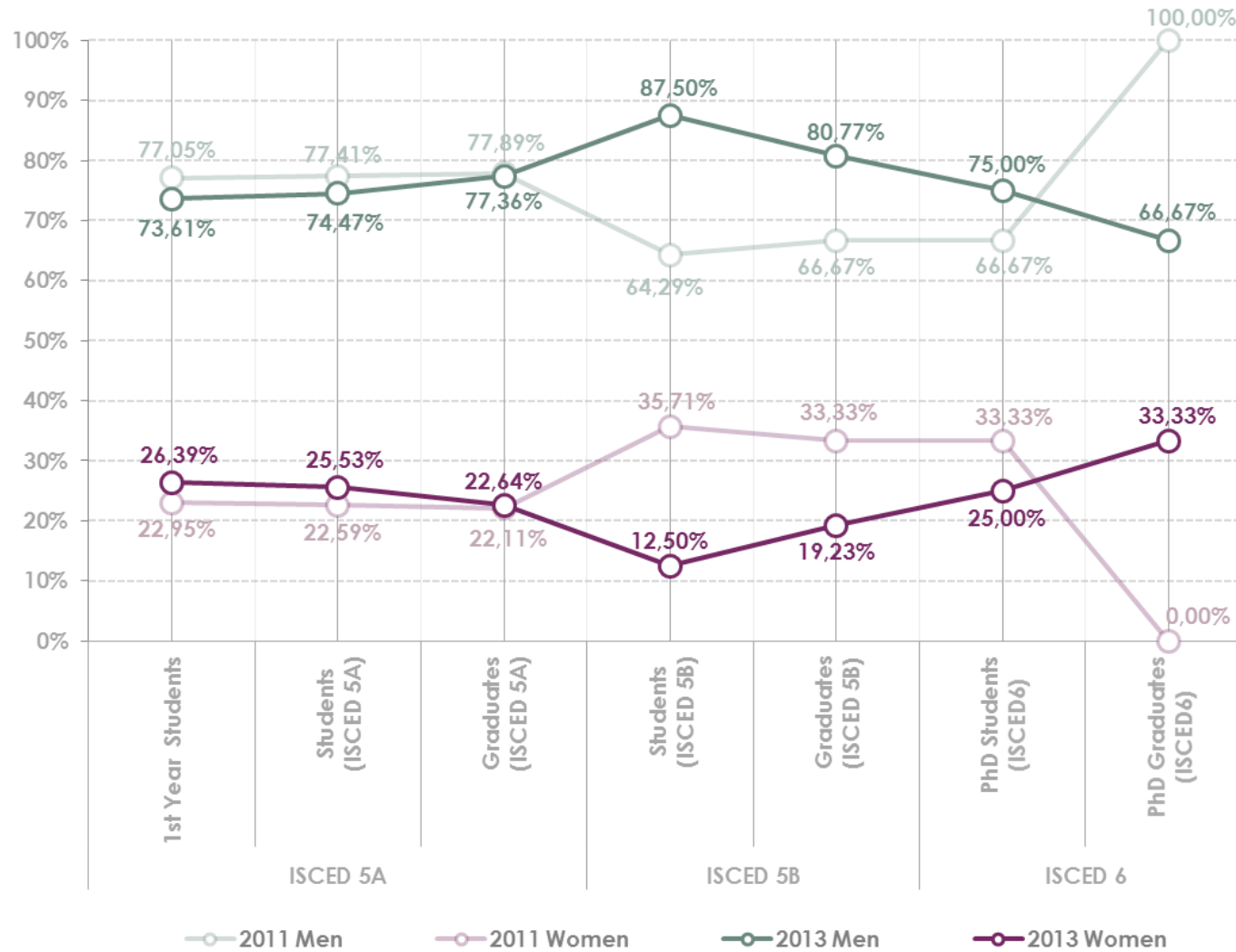
**FIGURE 1.15\_ Students, distribution by sex and level, School of Building Engineering (2008 and 2013)**



**Source:** Observatorio Académico Database, UPM

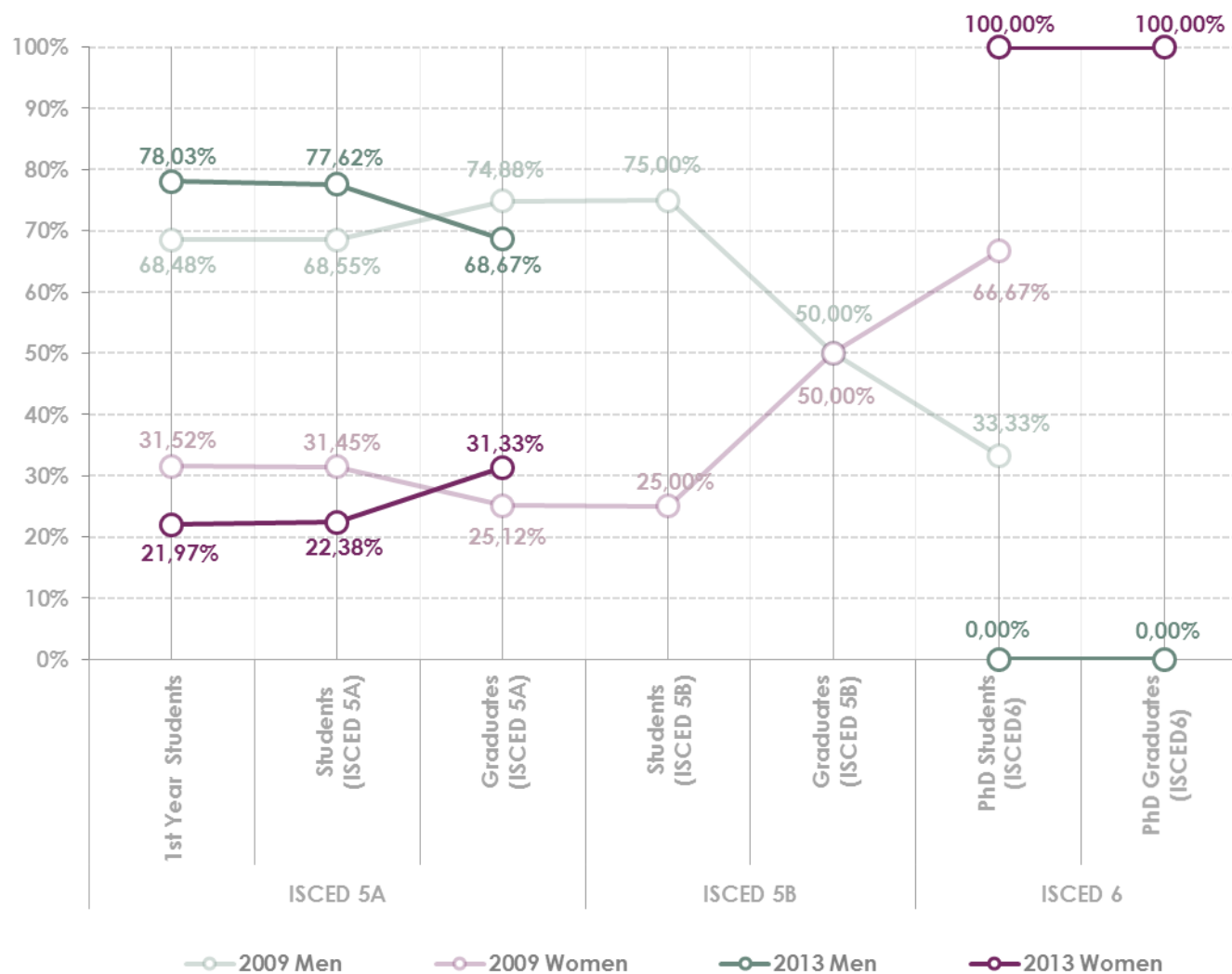
**Note:** In 2003 there were no PhD graduates in the School.

**FIGURE 1.16\_ Students, distribution by sex and level, Technical School of Industrial Design and Engineering (2011 and 2013)**



Source: Observatorio Académico Database, UPM

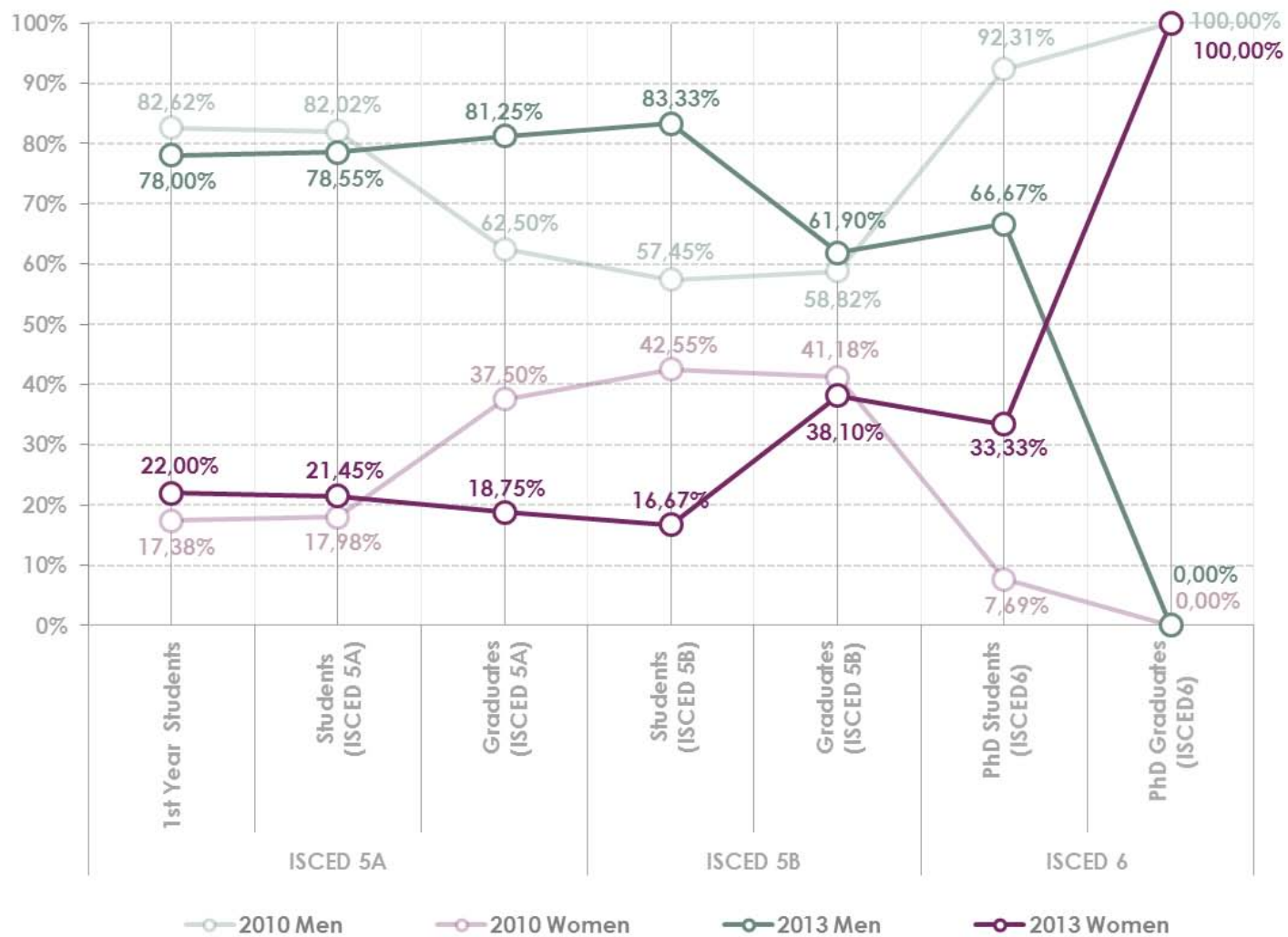
FIGURE 1.17\_ Students, distribution by sex and level, Technical School Civil Engineering (2009 and 2013)



Source: Observatorio Académico Database, UPM

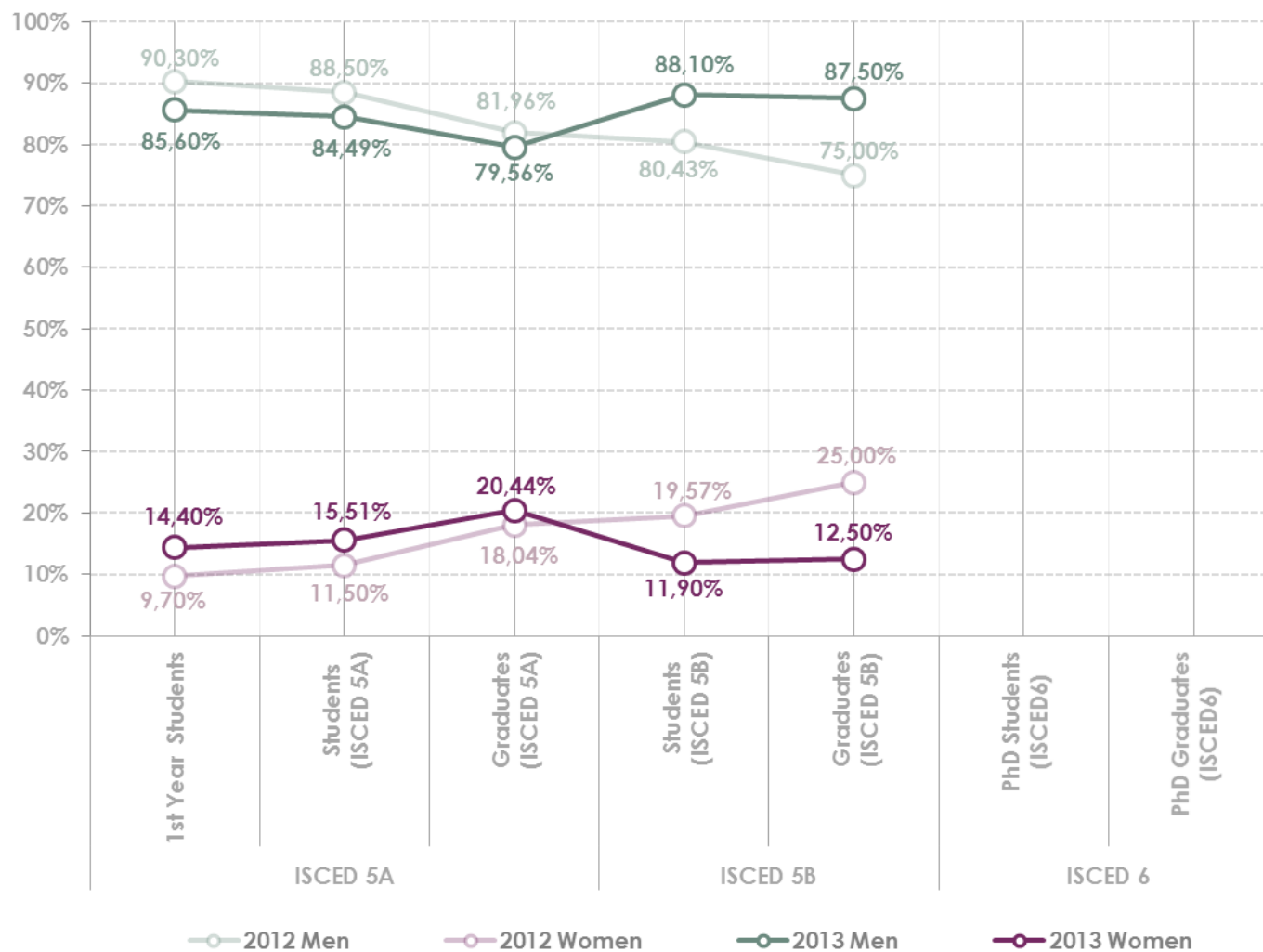
Note: There were no PhD graduates in 2009. In 2013 there were no ISCED 5B students or graduates.

FIGURE 1.18\_ Students, distribution by sex and level, Technical School of Telecommunications Engineering (2010 and 2013)



Source: Observatorio Académico Database, UPM

**FIGURE 1.19\_ Students, distribution by sex and level, Technical School of Computer Systems Engineering (2012 and 2013)**



**Source:** Observatorio Académico Database, UPM

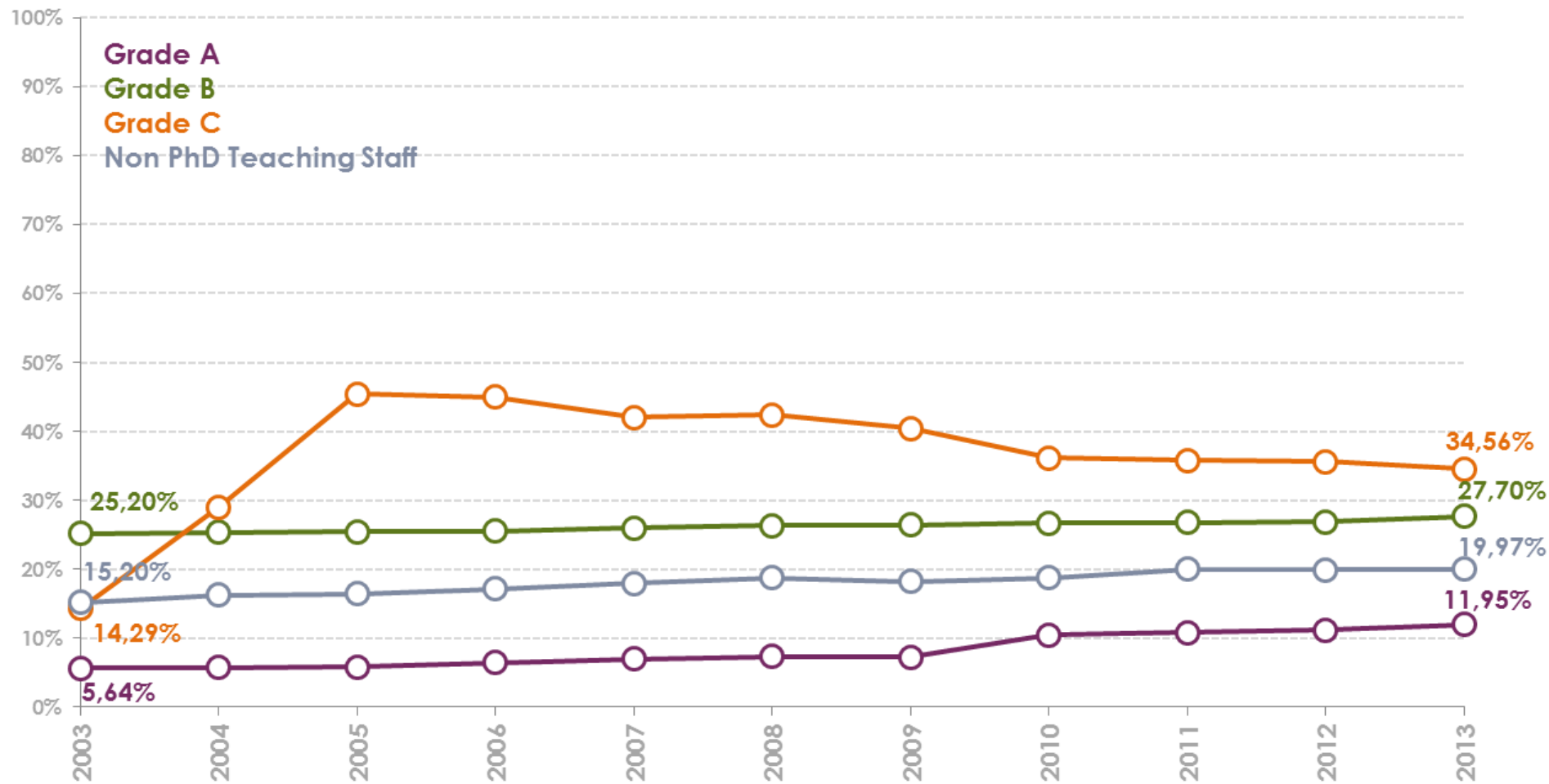
**Note:** This School offers no PhD courses.

**CHAPTER 2**  
**Faculty**

**CHAPTER 2.1.**  
**Women in Faculty**

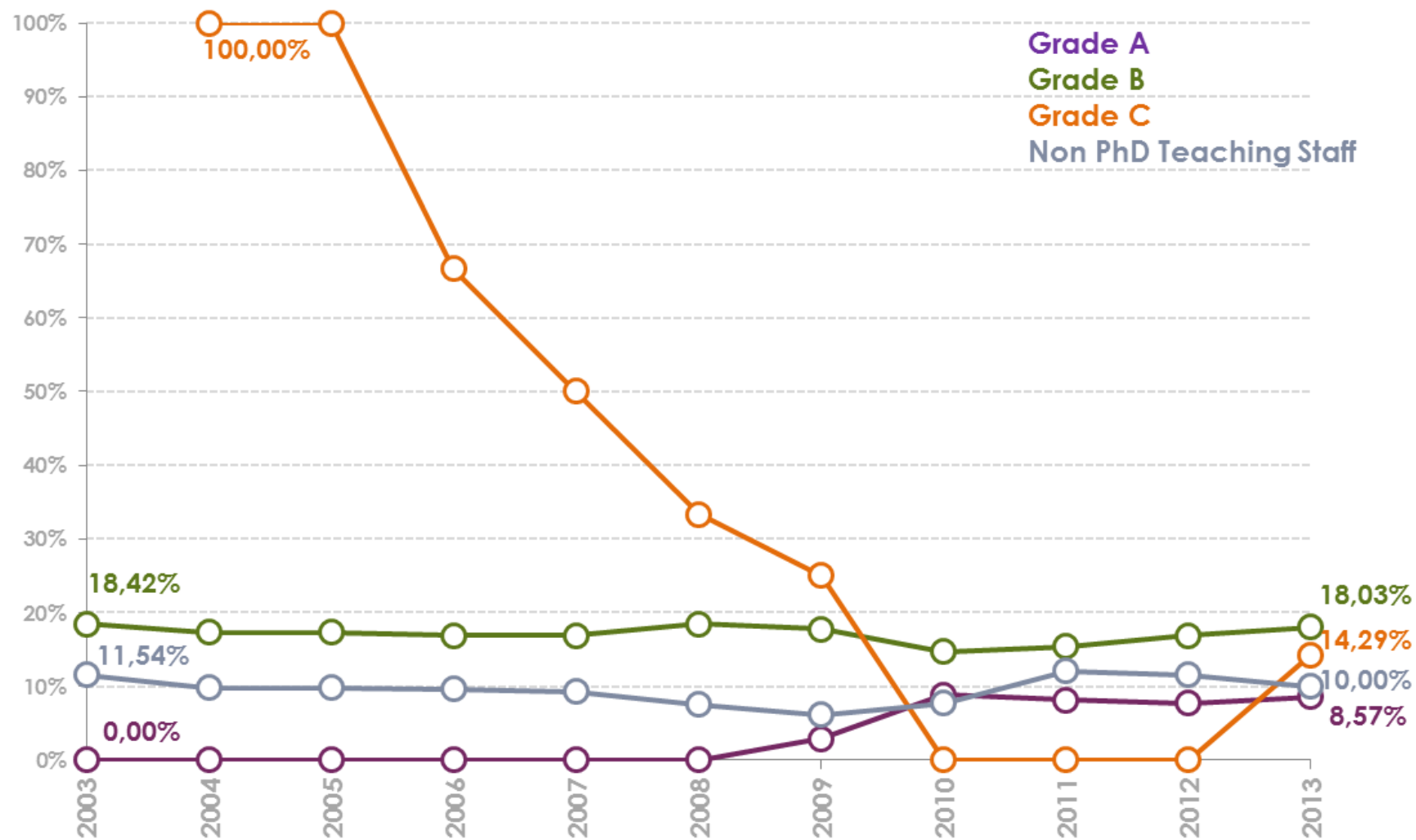


FIGURE 2.1.1\_ Proportion of women in Faculty by grade, Universidad Politécnica de Madrid (2003-2013)



Source: Observatorio Académico Database, UPM

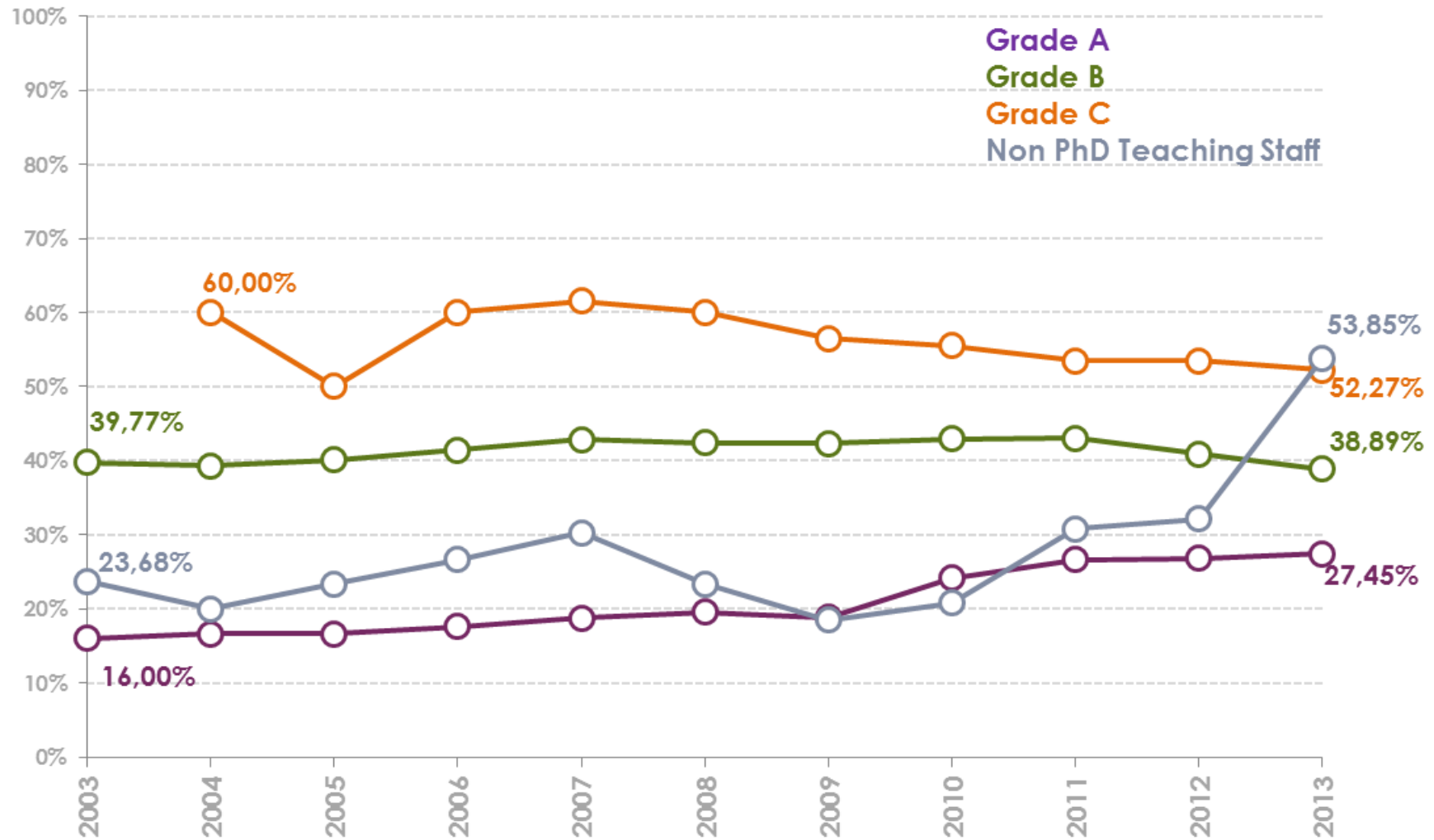
FIGURE 2.1.2\_ Proportion of women in Faculty by grade, School of Aeronautics Engineering (2003-2013)



Source: Observatorio Académico Database, UPM

Note on Figure 2.1.2: There were no Grade C researchers in year 2003.

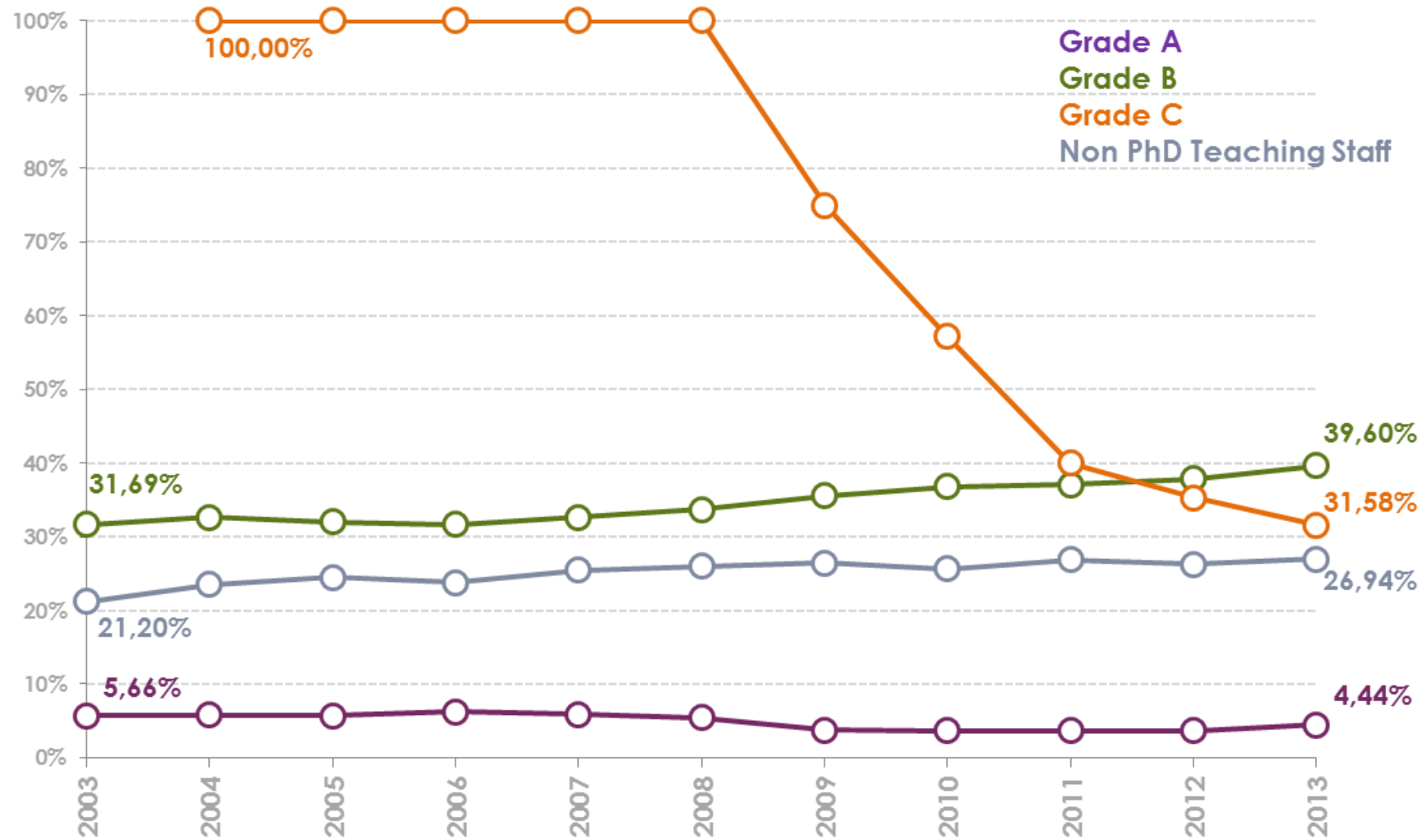
**FIGURE 2.1.3\_ Proportion of women in Faculty by grade, School of Agronomics Engineering (2003-2013)**



**Source:** Observatorio Académico Database, UPM

**Note on Figure 2.1.3:** There were no Grade C researchers in year 2003

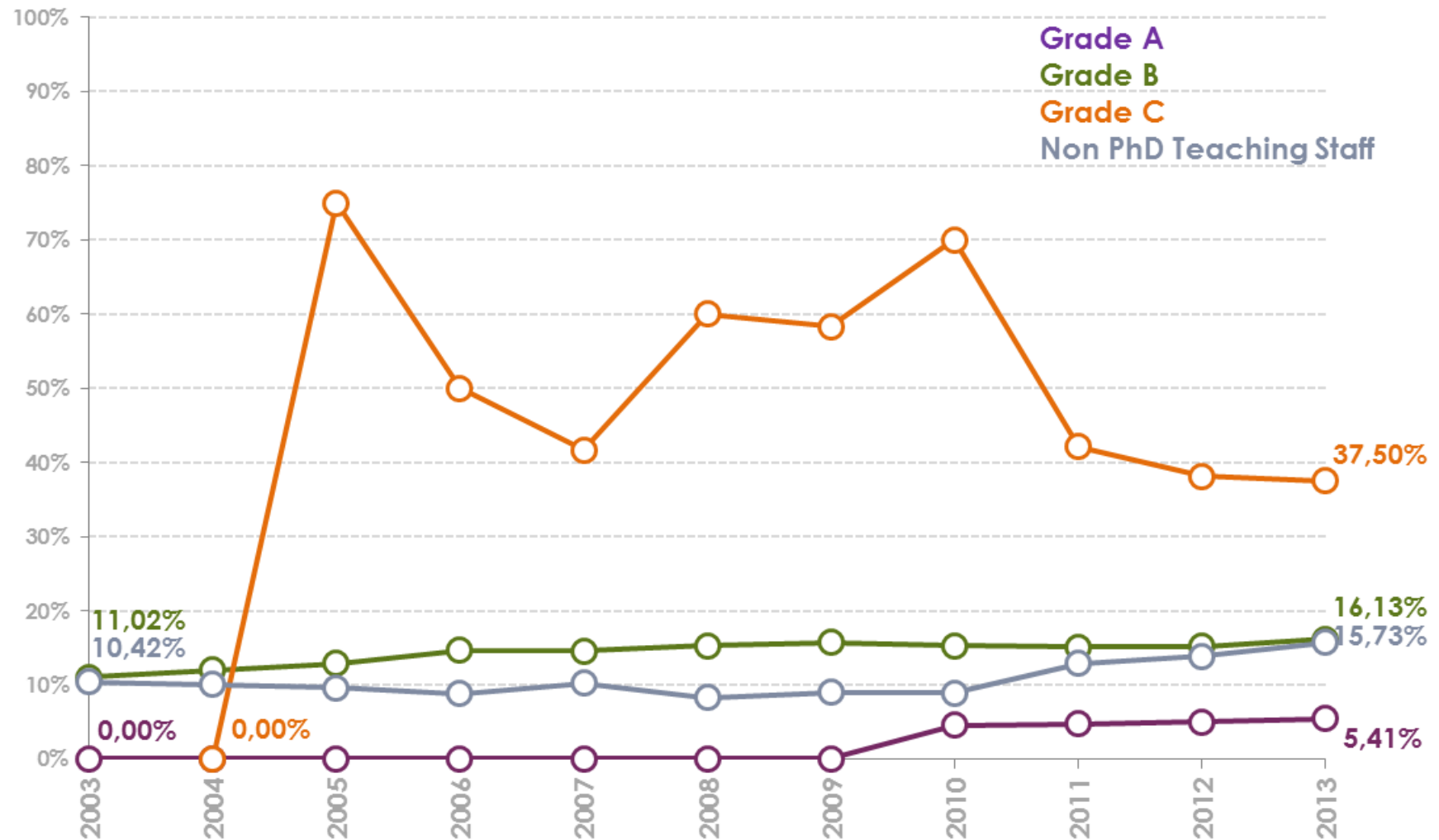
FIGURE 2.1.4\_ Proportion of women in Faculty by grade, School of Architecture (2003-2013)



Source: Observatorio Académico Database, UPM

Note on Figure 2.1.4: There were no Grade C researchers in year 2003

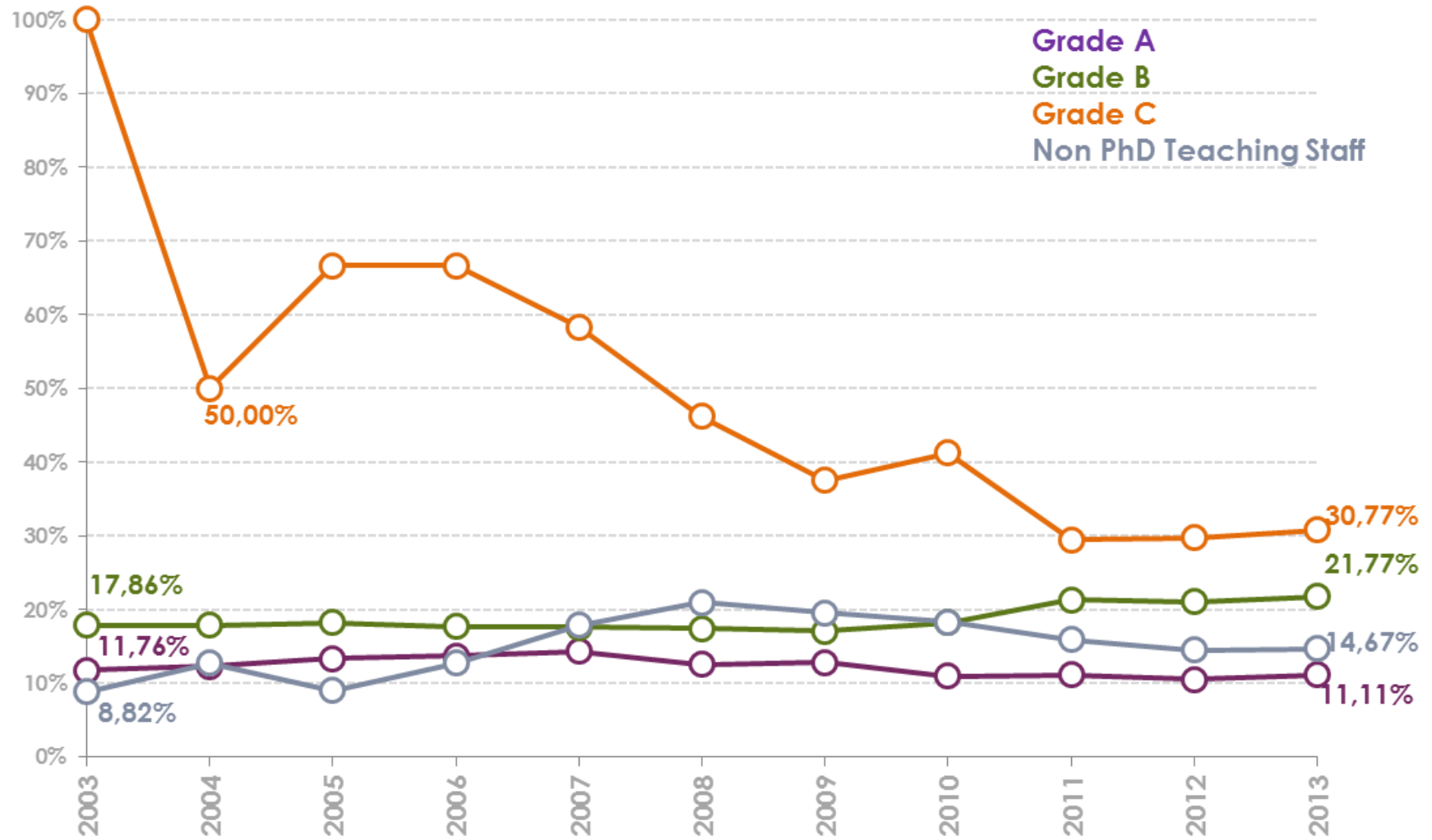
FIGURE 2.1.5\_ Proportion of women in Faculty by grade, School of Civil Engineering (2003-2013)



Source: Observatorio Académico Database, UPM

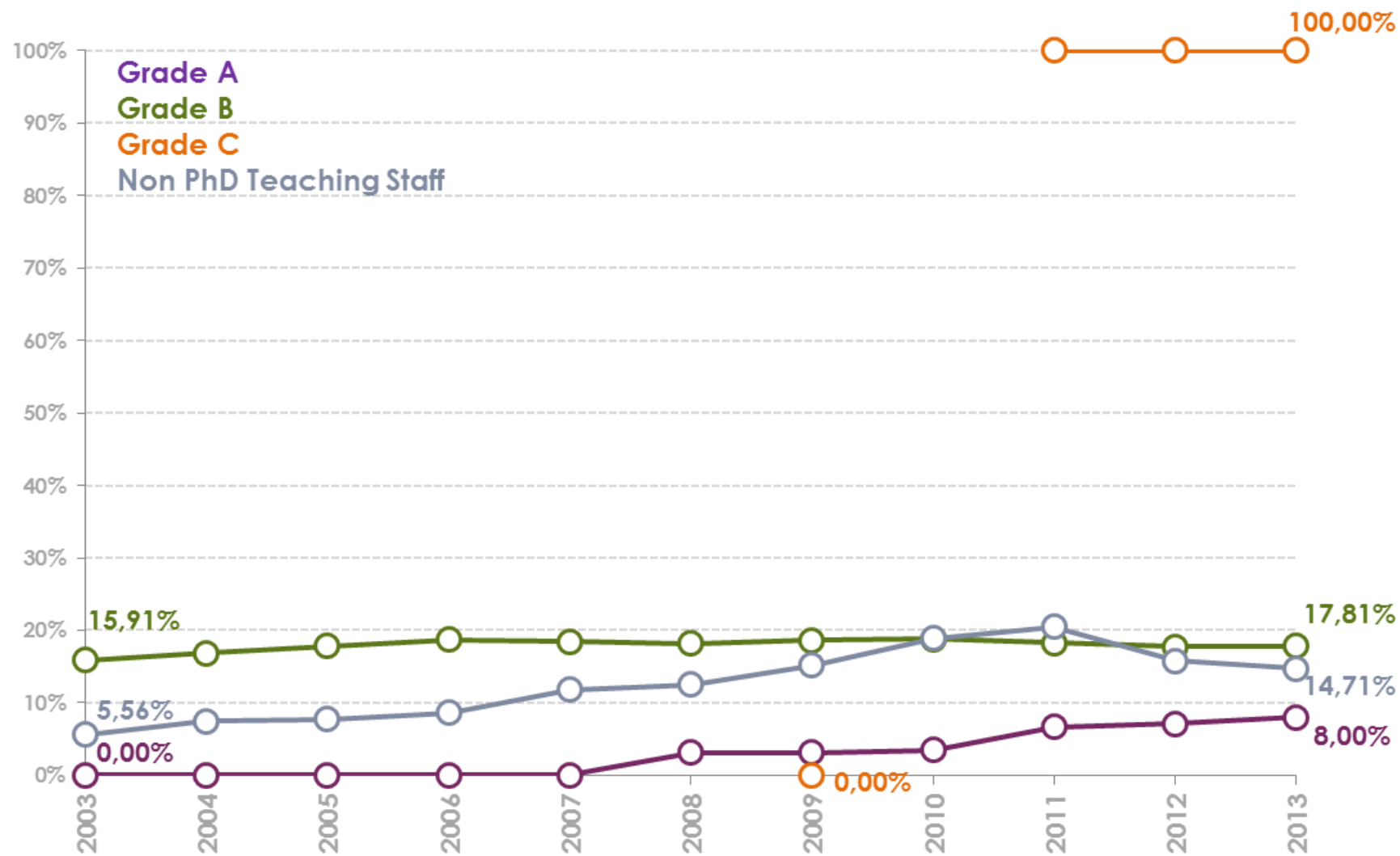
Note on Figure 2.1.5: There were no Grade C researchers in year 2003

FIGURE 2.1.6\_ Proportion of women in Faculty by grade, School of Industrial Engineering (2003-2013)



Source: Observatorio Académico Database, UPM

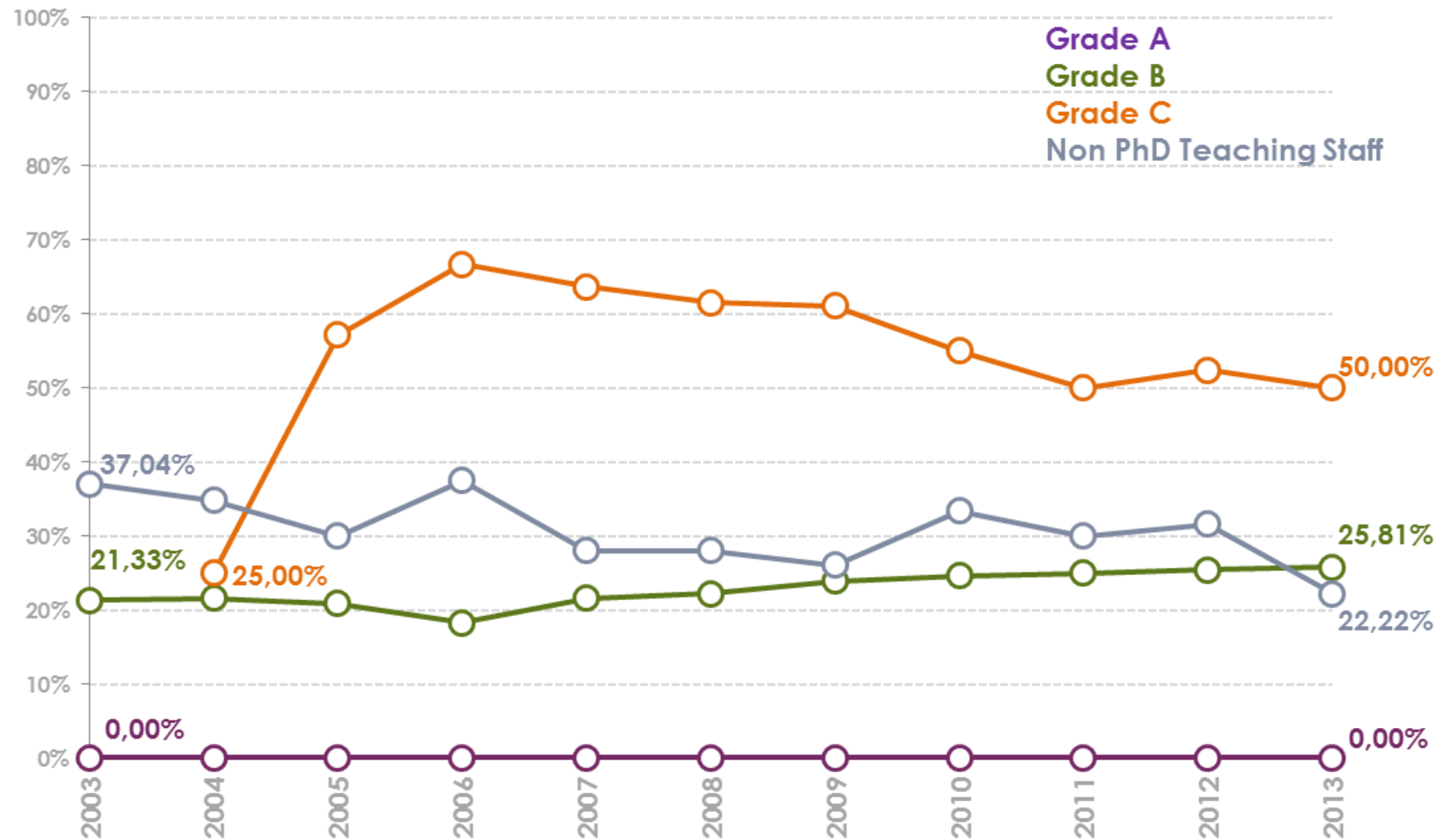
FIGURE 2.1.7\_ Proportion of women in Faculty by grade, School of Mining Engineering (2003-2013)



Source: Observatorio Académico Database, UPM

Note on Figure 2.1.7: There were no Grade C researchers in years 2003, 2004, 2005, 2006, 2007, 2008 and 2010.

FIGURE 2.1.8\_ Proportion of women in Faculty by grade, School of Forestry Engineering (2003-2013)

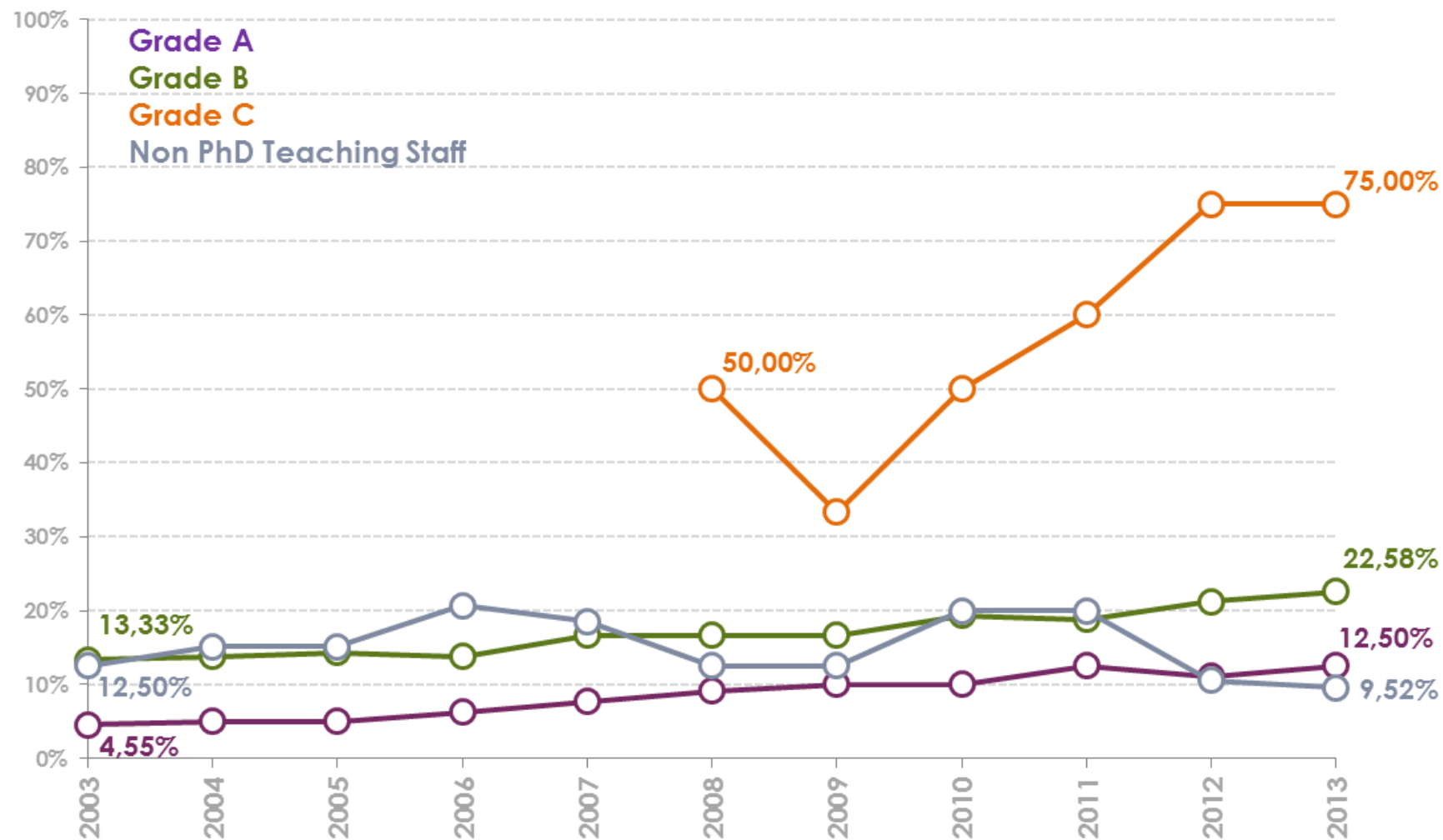


Source: Observatorio Académico Database, UPM

Note on Figure 2.1.8: There were no Grade C researchers in year 2003



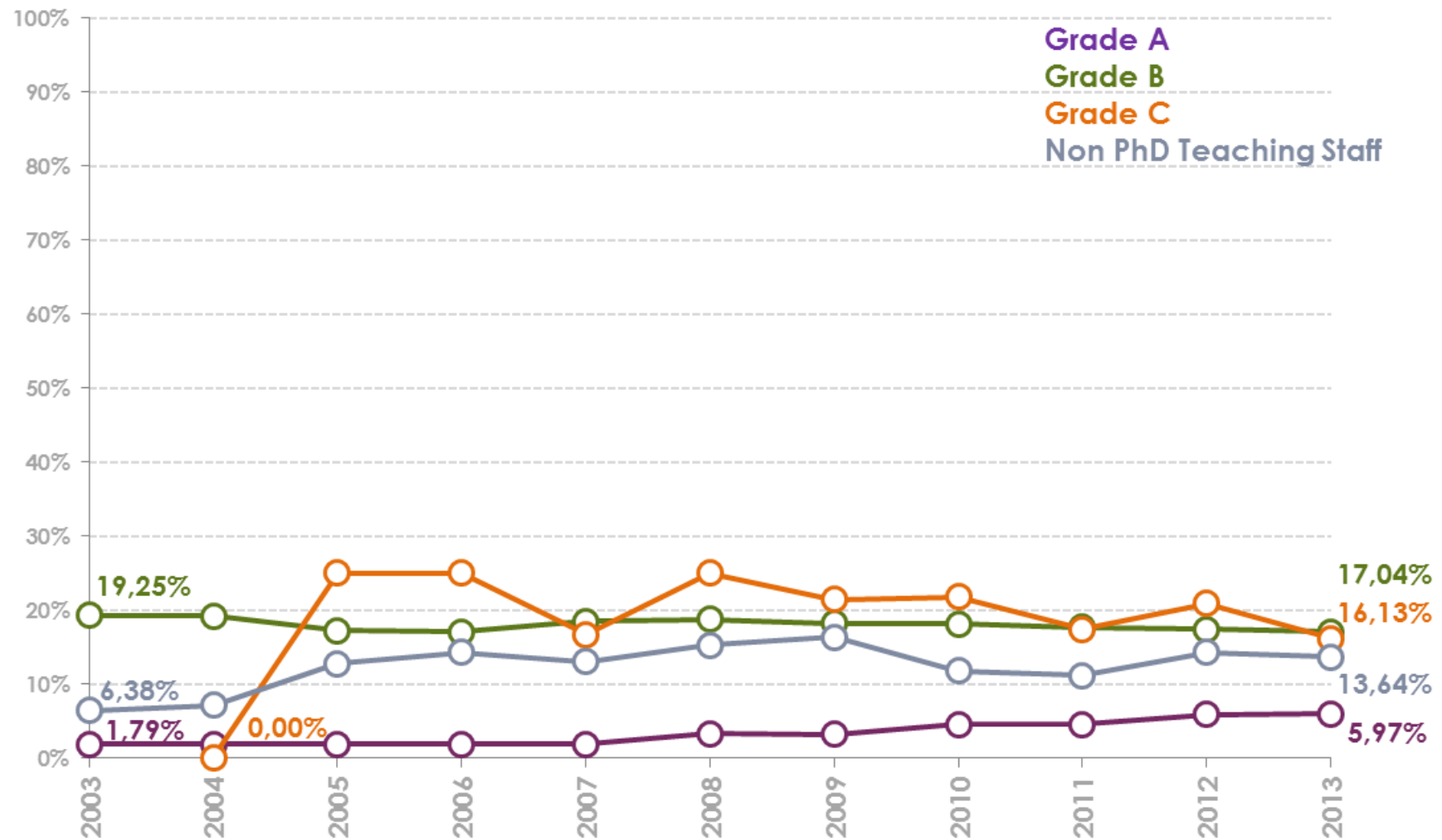
FIGURE 2.1.9\_ Proportion of women in Faculty by grade, School of Naval Engineering (2003-2013)



Source: Observatorio Académico Database, UPM

Note on Figure 2.1.9: There were no Grade C researchers in years 2003, 2004, 2005, 2006 and 2007.

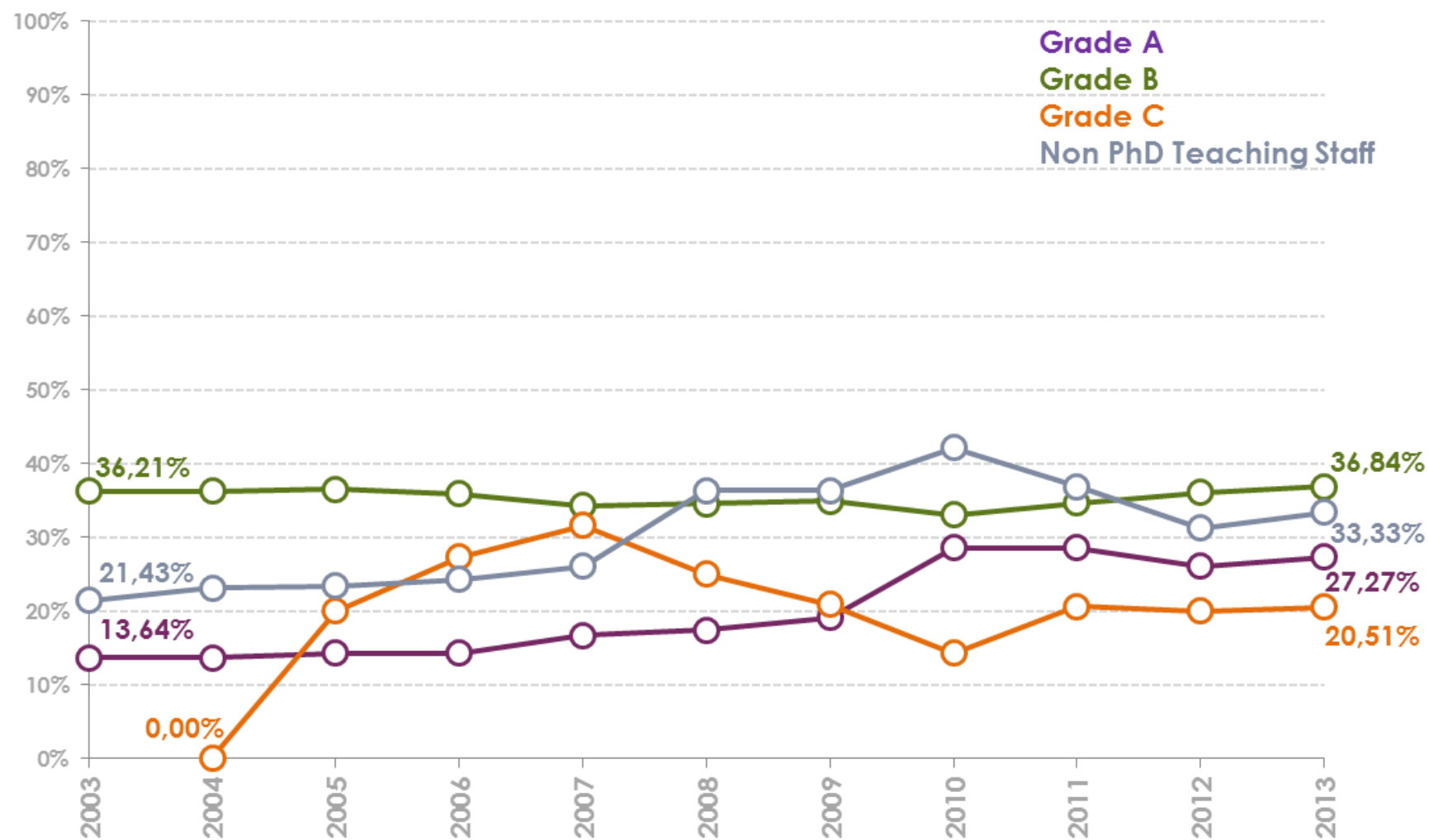
FIGURE 2.1.10\_ Proportion of women in Faculty by grade, School of Telecommunications Engineering (2003-2013)



Source: Observatorio Académico Database, UPM

Note on Figure 2.1.10: There were no Grade C researchers in year 2003.

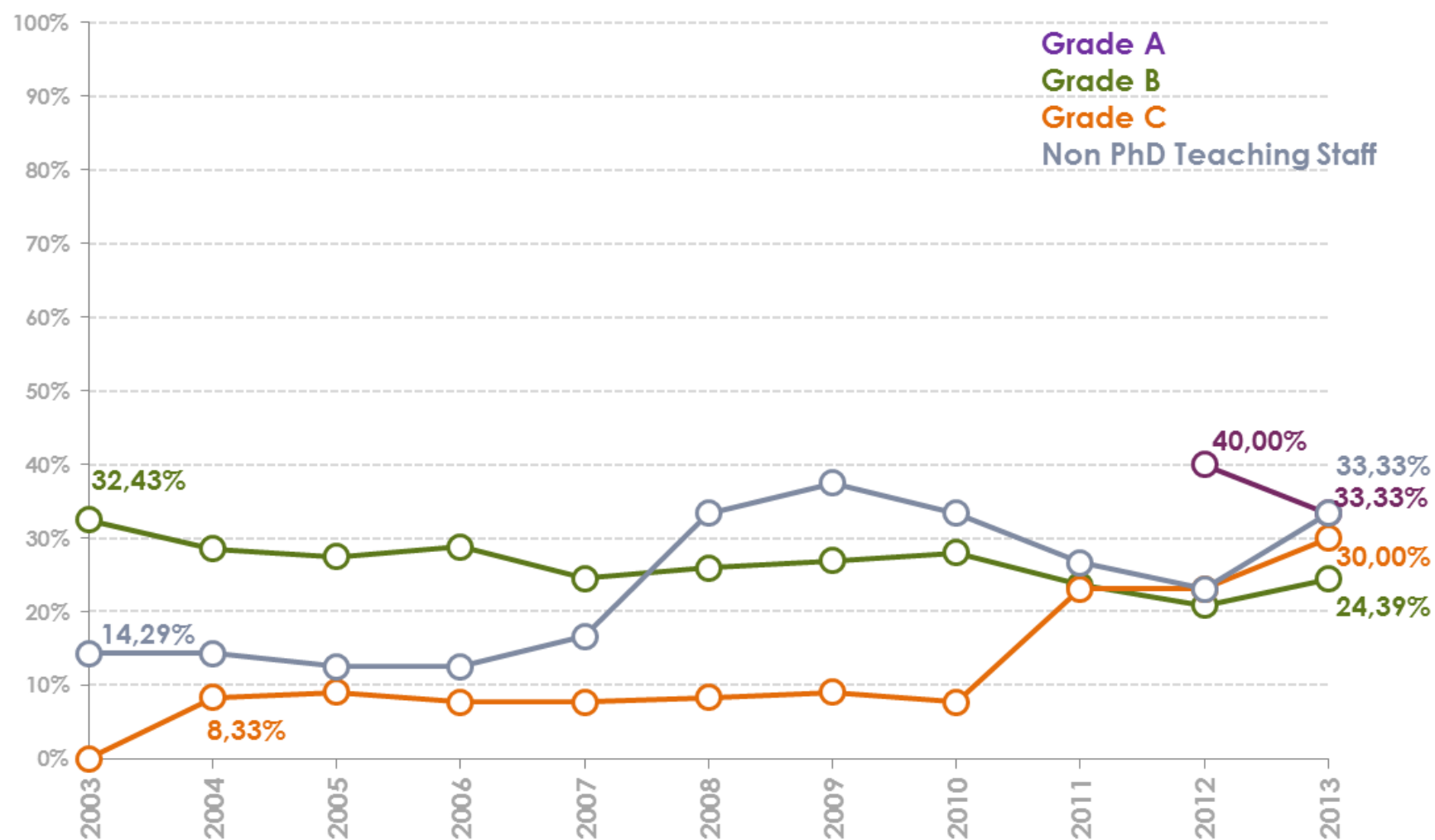
FIGURE 2.1.11\_ Proportion of women in Faculty by grade, School of Computer Sciences (2003-2013)



Source: Observatorio Académico Database, UPM

Note on Figure 2.1.11: There were no Grade C researchers in year 2003.

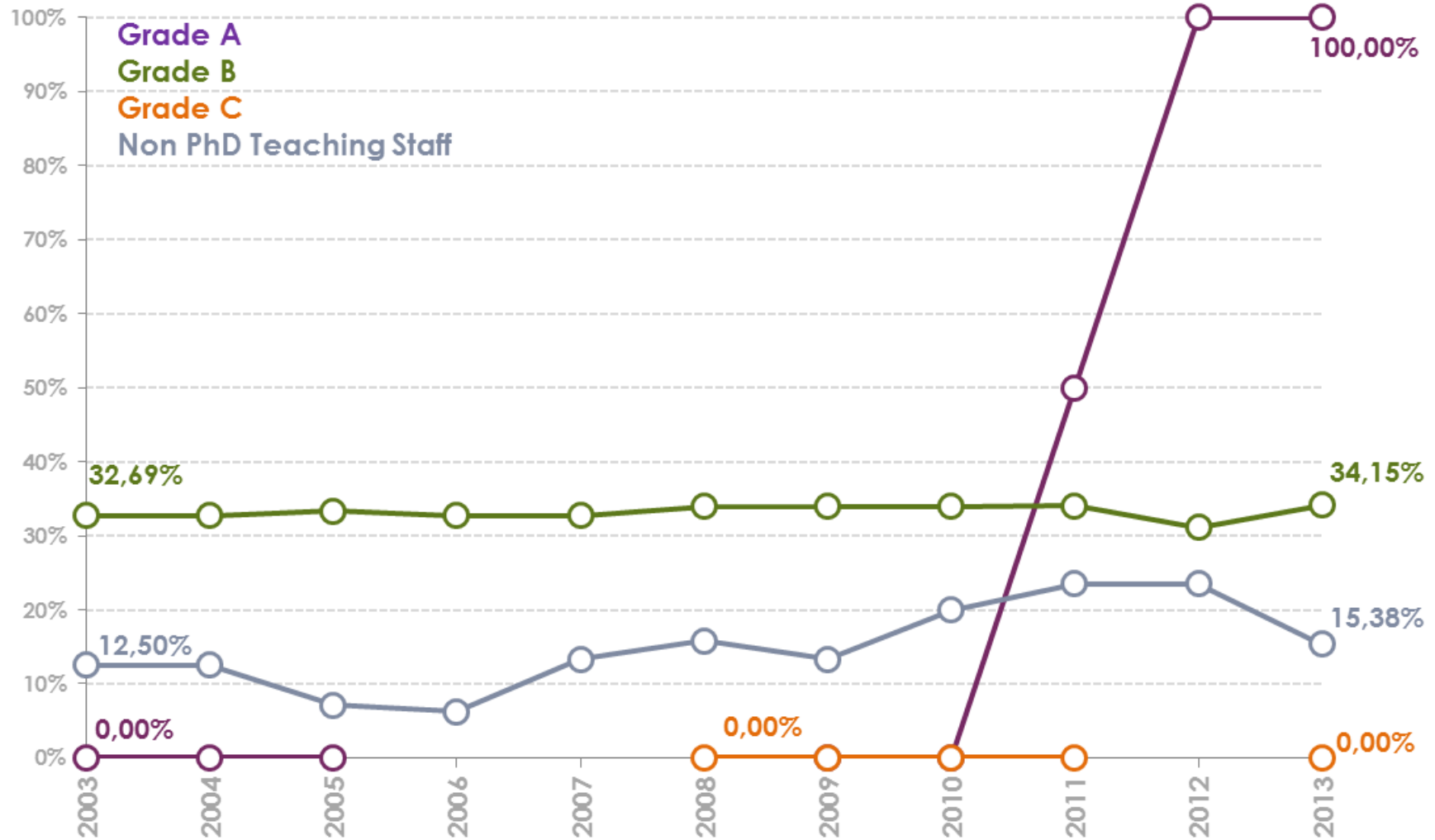
FIGURE 2.1.12\_ Proportion of women in Faculty by grade, Faculty of Sciences for Physical Activity and Sport (2003-2013)



Source: Observatorio Académico Database, UPM

Note: There were no Grade A researchers from year 2003 to year 2011.

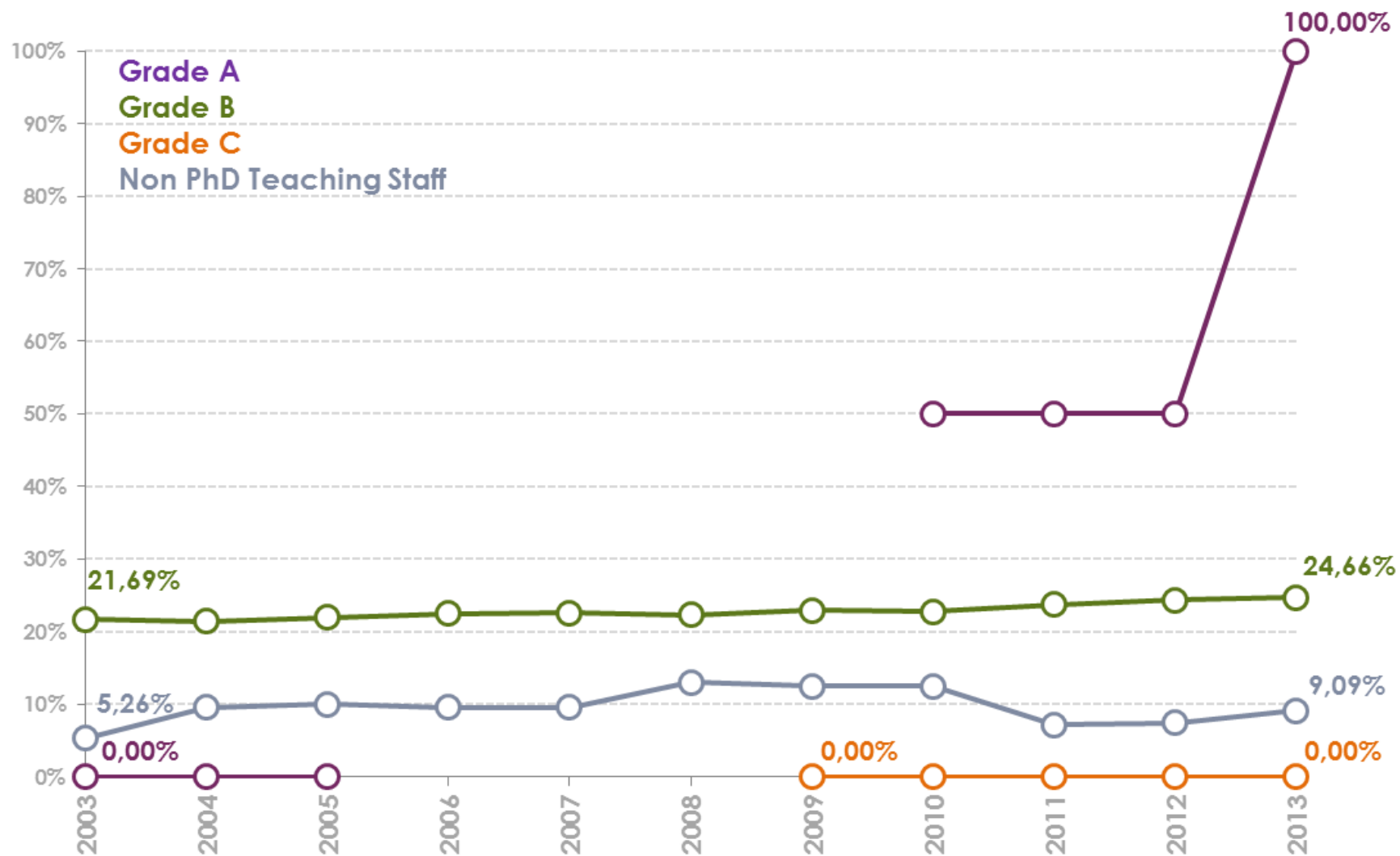
FIGURE 2.1.13\_ Proportion of women in Faculty by grade, School of Land Surveying, Geodesy and Mapping Engineering (2003-2013)



**Source:** Observatorio Académico Database, UPM

**Notes:** There were no Grade A researchers in years 2006, 2007 and 2008. There were no Grade C researchers from year 2003 to year 2007 and in year 2012.

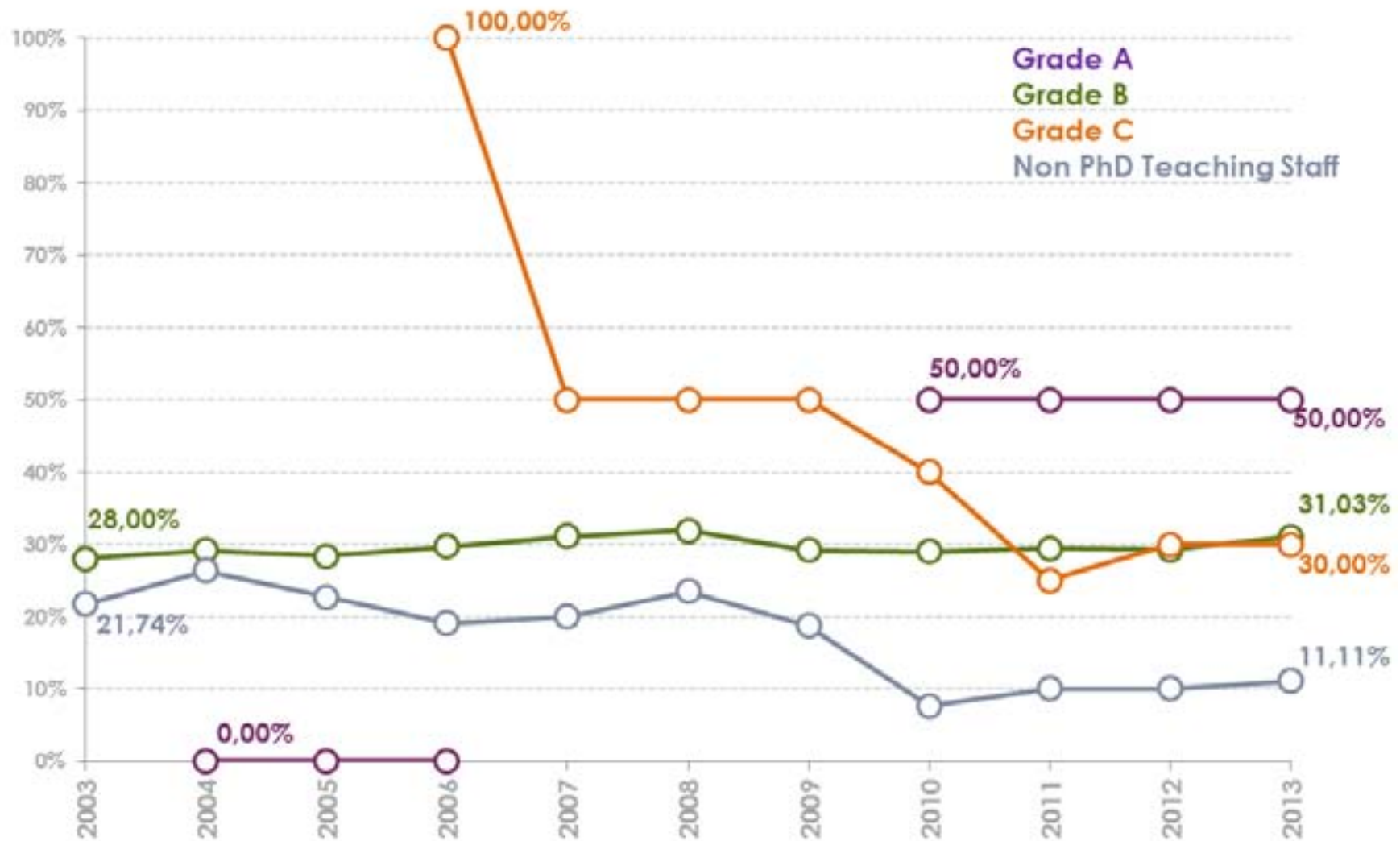
**FIGURE 2.1.14\_ Proportion of women in Faculty by grade, Technical School of Aeronautics Engineering (2003-2013)**



Source: Observatorio Académico Database, UPM

Note: There were no Grade A researchers in years 2006- 2009. There were no Grade C researchers in years 2003- 2008.

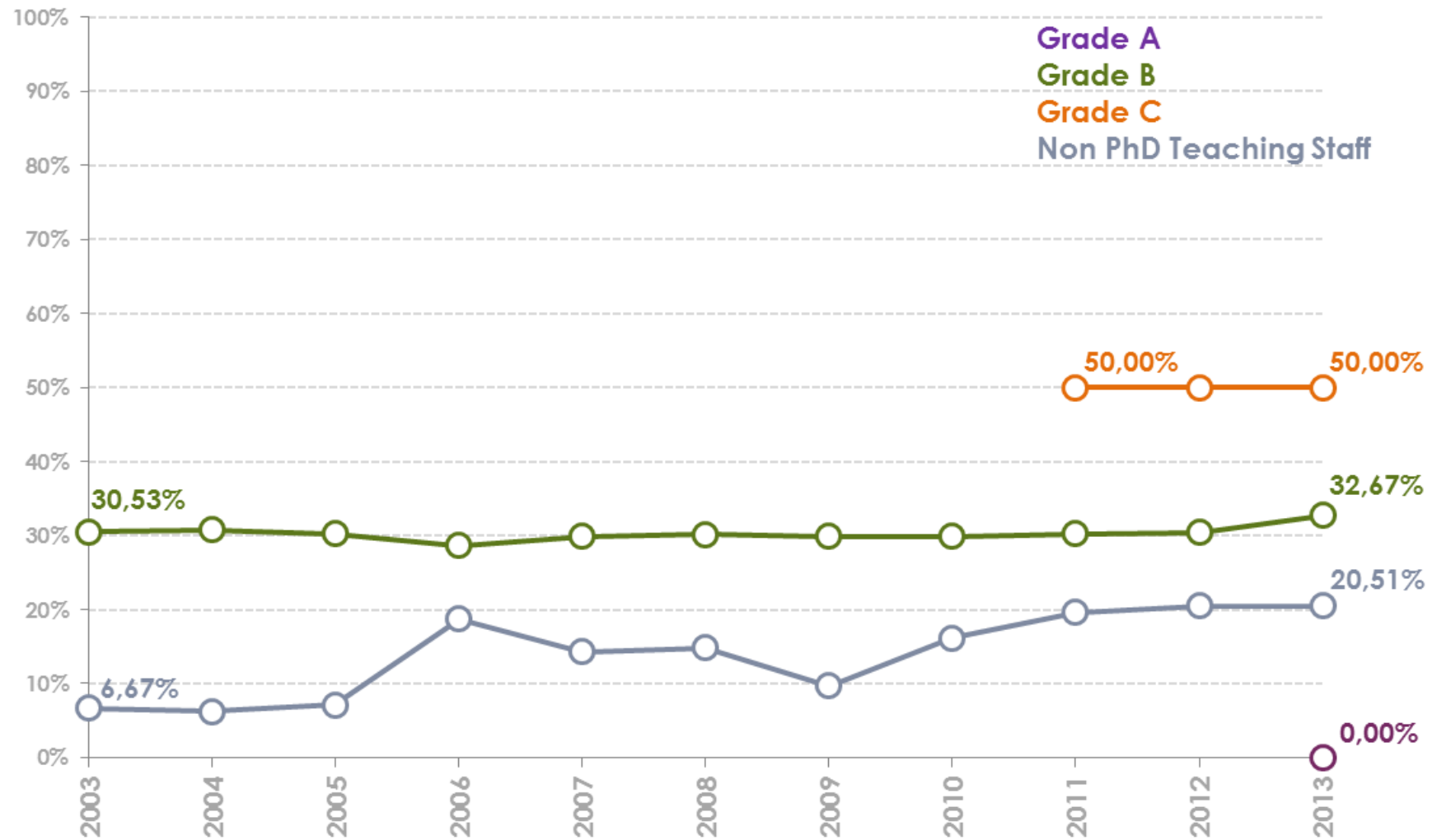
FIGURE 2.1.15\_ Proportion of women in Faculty by grade, Technical School of Agriculture Engineering (2003-2013)



**Source:** Observatorio Académico Database, UPM

**Note:** There were no Grade A researchers in years 2003 and 2007- 2009. There were no Grade C researchers in years 2003- 2005.

FIGURE 2.1.16\_ Proportion of women in Faculty by grade, School of Building Engineering (2003-2013)

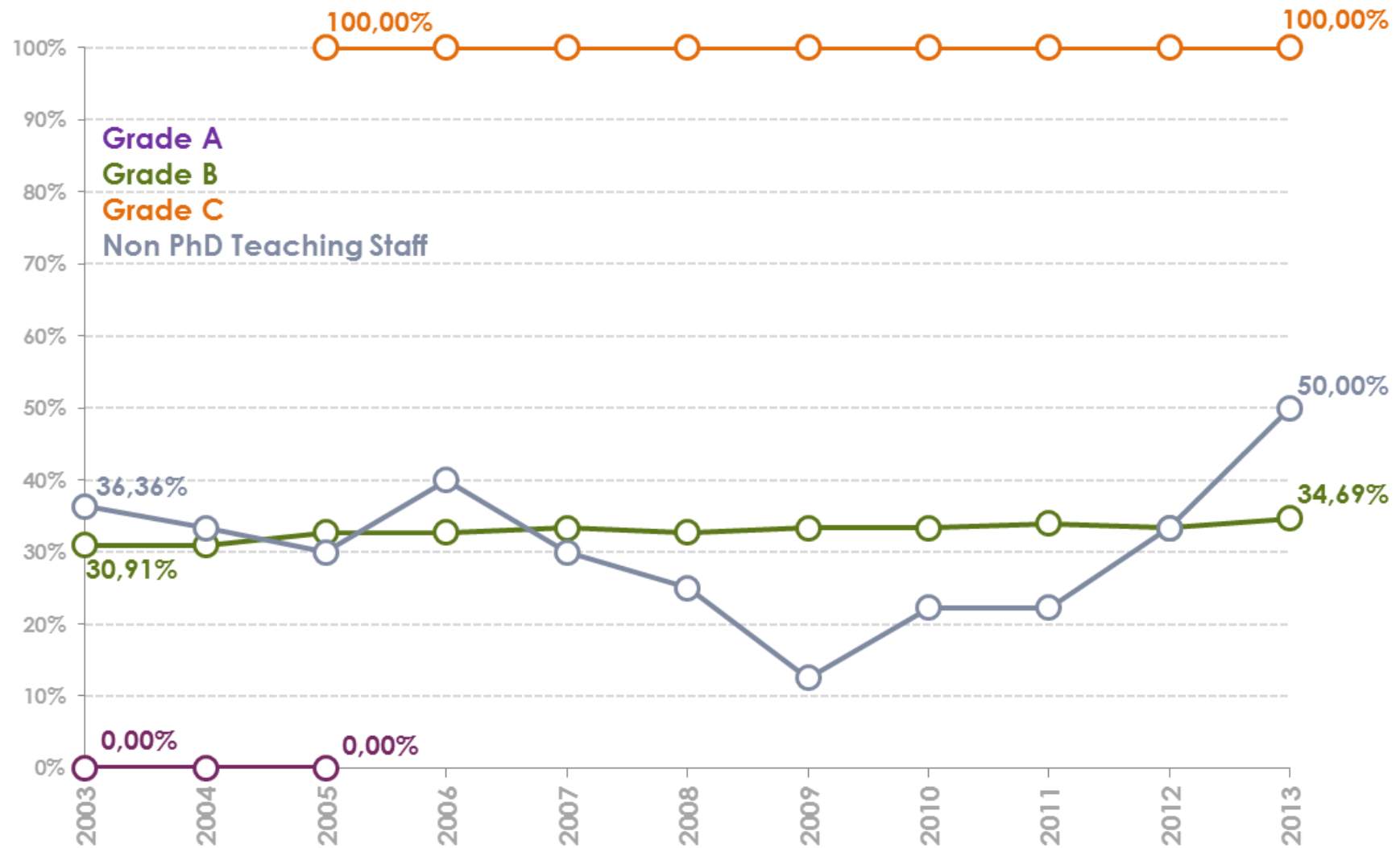


Source: Observatorio Académico Database, UPM

Note: There were no Grade A researchers from year 2003-2012. There were no Grade C researchers from year 2003-2011.



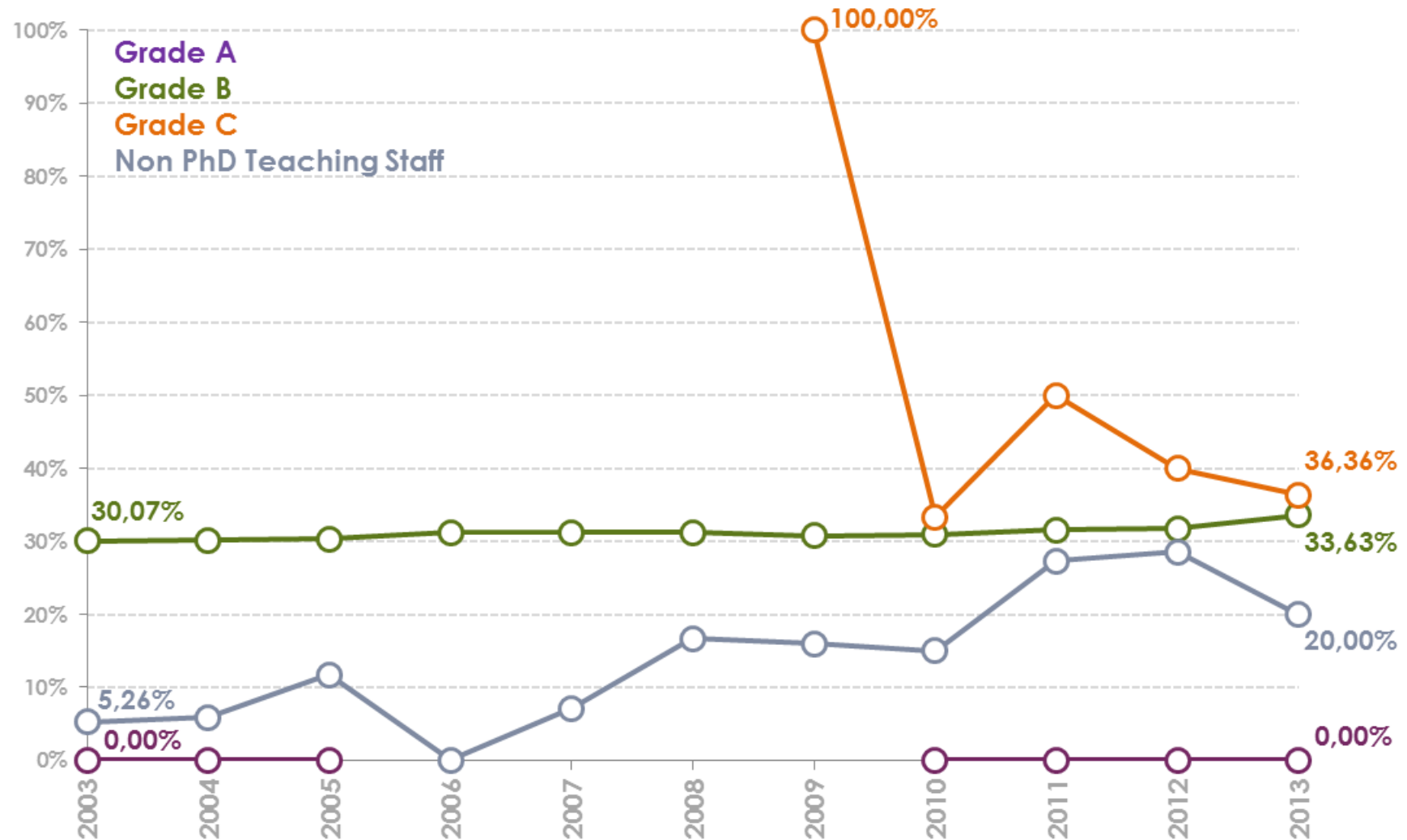
FIGURE 2.1.17\_ Proportion of women in Faculty by grade, Technical School of Forestry Engineering (2003-2013)



Source: Observatorio Académico Database, UPM

Notes: There were no Grade A researchers from year 2006- 2013. There were no Grade C researchers in years 2003 and 2004

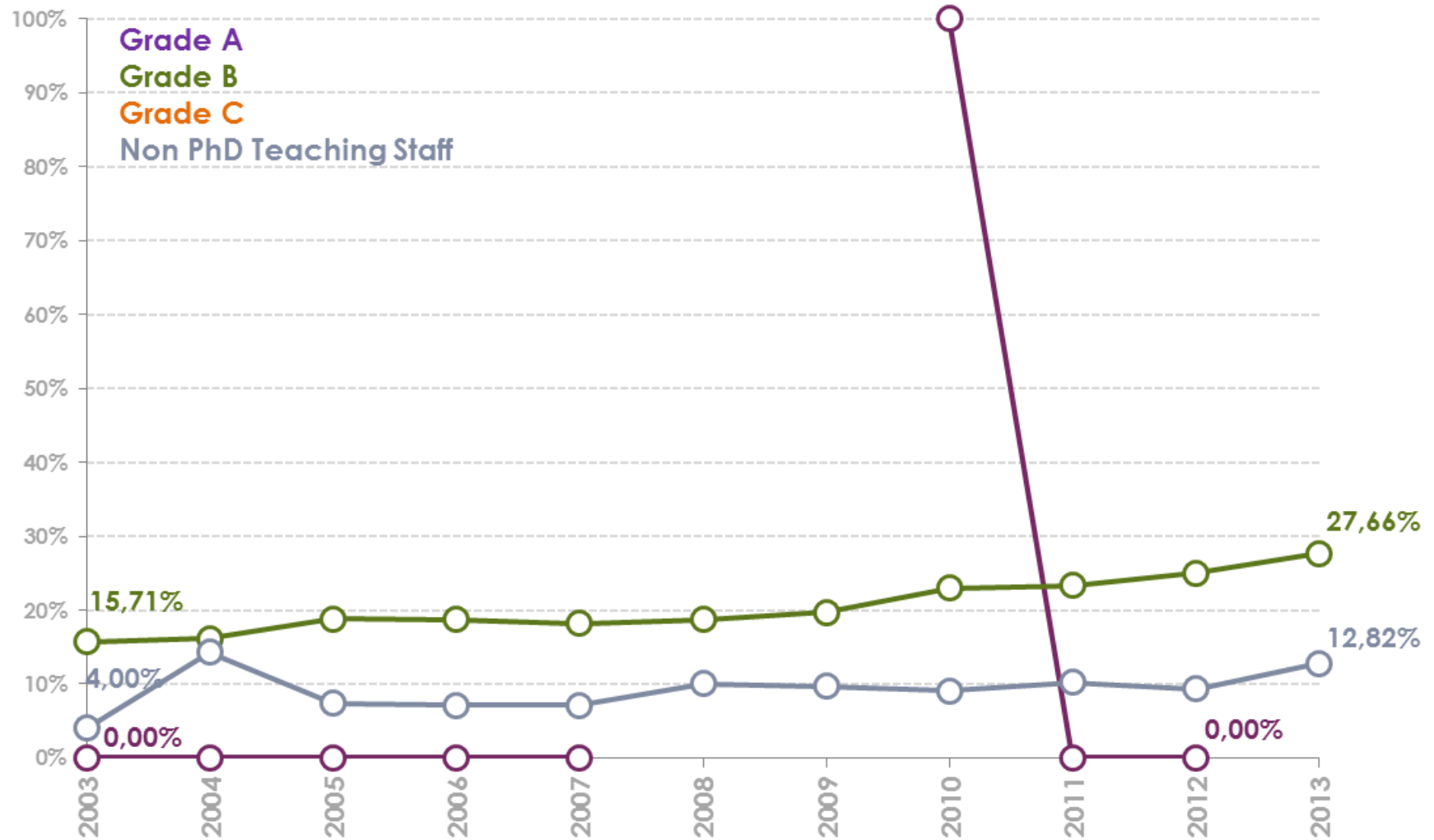
FIGURE 2.1.18\_ Proportion of women in Faculty by grade, Technical School of Industrial Design and Engineering (2003-2013)



Source: Observatorio Académico Database, UPM

Notes: There were no Grade A researchers in years 2006- 2009. There were no Grade C researchers in years 2003- 2008.

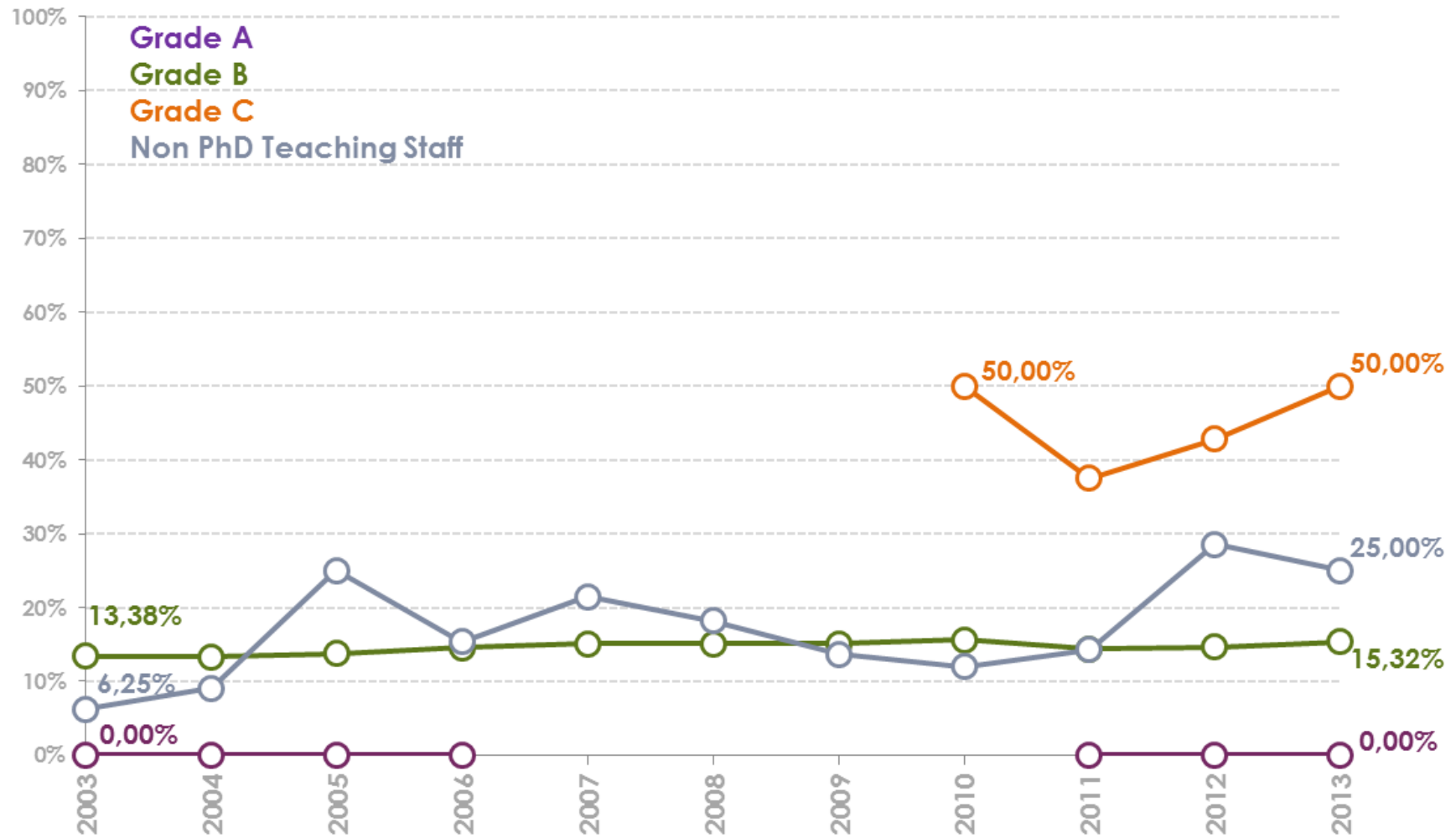
FIGURE 2.1.19\_ Proportion of women in Faculty by grade, Technical School Civil Engineering (2003-2013)



Source: Observatorio Académico Database, UPM

Notes: There were no Grade A researchers in years 2008 and 2009. There were no Grade C researchers from year 2003 -2013.

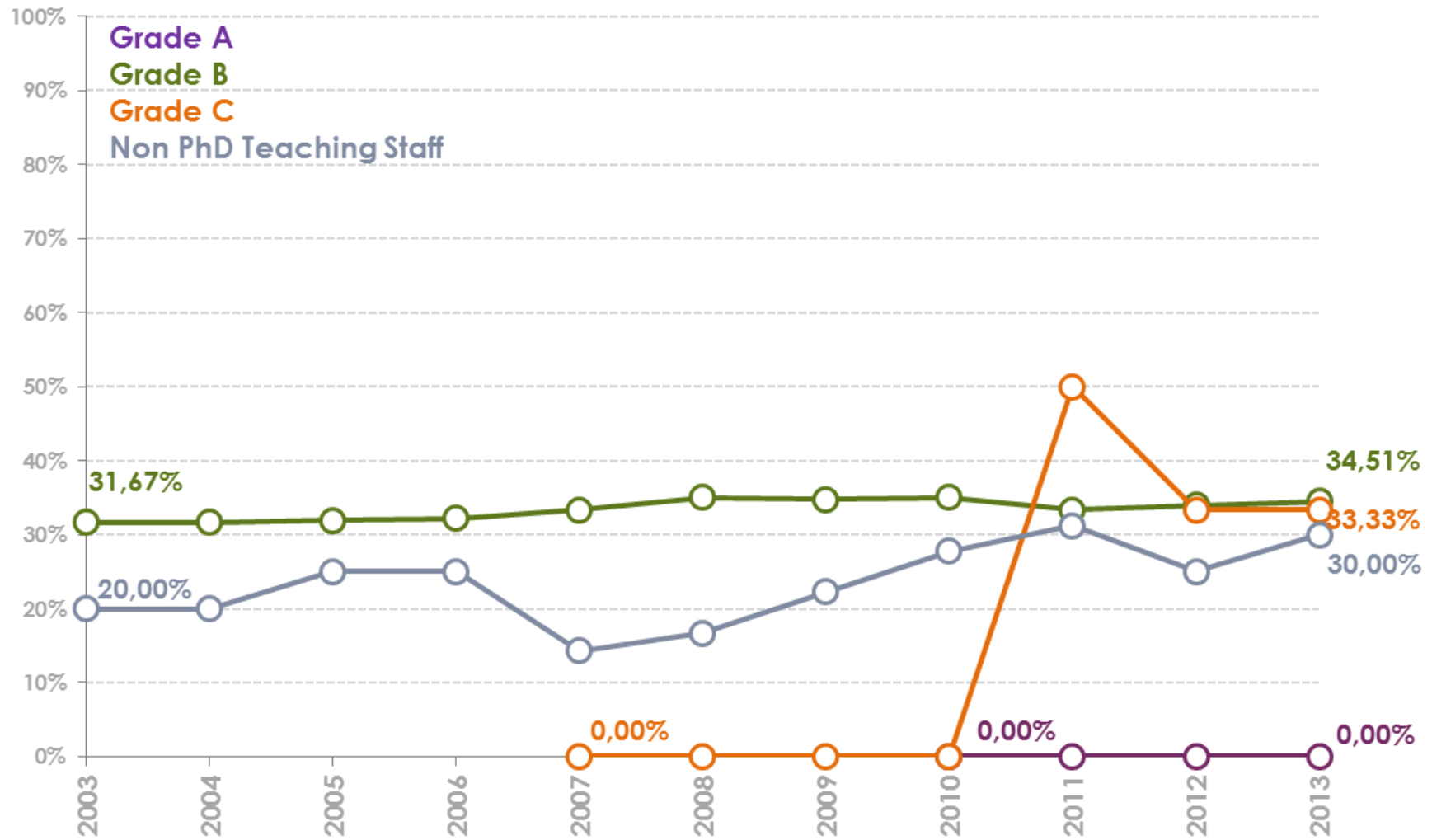
FIGURE 2.1.20\_ Proportion of women in Faculty by grade, Technical School of Telecommunications Engineering (2003-2013)



Source: Observatorio Académico Database, UPM

Notes: There were no Grade A researchers in years 2007-2010. There were no Grade C researchers in years 2003- 2009.

FIGURE 2.1.21\_ Proportion of women in Faculty by grade, Technical School of Computer Systems Engineering (2003-2013)

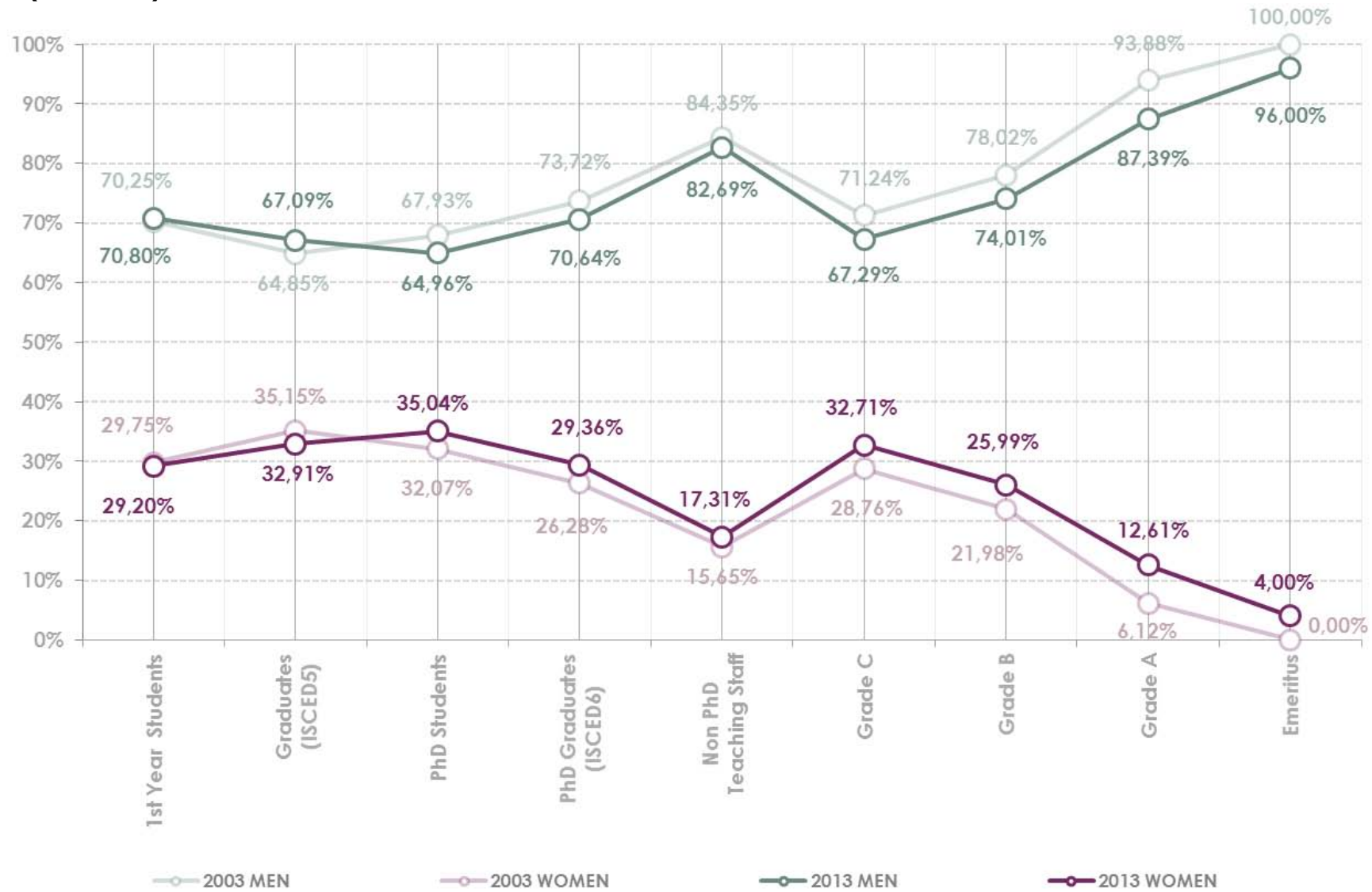


**Source:** Observatorio Académico Database, UPM

**Notes:** There were no Grade A researchers in 2003- 2009. There were no Grade C researchers in years 2003- 2006.

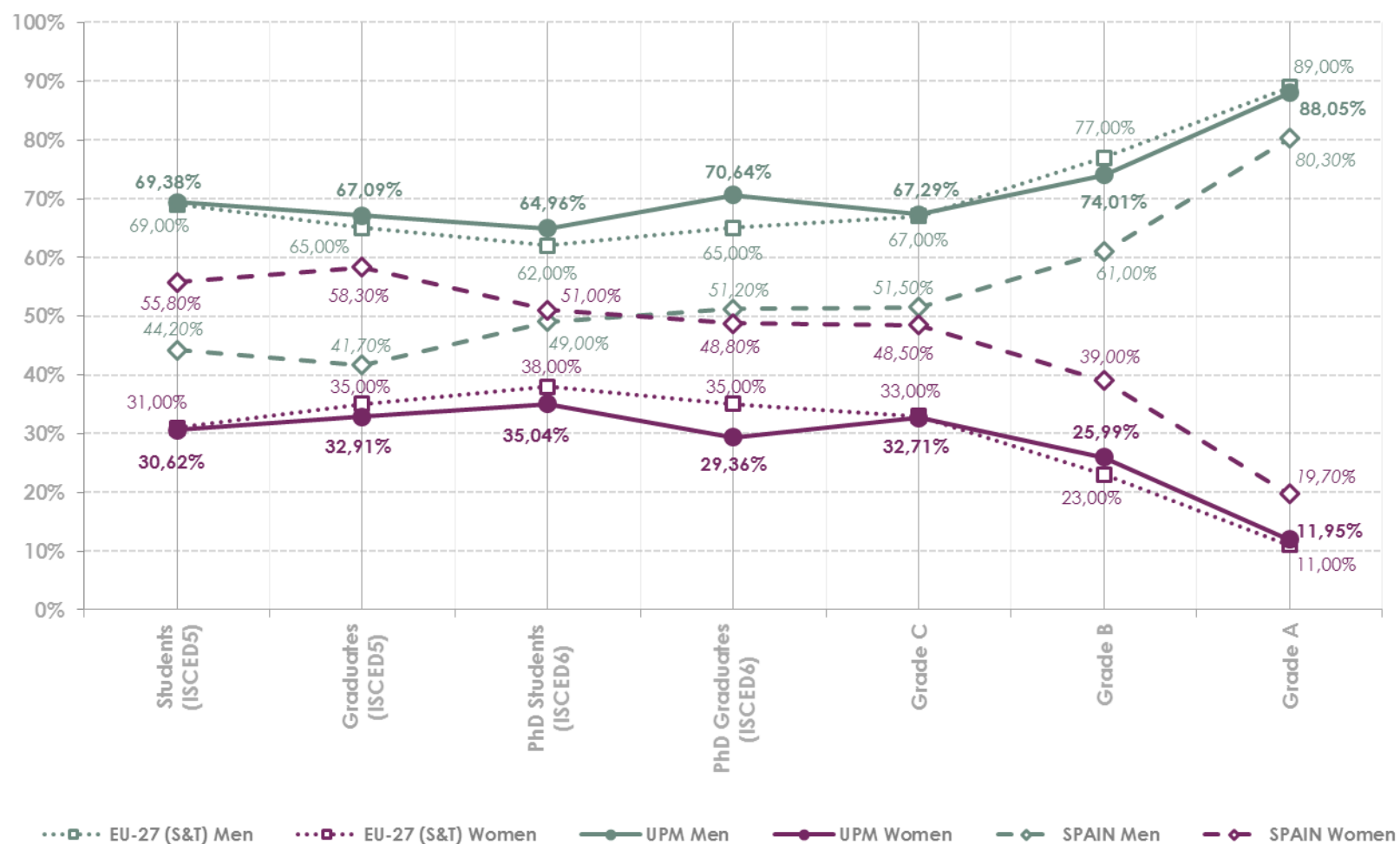
**CHAPTER 2.2.**  
**Women and men in a typical academic career**

**FIGURE 2.2.1\_Proportion of men and women in a typical academic career, students and academic staff, Universidad Politécnica de Madrid (2003-2013)**



Source: Observatorio Académico Database, UPM

FIGURE 2.2.2\_ Proportion of men and women in a typical academic career, students and academic staff, UPM, Spain and EU.

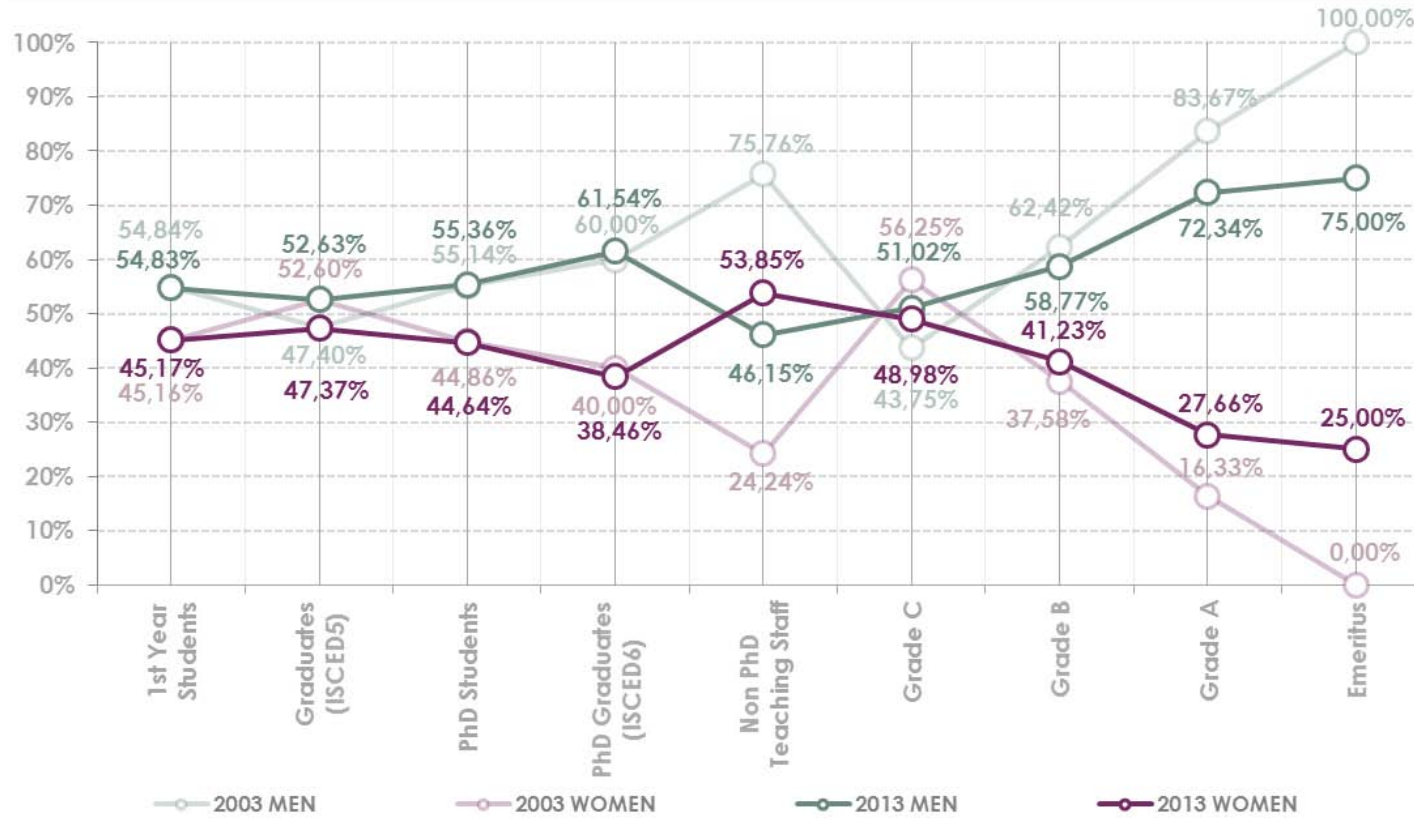


Source: For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

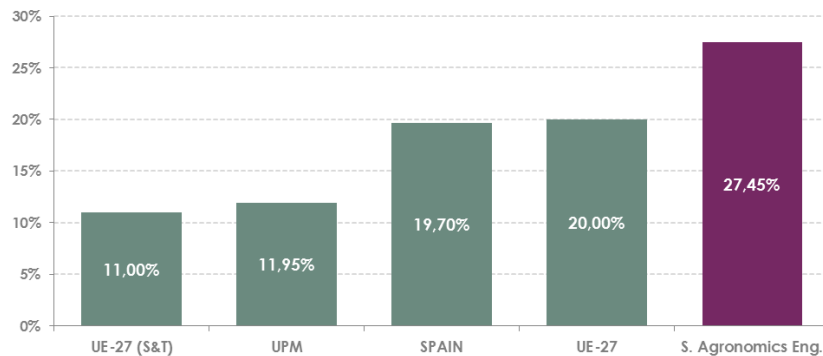
Notes: Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. The data from Spain includes only data from public universities.



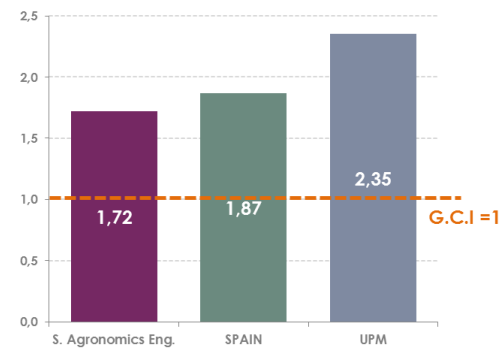
a) Proportion of men and women in a typical academic career, students and academic staff, (2003-2013)



**FIGURE 2.2.3**  
Proportion of men and women in a typical academic career, students and academic staff, **School of Agronomics Engineering**



b) Proportion of women in Grade A positions

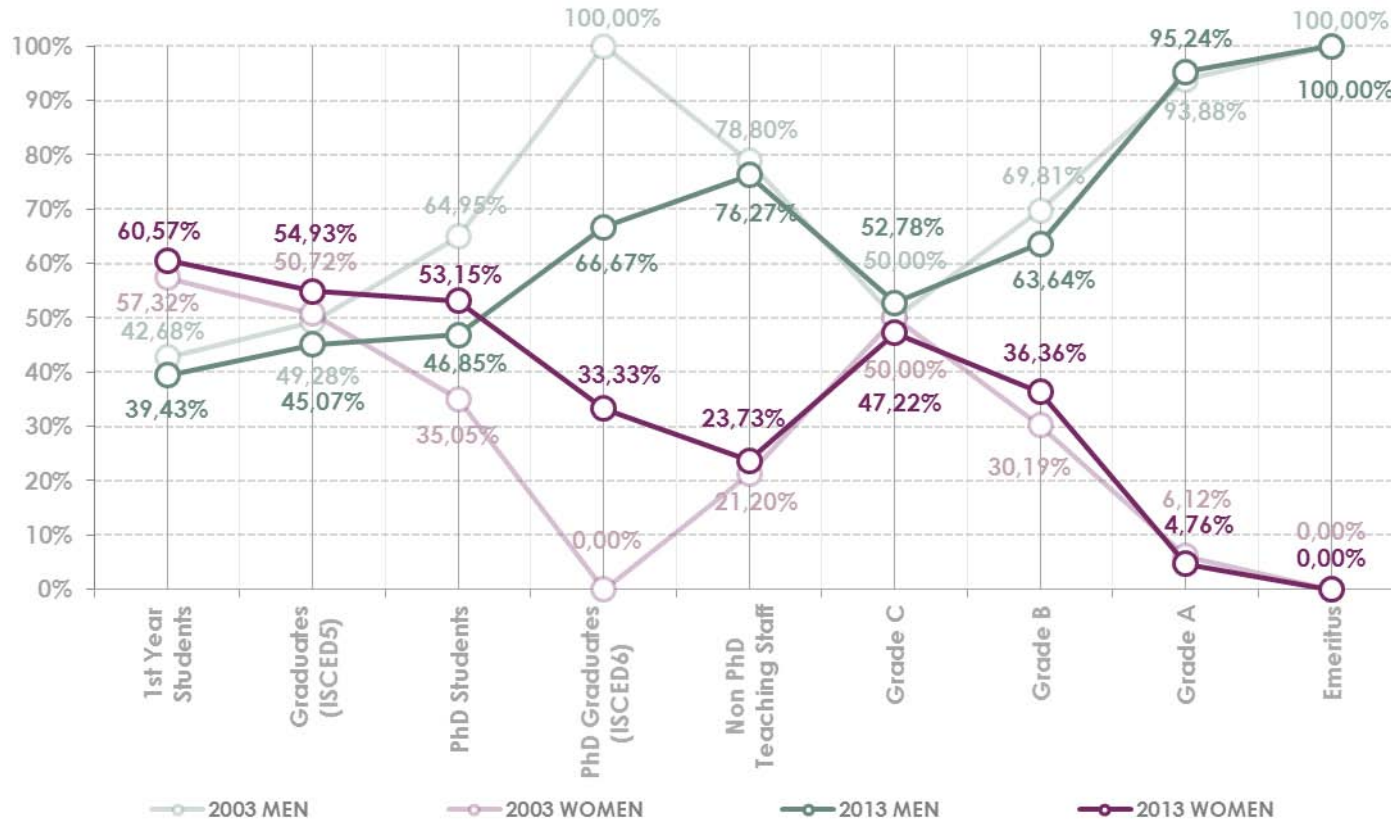


c) Glass Ceiling Index

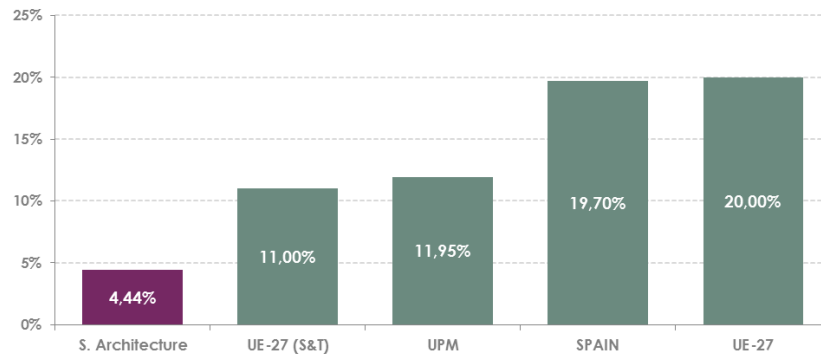
**Source:** For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. Figures b and c show "Grade A" including Emeritus Professors.

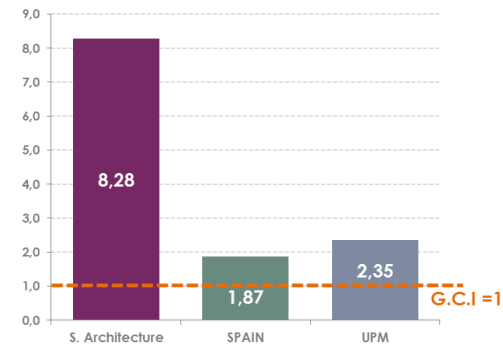
a) Proportion of men and women in a typical academic career, students and academic staff, (2003-2013)



**FIGURE 2.2.4**  
Proportion of men and women in a typical academic career, students and academic staff, **School of Architecture**



b) Proportion of women in Grade A positions

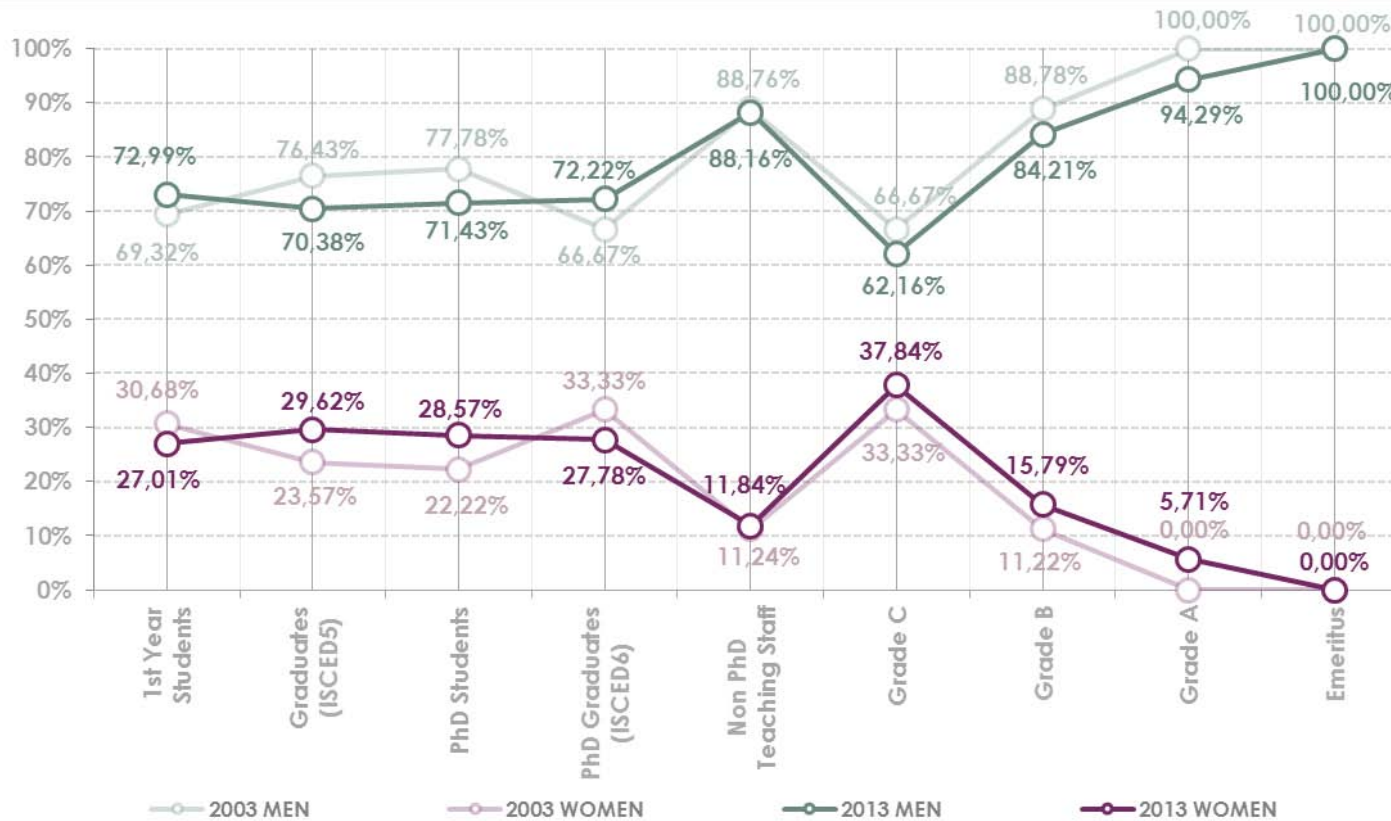


c) Glass Ceiling Index

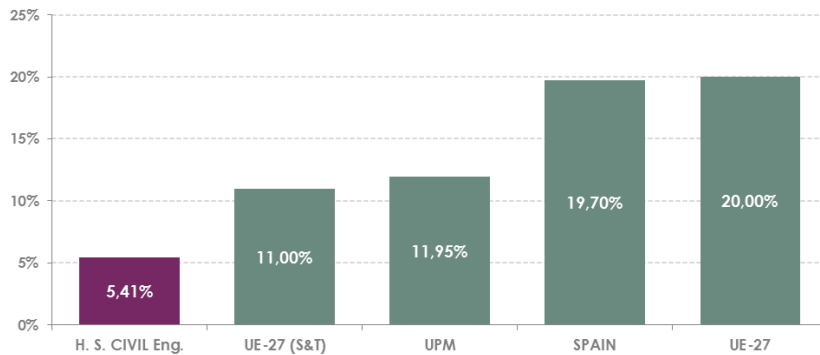
**Source:** For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. Figures b and c show "Grade A" including Emeritus Professors.

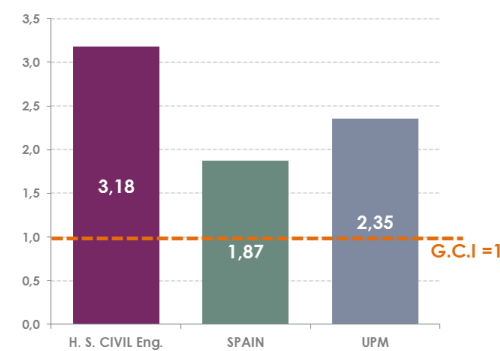
a) Proportion of men and women in a typical academic career, students and academic staff, (2003-2013)



**FIGURE 2.2.5**  
Proportion of men and women in a typical academic career, students and academic staff, **School of Civil Engineering**



b) Proportion of women in Grade A positions

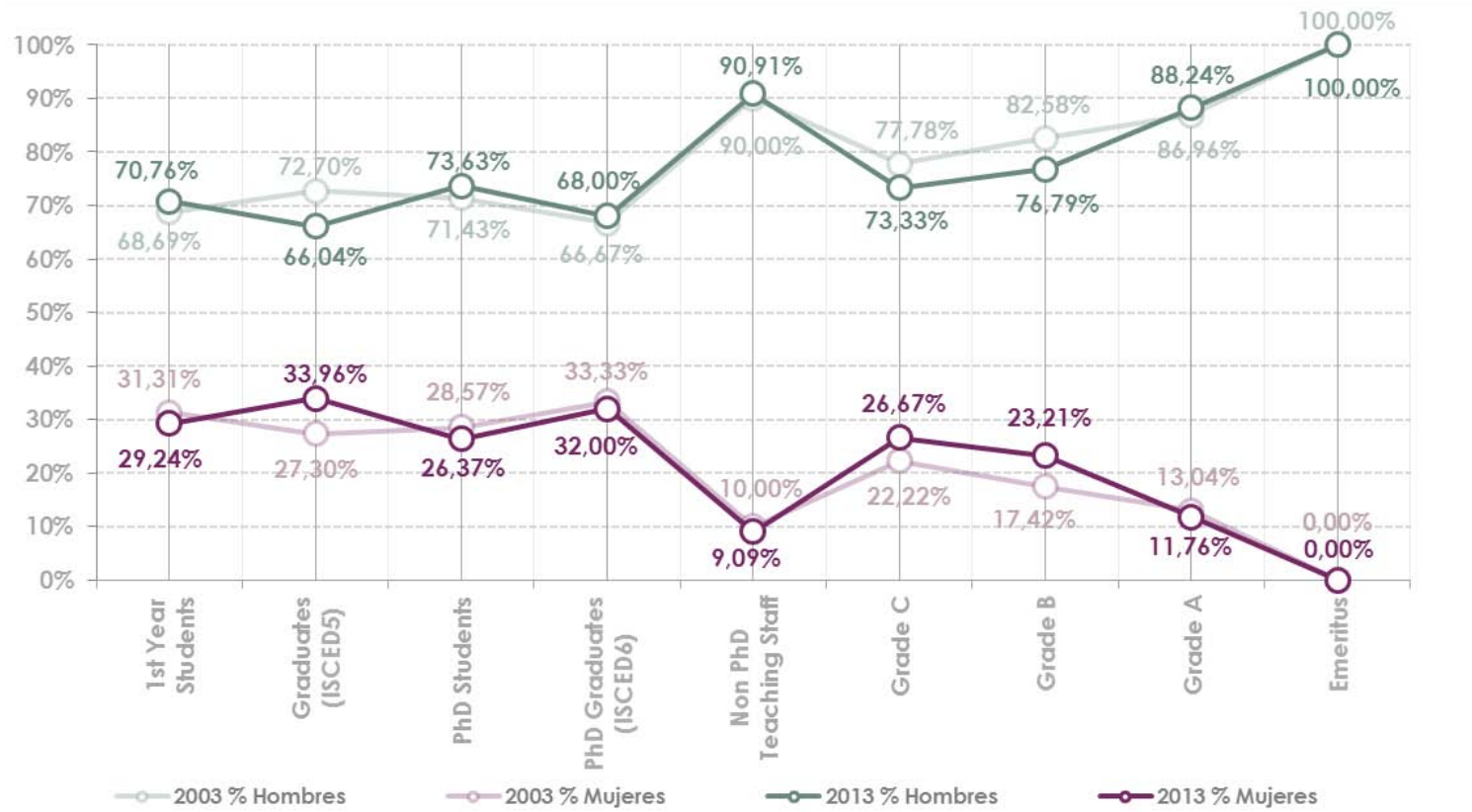


c) Glass Ceiling Index

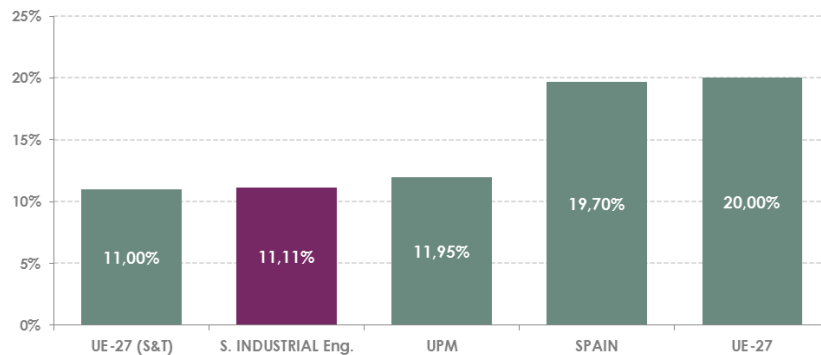
**Source:** For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. Figures b and c show "Grade A" including Emeritus Professors.

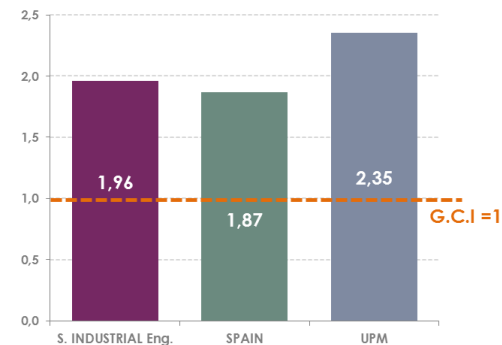
a) Proportion of men and women in a typical academic career, students and academic staff, (2003-2013)



**FIGURE 2.2.6**  
Proportion of men and women in a typical academic career, students and academic staff, **School of Industrial Engineering**



b) Proportion of women in Grade A positions

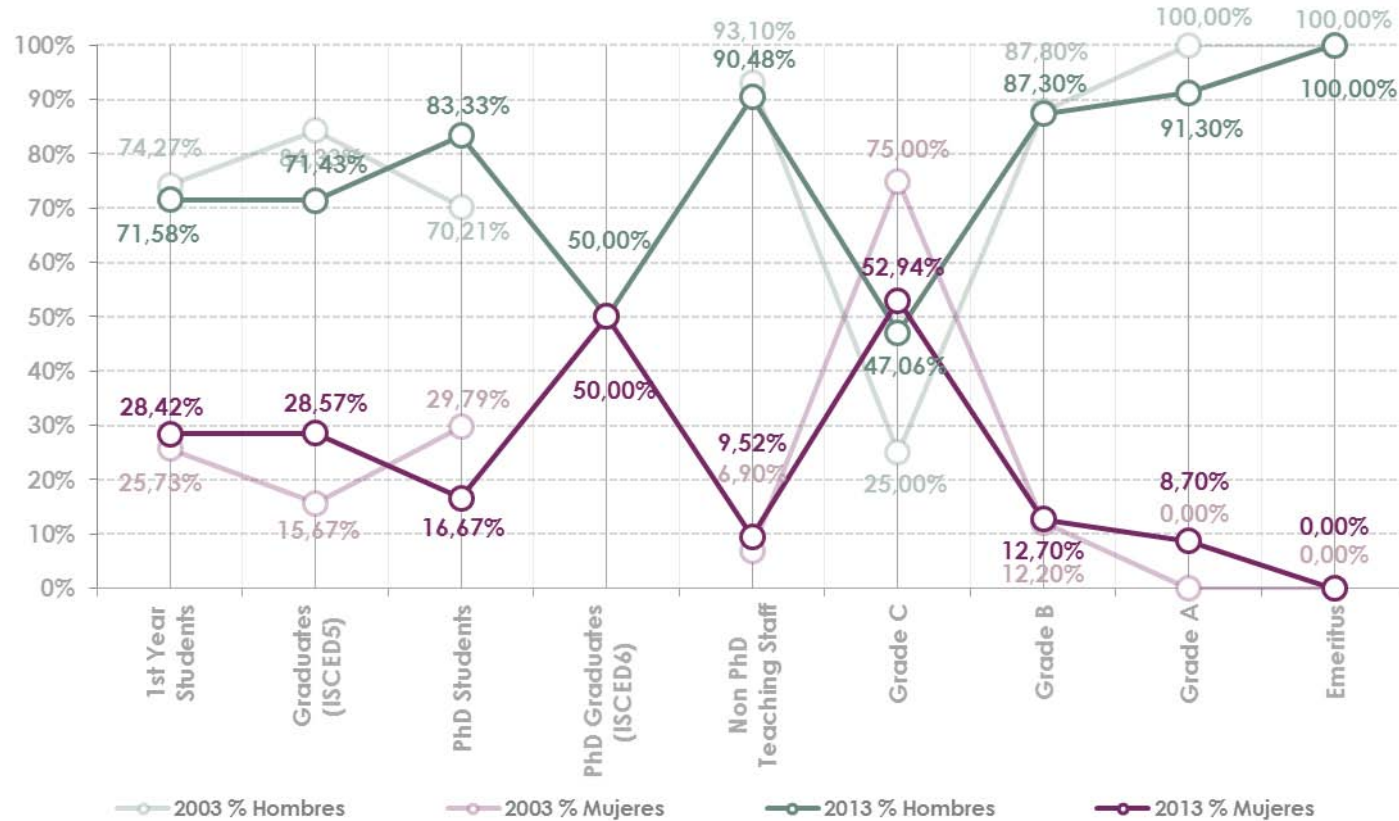


c) Glass Ceiling Index

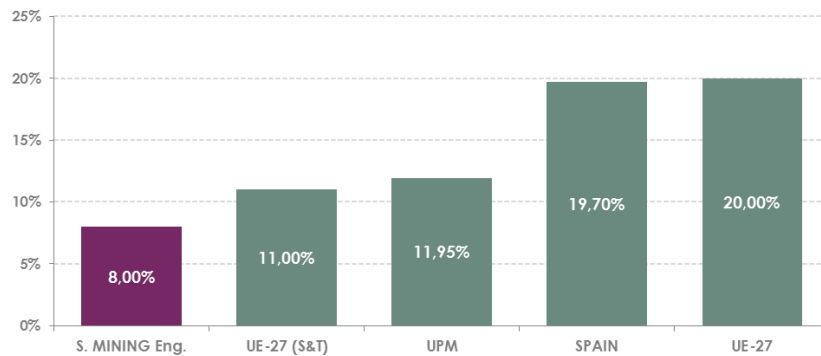
**Source:** For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. Figures b and c show "Grade A" including Emeritus Professors.

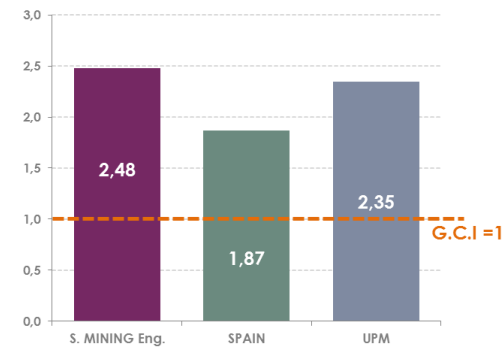
a) Proportion of men and women in a typical academic career, students and academic staff, (2003-2013)



**FIGURE 2.2.7**  
Proportion of men and women in a typical academic career, students and academic staff, **School of Mining Engineering**



b) Proportion of women in Grade A positions



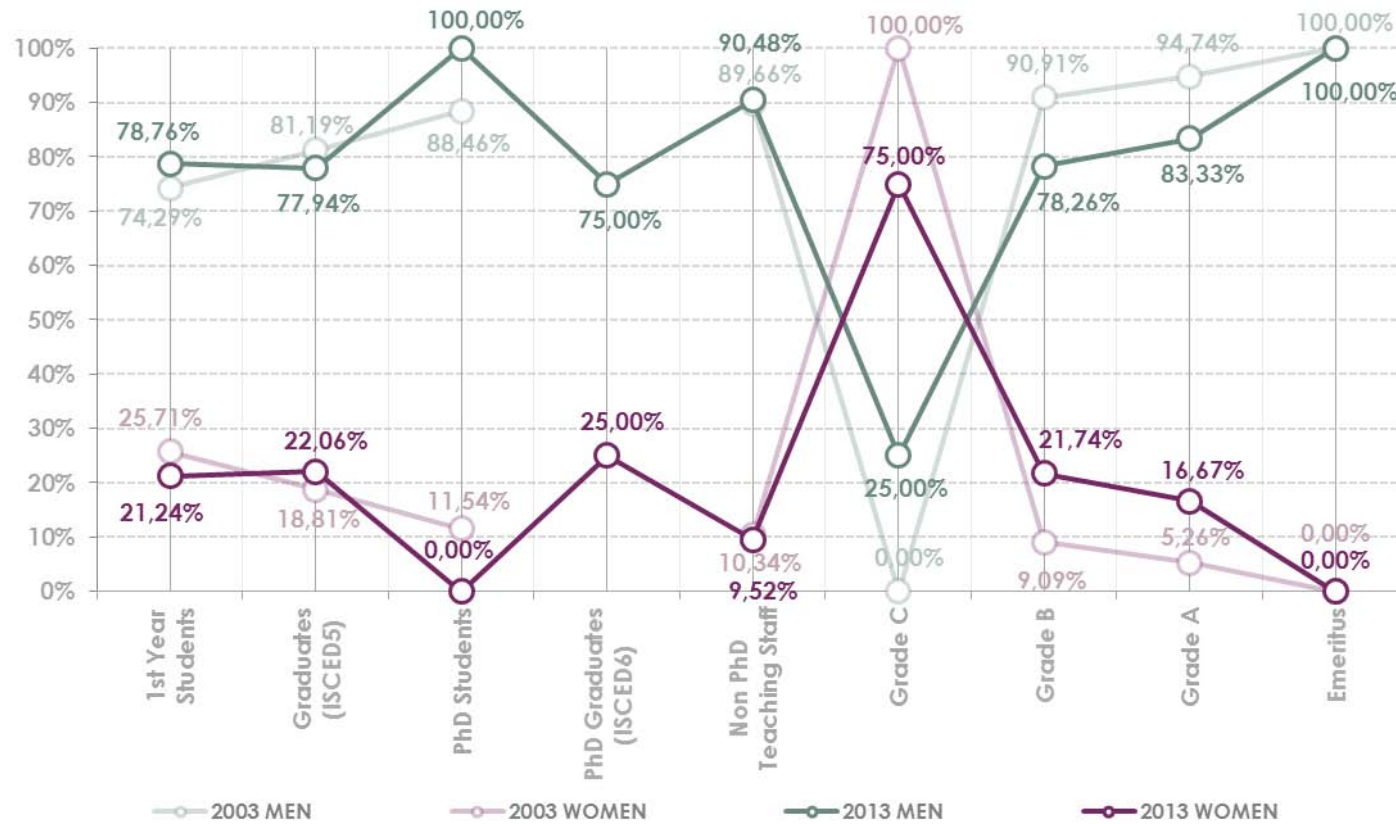
c) Glass Ceiling Index

**Source:** For EU-27: "She Figures 2012". For Spain: "Cientificas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

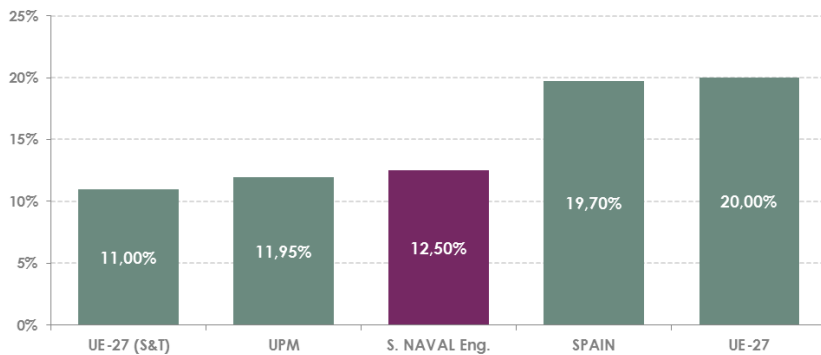
**Notes:** There were no PhD graduates in 2003. Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. Figures b and c show "Grade A" including Emeritus Professors.



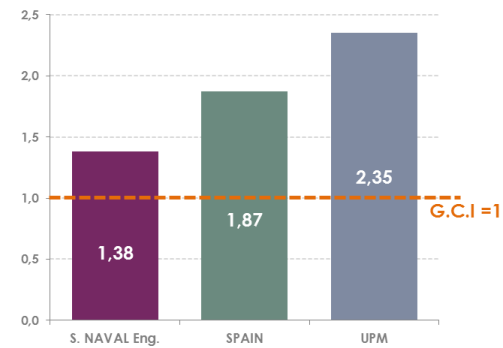
a) Proportion of men and women in a typical academic career, students and academic staff, (2003-2013)



**FIGURE 2.2.8**  
Proportion of men and women in a typical academic career, students and academic staff, **School of Naval Engineering**



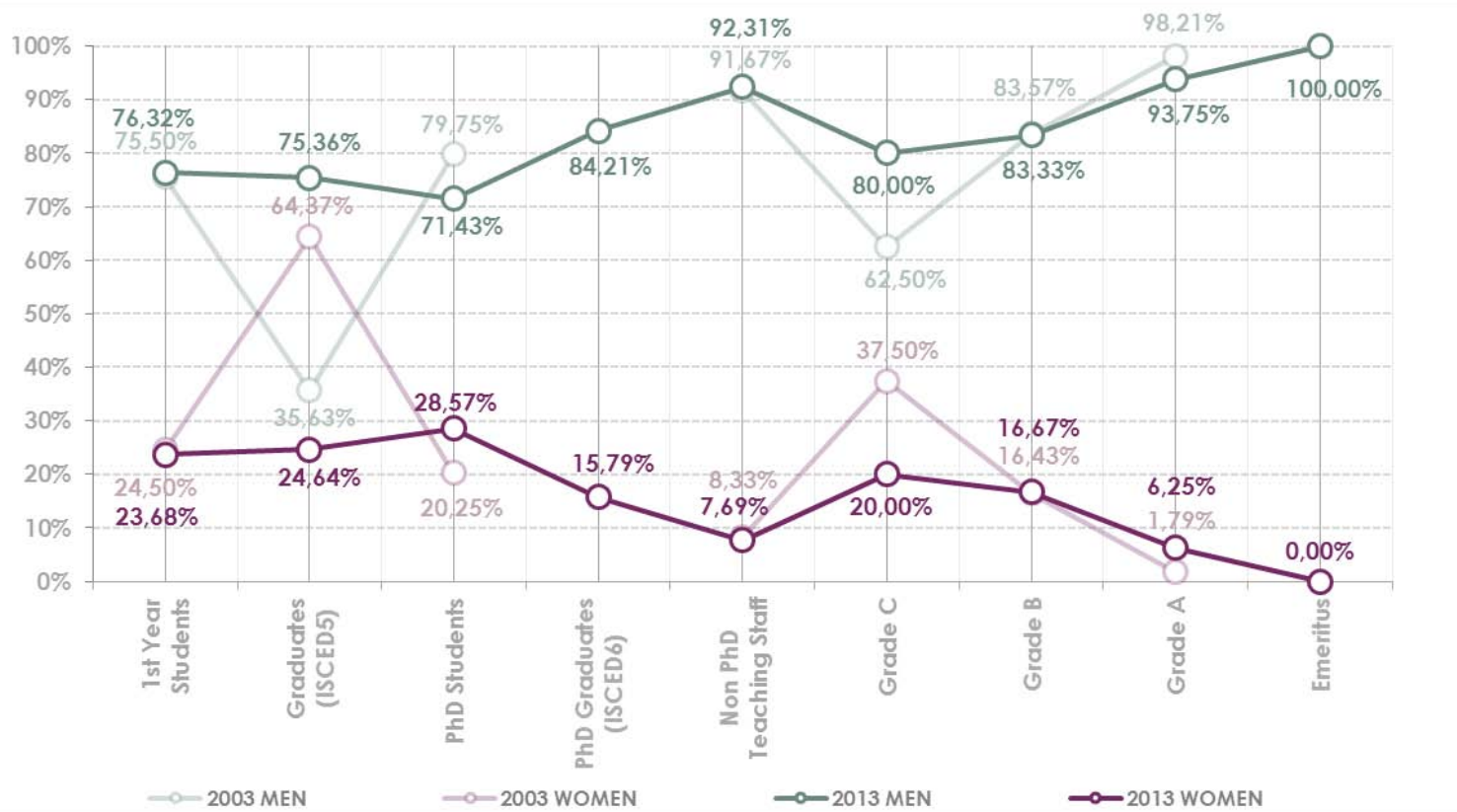
b) Proportion of women in Grade A positions



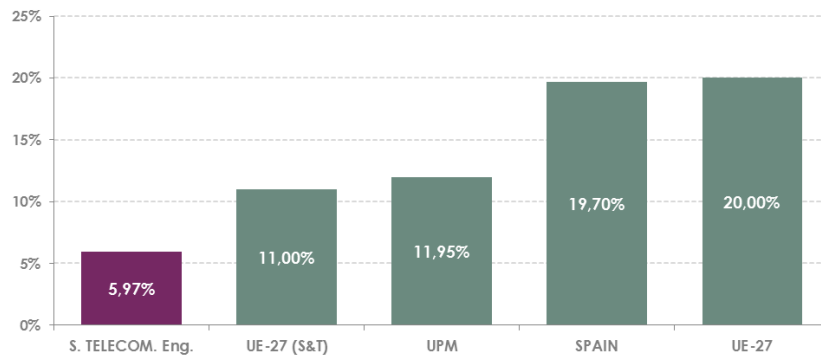
c) Glass Ceiling Index

**Source:** For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.  
**Notes:** There were no PhD graduates in 2003. Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. Figures b and c show "Grade A" including Emeritus Professors.

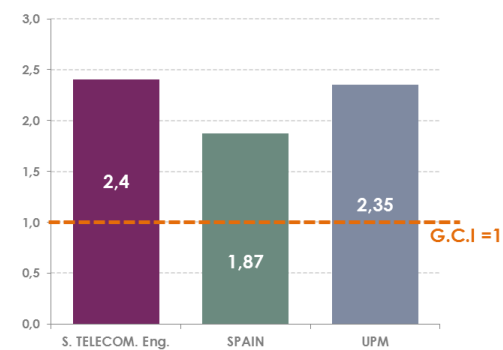
a) Proportion of men and women in a typical academic career, students and academic staff, (2003-2013)



**FIGURE 2.2.9**  
Proportion of men and women in a typical academic career, students and academic staff, **School of Telecommunications Engineering**



b) Proportion of women in Grade A positions

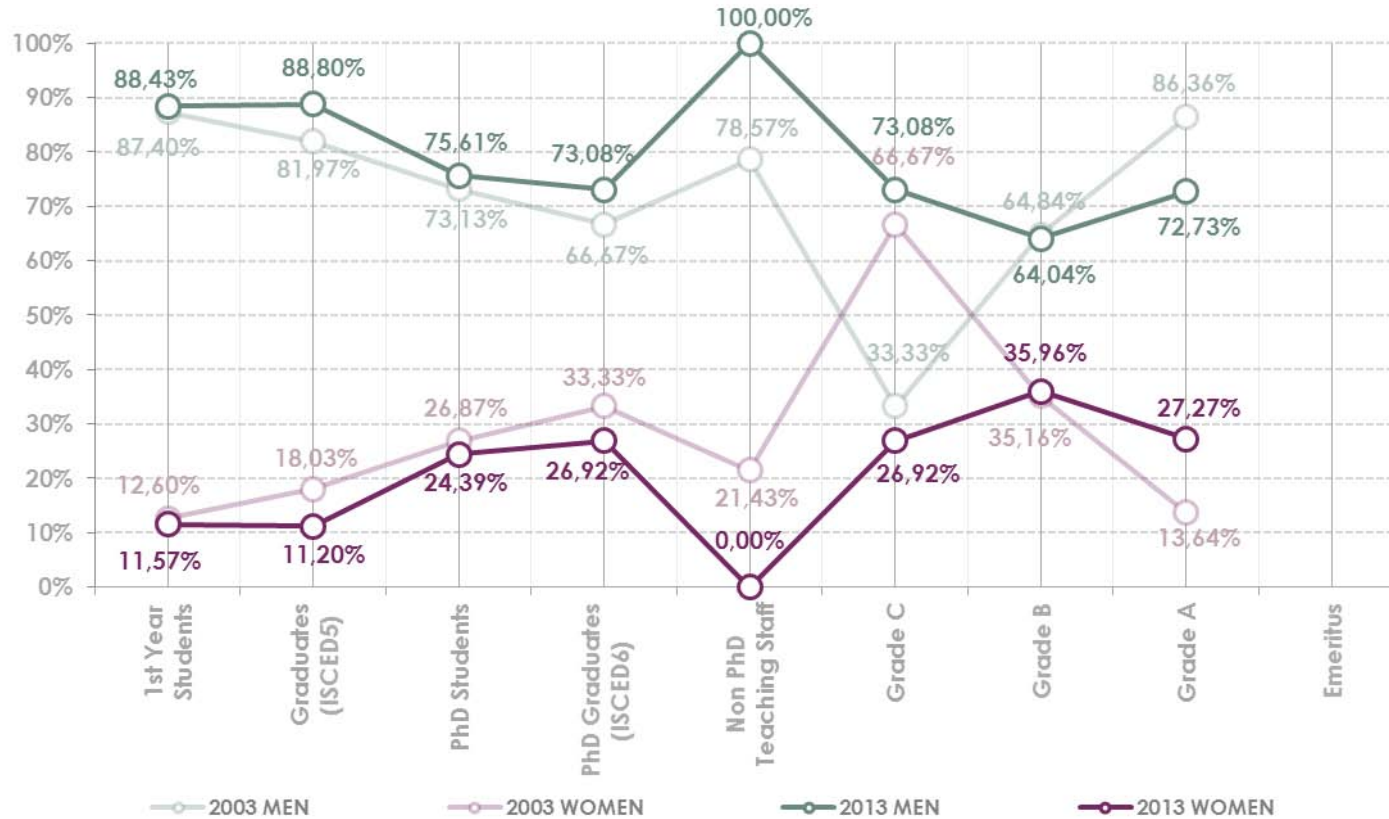


c) Glass Ceiling Index

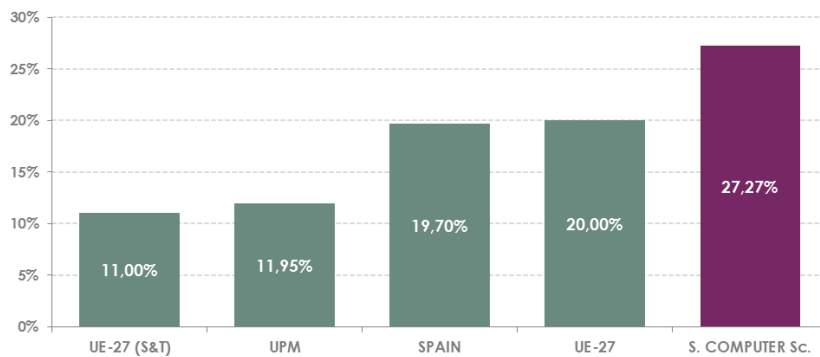
**Source:** For EU-27: "She Figures 2012". For Spain: "Cientificas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** There were no PhD graduates or Emeritus Professors in 2003. Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. Figures b and c show "Grade A" including Emeritus Professors.

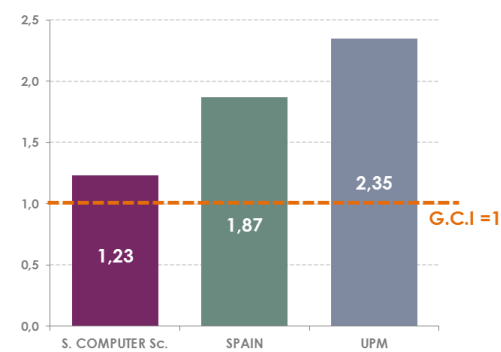
a) Proportion of men and women in a typical academic career, students and academic staff, (2003-2013)



**FIGURE 2.2.10**  
Proportion of men and women in a typical academic career, students and academic staff, **School of Computer Sciences**



b) Proportion of women in Grade A positions



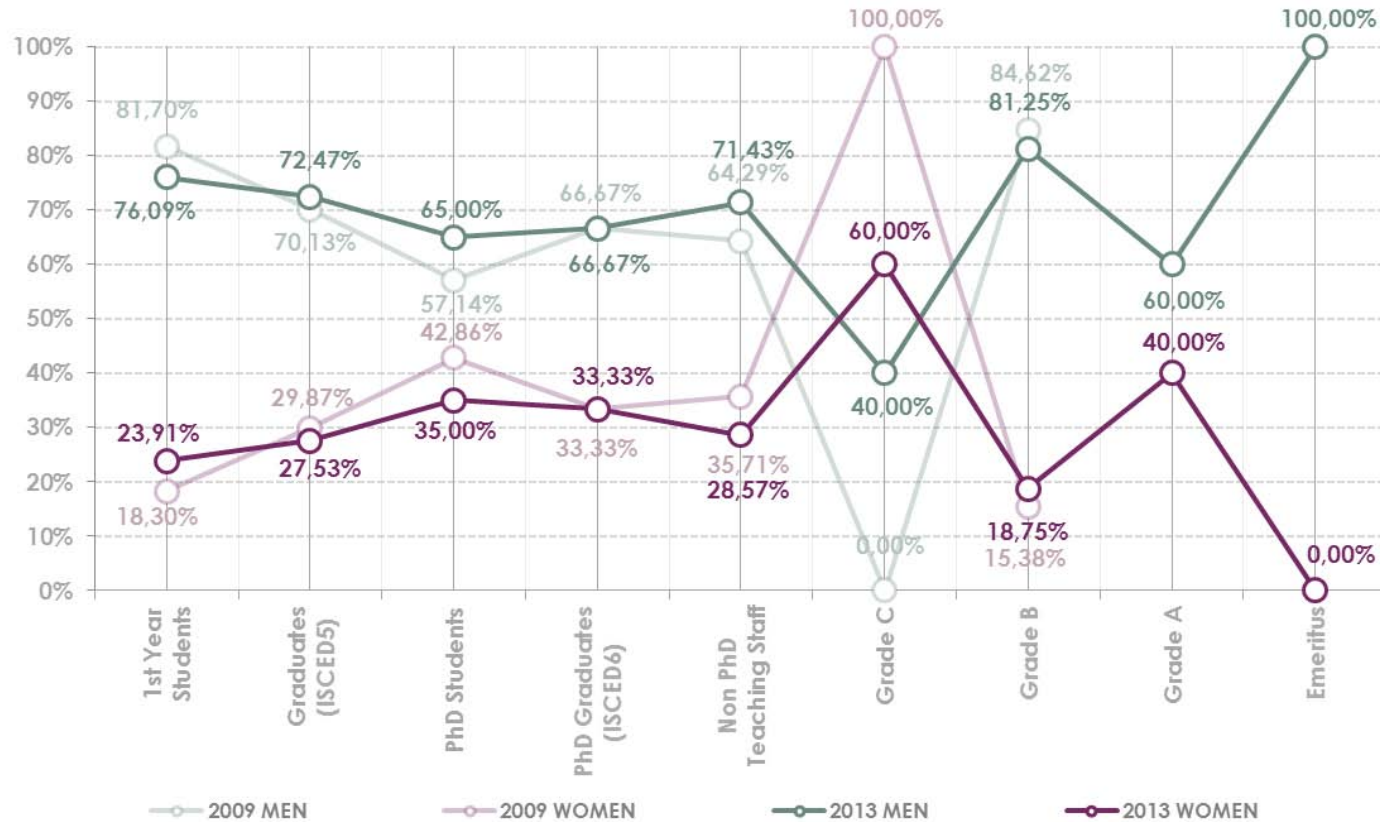
c) Glass Ceiling Index

**Source:** For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

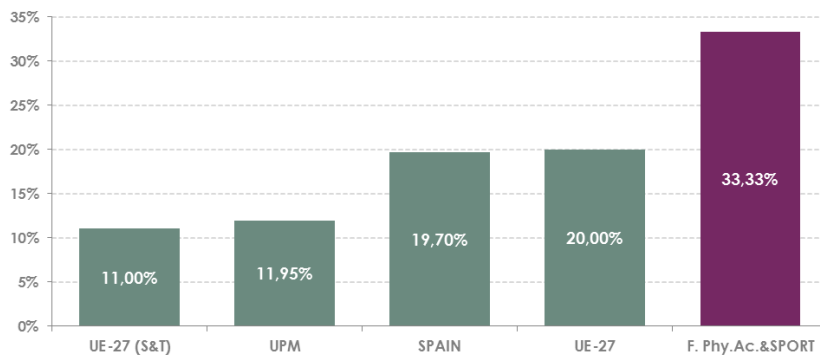
**Notes:** This School had no Emeritus Professor in 2003 or 2013. Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. Figures b and c show "Grade A" including Emeritus Professors.



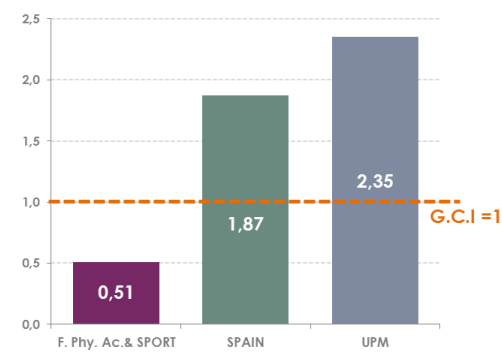
a) Proportion of men and women in a typical academic career, students and academic staff, (2009-2013)



**FIGURE 2.2.11**  
Proportion of men and women in a typical academic career, students and academic staff, **Faculty of Sciences for Physical Activity and Sport**



b) Proportion of women in Grade A positions



c) Glass Ceiling Index

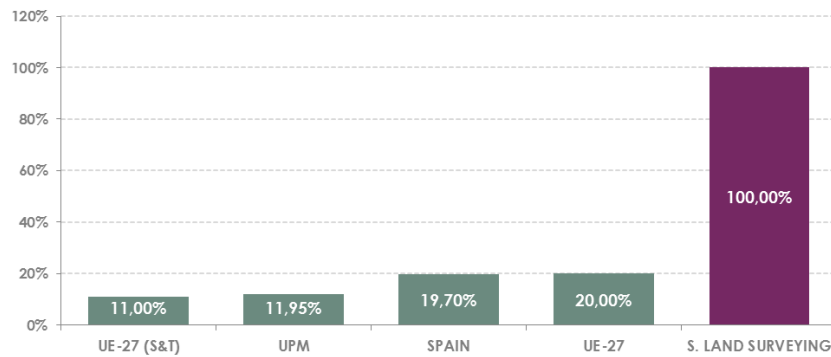
**Source:** For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** There were no Grade A teaching and research staff or Emeritus Professor in 2003. Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. Figures b and c show "Grade A" including Emeritus Professors.

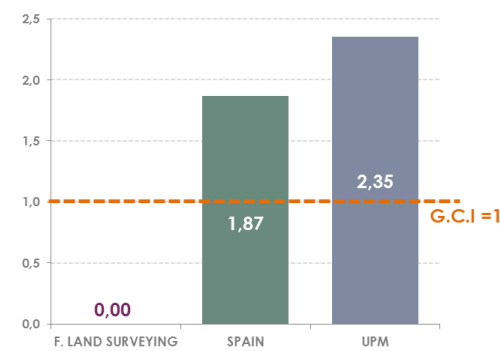
a) Proportion of men and women in a typical academic career, students and academic staff, (2003-2013)



**FIGURE 2.2.12**  
Proportion of men and women in a typical academic career, students and academic staff, **School of Land Surveying, Geodesy and Mapping Engineering**



b) Proportion of women in Grade A positions

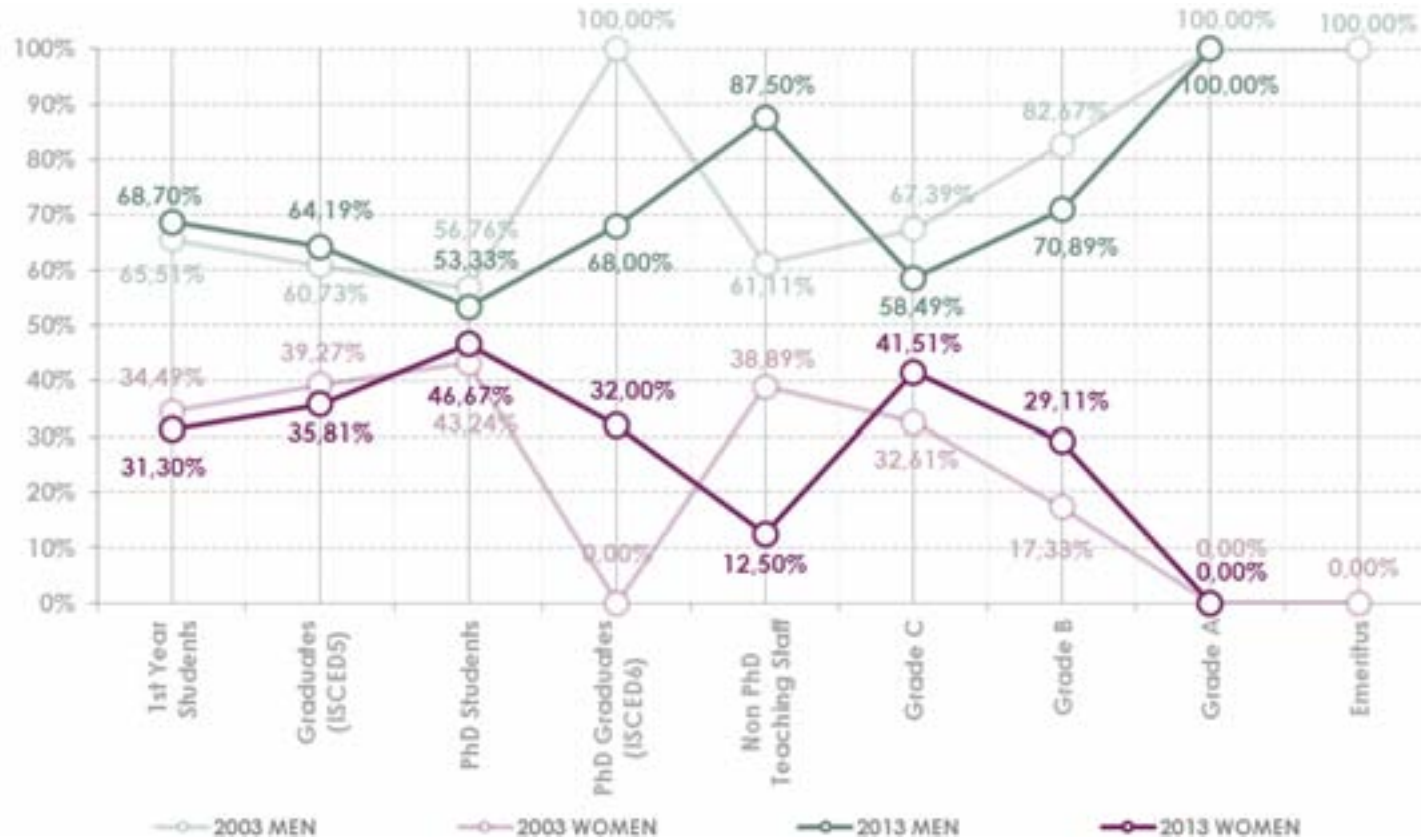


c) Glass Ceiling Index

**Source:** For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** There were no Grade A teaching and research staff or Emeritus Professor in 2003. There were no Emeritus Professors in 2013. Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. Figures b and c show "Grade A" including Emeritus Professors.

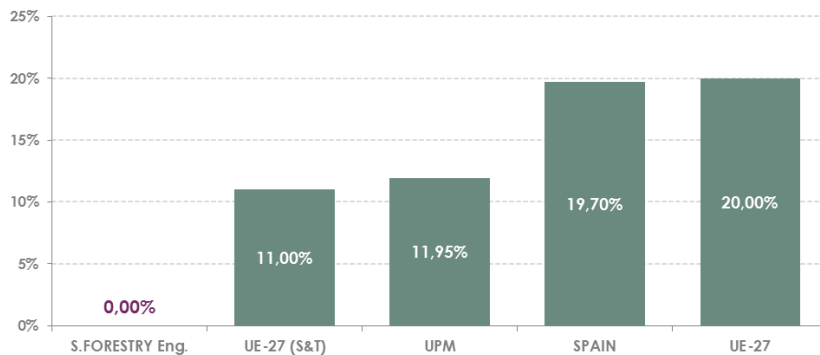
a) Proportion of men and women in a typical academic career, students and academic staff, (2003-2013)



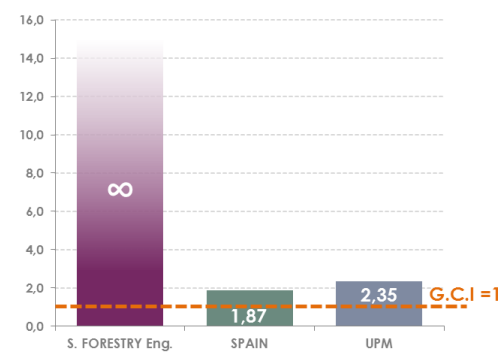
**FIGURE 2.2.13**  
Proportion of men and women in a typical academic career, students and academic staff, **School of Forestry Engineering and Natural Resources**

**Source:** For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** There were no Emeritus Professors in 2013. Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. Figures b and c show "Grade A" including Emeritus Professors. The figures shown on figure 2.2.12 merge two former Schools which have been fused together. These Schools are the Higher School of Forestry Engineering and the Technical School of Forestry Engineering. Merging both Schools was necessary to have the Evolution of earliest students in year 2013, since all students belong to the same Schools. PhD students, together with Teaching and Research Staff, used to belong to one of the Schools, and it was possible to separate them for figures 2.1.8 and 2.1.17.

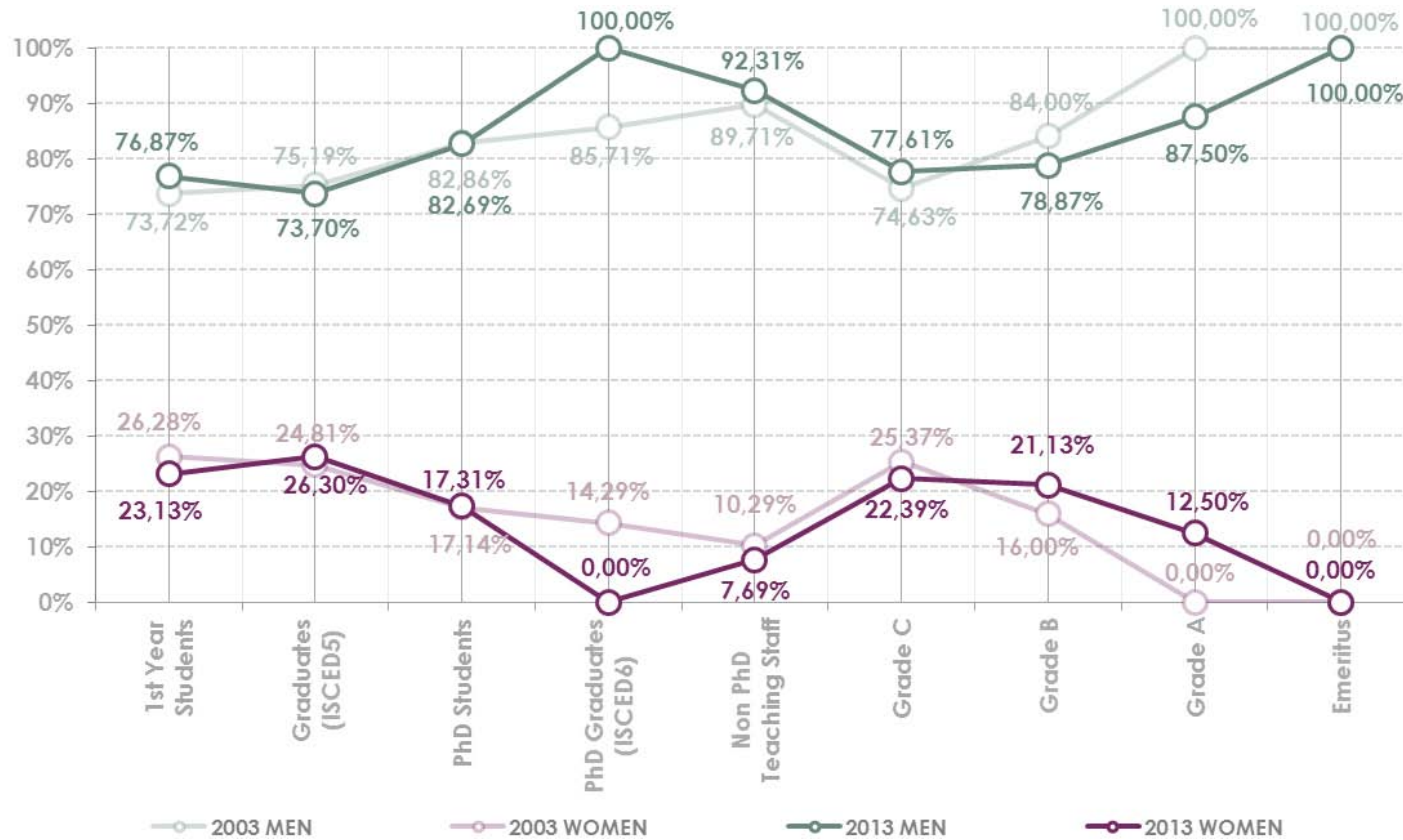


b) Proportion of women in Grade A positions



c) Glass Ceiling Index

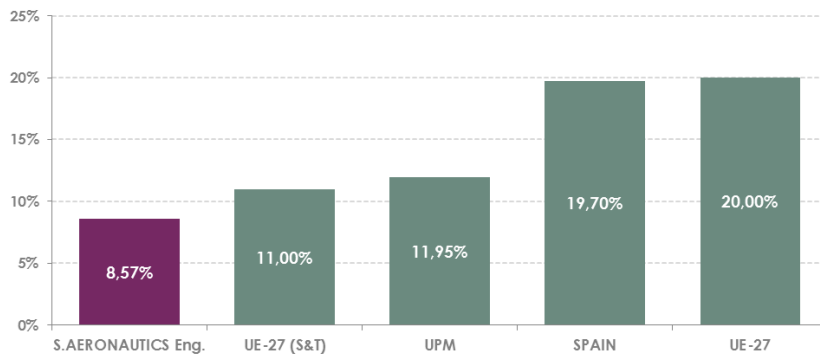
a) Proportion of men and women in a typical academic career, students and academic staff, (2003-2013)



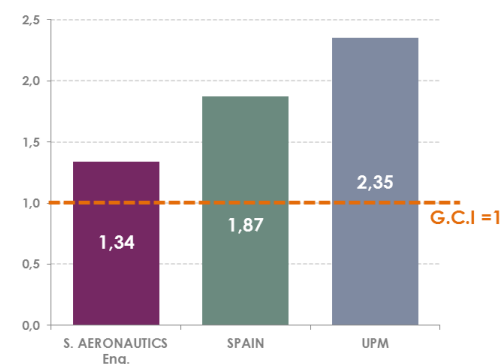
**FIGURE 2.2.14**  
Proportion of men and women in a typical academic career, students and academic staff, **School of Aeronautics and Space Engineering**

**Source:** For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** The figures shown on figure 2.2.13 merge two former Schools which have been fused together. These Schools are the Higher School of Aeronautics Engineering and the Technical School of Aeronautics Engineering. Merging both Schools was necessary to have the Evolution of early-stage students in year 2013, since all students already belong to the same School. PhD students, together with Teaching and Research Staff, used to belong to one of the Schools, and it was possible to separate them for figures 2.1.2 and 2.1.14.

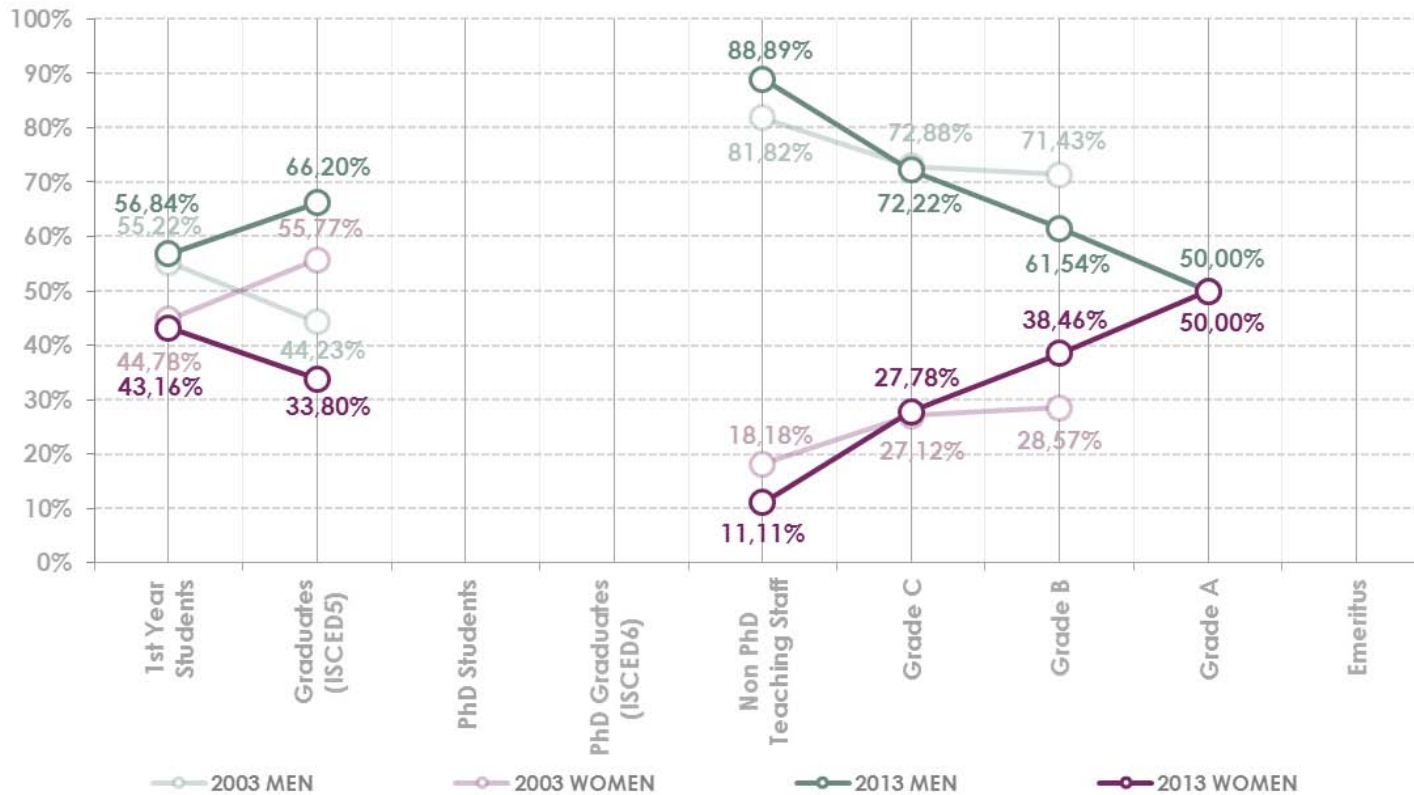


b) Proportion of women in Grade A positions

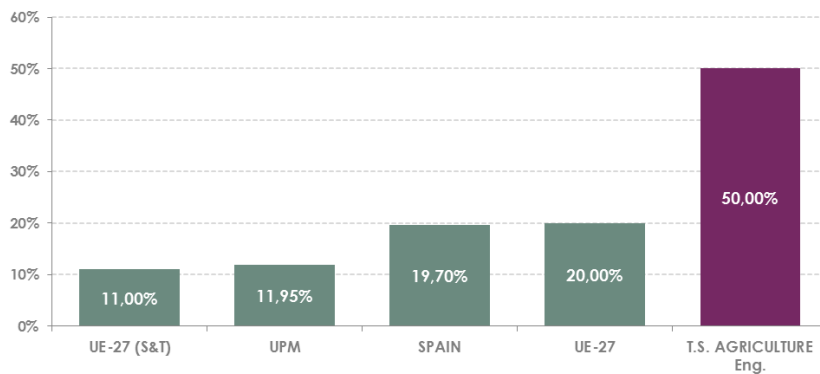


c) Glass Ceiling Index

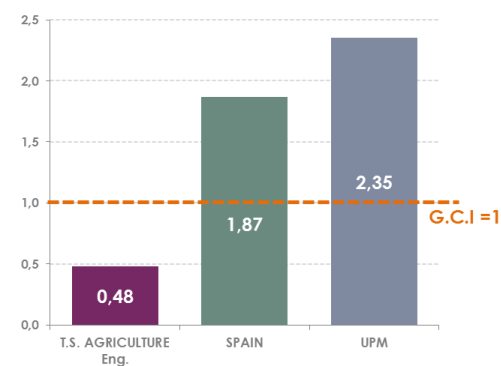
a) Proportion of men and women in a typical academic career, students and academic staff, (2003-2013)



**FIGURE 2.2.15**  
Proportion of men and women in a typical academic career, students and academic staff, **Technical School of Agriculture Engineering**



b) Proportion of women in Grade A positions



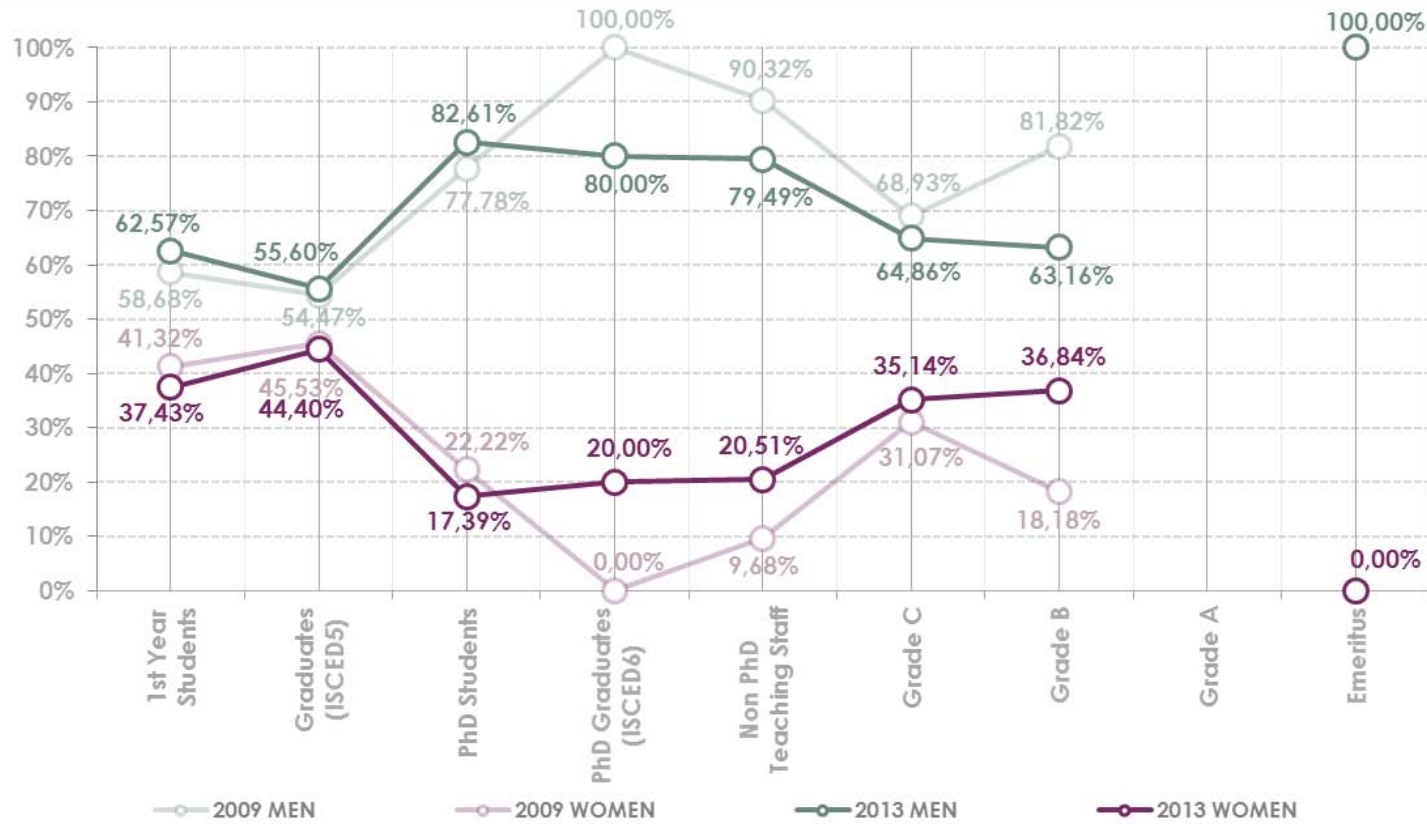
c) Glass Ceiling Index

**Source:** For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

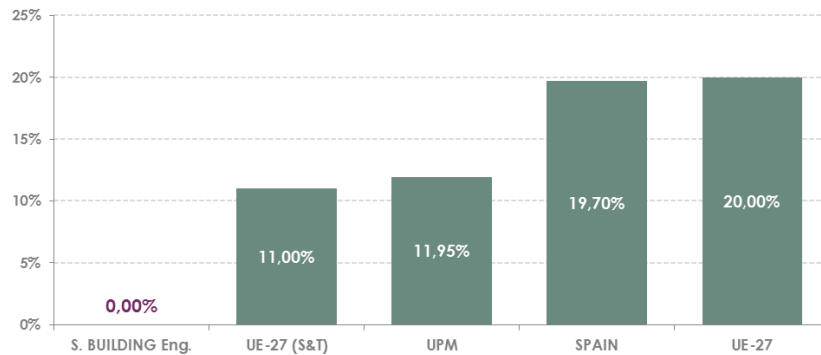
**Notes:** There were no Grade A teaching and research staff or Emeritus Professors in 2003. There were no Emeritus Professors in 2013. This School does not offer PhD courses.



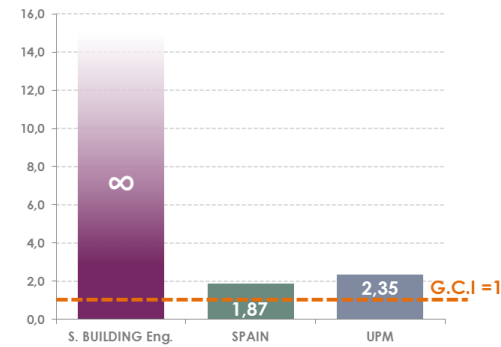
a) Proportion of men and women in a typical academic career, students and academic staff, (2009-2013)



**FIGURE 2.2.16**  
Proportion of men and women in a typical academic career, students and academic staff, **School of Building Engineering**



b) Proportion of women in Grade A positions

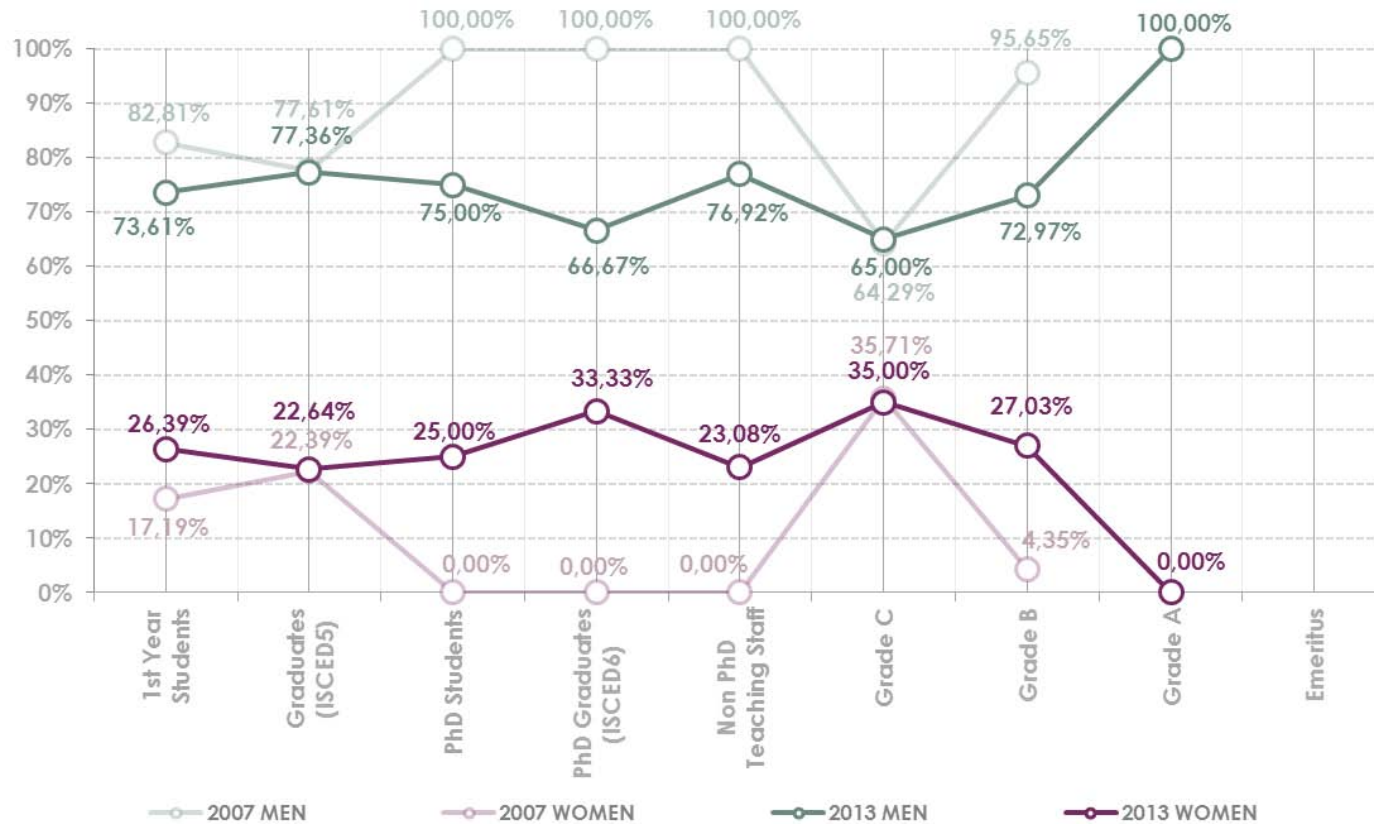


c) Glass Ceiling Index

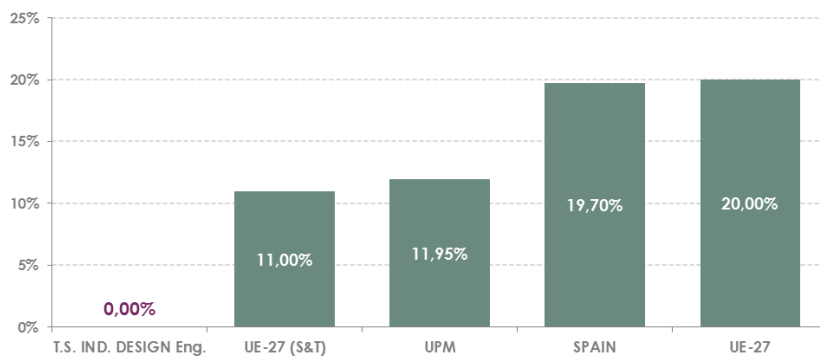
**Source:** For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** There were no Grade A teaching and research staff or Emeritus Professors in 2003. There were no Grade A teaching and research staff in 2013. Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. Figures b and c show "Grade A" including Emeritus Professors.

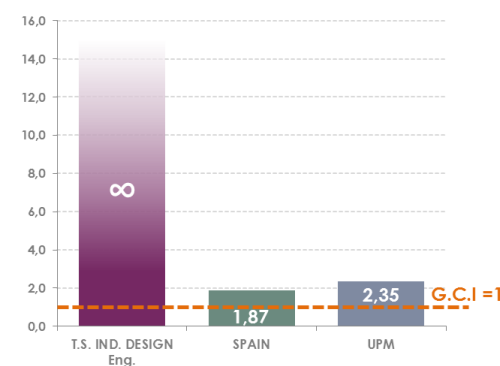
a) Proportion of men and women in a typical academic career, students and academic staff, (2007-2013)



**FIGURE 2.2.17**  
Proportion of men and women in a typical academic career, students and academic staff, **Technical School of Industrial Design and Engineering**



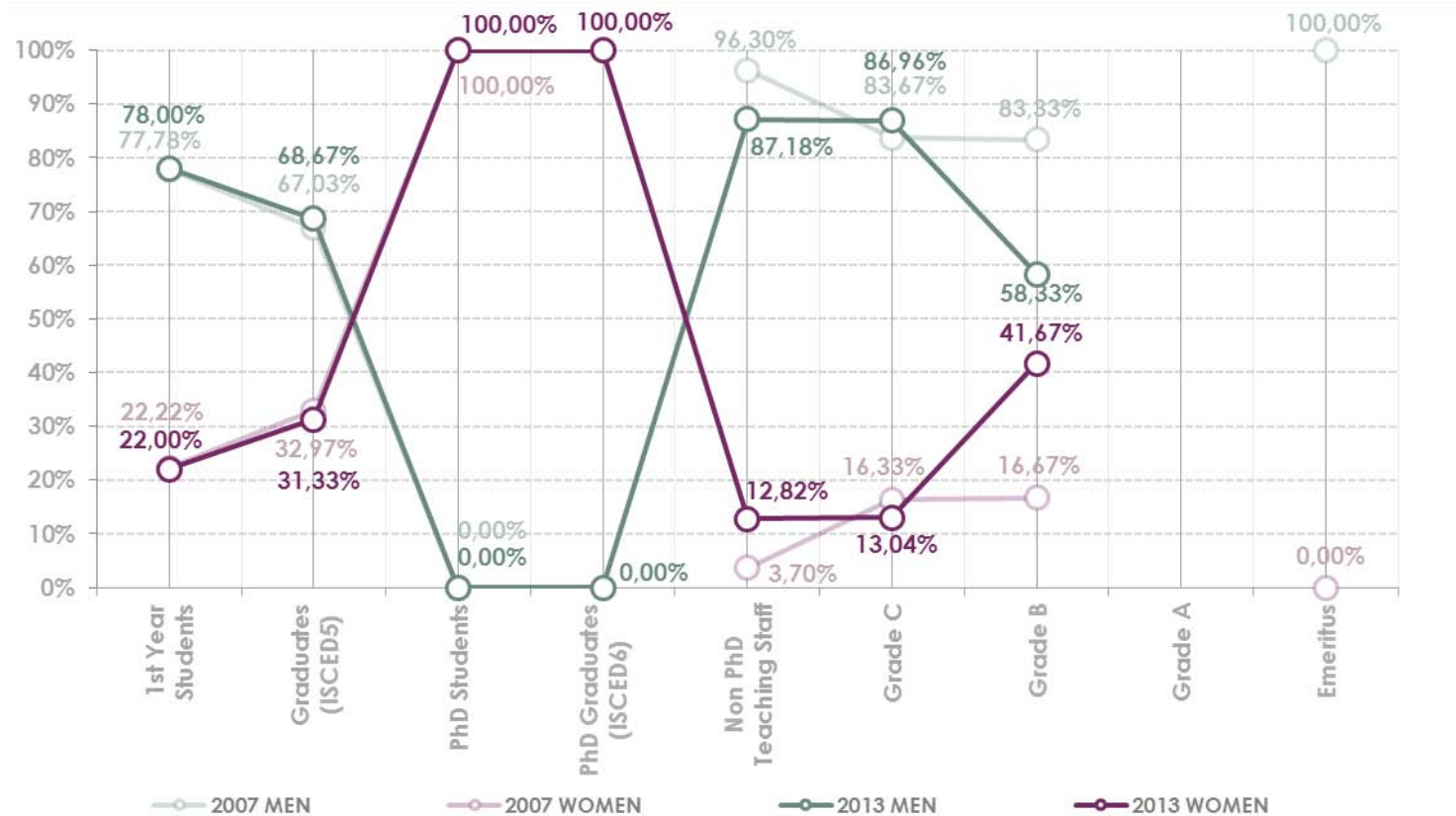
b) Proportion of women in Grade A positions



c) Glass Ceiling Index

**Source:** For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.  
**Notes:** There were no Grade A teaching and research staff or Emeritus Professors in 2003. There were no Emeritus Professors in 2013. Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. Figures b and c show "Grade A" including Emeritus Professors.

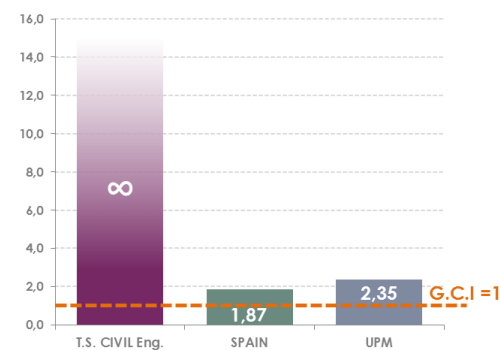
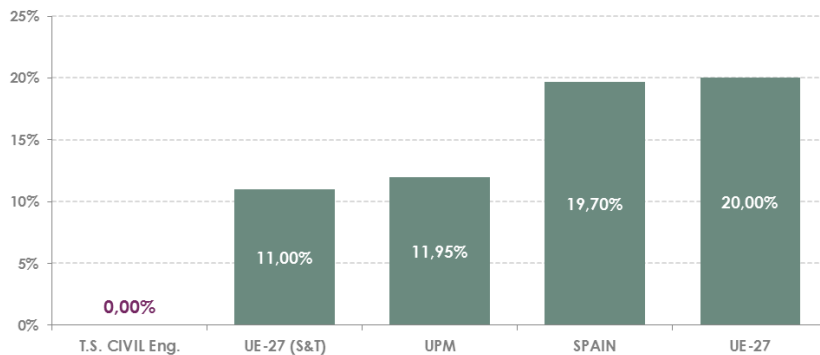
a) Proportion of men and women in a typical academic career, students and academic staff, (2007-2013)



**FIGURE 2.2.18**  
Proportion of men and women in a typical academic career, students and academic staff, **Technical School of Civil Engineering**

**Source:** For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** There were no Grade A teaching and research staff or Emeritus Professors in 2013. Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. Figures b and c show "Grade A" including Emeritus Professors.

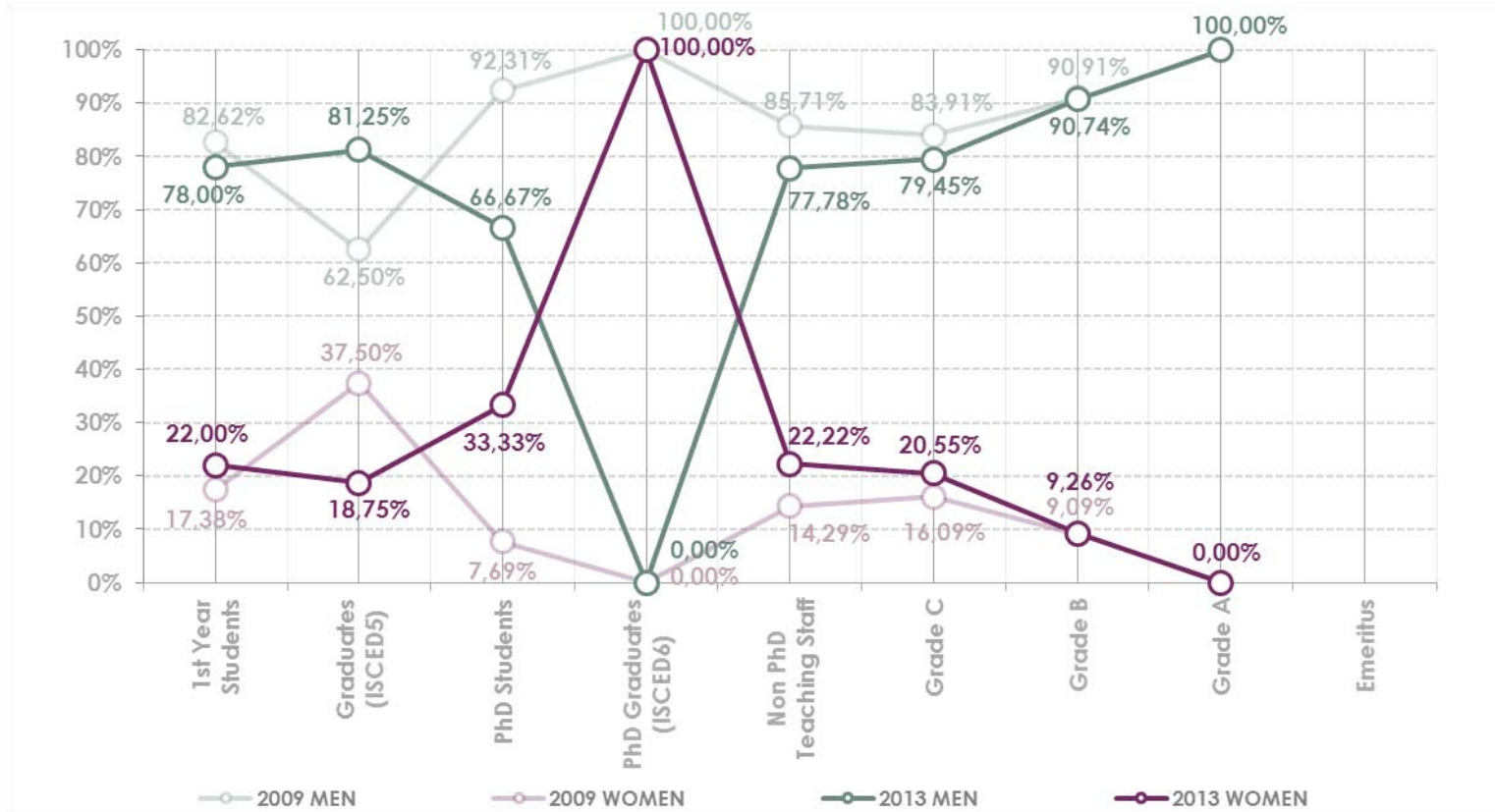


b) Proportion of women in Grade A positions

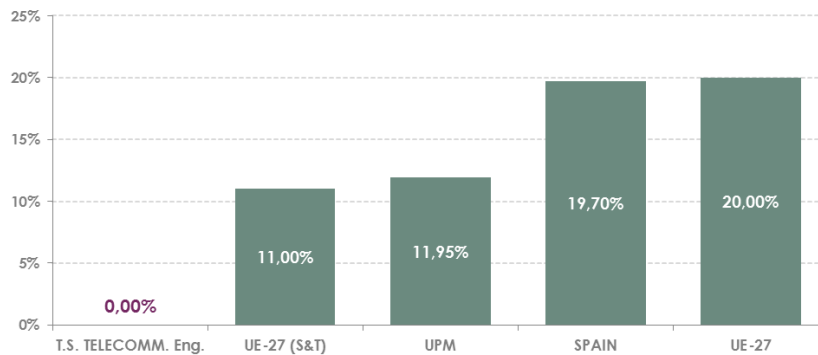
c) Glass Ceiling Index



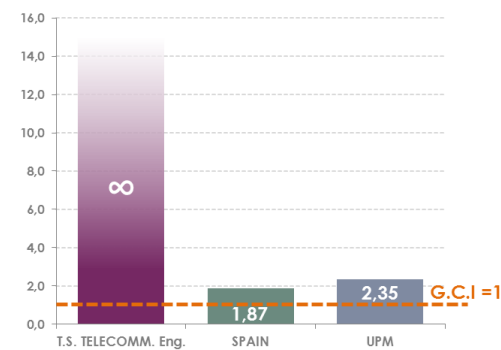
a) Proportion of men and women in a typical academic career, students and academic staff, (2009-2013)



**FIGURE 2.19**  
Proportion of men and women in a typical academic career, students and academic staff, **Technical School of Telecommunications Engineering**



b) Proportion of women in Grade A positions

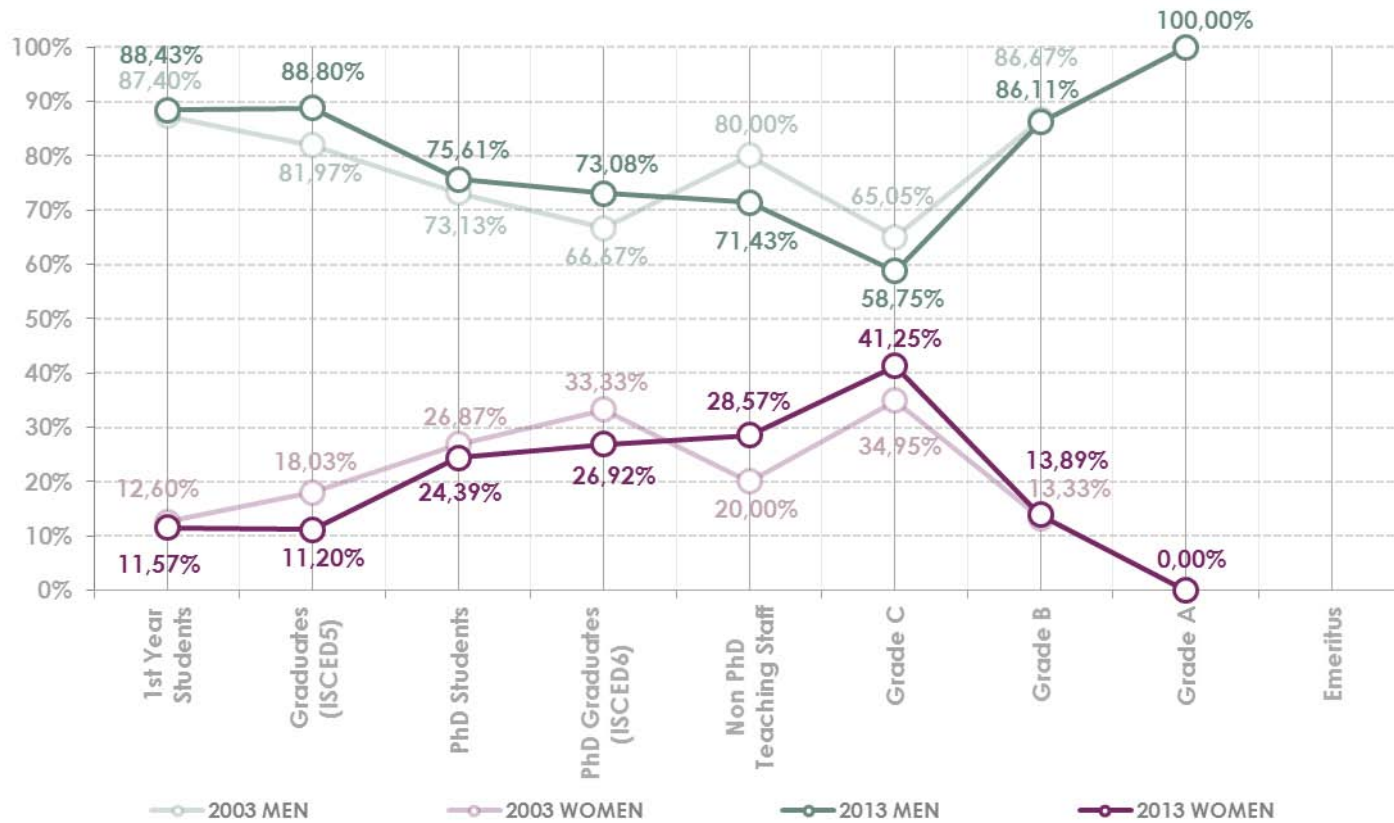


c) Glass Ceiling Index

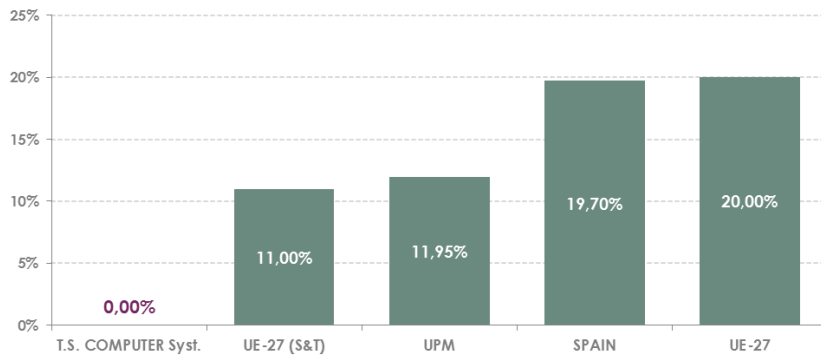
**Source:** For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** There were no Grade A teaching and research staff or Emeritus Professors in 2003. There were no Emeritus Professors in 2013. Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. Figures b and c show "Grade A" including Emeritus Professors.

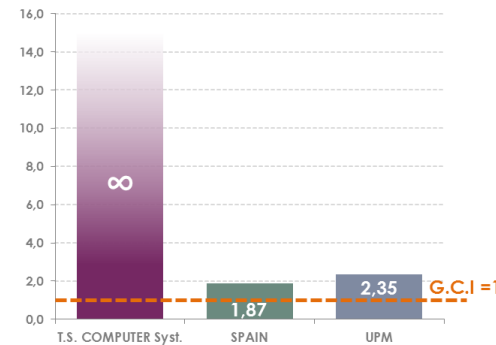
a) Proportion of men and women in a typical academic career, students and academic staff, (2003-2013)



**FIGURE 2.2.20**  
Proportion of men and women in a typical academic career, students and academic staff, **Technical School of Computer Systems Engineering**



b) Proportion of women in Grade A positions



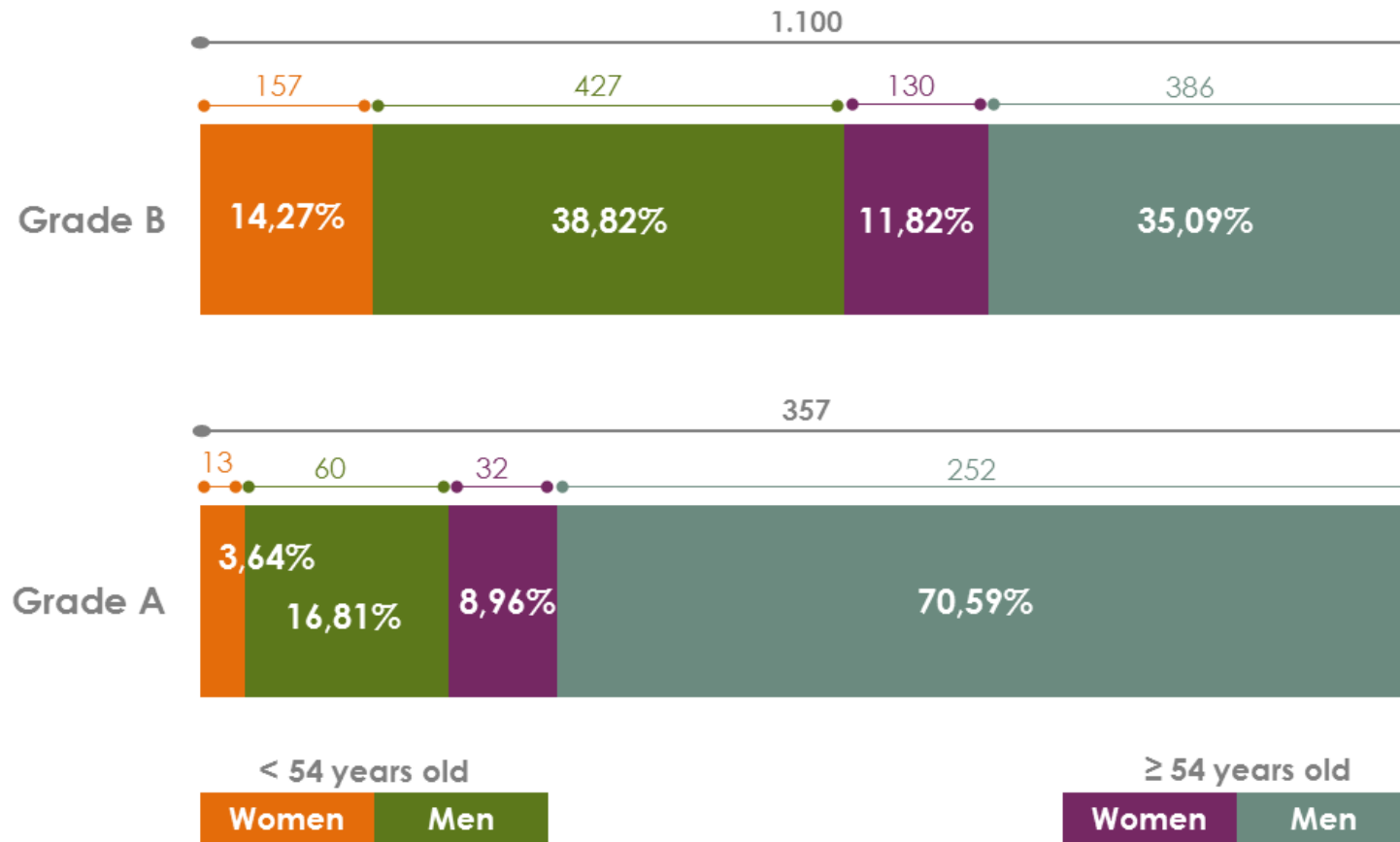
c) Glass Ceiling Index

**Source:** For EU-27: "She Figures 2012". For Spain: "Científicas en Cifras 2013". For UPM: Observatorio Académico Database, UPM.

**Notes:** There were no Grade A teaching and research staff or Emeritus Professors in 2003. There were no Emeritus Professors in 2013. Data refer to year 2010 for UE-27, year 2012 for Spain and year 2013 for UPM. UE-27 (S&T) refers to students enrolled in engineering and science studies. Figures b and c show "Grade A" including Emeritus Professors.

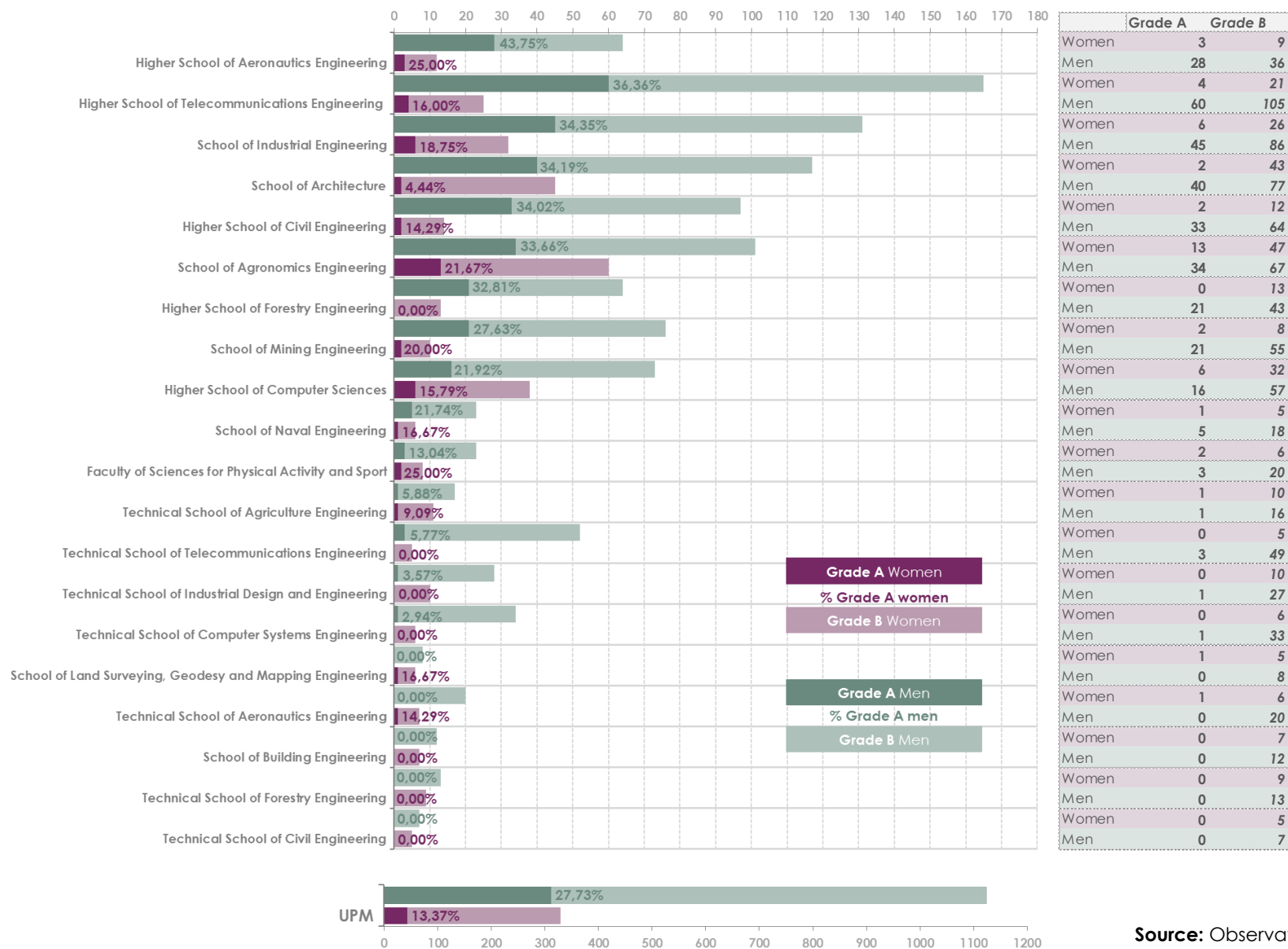
**CHAPTER 2.3.**  
**Seniority.**

FIGURE 2.3.1\_ Proportion of men and women in Grade A and Grade B positions, by age (2013)



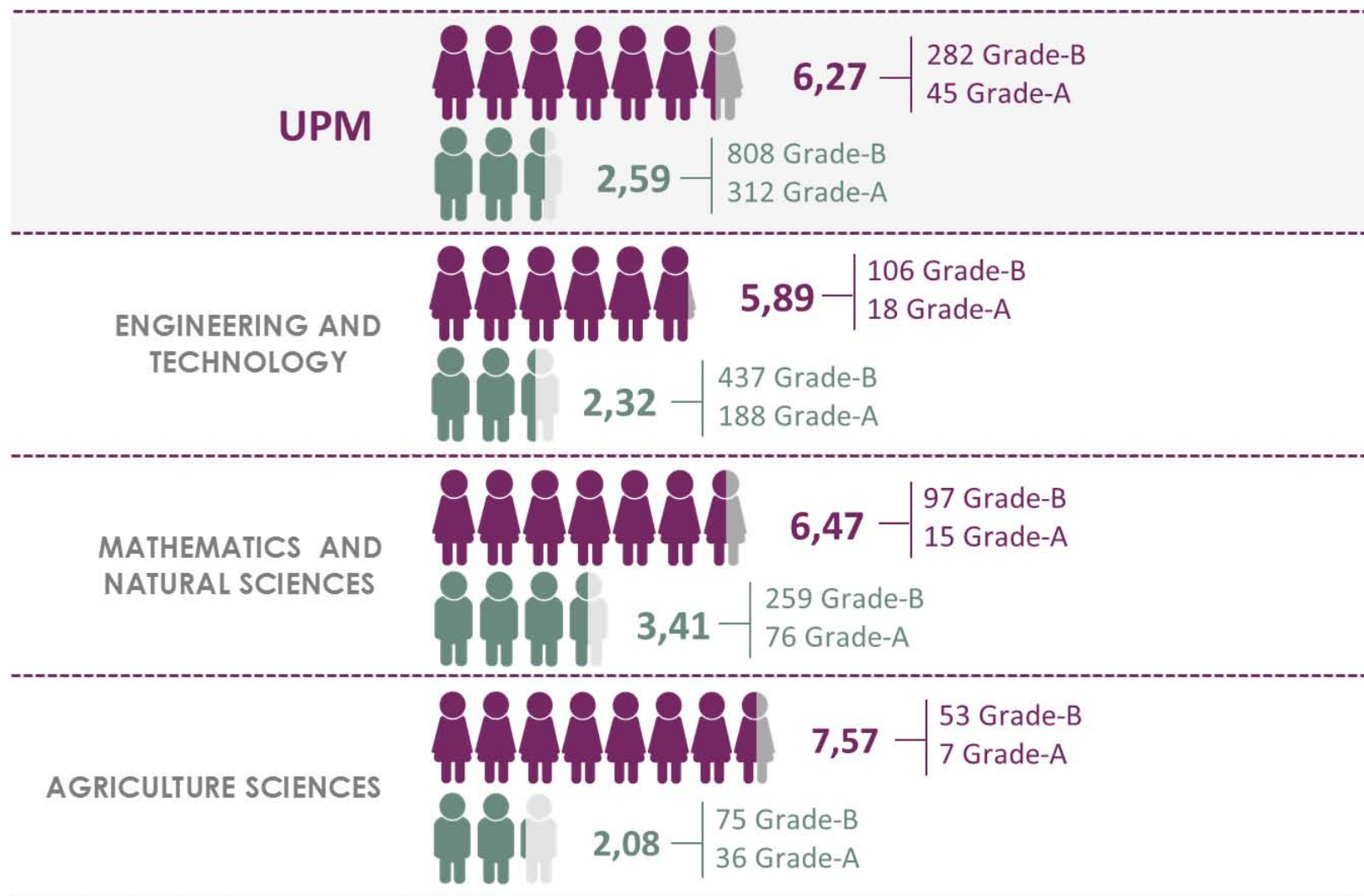
Source: Observatorio Académico Database, UPM

**FIGURE 2.3.2\_ Proportion and number of men and women in Grade A and Grade B positions by School (2013)**



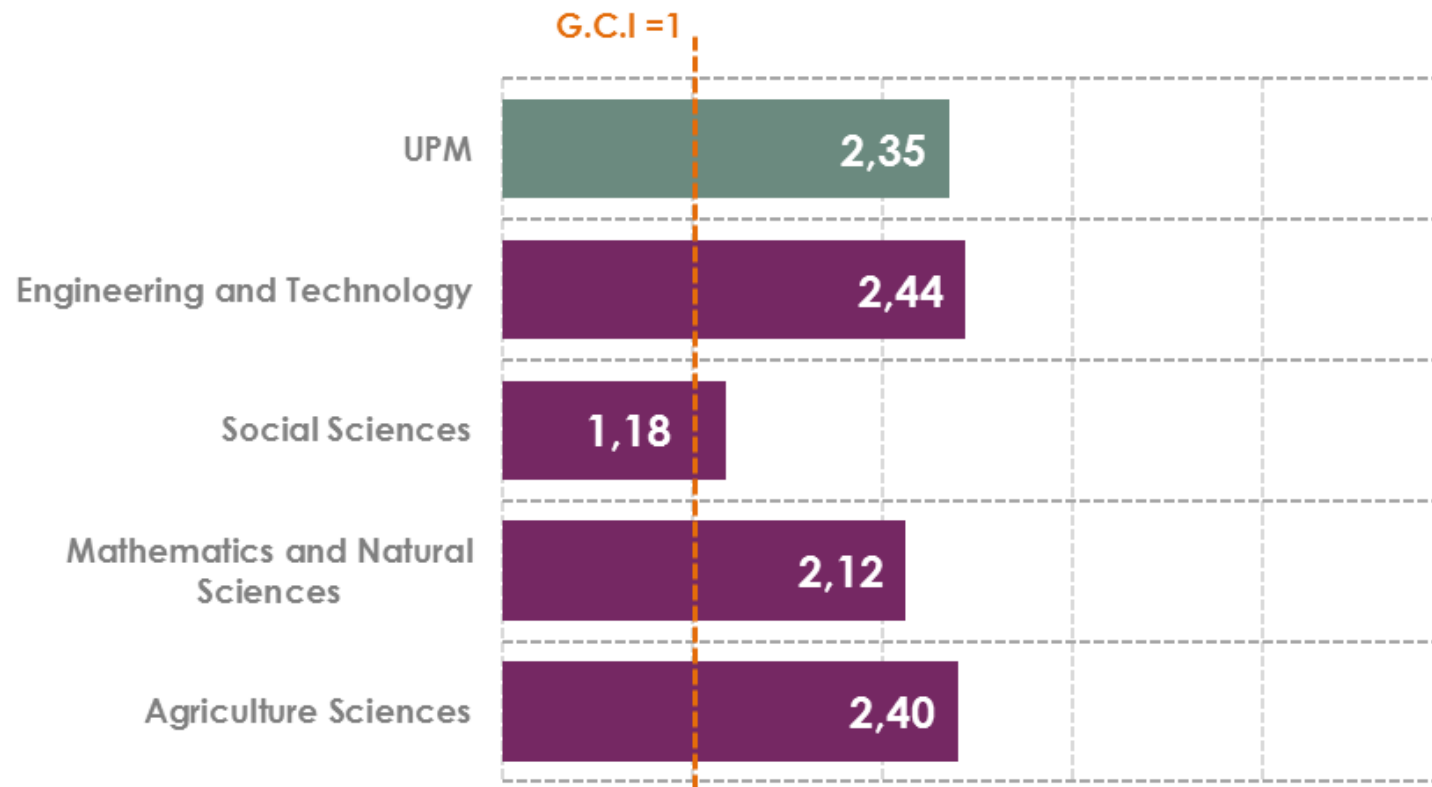
Source: Observatorio Académico

FIGURE 2.3.3\_ Number of Grade-B researchers per each Grade-A position, by sex and field (2013)



Source: Observatorio Académico Database, UPM

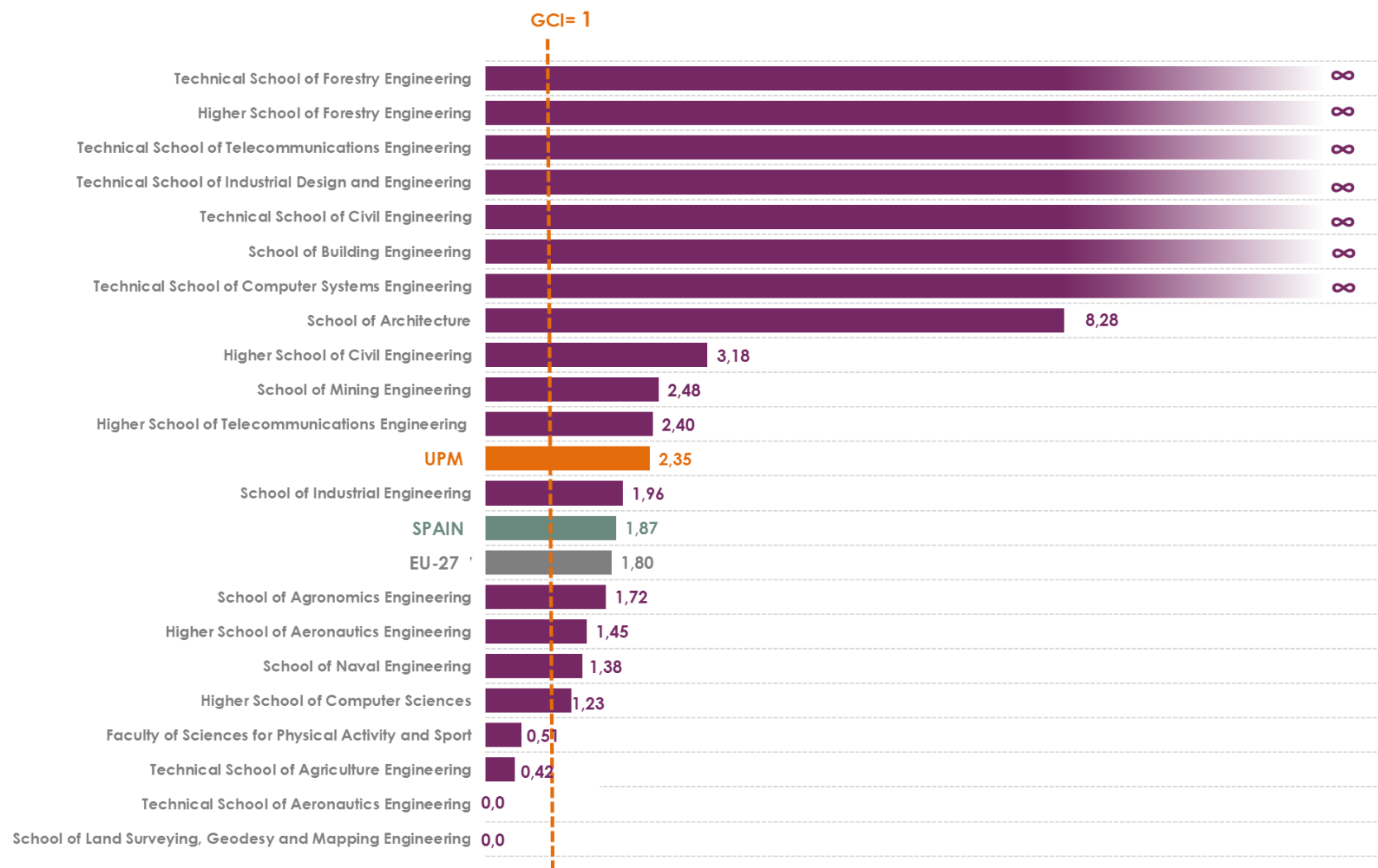
FIGURE 2.3.4\_ Glass Ceiling Index (GCI) by Scientific Field, Universidad Politécnica de Madrid (2013)



**Source:** Observatorio Académico Database, UPM

**Notes:** The Glass Ceiling Index (GCI) measures the relative chance for women, as compared with men, of reaching a top position. The GCI compares the proportion of women in grade A positions (equivalent to Full Professors in most countries) to the proportion of women in academia (grade A, B and C), indicating the opportunity, or lack of it, for women to move up the hierarchical ladder in their profession. A GCI of 1 indicates that there is no difference between women and men being promoted. A score of less than 1 means that women are over-represented at grade A level and a GCI score of more than 1 points towards a Glass Ceiling Effect, meaning that women are under-represented in grade A positions. In other words, the interpretation of the GCI is that the higher the value, the thicker the Glass Ceiling and the more difficult it is for women to move into a higher position. (She Figures 2013: 95)

**FIGURE 2.3.5\_ Glass Ceiling Index (GCI) by School, Universidad Politécnica de Madrid (2013)**



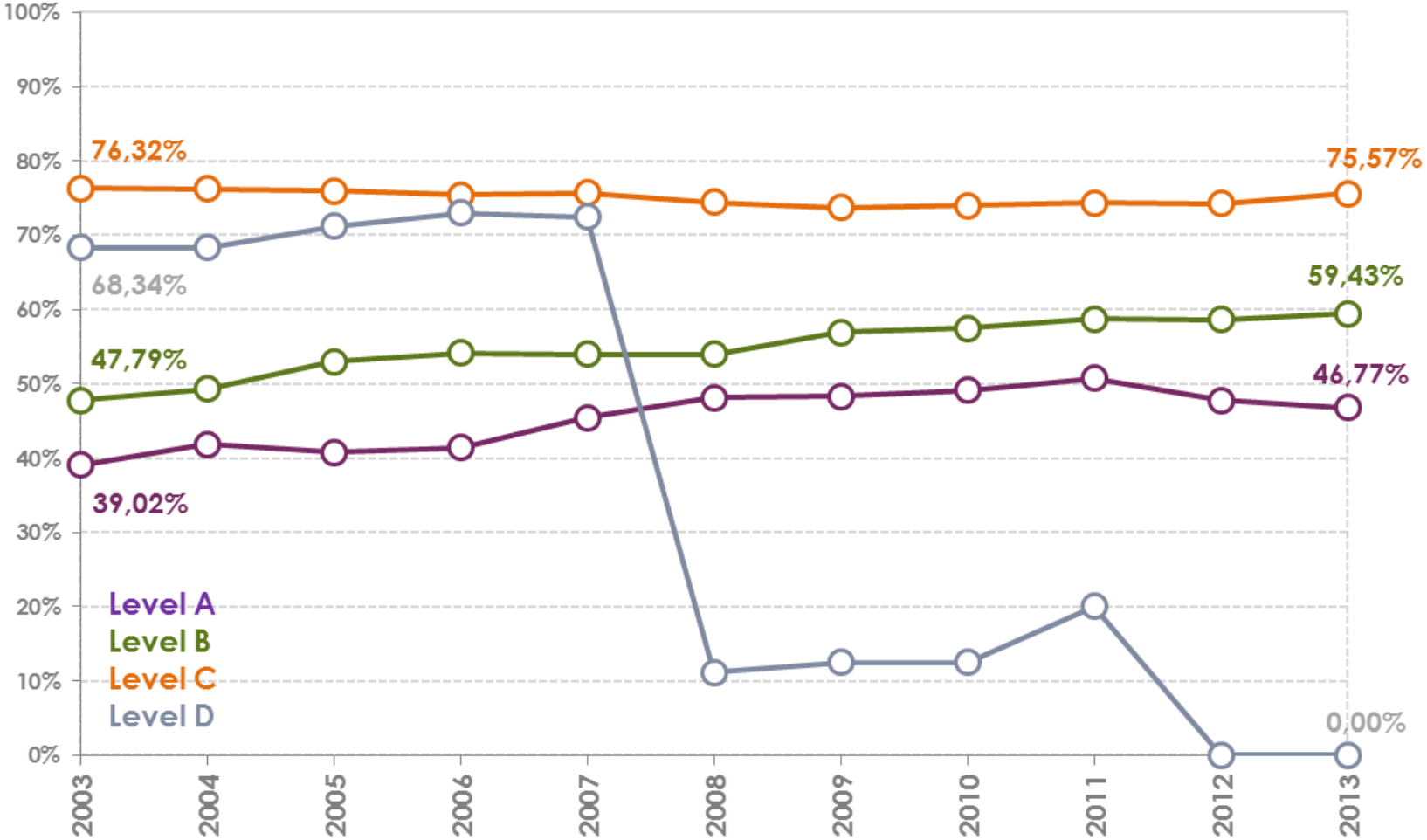
**Source:** For EU-27: “She Figures 2012”. For Spain: “Científicas en Cifras 2013”. For UPM and Schools: Observatorio Académico Database, UPM.

**Notes:** - Figure 2.4.2 shows the GCI of the UPM Schools. The GCI of the Technical School of Aeronautics Engineering and the School of Land Surveying, Geodesy and Mapping stands at 0, because there is no male Grade A among their teaching and research staff. However, the Schools at the top of Figure 2.4.2 show an uncertain value for the GCI which tends to infinity because there are no female Grade A researchers in such Schools. The situation of senior female researchers in these Schools is better expressed by Figure 2.3.2.



**CHAPTER 3.**  
**Administrative staff**

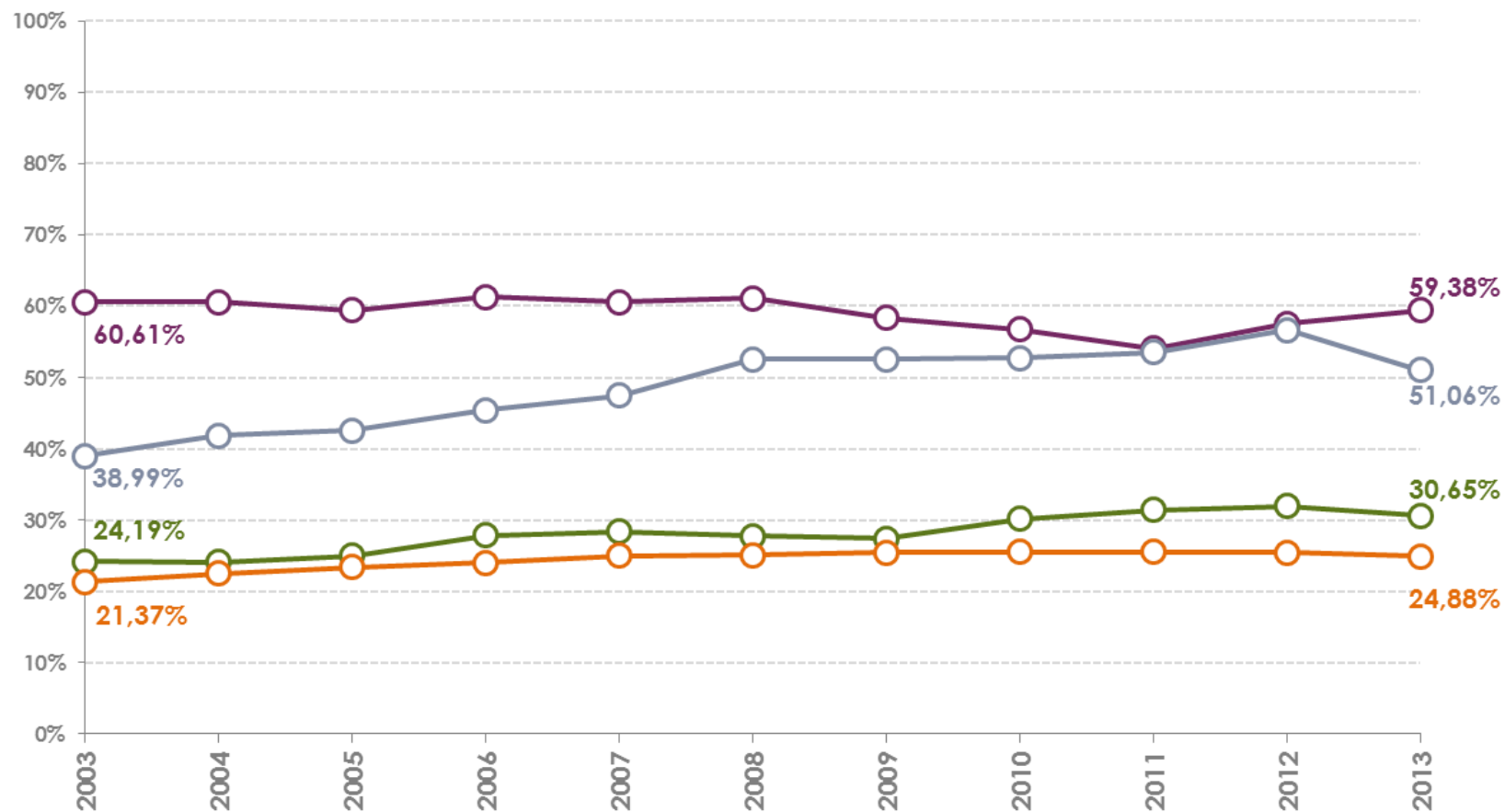
**FIGURE 3.1\_ Participation of women in administrative staff, by level, civil servants. Universidad Politécnica de Madrid (2003-2013)**



Source: Observatorio Académico Database, UPM

Notes on Figure 3.1.1: In 2007 the professional category "Level B" disappeared and renamed "Level A2".

**FIGURE 3.2\_ Participation of women in administrative staff, by level, non-civil servant personnel. Universidad Politécnica de Madrid (2003-2013)**

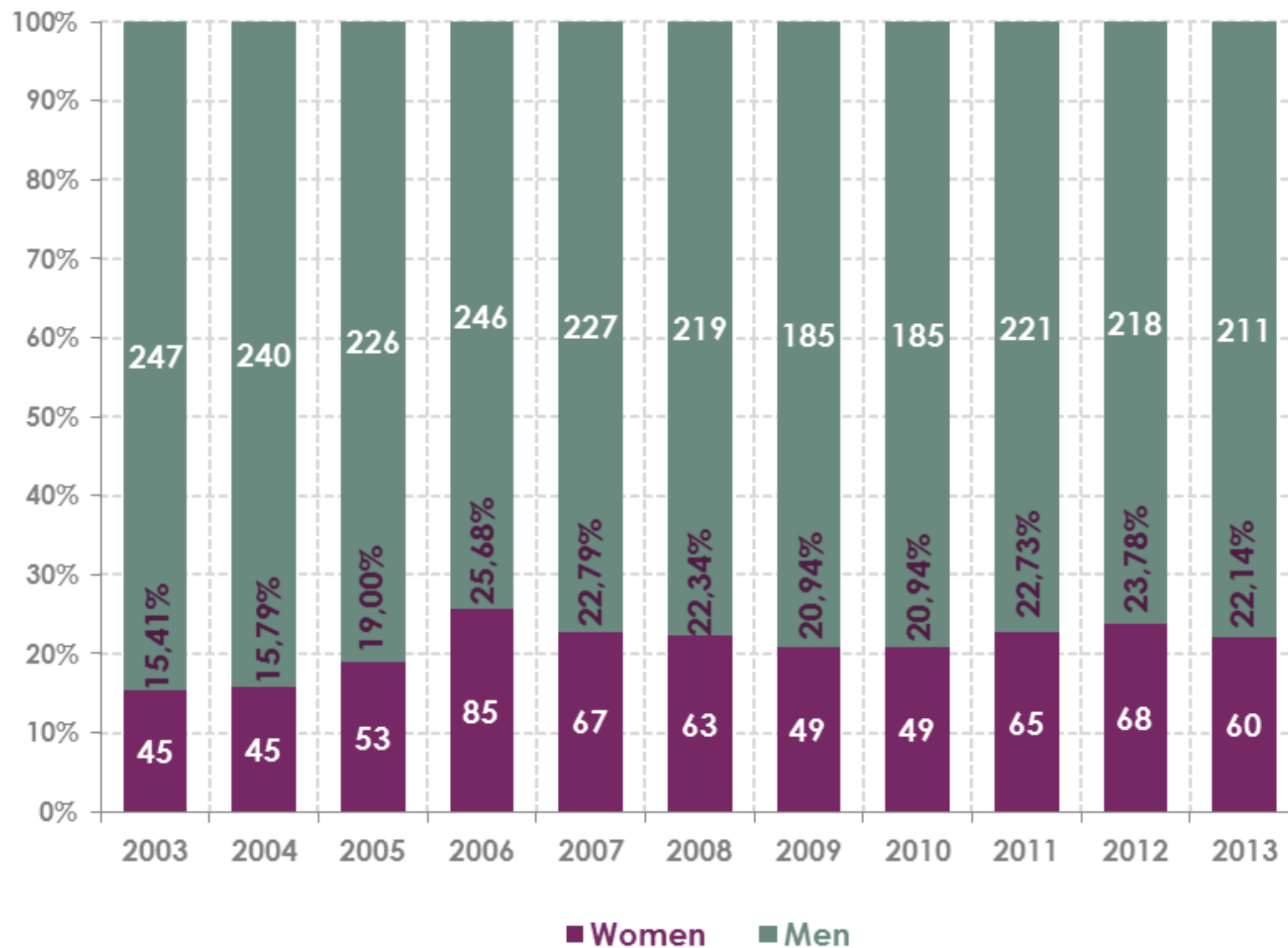


Source: Observatorio Académico Database, UPM

**CHAPTER 4**  
**Setting the Agenda**

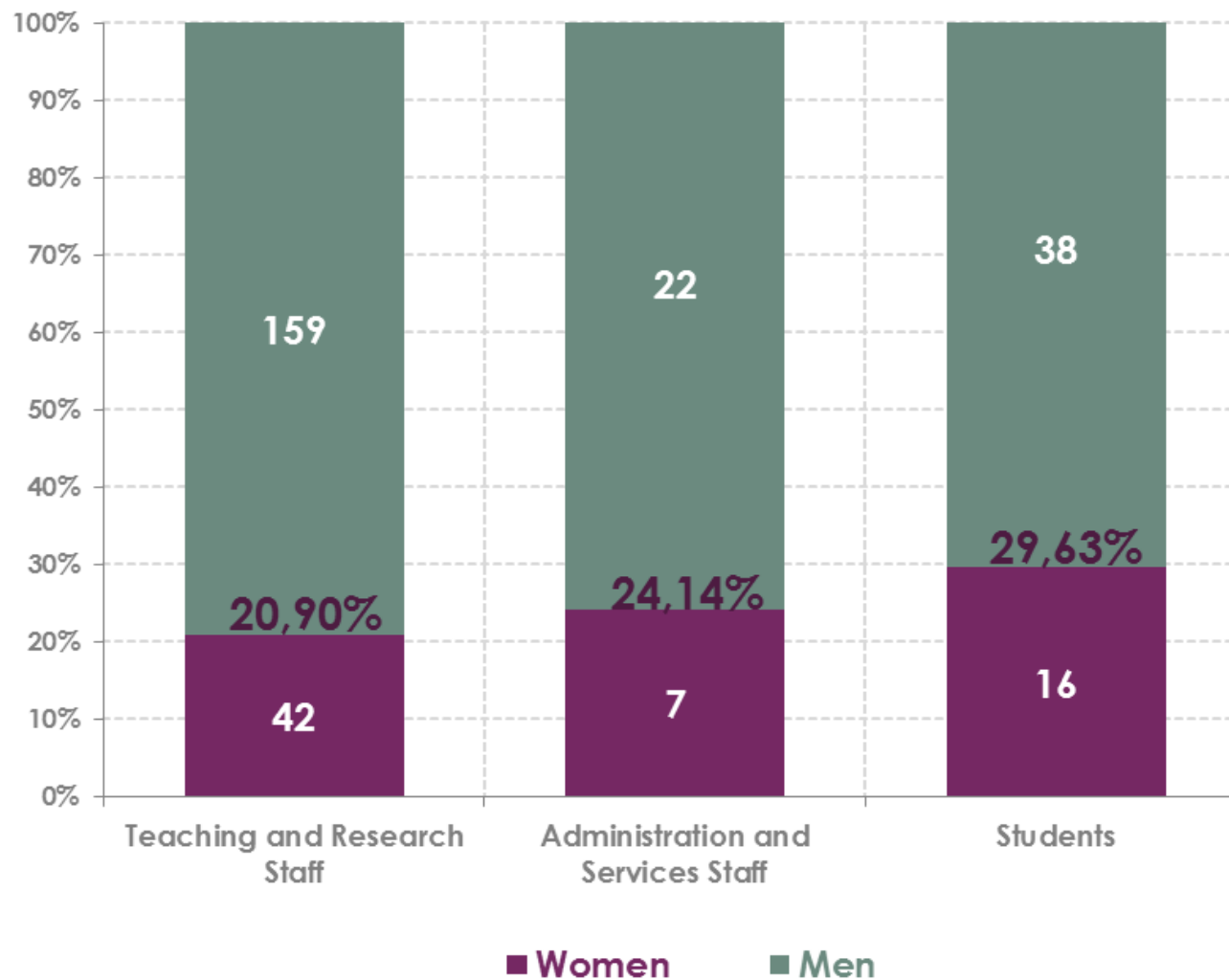
**CHAPTER 4.1**  
**Decision making bodies**

FIGURE 4.1.1\_ Proportion of women and men in the Senate, Universidad Politécnica de Madrid (2003-2013)



Source: Observatorio Académico Database, UPM

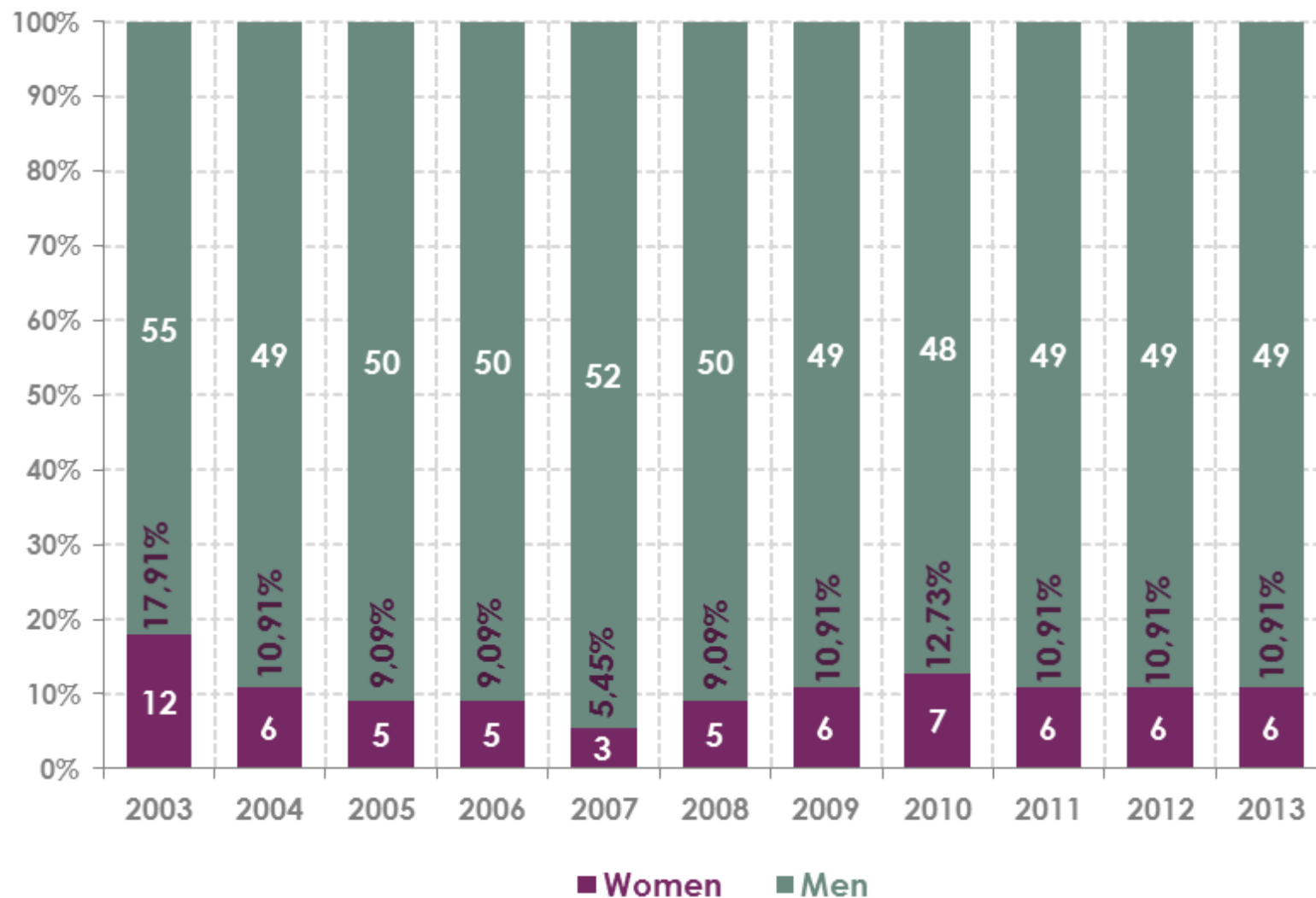
FIGURE 4.1.2\_Proportion of women and men in the Senate, by constituency type and sex, Universidad Politécnica de Madrid (2013)



Source: Observatorio Académico Database, UPM

Note: This figure represent the composition of the University Senate in June 2013.

FIGURE 4.1.3\_ Proportion of women and men in the Governing Council, Universidad Politécnica de Madrid (2003-2013)

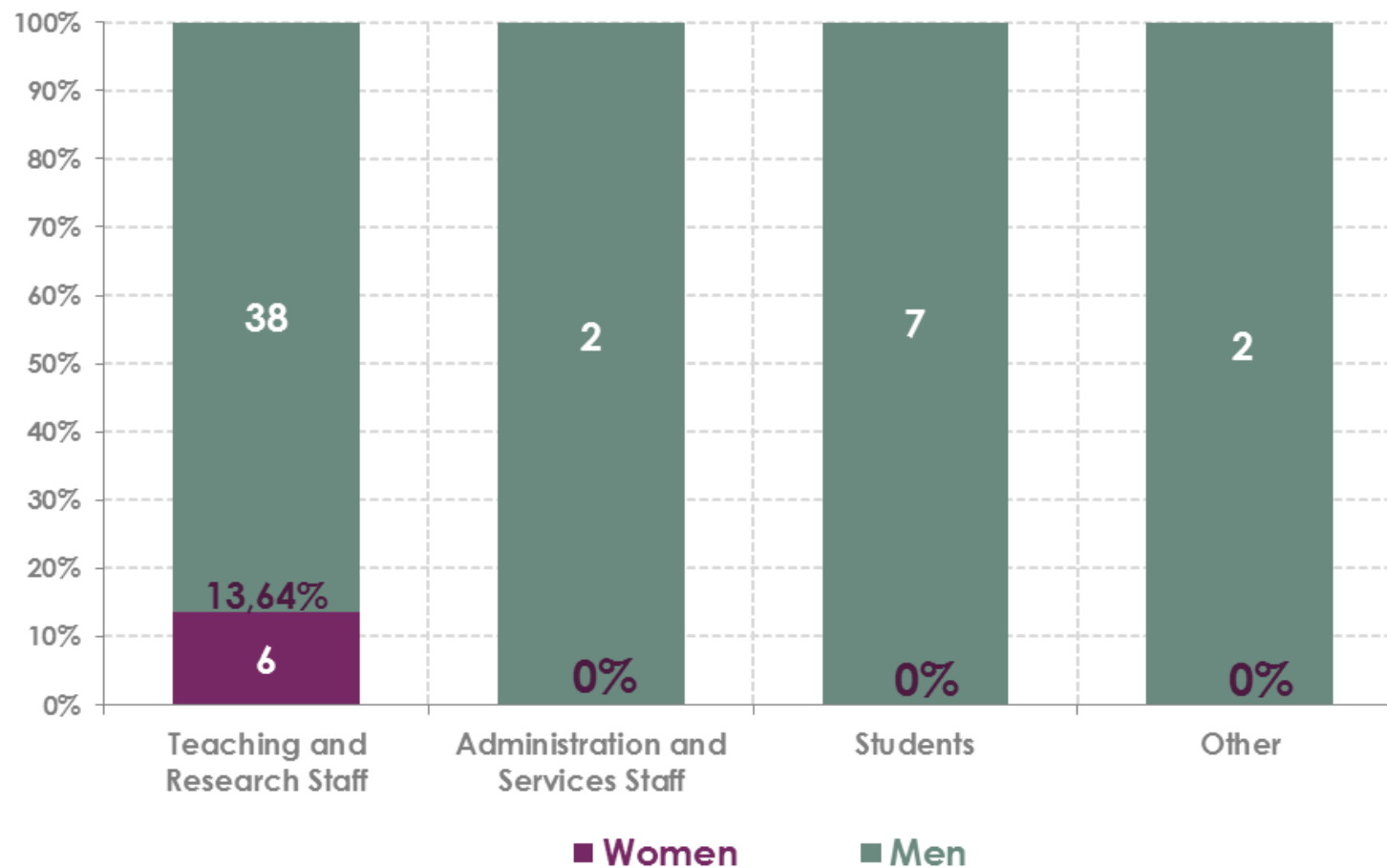


Source: Observatorio Académico Database, UPM

Notes on Figure 4.1.3: Figure 4.1.3 show the composition of the UPM Governing Council in the month of July from 2003 to 2013. In 2003 the UPM Governing Council was composed by 67 member, from 2004 the Council is composed of 55 members.



**FIGURE 4.1.4\_ Proportion of women and men in the Governing Council, by constituency type, Universidad Politécnica de Madrid (2013)**



**Source:** Observatorio Académico Database, UPM

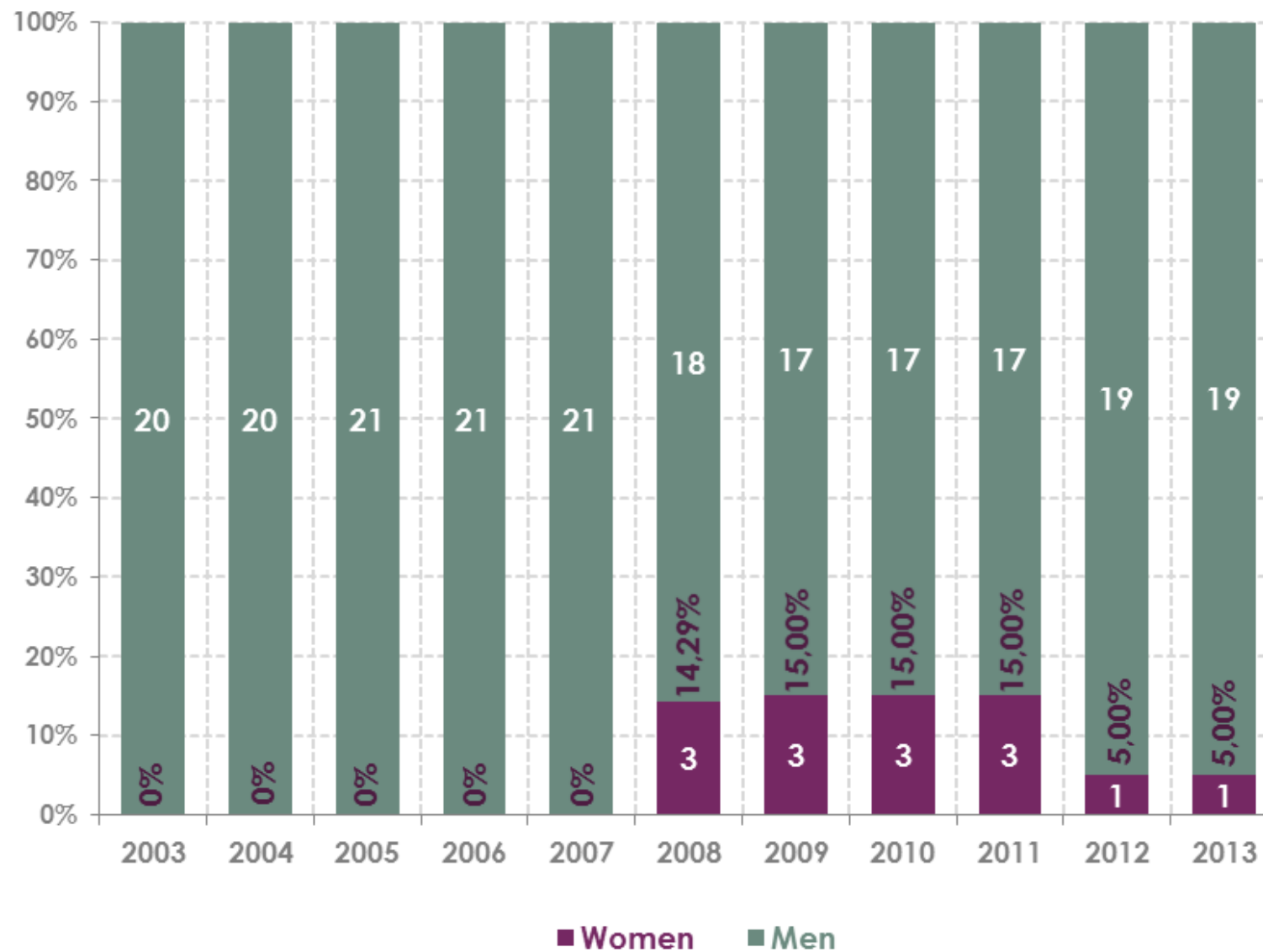
**Notes on Figure 4.1.3:** Figure 4.1.3 show the composition of the UPM Governing Council in the month of July from 2003 to 2013. In 2003 the UPM Governing Council was composed by 67 member, from 2004 the Council is composed of 55 members.

FIGURE 4.1.5\_ Proportion of women and men in the Rector's Council by sex, Universidad Politécnica de Madrid (2003-2013)



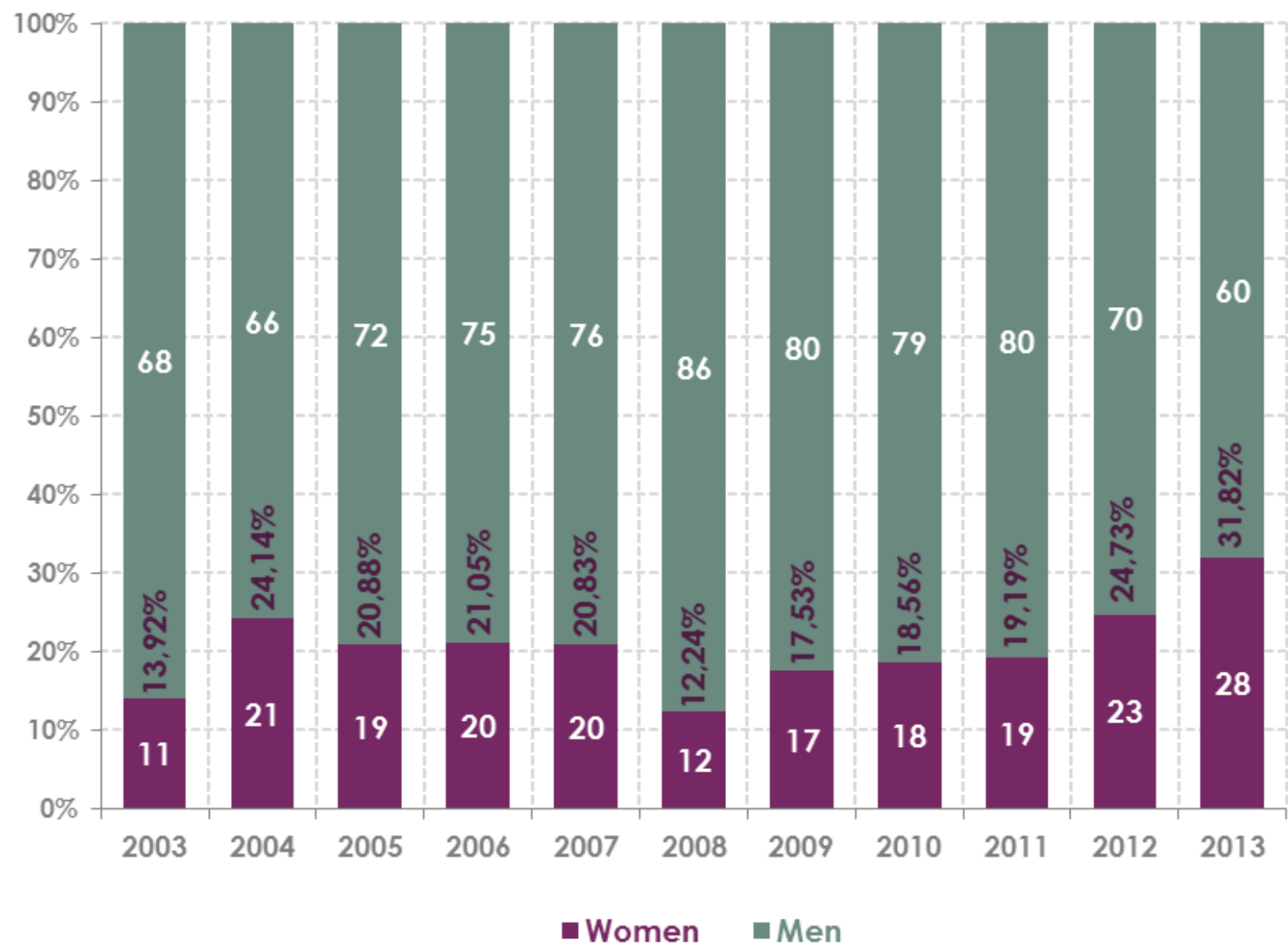
Source: Observatorio Académico Database, UPM

FIGURE 4.1.6\_ School Deans, distribution by sex, Universidad Politécnica de Madrid (2003-2013)



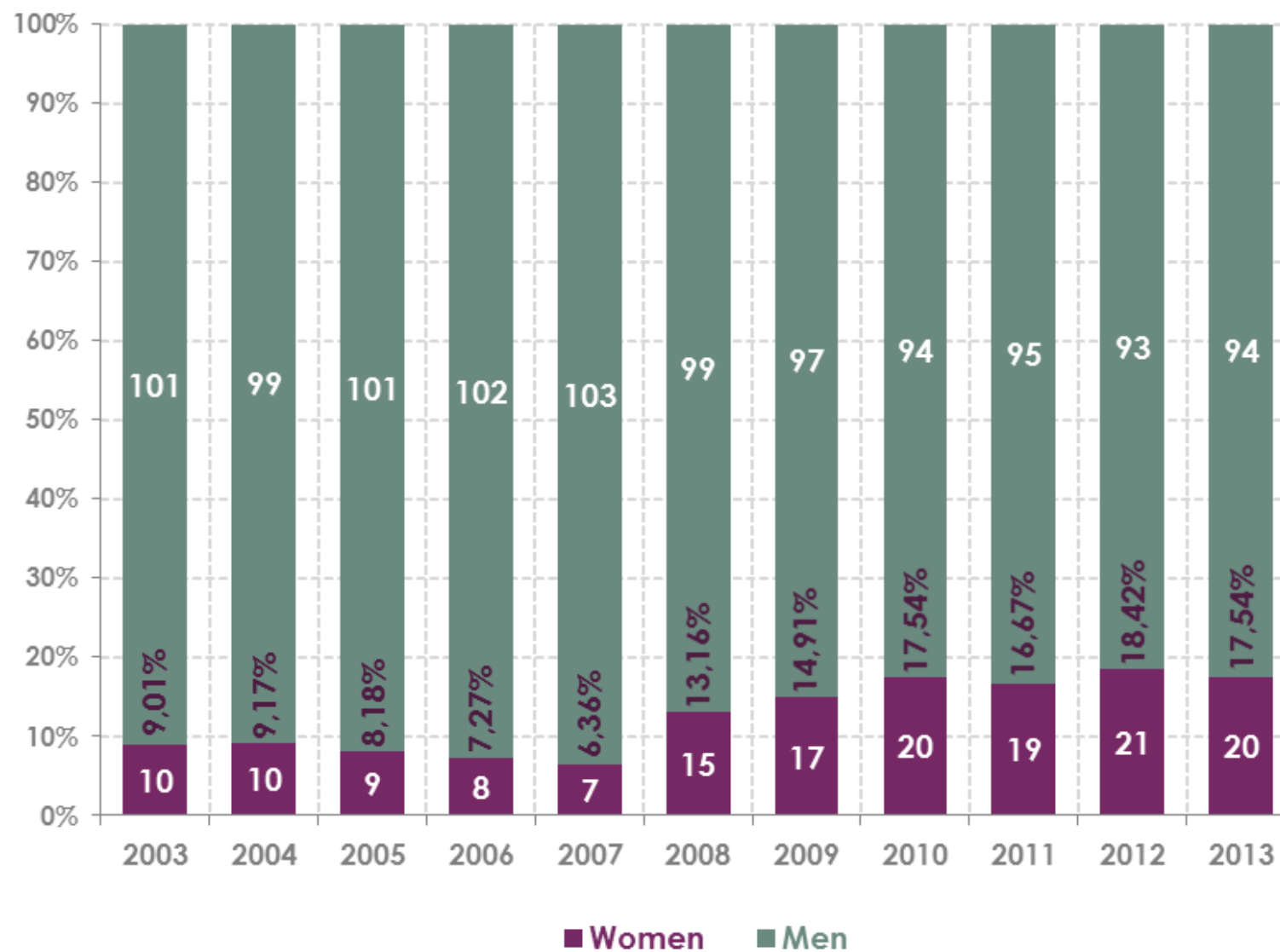
Source: Observatorio Académico Database, UPM

FIGURE 4.1.7\_ School Deputy Deans, distribution by sex, Universidad Politécnica de Madrid (2003-2013)



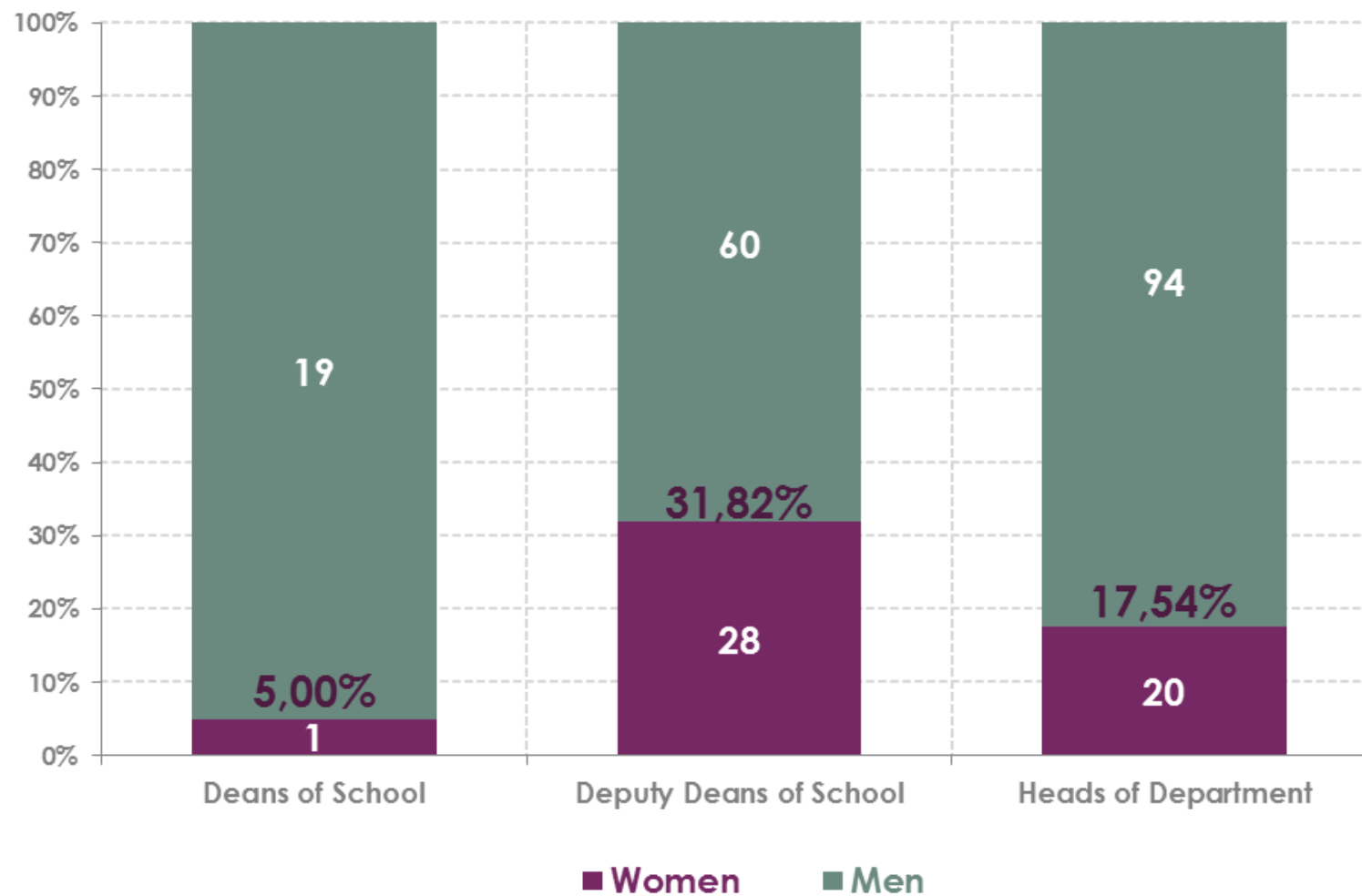
Source: Observatorio Académico Database, UPM

FIGURE 4.1.8\_ Department Heads, distribution by sex, Universidad Politécnica de Madrid (2003-2013)



Source: Observatorio Académico Database, UPM

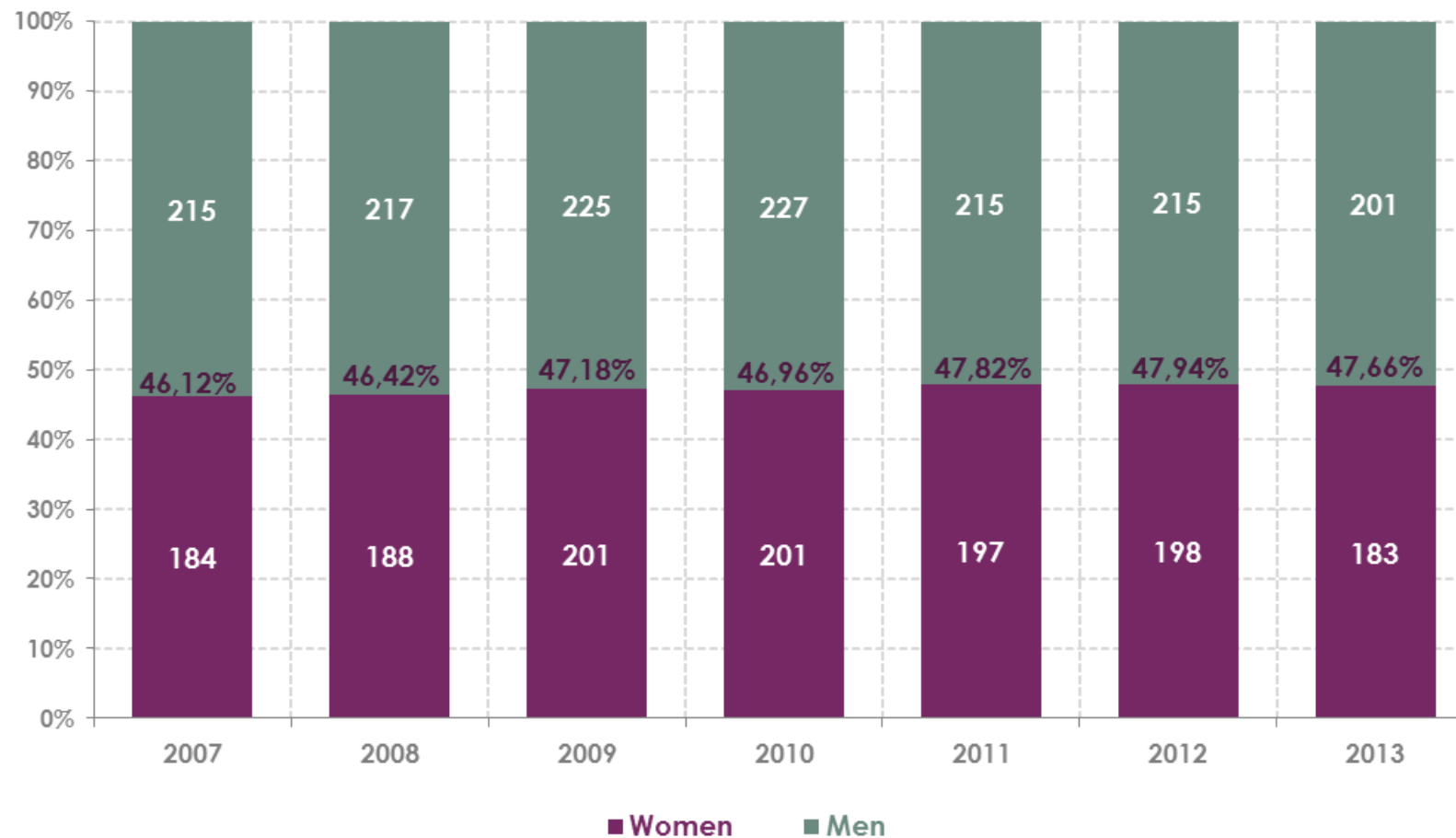
FIGURE 4.1.9\_ Single-person Governing Bodies, distribution by type and sex, Universidad Politécnica de Madrid (2013)



Source: Observatorio Académico Database, UPM

**CHAPTER 4.2.**  
**Research funding**

**FIGURE 4.2.1\_ Distribution of women and men in research teams, projects granted under competitive calls, Universidad Politécnica de Madrid (2007-2013)**

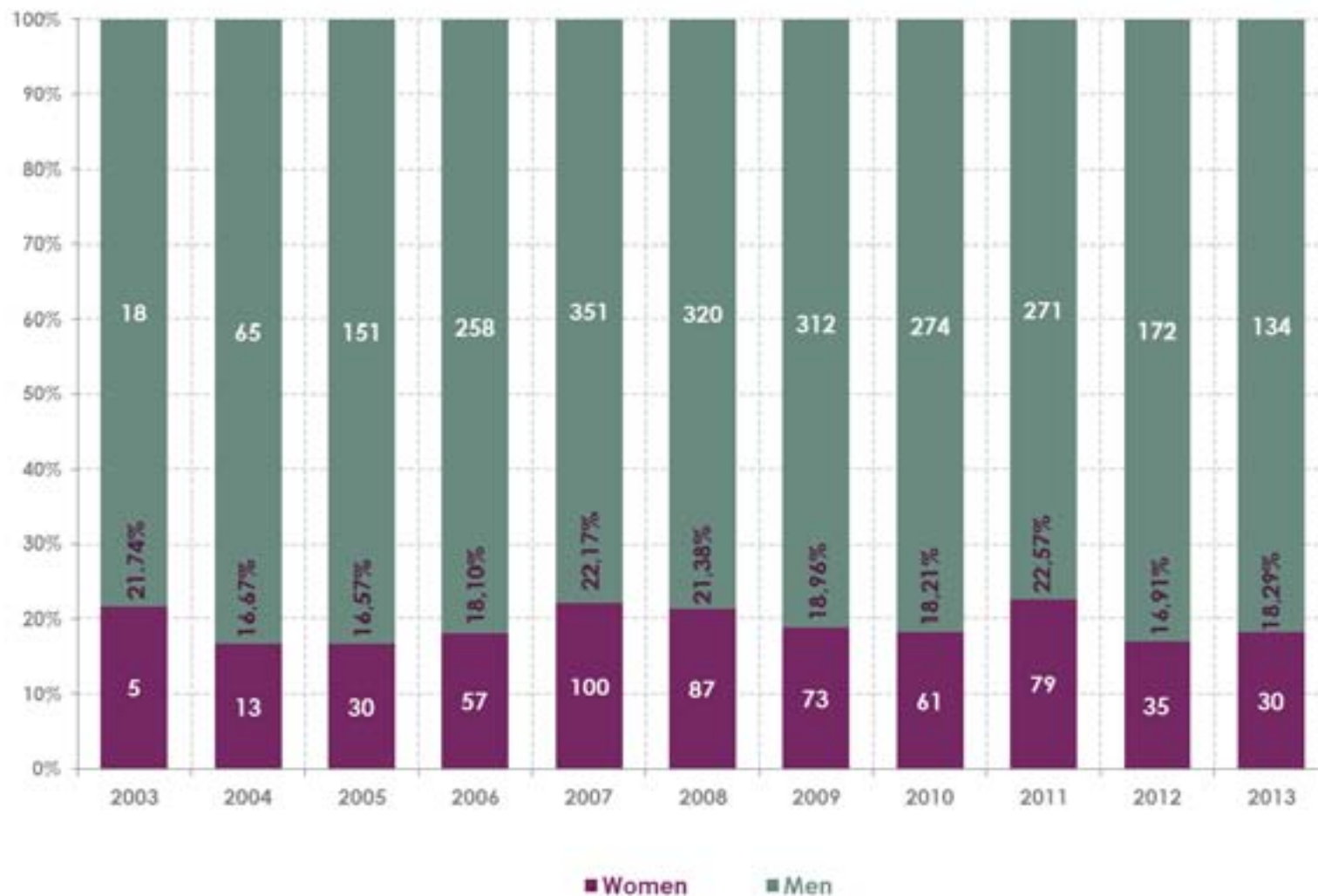


**Source:** Vice-Rectorate of Research Database, UPM

**Notes:** Data include all R&D projects granted to UPM researchers in competitive calls from public European, National and Regional Programs.



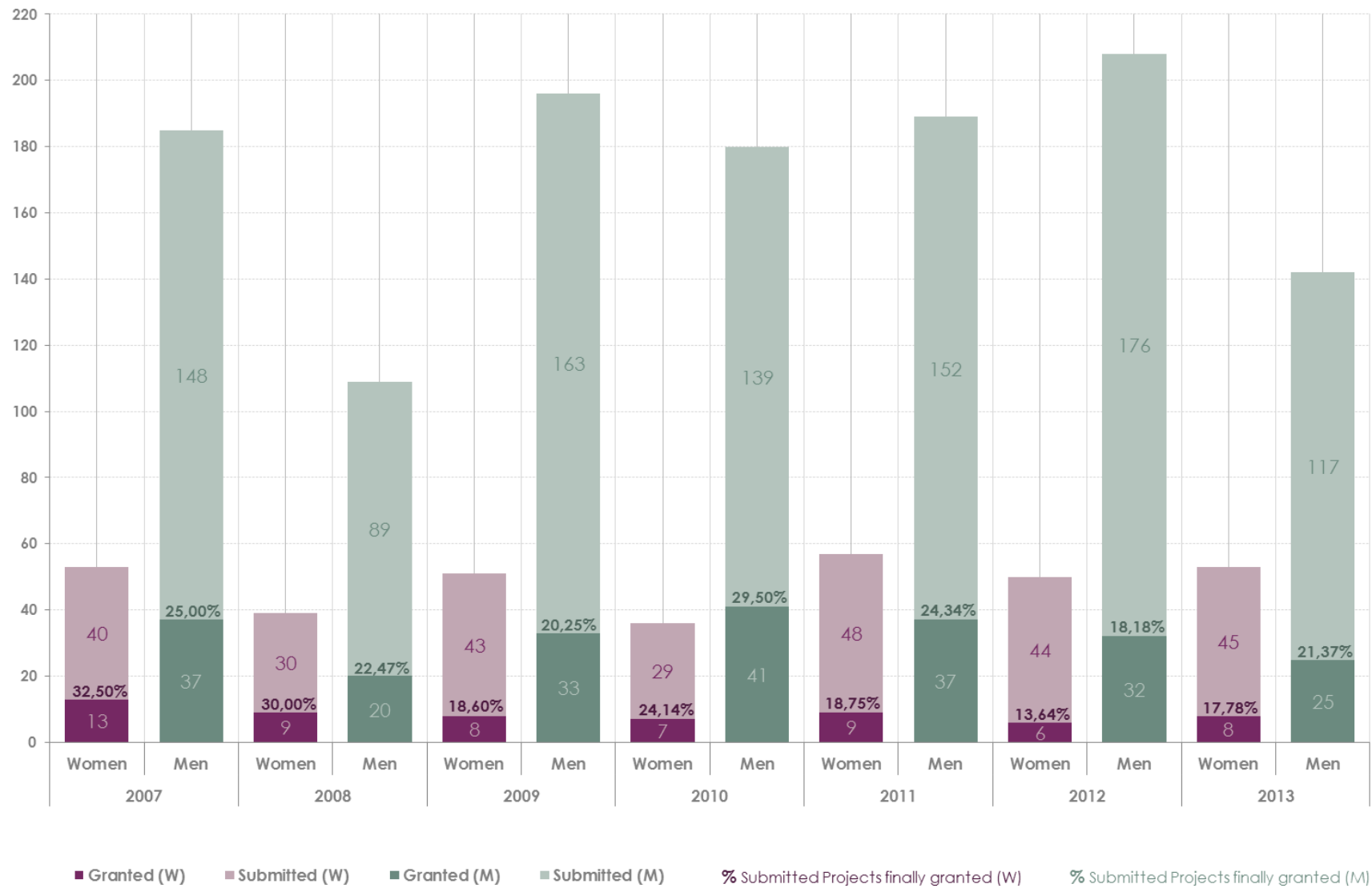
FIGURE 4.2.2\_ Distribution of Principal Investigators of R&D granted projects by sex, Universidad Politécnica de Madrid (2003-2013)



Source: Vice-Rectorate for Research Database, UPM

Notes: Data include all R&D projects granted to UPM researchers in competitive calls from public European, National and Regional Programs.

**FIGURE 4.2.3\_ Research funding success rate, distribution by sex of PIs, European FP7 calls, Universidad Politécnica de Madrid (2007-2013)**



Source: Oficina Europea Database, UPM

## **METHODOLOGICAL NOTES**

## Methodological Notes

### Students: ISCED Classification

This study uses the International Standard Classification for Education (ISCED) is the statistical framework maintained by the UNESCO for organizing information on education. **ISCED5** represents First Stage of Tertiary Education. **ISCED5A** represents largely theoretically based programmes leading to more advanced research programmes and professions with higher skills requirement. **ISCED5B** represent normally shorter programmes, which are more specific (practical, technical or occupationally) leading to professional qualifications or also other tertiary programmes such as doctorates. **ISCED6** represents Second Stage of tertiary education. They are programmes designed to lead to an advanced research qualification.

The following chart shows the equivalences used in this report.

UPM	ISCED
Grado	ISCED5A
1° Ciclo	
2° Ciclo	ISCED5B
Máster Oficial	
3° Ciclo	ISCED6
Postgrado Doctorado	

## Teaching and research staff: seniority grades

The classification used for Teaching and Research staff follows internationally agreed categories for research personnel. **Grade A:** The highest grade at which academic career is normally conducted. **Grade B:** Personnel not as senior as Grade A, but not at entry level positions. **Grade C:** The first grade in the academic research career, normally newly ISCED6 graduates. **Non-PhD staff-Grade D:** Personnel in positions that do not normally require a PhD, or postgraduate students working as researchers.

The following charts show the equivalences used in this report.

For charts on seniority (Figure 0.6; all Figures from Chapter 2.2 representing the *Glass Ceiling Index*; all Figures from Chapter 2.3), the correspondence is slightly changed for Grade A and Grade B, as follows:

UPM	"WOMEN AT UPM"
CATEDRATICO UNIVERSIDAD	Grade A
CATEDRATICO E.U.	Grade B
TITULAR UNIVERSIDAD	
PROFESOR INEF TITULAR	

UPM	"WOMEN AT UPM"
CATEDRATICO UNIVERSIDAD PROFESOR EMERITO L.D. PROFESOR ISAAC PERAL L.D. PROF. EMERITO	Grade A
CATEDRATICO E.U. TITULAR E.U. INTERINO TITULAR E.U. TITULAR UNIVERSIDAD INT. TITULAR UNIVERSIDAD PROFESOR INEF TITULAR PROFESOR INEF TITULAR INTERINO PROFESOR INNEF TITULAR INTERINO INDEFINIDO	Grade B
PROFESOR INEF DOCTOR L.D. PRF.AYUDANTE DOCTOR L.D. PRF.CONTRATADO DOCTOR L.D. PRF.CONTRATADO DOCTOR R.A. L.D. PRF.CONTRATADO DOCTOR O.A. L.D. PRF.CONTRATADO DOCTOR R.S.A. L.D. PRF.CONTRATADO DOCTOR O.S.A.	Grade C
MAESTRO LABORATORIO PROF. ASOCIADO TIPO 1 PROF. ASOCIADO TIPO 2 PROF. ASOCIADO TIPO 3 PROF. ASOCIADO TIPO 4 AYUDANTE (L.R.U.) EU AYUDANTE (L.R.U.) L.D. AYUDANTE L.D. PRF.COLABORADOR L.D. PROF. ASOCIADO L.D. PROF. VISITANTE	Non PhD Teaching Staff

## Administrative Staff Classification

The Administrative Staff at UPM (*Personal de Administración y Servicios, P.A.S* ) is divided in two main groups: civil servants (*PAS Funcionario*) and non-civil servants (*PAS Laboral*). These two categories are further subdivided into A, B, C and D categories.

The following chart shows the equivalences used in this report.

	UPM	"WOMEN AT UPM"
Civil Servants	Escala A	<b>Level A</b>
	Escala A1	
	Escala A2	<b>Level B</b>
	Escala B	
	Escala C	<b>Level C</b>
	Escala C1	
	Escala C2	
	Escala D	<b>Level D</b>
Escala E		
Non-Civil Servants	<i>Escala A1</i>	<b>Level A</b>
	<i>Escala A2</i>	
	<i>Escala B1</i>	<b>Level B</b>
	<i>Escala B2</i>	
	<i>Escala C1</i>	<b>Level C</b>
	<i>Escala C2</i>	
	<i>Escala C3</i>	
	<i>Escala D</i>	<b>Level D</b>
<i>Escala D1</i>		

## The Schools at UPM

The Universidad Politécnica de Madrid has 20 Schools offering technical studies in the fields of engineering and architecture. One school offers studies on sports and physical activity. Traditionally, most engineering studies were divided in two main categories: Higher (longer programmes, 4-6 years long, mostly equivalent to a Master degree) and Technical (shorter programmes, 3-4 years long, mostly equivalent to a Bachelor or similar). This classification has been changed recently within the process of adapting to European standards. At the moment, the University is in a reorganization process through which some Schools are merging. In some cases, two former different Schools are already sharing the same programme of studies, while keeping two different Schools with different programmes in last courses or Master/Phd levels. For this report we have translated the names of Schools as follows:

	SPANISH	ENGLISH
	ETSI Agrónomos	School of Agronomics Engineering
	ETS de Arquitectura	School of Architecture
	ETSI Caminos, Canales y Puertos	School of Civil Engineering
	ETSI Industriales	School of Industrial Engineering
	ETSI de Minas y Energía	School of Mining Engineering
	ETSI Navales	School of Naval Engineering
	ETSI Telecomunicación	School of Telecommunications Engineering
	ETS de Ingenieros Informáticos	School of Computer Sciences
	Facultad de Ciencias de la Actividad Física y Deporte (INEF)	Faculty of Sciences for Physical Activity and Sport
	ETS en Topografía, Geodesia y Cartografía	School of Land Surveying, Geodesy and Mapping Engineering
School of Aeronautics and Space Engineering	ETSI Aeronáuticos	School of Aeronautics Engineering
	EUIT Aeronáutica	Technical School of Aeronautics Engineering
	EUIT Agrícola	Technical School of Agriculture Engineering
	ETS de Edificación	School of Building Engineering
School of Forestry Engineering and Natural Resources	ETSI Montes	School of Forestry Engineering
	EUIT Forestal	Technical School of Forestry Engineering
	ETSI Diseño Industrial	Technical School of Industrial Design and Engineering
	ETSI Civil	Technical School of Civil Engineering
	ETSI y Sistemas de Telecomunicación	Technical School of Telecommunications Engineering
	ETSI de Sistemas Informáticos	Technical School of Computer Systems Engineering

## Decision Making Bodies at UPM

Information on Governing Bodies and regulation of UPM is available in the website of the University ([www.upm.es](http://www.upm.es)).

### University Senate

The Senate is the highest representative body of the university community. It is responsible for supervising the management of the UPM and establishing the general guidelines and framework in all different areas of university life.

According to the Statutes of the UPM, the Senate should be composed by the Rector (chair), the Secretary-General and the Manager of the University, along with 300 representatives from the different groups of the University (202 representatives for teaching and research staff, 70 representatives for students and 28 for administrative staff). The Senate is chosen by election every four years. The Spanish term is "*Claustro Universitario*".

### Governing Council

The Governing Council is the governance body of UPM. It is committed to propose the strategic guidelines and programme of the University, as well as set the regulations and the corresponding implementation procedures for educational, research, economic and human resources areas.

According to the Statutes of the UPM, the Governing Council should be composed by the Rector (chair), the Secretary-General and the Manager of the University, and two members from the Social Council, along with a maximum of other fifty members including all Vice-Rectors, representatives chosen by every group composing the Senate, representatives from School Deans, Heads of Departments and Directors of different research institutions within UPM. The Governing Council is chosen by election every four years. The Spanish term is "*Consejo de Gobierno*".

### Rector's Council

The Rector's Council is composed by the Rector, all Vice-Rectors, the Head of Rector's Cabinet, the Manager of the UPM and the President of the FGUPM (Fundación General UPM).

## Rounding Error

In some cases, the row or column totals do not match the sum of the data. This may be due to rounding error.

## Decimal places

All the data in the figures have been calculated at the precision levels of one or two decimals, except for figures showing data from the publication *She Figures 2012*, which are at precision level of no decimal.

However, the values have been rounded in some figures to let them fit.