

Table A-1. Summary of information collected in focus groups on “ Inclusivity in students’ enrolment and implementation in the curriculum” and “Awareness of gender equality and EDI values among students and academic staff”.

Inclusivity in students’ enrolment and implementation in the curriculum									
Themes 1	Accessible spaces and classrooms - Disabilities	Accreditation no disseminated	English requirements	Inequality of academic opportunities - no disseminated	Lack of student accommodation locally	Lack of support for student mobilization within the country	Outreach systems open to everyone	Student mobility	Support for student pregnancy
Academics and Graduates	The institution shows partial inclusivity, with adaptations such as ramps, ground-floor classes for a wheelchair-using lecturer, neutral bathrooms, and some support for students with hearing impairments. However, significant limitations remain, including lack of elevators and limited visibility of support for visual and auditory needs. At the same time, ongoing training and courses on inclusive education indicate growing awareness, though further infrastructure and support improvements are still needed.								
Students Group 1	The university has spaces that can help a person with disabilities, even if they are in a wheelchair; for example, there is an elevator that allows access to different places. The classrooms are also quite large, and the doors are large enough to allow a wheelchair to pass through. I have not seen people with other disabilities in any class, and there was no teacher who showed these abilities.		The student values learning an additional language for career, research, and mobility benefits, but notes the university neither requires nor offers opportunities to study a third language. English support is available through in-person and online modules, including a dedicated space where students can practice and receive help from teachers. However, participation seems driven by incentives rather than structured, formal classes, and while schedules exist, the support is more flexible than systematic. Previously, students had up to six semesters to achieve English accreditation or risk not progressing, but this requirement has been removed.					Mobility programmes are well-developed, offering a wide range of international exchange opportunities through numerous agreements with universities abroad.	Pregnant students are generally able to continue their studies without disruption, and there is some awareness of possible scholarships and support, though information is unclear. Government programmes exist, and participants believe universities should ensure equal access to education regardless of pregnancy. However, support mechanisms are not well known, and inclusion is seen as both an institutional responsibility and a collective effort among students. There is awareness of government support programmes for pregnant women, but uncertainty about university-level provision. Participants stress that education is a right that should not be denied due to pregnancy and see inclusion as both an institutional duty and a shared responsibility among students, though support systems remain unclear.
Students Group 2		Most students are unaware of CACEI accreditation, and even those who have heard of it often do not understand its importance. There is a strong need for better communication and early awareness, as knowing about accreditation can increase students’ engagement, ability to prove their degree’s value, and access to benefits. Improved dissemination and formal recognition (e.g., certificates) could enhance students’ understanding and outcomes.	Students highlight language as a key barrier to opportunities, as even high-performing students may lack time or financial resources to learn it. While English is a requirement and assessed through a TOEFL-based system, the level taught at university is perceived as low and inconsistent, especially compared to external centres like CL. Teaching quality varies, with limited interaction and practice, leaving students to rely heavily on self-learning despite the importance of English for academic work.	Awareness of opportunities varies, often depending on personal exposure or initiative, with many students unimformed due to limited promotion. Despite this, those who are aware recognise their value and show strong interest, especially after seeing peers benefit from them. Economic barriers limit access to opportunities, as many students depend on competitive, merit-based scholarships. Those who do not qualify often cannot afford participation, despite having interest.	The university has an additional campus in Tizimin, but it offers fewer programmes, limiting access to quality education for students outside the main city. Mobility remains unequal, favouring those who live nearby or have financial and family support for transport. Additionally, the lack of student accommodation and comfortable on-campus rest areas exacerbates the challenges for commuting students, whose long travel times significantly impact their well-being and study experience.	A student describes significant commuting challenges for those living outside the city, despite available transport. Poor planning, overcrowding, and long waiting times mean journeys that should take about 1–1.5 hours can extend to 3–4 hours. This disproportionately affects many students, requiring extensive time management and highlighting inequalities in access.	The faculty website is outdated, poorly organized, and unreliable, limiting access to information. Despite having skilled students who could help improve it, the university does not leverage this potential. Enhancing the website is seen as a key opportunity to improve communication, visibility of opportunities, and overall user experience.		
Awareness of gender equality and EDI values among students and academic staff									
Themes 2	Complain protocol to comply with gender equality and harassment	EDI consciousness vary between students and academics	Equity reporting in place but unfulfilled	Gender balance student perspective	Increasing number of women in engineering	Not feeling disadvantaged but see others privilege	Pastoral support perspectives	Protocol against gender violence	Welcome ethnic and gender diversity
Academics and Graduates							There is limited visibility of students with disabilities, suggesting gaps in inclusion for this group. While the university collects data on identity (e.g., indigenous background) and celebrates milestones like increased female graduates, the use and impact of this data are unclear. Additionally, institutional mechanisms do not fully capture or address specific health conditions, as students sometimes need to self-advocate to communicate their needs.	Gender representation varies by field, with women more prominent in areas like nursing and increasing participation from other gender groups. However, instances of gender discrimination among academics still occur, though not universally. A formal protocol exists to address such issues, allowing both students and staff to report discrimination or rights violations.	The university has gender equity and inclusion initiatives, particularly aimed at increasing women’s participation in STEM and supporting indigenous students through preparatory and mentoring programmes. Inclusivity is increasingly understood as broader than gender, encompassing diverse identities and minority groups, with some grassroots and institutional efforts supporting this shift. However, awareness of programme effectiveness is limited, implementation impact is unclear, and formal measures (e.g. quotas or visible policies) are not always evident.
Students Group 1	The university has a formal gender violence protocol that allows individuals to report incidents and ensures investigation and follow-up. While the process is considered slow, it is generally effective in providing support and reaching resolutions, indicating that mechanisms for addressing gender-based issues are in place but could be more efficient. Sanctions for gender-related incidents vary based on severity and may include measures such as restraining orders, class adjustments to protect the victim, or, in serious cases, legal action or expulsion. Priority is given to the victim, and consequences are tailored to the offence. Students can report issues through trained faculty lecturers or a dedicated university office, either in person or online, although there is some uncertainty about the exact location and process.	Perceptions of inclusivity among teachers vary; while many are supportive and treat students equally, some often described as more traditional—make occasional gender-insensitive comments. This reflects a generational gap, where younger staff tend to be more open, while others struggle to adapt, despite broader institutional efforts toward inclusion.	Teaching staff appear male-dominated, although overall faculty roles are more balanced, with women more represented in administrative and research positions. Student experiences vary, with some encountering both male and female lecturers, while others report limited exposure to female teaching staff. There are specific student groups promoting inclusion, including a feminist group within the faculty and another at the university level, though awareness of them may vary. The faculty is perceived as highly diverse and generally respectful, fostering inclusion across ethnicity, gender, and sexual diversity. Students highlight a tolerant environment and the presence of LGBTQ+ initiatives, such as the “UADY Diversidad” collective, reflecting growing recognition and support for diversity within the university community.	Students observe a noticeable increase in women’s participation in engineering programmes, which stands out compared to traditionally male-dominated fields like civil engineering, where female representation was previously very low.	Differences in academic preparation among classmates are perceived as individual, not related to gender or other diversity factors.	Experiences with tutoring support are mixed. Some students benefit greatly from attentive tutors who provide academic and emotional support, while others struggle with unavailable or unresponsive tutors. Structural limitations, such as high student-tutor ratios, make it difficult to ensure consistent support, and changing tutors can be a complex process.	Awareness of the gender violence protocol exists, but knowledge about how to access it is unclear; however, students believe they can approach staff who will guide them to the appropriate process.	The university is perceived as diverse and respectful, with no visible discrimination based on ethnicity or background. There is awareness of government support for pregnant women, but uncertainty about university-specific provisions. Inclusion is understood as both an institutional responsibility and a shared effort among students, with emphasis on ensuring equal access to education regardless of personal circumstances.	
Students Group 2			Student organisations exist but have limited impact, as their proposals are often not implemented and remain at the planning stage. Despite student initiative (e.g., attempts to develop tools like an app), institutional support and follow-through appear weak.			Students perceive the university as offering meaningful support through scholarships, mobility opportunities, language courses, and generally supportive teachers, especially for academic guidance. While equality is largely experienced and discrimination is not widely felt, some note occasional preferential treatment. Overall, inclusivity is present but not entirely consistent across experiences.	While platforms like UADY Virtual and some psychological support services exist, their visibility and perceived effectiveness are limited. Students report high academic pressure and structural challenges that make it easy to fall behind, with insufficient support to prevent or address this, leading to stress and, in some cases, student burnout.		

Table A-2. Summary of information collected in focus groups on “Perception of how the academic community understands EDI implementation in the curriculum” and “ Inclusivity and employability”.

		3) Perception of how the academic community understands EDI implementation in the curriculum						
Themes 3	Community building	Mental health support for students available	Not clear inclusivity in the curriculum	Perspective of curriculum co-creation with students	Sense of belonging	Student inclusivity perception	Unsupportive perception of inclusivity	
Academics and Graduates		There is growing awareness of neurodiversity and mental health conditions among students, but staff often feel unprepared to respond to emergencies or provide appropriate support. While some teachers attempt to identify and refer students with conditions like ADHD, institutional systems and training remain insufficient. Participants emphasise the need for better data collection, staff training, and adapted teaching strategies to ensure neurodivergent students are effectively supported and included.				Inclusion efforts for minority groups are emerging but remain uneven and largely informal. Students from LGBTQ+ and indigenous communities are engaging for representation with some institutional support, though this is not reflected in formal admission policies beyond limited measures for indigenous groups and gender parity in hiring. Institutional approaches vary, with some universities lacking structured policies but beginning to address diversity through staff training and dialogue, highlighting a transition phase toward more inclusive practices.		
Students Group 1	A student-led musical group, supported by a faculty cultural coordinator, has grown into a well-structured and recognized initiative, becoming a successful example of successful student engagement and community building within the faculty.	Tutoring and psychological support systems are in place, offering both academic guidance and personal support. However, their effectiveness varies: some students experience highly supportive tutors, while others face limited availability or engagement. Psychological services are valued but constrained by high demand, short duration, and limited sessions. Overall, support exists but is inconsistent, depending on access, tutor involvement, and institutional capacity. Psychological and tutoring support exist but are limited and inconsistent. Psychological services are often saturated, short-term, and require waiting periods between sessions. Tutoring experiences vary widely, with some students receiving strong academic and personal support, while others face unavailable or less engaged tutors. Overall, access to support depends on both institutional capacity and individual tutor-student dynamics.					That's what special universities are for, I mean, I don't think that's what they are for here. I honestly think that the program is not there, it's not adapted. Something that I would like to comment on is the question that was in Mexico, if it was inclusive in Mexico. Well, I have the case of my cousin who just finished high school, he has ADHD.	
Students Group 2		Psychological support services are perceived as limited and ineffective due to high demand, few sessions, and a referral process that often requires additional payment and delay. While initial contact is possible, the support is seen as insufficient for more serious needs, with some students feeling that the system lacks timely, specialised care and discourages follow-through during vulnerable moments. Psychological support is seen as bureaucratic and insufficient, involving initial screening without specialised help, followed by referrals that require additional time and payment. While it may help in mild cases, the process is slow and discouraging, especially for students in urgent or vulnerable situations, limiting its overall effectiveness.	EDI and equity topics are minimally integrated into the curriculum, often appearing late in programmes and in very few modules. While some teachers go beyond teaching content to support students holistically, others limit themselves to delivering material only, reflecting inconsistent engagement with inclusive education goals. This highlights a lack of standardisation in teaching practices and limited curricular emphasis on developing socially responsible, well-rounded professionals.	Participants highlight the need to update curricula and see value in involving senior students in redesign processes, recognising existing gaps as opportunities for improvement.	Students express mixed perceptions of belonging. Some feel a sense of identity and prestige associated with the institution, driven more by social recognition than institutional efforts. Others report a weaker sense of belonging, influenced by limited community-building opportunities, declining selectivity, and comparisons with other universities. A lack of institutional support for student groups and activities (e.g., sports or clubs) further reduces engagement, leaving community-building largely dependent on student initiative rather than structured support.	There are weaknesses in enforcing rules and promoting inclusive behaviour, as recurring issues (e.g., misuse of designated spaces) persist despite existing controls, suggesting a need for stricter measures. At the same time, inclusion depends heavily on individual teachers' attitudes due to a lack of standardised training, leading to inconsistent support, while students tend to show greater awareness and willingness to foster inclusive practices.	Participants highlight that inclusivity and equity are still emerging and unevenly implemented, with significant barriers related to mobility, costs, and limited support for students outside the city. There is also a lack of scientific outreach and information dissemination, reflected in low programme demand. While many teachers are perceived as fair, instances of bias and limited inclusion (especially for students with disabilities) persist, alongside weak social awareness within the student community. Financial support is insufficient and uneven, with many students unable to access government scholarships despite economic challenges. Overall, structural, cultural, and informational gaps continue to limit equal access to quality education.	
		Inclusivity and employability						
Themes 4	Curriculum accreditation alignment	Knowledge about accreditation	Existence of professional societies	Extra academic support for students	Lack of career information dissemination	Link curriculum-employability	Updated curriculum needed for accreditation	
Academics and Graduates	Accreditation processes linked to CACEI are structured and systematically embedded in some institutions like TEC, where programmes are proactively designed around accreditation criteria and coordinated across teaching teams. In contrast, at UADY, alignment with accreditation exists but is more fragmented and reactive, relying on institutional educational models and departmental efforts rather than a unified strategy. Updates to curricula and evaluation practices are ongoing, but often lag behind new accreditation frameworks, highlighting challenges in timely adaptation and consistency.	Accreditation aligned with CACEI is central to engineering programmes, with institutions like TEC adopting structured, coordinated approaches that integrate accreditation requirements into curriculum design from the outset. In contrast, at UADY, alignment is more flexible and department-driven, relying on the institutional educational model and gradual adjustments. While efforts exist to meet accreditation standards, they are often reactive and occasionally outdated relative to new frameworks, highlighting challenges in consistency and timely curriculum alignment.						
Students Group 1	Participants see the academic and theoretical foundation as strong and recognise accreditation (CACEI) as a rigorous, long-term process involving analysis of curricula, student performance, and continuous evaluation. Awareness of accreditation is increasing through coursework and student involvement. However, experiences vary across programmes, with some curriculum improvements and student feedback being incorporated, while gaps remain in practical training and software integration due to time constraints and uneven implementation.	Students are gaining more awareness of the accreditation (CACEI) process through teacher involvement and participation in related activities, such as social service. While some programmes are actively working toward accreditation and curriculum improvement, student feedback reveals gaps in practical skill development (e.g., limited training in key software) due to time constraints and uneven integration into the curriculum. Students have some awareness of the CACEI accreditation process, recognising it as a detailed and long-term procedure involving coordination with the institution, evaluation of student performance, curriculum comparison, and continuous monitoring. However, this understanding is general and typically gained through specific coursework rather than widespread knowledge.	Student representation is organised through societies and councils, often linked to specific programmes, but participation is flexible, allowing students to engage across different groups regardless of their degree.	The faculty offers entry-level assessments and remedial programmes for students with weaker backgrounds, providing additional classes to help them catch up and reduce initial academic disadvantages. Peer support is available through small group or one-on-one sessions, where motivated students can receive personalised guidance from advisory staff to better understand specific topics. UADY offers a range of optional courses, including academic and extracurricular options, that support broader skill development beyond the core degree, such as improving writing and communication skills.			Students report meaningful practical learning experiences through tools like industrial simulation software (e.g., Aspen Pro), applied projects, and industry-related activities. Guest lectures and real-world examples enhance understanding, though these experiences depend on the programme and teacher, leading to variability in how consistently practical skills are developed across courses.	
Students Group 2	Greater awareness of CACEI accreditation is seen as a key achievement, helping students recognise the value and quality of their programme and better understand its importance.	Increased awareness of CACEI accreditation is seen as a significant achievement, helping students recognise the value of their programme and better understand its quality and credibility.		Students from diverse educational backgrounds experience unequal starting points, as the curriculum assumes prior knowledge in areas like calculus, physics, and programming. Those without this foundation feel disadvantaged, especially in early semesters. Although leveling (homologation) courses exist, they are seen as insufficient, limited in scope, and not well integrated into programme needs. Additionally, gaps exist on both the engineering and discipline-specific sides (e.g., biology in biotechnology), leading to knowledge imbalances and making it harder for some students to keep up, particularly when foundational content is not reinforced effectively.	There is a recognised lack of scientific outreach and promotion at the faculty, limiting student awareness and engagement with engineering opportunities.	Participants highlight a disconnect between theory and practice, with limited integration and application of knowledge across subjects. Practical learning opportunities (e.g., labs, projects, industry work) exist but are often insufficient, poorly timed, or rushed due to curriculum constraints. Hands-on experience tends to occur later in the programme or requires student initiative (e.g., internships, research). Additionally, opportunities for involvement are not well-disseminated, and better coordination, planning, and early integration of practice into learning are needed.		

Figure A-1. Hierarchical chart produced in Nvivo showing the themes and categories related to the research questions evaluated; 1) Inclusivity in students' enrolment and implementation in the curriculum, 2) Awareness of gender equality and EDI values among students and academic staff, 3) Perception of how the academic community understands EDI implementation in the curriculum, 4) Inclusivity and employability.

