



Basic Guide for Student Admission

ELA4ATTRACT
EMPOWER LA HE FOR INCLUSION AND STEM ATTRACTION



Aim

This guide aims to provide basic guidelines for including the gender perspective in the admission processes for new students to university studies in the STEM field. To do so, attention must be paid to the existing sex and gender imbalance among the current student body of the institution or university, detecting possible tools to compensate for it and promoting change.

The guide is intended for people who work in a university admissions office. It is in their hands to create a more equitable and inclusive admissions process that recognizes and values the diversity of experiences and perspectives that a diverse student body brings to the university community.

The guidelines proposed here are contextualized in Latin American and European countries, so if they are to be applied to other contexts, they may require some adaptation.

Although the guidelines are intended for admission to undergraduate studies, they can be easily adapted to admission to master's studies.

Since the aim is to cover many different contexts, we will first define what is meant by a university admission process, as well as some general aspects to be taken into account by the admissions team, and then proceed to present the objective guidelines of this document.

University admission process

A **university admission process** is the set of steps and requirements that a university establishes to “select” students who will enter its academic programs in the case of a **competitive process** or that it establishes to “enroll” in the case of a **non-competitive process**. This process occurs in the last year of secondary education or once applicants for tertiary education have completed their secondary studies.

The length of university admissions processes varies depending on the country, institution, and type of process. However, on average, these processes usually last from **several months to a full year**. Below is a general average of the stages of a university admissions process:

Preparation and Requirements (6 months to 1 year before application)

- **Previous studies:** During the last year of high school, the student prepares for admission exams or to meet requirements (such as personal essays, letters of recommendation or portfolios).
- **Standardized tests:** In countries with entrance exams such as the SAT in the United States or the PAES in Chile, students usually take these exams during the year prior to their application.

Application Period (1 to 3 months)

- This is the period in which universities open their platforms to receive applications.
- During this time, candidates submit their applications, attach documents, and pay admission fees, if required.

Evaluation of Applications and Results (1 to 6 months)

- Once the application process is closed, universities review the applications. This process can be quick at institutions with automated systems or take longer if applications require interviews, essay or portfolio reviews.

Enrollment Period (2 weeks to 2 months)

- Once admitted, candidates have a period to **enroll**, which can last from **2 weeks to 2 months** depending on the university.
- If the student does not enroll within the established deadline, the place is offered to someone on a waiting list, which extends the process a little further.

In summary, the admission process, from preparation to enrollment, can take between **6 months and a year**, depending on the country and the educational system.

These processes vary by institution and country, but generally include the following elements when it comes to **competitive processes or those that seek to “select” students**:

1. **Academic requirements:** Universities often require a minimum level of academic performance, such as a grade point average or specific scores on national exams (such as the PSU or PAES in Chile, or the SAT in the US).
2. **Admission exams:** Some universities administer specific exams that assess knowledge in key areas such as mathematics, science, language or logical reasoning skills.
3. **Online application:** Applicants must fill out online forms where they provide personal and academic information and the programs to which they wish to apply.
4. **Documentation:** Universities request the submission of documents that may include certificates of studies, letters of recommendation, personal essays or portfolios, depending on the program.
5. **Interviews:** In some cases, personal interviews are conducted to assess the applicant's motivations, interests and skills.
6. **Special Admission:** There are alternative admission routes for special cases, such as high-performance athletes, people with disabilities, or people who have outstanding achievements in other areas.
7. **Results and enrolment:** After the evaluation, the university publishes the results. Admitted students must follow the enrolment process to confirm their place.

This process allows universities to select students who meet their criteria and are a good fit for the academic programs they offer.

There are also countries where **there is no competitive selection process** to enter university, but rather it is only necessary to complete an **application process**, provided that certain basic requirements are met. This is common in countries where access to higher education is more democratized or where university education is considered a universal right. Some examples are:

- Germany: At many public universities, if a student has the **Abitur** (the high school diploma certifying completion of secondary education), they can enroll directly in the university and the course of their choice without going through a competitive process, except in courses with high demand (such as medicine). In such cases, a quota system or selection based on academic merit may apply.

- France: Once a student has obtained the **baccalaureate** (equivalent to a high school diploma), he or she can enroll in most public universities without having to go through a selection process. However, for courses in high demand or at certain *grandes écoles*, there may be a more rigorous selection process.
- Argentina: Public universities, such as the **University of Buenos Aires (UBA)**, do not have a selection process for most courses. Students only must register and take an introductory course called **the Common Basic Cycle (CBC)**. All people who complete this course can continue their studies without direct competition.
- Uruguay: For most courses at the **University of the Republic (Udelar)**, there is no rigorous selection process. Students must enroll in the course of their choice provided they have completed secondary education. However, certain courses may have specific entrance exams, but not a general competitive process.
- Finland: Access to higher education is highly democratized. Although there are entrance exams for some universities, the selection process is often not as competitive as in other countries. For certain programs, it is sufficient to meet the basic requirements and pass an aptitude test, if applicable.

For the purposes of this guide, regardless of competitive or non-competitive admissions, recommendations that avoid gender bias and expand opportunities for all students graduating from secondary education are valid.

From the perspective of applicants, the decision to continue their studies in higher education, in terms of which university courses to aspire to as part of their academic career, conditions their preparation and how they “navigate” this process. Therefore, for universities, support and guidance in vocational decisions, prior to the actual admission process, is key.

General aspects to take into account

Gender is a social category and a constitutive element of social relations and structures based on hierarchies imposed by discourses and ideologies that define social norms, stereotypes and roles associated with femininity and masculinity, which produce different structural forms of inequality and injustice, both in terms of recognition and status and in access to socioeconomic resources (AQU Catalunya, 2018).

The existence of gender stereotypes directly influences the expectations of men and women, conditioning, among other aspects, their professional vocation. This leads to the underrepresentation of women in STEM careers, especially in engineering and technology studies, with a percentage of women that is usually between 10 and 30%. In addition, gender stereotypes have consequences in all areas of the university, evidence of this is the distribution of positions of power, salary differences (caused or not by the care of third parties) and the glass ceiling that women still experience throughout their academic career.

This situation contradicts the principles of equality between men and women, principles shared by all member countries of the United Nations. Indeed, within the United Nations Economic and Social Council, the Commission on the Status of Women (CSW) is the main intergovernmental body dealing with promoting gender equality, based on the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW, 1979). Article 10 of CEDAW highlights the importance of education in promoting equality between men and women: "States Parties shall take all appropriate measures to eliminate discrimination against women in order to ensure them equal rights with men in the field of education."

Therefore, it is the obligation of all member states to offer the same opportunities for access to university studies for men and women. To guarantee this equality of opportunity, action must be taken from an early age and at different levels (society, family, school). But this does not exempt universities from taking specific actions. In the case of the admissions office, these actions include: (1) monitoring applications, admissions, enrolment and permanence in a segregated manner by sex in order to analyze their evolution over time and to be able to design mitigation strategies if necessary, (2) evaluating applications without any gender bias, conscious or unconscious, (3) designing attraction campaigns that promote equal opportunities, (4) promoting parity in admissions through aid and/or quotas, and (5) influencing the design of public policies that at a systemic level result in eliminating the notion of studies for one gender predominating over another. This review of the system is not only about actions focused on education but also about the recognition and appreciation of professions, trades and disciplines in a society and how those who make up this society are expected to take on challenges.

In the fight for equal opportunities, some countries have included in their legislation precise indications on how to record sex or gender in surveys and/or applications for follow-up and the relevant analysis and design of corrective measures. Each admissions office must consult this legislation and act accordingly. If it does not exist, it is recommended to ask for information based solely on the sex of the applicant and giving two options: male/female. This dichotomous approach is only for statistical purposes in the current context, but in the long term it should shift the understanding of the phenomenon towards a spectrum perspective. Based on this dichotomous approach, it is not recommended to ask about sex and gender because the combination of both answers can provide information that the applicant may not want to provide and, in addition, it can be a source of bias among those in charge of admissions.

Naturally, human beings evaluate and judge others quickly and unconsciously. These judgments are influenced by our cultural context and our past experiences. In fact, in most Latin American and European countries, the stereotype that women perform worse than men in fields of study with a strong mathematical component, such as STEM studies, is still present (Reuben et al., 2014). These unconscious biases affect all our decisions, including those corresponding to the application admission process. It is difficult to eliminate these biases, but we can be aware of them and try to counteract them with admission practices that guarantee a fair evaluation of all candidates, regardless of their sex or gender (Aalto University, 2020). A critical aspect of the admission process is the evaluation of applications and, specifically, the interview. It is in the interview that the admission committee plays a key role. In fact, it has been shown that it is essential that the admission committee is aware of the existence of unconscious gender biases (Régner et al., 2019) and that the interview is structured respecting a common guideline for all candidates (Woo et al., 2023). It is important to remember that a gender-balanced committee does not guarantee an evaluation free of bias and stereotypes.

But biases do not only come from admissions staff, but from the indicators themselves. For example, pre-university grade point averages are influenced by the gender bias of the corresponding teaching staff; in CVs and motivation letters, boys tend to promote themselves more than girls; and recommendation letters are subject to the bias of the author (Woo et al., 2023). In fact, even admissions exams, whether national or institutional, can contain biases in their design (Woo et al., 2023).

The following are the measures to be followed for the incorporation of the gender perspective in the admission process for university studies.

Extent	Description
<i>Student recruitment / Supporting vocational decisions</i>	
1	<p>Design information and dissemination activities with a gender perspective</p> <p>All promotional activities should be designed under the principles of equality between men and women, which implies paying attention to the similarities and differences in the experiences, interests, expectations, attitudes and behaviors of women and men, and identifying the causes and consequences of gender inequality to combat it. The Basic Guide for Activity Facilitators prepared within the framework of the ELA4ATTRACT project is recommended.</p>
2	<p>Ensure that information about admission processes available in digital and/or printed format uses inclusive language and does not contain gender stereotypes in texts, images and videos.</p> <p>The web is the gateway for most future students. It is therefore essential to ensure that written language does not discriminate against any sex, social gender or gender identity and does not perpetuate gender stereotypes. The United Nations guide is recommended in English and Spanish (United Nations, n.d.).</p> <p>Furthermore, images that appear on the web can reinforce or counter gender stereotypes. We have the opportunity to change these stereotypes by looking for images where gender roles are not perpetuated. On the website of the European Institute for Gender Equality(European Institute for Gender Equality, n.d.) Some examples are shown of how to avoid the use of stereotypical images.</p>
3	<p>Design communication and dissemination pieces such as social media posts, videos, reels, etc. with a gender perspective</p> <p>Promotional videos are a great opportunity to change stereotypes about masculinized studies, such as engineering. It is time to include girls as student role models and to make visible the contribution of engineering to humanity, especially how it can improve people's quality of life and contribute to the environment. The language used in these videos should be inclusive, not sexist or androcentric.</p>
4	<p>Make visible available scholarships, special quotas, segregated admission routes, etc. for the less represented gender.</p> <p>It is likely that if a field of study is highly masculinized or highly feminized, the university institution has scholarships and grants aimed solely at the less represented gender to reverse the situation and achieve gender parity among enrolled students. If this is the case, the website from which admission applications are collected must publicize these grants. Dissemination channels such as social networks and</p>

		participation in face-to-face events such as fairs or Expos should also make these possibilities visible.
<i>Processing the application</i>		
5	Ensure that the information and instructions during the online application and/or registration processes do not express gender stereotypes.	Design wireframes or prototypes with the user experience that web developers should produce so that the online process is free of gender bias. For example, in the first and last name fields, do not mention that the first surname must be the father's. For example, add fields for applicants to indicate how they prefer to be called (He/She/They).
<i>Review of applications</i>		
6	Analyze applications holistically and unbiasedly	<p>Since even the university entrance exam (whether national or from the institution itself) is not free from bias, it is recommended to analyze applications for admission from a holistic perspective, including multiple instruments: academic performance, the curriculum vitae with extracurricular activities and personal aspects, the motivation letter, letters of recommendation and, if possible, a personalized interview. In this analysis, one must be aware of the possible effects of gender on the candidate's experiences and opportunities.</p> <p>In the first phase of the review, corresponding to the minimum eligibility criteria, it is recommended that applications be treated anonymously (without information on the name, photograph or sex of the candidate).</p> <p>In the second phase, which is more qualitative and personalized, the sex of the candidate must be considered in order to have a more realistic view of their experiences and opportunities, but always taking into account one's own biases and following a standardized process that guarantees equal treatment.</p> <p>To ensure a less biased review, it is recommended to follow strategies such as peer review, and to ensure that the committee is made up of people from different backgrounds, genders and even academic areas (but with the appropriate training).</p>
7	Implement affirmative action measures	An easy-to-implement and communicate positive action measure is that, when faced with similar candidates, the candidate of the least represented

		<p>sex will be selected to achieve parity between admissions in the medium to long term.</p> <p>There are other, more forceful positive action measures, such as applying quotas to the less represented sex, but this action must be implemented smoothly, with transparency and monitoring its effect over the years.</p>
8	Designing a standardized interview	<p>To avoid gender biases, it is important to follow an interview template, with standardized questions for all candidates. If at any time you decide to go off-script, you must be aware that it is a critical moment where gender biases will be present (Woo et al., 2023).</p> <p>At all times during the interview, language should be inclusive, not sexist or androgenic.</p>
<i>From the admissions office (and the management)</i>		
9	Provide regular training to identify and reduce gender bias	<p>Those in charge of reviewing applications should participate in courses or workshops to become aware of their own gender biases and, consequently, of the possible gender biases that all those involved in the admission process may have (from pre-university teachers, people who write recommendation letters and the students themselves). Real examples should be used to identify gender biases in all the indicators that make up the admission process.</p>
10	Provide standardized templates for candidate analysis	<p>For the analysis of the CV, the motivation letter, the recommendation letters and the interview, it is necessary to have templates to make an equitable analysis between all the candidates. As an example, the templates shown in (Aalto University, 2020) and in are recommended (Woo et al., 2023).</p>
11	Use data analytics to monitor trends and potential biases throughout the process	<p>Monitor admissions and rejections by sex to identify trends and design corrective measures.</p> <p>If possible, relate admissions, separated by sex, to their academic performance at the end of their studies. In this way, it will be possible to identify the profile that best adapts to the institution at present, which may reveal gender biases existing throughout the student's experience at the institution. If necessary, report to those in charge of the study plans the possible discrimination of these plans and their penalization of the diversity of the student body.</p>

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