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LUCCA

JOINT STUDENTS AND TEACHERS BOARD: ANNUAL REPORT 2022 CONCERNING THE ACADEMIC YEAR 2021-22

Approved on December 22, 2022

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Summary

I - FOREWORD

I.1 - Function

The Teachers-Students Joint Board (henceforth: Board) of the IMT Alti Studi Lucca School (henceforth: School) was **established**, according to Article 2, paragraph 2, letter g) of **Law 240/2010**, by Decree of the Director (henceforth: Rector) of **November 7, 2018.** It is in charge of the function of the first internal evaluator of educational activities. It performs an overall monitoring activity on the Quality Assurance of educational offerings and services to students. It is helpful to recall that the Board is committed to constantly monitoring the educational activities and other services that the School offers to the students. Like all previous ones, this report results from the monitoring activity that extended throughout the entire calendar year of reference.

This report thus represents the concluding formalization of an overall monitoring activity that precedes it and is the main task of the Board itself.

I.2 Composition

The Board consists of three student representatives and three faculty members appointed by the Rector. The Board took **office on March 6, 2019**, with the last changes in representation occurring on **December 10, 2021**, **December 24, 2021**, and **February 17, 2022**. For most of the calendar year 2022, the Board was composed of the following six members, who collegially worked on the preparation of this report:

- **Student members**: Mattia Adamo - student representative on the Board of Governors (Board member as of December 24, 2021); Samrawit Ayele - XXXVI cycle doctoral student (Board member as of February 18, 2022, serving as secretary); Flaminia Ferlito - student representative on the Assessment Board (Board member as of December 24, 2021).
- **Professors members**: Amos Bertolacci - Full Professor (acting as President); Gustavo Cevolani - Associate Professor; Irene Crimaldi - Associate Professor.

The Board expresses its deepest gratitude to the previous representatives of the students (Livia Baldinelli, Erica Ordali, and Sedric Zucchiatti) and the professors/professors (Massimo Riccaboni) for their valuable contribution to the work of the Board and the excellent work done. To the work of the Board during the year in question in all its phases also has constantly and fruitfully contributed Nicolò Castellani, representative of the students in the Academic Senate, to whom the Board's heartfelt gratitude goes. Following the entry into the Board of student Samrawit Ayele, the work of the Board was always conducted in English whenever possible.

The composition and act of appointment of the Board are available on the School's website (http://www.imtlucca.it/it/scuola-imt/organi-comitati/Boarde-paritetica-docenti-studenti), where you can also find the 2019, 2020 and 2021 Annual Reports covering the AY 2018-19, 2019-20 and 2020-21 respectively, their English translation, the guidelines regulating the Board's activities, and the calendar of regular meetings held during the calendar year 2022.

I.3 Tools

Communication between trainees and the Board took place through **five** main **channels.**

a) The Board had four types of opinion survey questionnaires administered and returned by the students: aa) the individual course-related questionnaires, Teaching Evaluation Questionnaire (henceforth: TEQ), distributed to the student in the XXXVII doctoral cycle (see below, Section III); ab) questionnaires related to each of the doctoral years following the first, administered to all

students of the second and following years who at the time of questionnaire administration (November 13, 2022) had not yet discussed the thesis (End of Year Questionnaire; see below, Section IV.1), according to a modified grid of questions from the previous year; ac) the questionnaires for the entire doctoral program, administered to students who had discussed their theses and obtained their Ph.D. degrees in 2022 (PhD Program Evaluation Questionnaire; see below, Section IV.1); ad) the Good Practice project questionnaires related to the services provided by the School, filled out by the School's students with reference to the calendar year 2021 (see below, Section V), according to a grid of questions modified from the previous year; the answers provided by the students were obtained by separating from the set the questionnaires expressly indicated as being filled out by students.

b) The student representatives on the Board, assisted by the student representative on the Academic Senate, have continuously collected the demands that emerged from the student body during the year. Their role as student representatives on other School bodies and committees (Assessment Board, Board of Governors, Academic Senate) facilitated the liaison function between students and the Board.

c) As a result of Ms. Samrawit Ayele joining the Board as a student representative, the Board has been able to communicate more directly with the international component of the School's student body, with particular reference to the International Student Union.

d) Another communication channel was the public return of the 2021 annual report on **March 28 2022,** to which the entire School Community was invited. As was the case with the return of the 2019 and 2020 annual reports, the discussion that followed the presentation of the annual report by the student representatives on the Board provided an opportunity for discussion and dialogue between students and faculty on the full range of points addressed in the report. Due to an unfortunate coincidence of events, the restitution in question coincided with other events held at the School in the same time slot on the same day, after the invitation to participate in the restitution had already been issued to the entire Community. The Board hopes that such coincidences will not occur again in the future and that the restitution of the annual report may be felt by the school as the whole as a unique opportunity for the exchange of ideas and experiences for the benefit of all, with the consequent suspension of all other academic activities.

e) The Board can be contacted directly electronically through the email address: commissione.paritetica@imtlucca.it, listed on the above page of the School's website, which each student can use freely. This address also served for internal communication among Board members.

I.4 Activities

In the calendar year 2022, the Board **met nine times in mixed mode** (January. 25; March 2; May 30; June 24; July 15; September 26; November 2; November 25; December 19) for regular meetings and **twice online** (in March and April) for urgent interpellations received in advance regarding the establishment of new doctoral programs and doctoral tracks at the School - new doctoral programs in Economics, Analytics and Decision Sciences, and new doctoral tracks within the doctoral programs in Cognitive and Cultural Systems and Systems Science - at the March meeting, and regarding the new format of the PhD Program Evaluation questionnaire (format according to which the questionnaire will be administered soon), at the April meeting. The Board was likewise approached on a preliminary basis about the establishment of the new PhDs in Cybersecurity and Management of Digital Transformation, which was discussed at the June 24 regular meeting, and about the new format of the End of Year

questionnaire (format according to which the latter questionnaire has already been administered in AY 2021-2022), which was discussed at the July 15 regular meeting (at which further feedback could be provided regarding the modified version of the new format of the PhD Program Evaluation questionnaire, which was already reviewed at the April online meeting). On the other hand, the Board was not asked about the establishment of the inter-university Master's Degree "Software: Science and Technology," which was approved by the relevant bodies of the School at the end of November, as the School is not the administrative home of the degree in question. The Board hopes that, in similar cases, there may be communication between the Board itself and the Joint Students and Teachers Board of the university administrative headquarters of the degree or doctoral program in question.

The reconnaissance work carried out at these meetings resulted in the following five **formal communications addressed to the School's Quality Enhancement Committee** (henceforth: Committee): one dated March 23, regarding the Board's opinion on the new PhD in Economics, Analytics and Decision Sciences, and the new doctoral tracks within the PhDs in Cognitive and Cultural Systems and Systems Science, discussed at the March online meeting; one dated April 22, regarding the Board's opinion on the new format of the PhD Program Evaluation questionnaire, addressed in the April online meeting; one dated June 24, regarding the Board's opinion on the new PhDs in Cybersecurity and Management of Digital Transformation, discussed at the June 24 regular meeting; one dated July 15, regarding the Board's opinion on the new format of the End of Year questionnaire, discussed at the July 15 regular meeting; and one dated November 2, regarding the Board's opinion on the possible better use of the technological tutors workforce. Other communications were sent to the PhD and Higher Education Office and the General Director, regarding persistent difficulties regarding financial support of students on a mission (June 24 and June 29, July 29); and to Campus Management and Front Office regarding the proposal to activate agreements with the Language Centers of the Universities of Florence, Siena, and Siena for Foreigners, to improve the educational proposal of students (July 15).

The nine regular meetings were formalized in as many **calls** (prepared jointly by the Professor acting as President and the student acting as secretary) containing their agendas. Their findings were summarized in as many **minutes** submitted from time to time to the Board for approval at the next meeting (the minutes of the December 19 meeting are being approved). Since the March 2 meeting, all regular meetings have been held and have been minuted in English. To the above meetings must be added the previously mentioned March 28 **meeting devoted to returning** and sharing with the School community the results of **the 2021 Annual Report**, which was also held in English.

The Board also took part in a **joint meeting** on September 19, formalized in special minutes, which involved the various actors of the Teaching and Research Quality Assurance at the School (**Assessment Board, Committee and Board**) in improving the mutual interaction and specific action of these three bodies. The synergy initiated at this meeting resulted in the following operational lines aimed at: reiterate the joint meeting every year in September to provide members of the three Bodies with a time to meet and compare; share agendas and minutes of the meetings with all members of the three Bodies via network folder deferring to the three presidents the evaluation regarding any other materials of common interest to be shared; devote special attention to the training activity of student representatives on Quality Assurance issues; consider the organization of joint events on matters of common interest (e.g. focus groups and opinion survey instruments alternative to questionnaires).

As already highlighted in the 2019, 2020 and 2021 reports, **the interaction and collaboration with the** School's **other bodies and committees in** charge of Teaching and Research Quality Assurance (Committee and Assessment Board, plus the Operational Management Group) have been excellent. As has been the case in all previous years, this report was also subjected to a preliminary check by the Committee, to whom the Board's heartfelt thanks are due for helpful feedback. The Board is well aware of the workload that has affected the **School's**

administration as a result of the establishment of the new doctoral programs and doctoral tracks planned for AY 2022-2023, resulting in inevitable delays in the transmission of data useful for drafting this report (see Section II) or incompleteness of the data available to initiate new areas of inquiry (see Section VI). Precisely because of this added workload, the Board particularly appreciated the effort of the offices, to the best of their current ability, to transmit the requested data to the Board. The Board primarily benefited, at the informational and operational level, from the input of the PhD and Higher Education Office and the Planning, Control and Quality Unit, to whose members the Board's heartfelt thanks are due for their fruitful cooperation.

In its function as a permanent observatory of the School's teaching activities and the services offered by the School to its students, as well as an actor in Quality Assurance having specific functions and competencies, the Board has focused its work on **three main areas.** For **teaching activities, in** addition to continuing the in-depth analysis of the satisfaction questionnaires of the existing courses and the monitoring of compliance with the scheduling guidelines of the courses themselves and of the final exams, it began to pay attention, following the request for a preliminary opinion received regarding the activation of the new doctoral programs and doctoral tracks described above, to the configuration of the teaching offer that will be implemented by the School starting from the academic year 2022-2023, drawing attention to some possible critical issues. Concerning **services**, in addition to continuing the monitoring of the actions already taken by the School regarding previously reported critical issues (extension of the doctoral scholarship for students in the last year of their doctoral cycle following the Covid emergency; availability and adequacy of workstations; effectiveness and to the extension of the Wi-Fi network coverage within the Campus), it paid particular attention to the restoration of the housing of students in double rooms and the criteria adopted for the allocation of these rooms and the few single rooms remaining available. Already in the 2021 report, the Board planned to initiate a reflection on the ways to ensure that all the School's students, with particular regard to the international component of the student body, would be welcomed, respected and valued for cultural differences, applying the best practices of the most advanced universities, both Italian and foreign, in this field, following the School's **international nature and vocation.** This reflection has taken concrete shape in the current year, materializing in a survey work to which a specific section of this report is devoted (VI - Framework E), not present in previous years' reports.

The Board, to make its action as efficient as possible, has broadened the scope of its collaboration, establishing greater synergy with the School's other Bodies and Committees responsible for Quality Assurance, adopting English as the language of internal communication and drafting minutes, and paying specific attention to the status of international students at the School.

I.5 This report

This report summarizes the Board's work during 2020 in **six summaries**: **II - Framework A**: State of the Art: Analysis of critical issues reported in the previous annual report and evaluation of the school's processes for their solution. **III - Framework B**: Analysis and proposals regarding the management and use of questionnaires to survey students' opinions about individual teachings. **IV - Framework C:** Analysis and suggestions regarding other aspects of teaching activities. **V - Framework D**: Analysis and proposals regarding services offered to students (teaching support services, residential services and non-residential services). **VI - Framework E**: Analysis and proposals regarding services provided to international students. **VII- Framework F**: Summary of the proposals in this report with specific indications of their recipients. Framework B analytically examines, from both a quantitative and qualitative perspective, the questionnaires regarding the teaching of individual courses for the XXXVII doctoral cycle (see above aa)), considering the courses of this cycle that are completed as of November 30, 2022. Framework C complements the previous framework by turning attention to the scheduling of courses. The aggregated form

according to doctoral tracks (without distinction of course years) and the still sporadic findings related to the end-of-year (see above, ab)) and end-of-entire-doctoral (see above, ac)) questionnaires - three-year up to and including cycle XXXV, four-year from cycle XXXVI onward) - have recommended including the examination of this important source of the student body's opinion in a purely qualitative form within Framework C. Framework D considers the critical issues resulting from the Good Practice 2021 questionnaires (see ad) above), along with the solicitations that reached the Board through the other channels of communication with the student body. Framework E outlines the steps initiated by the Board to begin an in-depth analysis of the presence of international students at the School and to assess the actions taken by the School to address their needs. Framework F seeks to implement what was recommended in the CRUI courses dedicated to peer committees regarding the conciseness and effectiveness of annual reports.

As in previous years, this report maintains an articulated structure and an in-depth level of analysis to give an adequate account of all the work done by the Board during the reporting year, in the hope of providing the best possible service to improving the quality of the School, and to reiterate the importance and centrality of the Board as one of the Quality Assurance Bodies. The resulting length of the report is offset by the concise nature of Framework F, aimed at a quicker and more user-friendly approach to the contents of the report.

II - FRAMEWORK A: STATE OF THE ART: ANALYSIS OF THE CRITICAL ISSUES REPORTED IN THE PREVIOUS ANNUAL REPORT AND EVALUATION OF THE PROCESSES PUT IN PLACE BY THE SCHOOL FOR THEIR SOLUTION

The main critical issue noted during 2021 about questionnaires as tools for course evaluation concerned the incompleteness of available data. The results of individual course questionnaires needed to be completed at the end of the 2020-2021 academic year or reached the Board too close to that date. The Board had suggested an improvement in the quantity (possibly all courses delivered in the relevant academic year) and timing (possibly well in advance of the end of the academic year) of individual course questionnaire data. The problem was aggravated on both sides, given that the latest questionnaire data were submitted to the Board on November 25 and given that, according to the information in the Board's possession, as of November 17, two courses had started by the end of the AY, but they were scheduled to be completed in the following AY, two courses yet to be scheduled, and eight course modules yet to be scheduled, related to three different courses.

With regard to teaching offerings, the issues that mainly emerged during 2021 were related to overlapping course content and timing of the lecture calendar and overlapping dates of course exams with those of lectures and exams of other courses. The Board, to counter these critical issues, had proposed the initiation of a reflection on the advisability of rationalizing the drafting of the syllabi of individual courses, first and foremost within the track to which they belong, with the possibility of creating an environment for sharing course material, also including in the calendar the dates of examinations, both final and intermediate (where applicable), and bringing forward to July the approval of the teaching schedule and academic calendar (as well as the calendars regarding the meetings of the Bodies), to prepare by October the calendar of classes of the following AY. While most of these suggestions have been implemented, the approval of the teaching schedule and academic calendar appears to the Board as yet to be done at the time of writing.

In terms of services provided, the major critical issues had all been resolved or taken care of during 2020. At the time of delivery of the 2021 report, some critical issues remained to be resolved, concerning Wi-Fi and workstations, or remained, concerning canteen and mission reimbursement. During 2021, effective interventions were put in place by the School to solve the problems related to Wi-Fi with an upgrade of the network; at the time

of writing of this report, except for sporadic and occasional drops in connection speed, the effectiveness of the solutions can be confirmed. With regard to workstations, the School has moved forward with the purchase of a building that will allow for the creation of new offices and workstations; however, at the moment, the number of workstations still appears to be inadequate compared to the number needed for the School's scientific Community. While students express appreciation for the improved timing of mission reimbursement (see section V.1), the slowness in the financial management of Erasmus grants and the disbursement of the grant increment for research periods abroad remains an unresolved problem, largely dependent on technical difficulties beyond the School's competence, to which the Board has already drawn attention in previous annual reports.

The remaining issues found during 2021 are critical issues related to the Campus model and the need for more knowledge of the function and importance of the Joint Board within the School. In response to the first issue, the Board suggested establishing focus groups on individual critical issues reported or mentioned in the past report, such as a better focus on life on Campus from the perspective of privacy protection and other sensitive issues. Finally, the Board emphasized that it was important to stimulate the School with a better understanding of the nature, tasks and institutional interlocutors of the Board within the Quality Assurance system for the benefit of the students and the School as a whole. Regarding the first point, the School's attention was understandably focused on the more urgent issue of redistribution of room accommodations, as discussed in [Section V]. Regarding the second point, the activation of a concrete institutional dialogue among the School's actors deputed to Quality Assurance, as documented in [Section I], points in the indicated direction.

III - FRAMEWORK B: ANALYSIS AND PROPOSALS ON THE MANAGEMENT AND USE OF QUESTIONNAIRES SURVEYING STUDENTS' OPINIONS ABOUT INDIVIDUAL TEACHINGS

Within the Quality Assurance system, the survey of students' opinions and their views on the teachings offered by the School plays the dual role of verifying the effectiveness of individual teachings with respect to the educational objectives of the doctoral course and enabling improvement of its teaching offerings.

The survey of students' opinions is carried out for each course provided by the School. It is based on administering an anonymous online questionnaire at the end of the course. This questionnaire is sent to each student who attended the course and consists of multiple-choice questions with a 5-level scale (strongly agree, agree, neutral, disagree, strongly disagree) and open-ended questions. The structure of the questionnaire is shown in Table 1.

Before proceeding to the analysis of the questionnaires about the individual teachings of the School, it is appropriate to recall some **methodological considerations**.

The analysis is based on data for the last three doctoral cycles, from cycle XXXV to XXXVII. This decision is motivated by reasons of comparability of data over a period of time defined as medium term. The adoption of the same questionnaire allows the comparative analysis of the trend in the quality of teaching perceived by students belonging to different cycles and the detection of possible changes taking place in the absence of possible confounding factors associated with variations in the questionnaire.

Some clarifications are necessary regarding the data analyzed. It should be noted that regarding cycle XXXVII, it was only possible to analyze data for some courses offered by the School. More specifically, students' opinions were analyzed for 90 of the 97 courses in cycle XXXVII, the findings of which were available as of November 30, 2022. The Board believes that, although incomplete, the available data primarily allow for indicative evidence of the evolution of students' perceptions of the quality of teaching. It has decided to summarize the partial results in this report to ensure timely feedback to the School's bodies and committees to optimize the quality of teaching. The

full results of the analysis will be reported in the next annual report. For the same reason, data for the XXXVI doctoral cycle in this report incorporate surveys of opinions on courses that could not be analyzed in the previous report because these courses still needed to be completed at the date of the last survey.

Table 1: Structure of the questionnaire for surveying student opinions

N.	QUESTION TEXT (ITALIAN)	ANSWER TYPE.
Q1	The course was intellectually stimulating	Multiple choice
Q2	The class schedule has been adhered to	Multiple choice
Q3	The course was relevant and useful for my research project	Multiple choice
Q4	The course was well organized	Multiple choice
Q5	The tasks assigned were adequate	Multiple choice
Q6	The examination methodology was appropriate	Multiple choice
Q7	The professor clearly explained the learning objectives, the responsibilities of attendees, and the course requirements.	Multiple choice
Q8	The professor laid out the topics clearly	Multiple choice
Q9	The professor was well prepared and organized	Multiple choice
Q10	The professor was available for further information and clarification outside of class time.	Multiple choice
Q11	What aspects of the course or professor's approach contributed most to your learning?	Open
Q12	In what ways did the course contribute most to your research project?	Open
Q13	What aspects would you change about the course or the professor's approach to improve it?	Open
Q14	Any other suggestions?	Open

Many of the courses offered by the School are found to be selectable in the curriculum by students belonging to different tracks. This makes a separate analysis by doctorate (CCS, SS) and track (AMCH, CCSN, CSSE, ENBA) impractical, given the need for more information about the respondents' doctorate and track affiliation. Despite this clear limitation, the Board decided to propose analyses by doctorate and track if they were reasonably feasible.

The Board decided not to include seminar and presentation activities of the students' research activity in the analysis (instead, long seminars without exams were included in the analysis).

The Board appreciates that the School has started administering TEQ separately to internal and external students[1] from the XXXVI cycle as per Board's proposal.

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[1] Concerning course evaluations, evaluations from "external" students, i.e., not enrolled in the School but part of joint programs (students from Scuola Superiore Sant'Anna or other external students in various capacities admitted to attend classes) are noted.

Given this increased availability of information, the Board decided to analyze the opinions of the School's students and external students jointly and separately. However, the main analyses given in this report are in aggregate form. A comparison of opinions differentiated by affiliation of respondents for Cycle XXXVI and Cycle XXXVII is next illustrated.

Finally, some remarks about the protocol for administering the TEQs are in order. Specifically, in the last report, the Board pointed out that sending questionnaires to all students enrolled in the course in their curriculum could cause a decrease in the response rate if a student decided not to take a course initially included in the curriculum. As a result of these considerations, the Board hoped for measures to address this possible problem. It is therefore noted that starting with Cycle XXXVI, the School has introduced attendance registers; as a result of this, the sending of questionnaires is no longer done automatically to all students who include a particular course in their syllabus but only to those who have attended the course according to what is reported in the attendance registers. In the Board's opinion, the introduction of attendance registers appears to be an appropriate measure to eliminate a possible underestimation of the response rate about Cycle XXXVI. The effects on cycle XXXVII are also analyzed.

Over the past three doctoral cycles, the School has offered 282 courses (385 modules) of which 91 (113) were offered in the XXXV doctoral cycle, 94 (144) in the XXXVI and 97 (128) in the XXXVII cycle, slightly but steadily increasing in the two tracks of the SS program. In contrast, the courses offered by the two CCS tracks remain constant. Over time ENBA turns out to be the track offering the most courses within the School. The CCSN and CSSE track present several courses composed of multiple modules; in contrast, most AMCH and ENBA track courses present single-module courses. The values for each track/doctorate and cycle combination are shown in Table 2.

To survey students' opinions about the courses offered, the school sent out 2547 questionnaires, of which 755 are referable to cycle XXXV, 1022 to cycle XXXVI and 770 to cycle XXXVII. Of these questionnaires, 1977 were completed, which implies an average response rate for cycles XXXV-XXXVII of 77.62%. About the evolution of the average response rate over time, cycle XXXVII sees a decrease of 9 percentage points compared to cycle XXXVI; analyzing more deeply the reason for this decrease, we attribute the reason for this figure to the large increase in the number of questionnaires sent to the AMCH track, which exceeds the previous two cycles by more than 90. This is due less to an increase in AMCH doctoral students than to course attendance by students from previous tracks. Regarding the remaining three tracks, CCSN shows an increase in the response rate compared to cycle XXXVI by about four percentage points, while CSSE XXXVII increases the response rate by ten percentage points. In contrast, ENBA's response rate drops by 8.5 points.

More information is given in Table 3.

Table 2: Number of courses and modules offered by track/doctorate and cycle

PhD	Track	XXXV Courses	XXXV Modules	XXXVI Courses	XXXVI Modules	XXXVII Courses	XXXVII Modules
	AMCH	23	24	22	24	23	30
	CCSN	20	30	21	51	21	33
CCS		43	54	43	75	44	63
	CSSE	18	25	20	34	21	28
	ENBA	30	34	31	35	32	37
SS		48	59	51	69	53	65
	Total	**91**	**113**	**94**	**144**	**97**	**128**

Table 3: Questionnaires sent out, responses received, and response rate by track/doctorate and cycle

PhD	Track	XXXV # Sent	XXXV # Answers	XXXV Response Rate	XXXVI # Sent	XXXVI # Answers	XXXVI Response Rate	XXXVII # Sent	XXXVII # Answers	XXXVII Response Rate
CCS	AMCH	155	139	90.71%	144	132	93.98%	243	122	51.01%
	CCSN	146	94	64.18%	190	102	54.95%	133	69	58.74%
CCS Total		301	233	77.45%	334	234	71.21%	376	191	54.35%
SS	CSSE	228	142	66.51%	447	314	72.71%	117	89	82.54%
	ENBA	226	115	49.02%	241	169	69.18%	277	176	61.67%
SS Total		454	257	55.35%	688	483	70.70%	394	265	67.37%
Total		**755**	**490**	**64.93%**	**1022**	**717**	**70.93%**	**770**	**456**	**61.42%**

The average number of questionnaires sent out per course was 9.10, 9.64 and 9.39 for cycles XXXV, XXXVI and XXXVII, respectively, while the average number of responses obtained to the questionnaires increased from 5.90 to 6.96 and finally to 5.56. Breaking down these data by PhD or track (as shown in Table 4), one can observe the high average number of questionnaires sent for the AMCH XXXVII track, about four more for each course, underscoring the previous survey regarding the origin from previous tracks of students attending AMCH XXXVII courses. The number of questionnaires sent to CSSE XXXVII students dropped significantly compared to previous tracks. There is an increase of about one point in the number of questionnaires sent to CCSN and ENBA.

Table 4: Average number of questionnaires sent and responses obtained by track/doctorate and cycle

PhD	Track	XXXV		XXXVI		XXXVII	
		Media Submitted	Average Responses	Media Submitted	Average Responses	Media Submitted	Average Responses
	AMCH	8.61	7.72	7.20	6.60	11.57	5.81
	CCSN	8.11	5.22	6.79	3.92	8.31	4.31
CCS		8.36	6.47	6.96	5.09	10.16	5.16
	CSSE	13.41	8.35	17.88	13.08	9.75	7.42
	ENBA	7.53	3.83	7.30	5.12	8.39	5.33
SS		9.66	5.47	11.86	8.47	8.76	5.89
Total		**9.10**	**5.90**	**9.64**	**6.96**	**9.39**	**5.56**

The analysis of course distributions according to the number of questionnaires sent and the number of responses received is shown in Figure 1. Again evident from the figure is the higher number of questionnaires sent, which is 56 percent of the total questionnaires sent. The reasons concern, on the one hand, the increase in the number of grants available for doctoral courses and, on the other hand, the presence of students from earlier cycles in the XXXVII cycle courses. There is not the same increase in the response rate.

The criticality of "micro-classes," i.e., classes for which fewer than four questionnaires are sent and filled out, decreases from 18 percent in XXXVI to 9 percent in XXXVII cycle in terms of questionnaires sent and from 33 percent to 23 percent in terms of responses sent. In any case, the micro-classes are frequently composed of students who select the course because of their own research and study background and who, therefore, are often supervised by the course instructor. This could lead to biased results, although the latter was partially mitigated this year.

Figure 1: Distribution of courses by the number of questionnaires sent and responses received per cycle
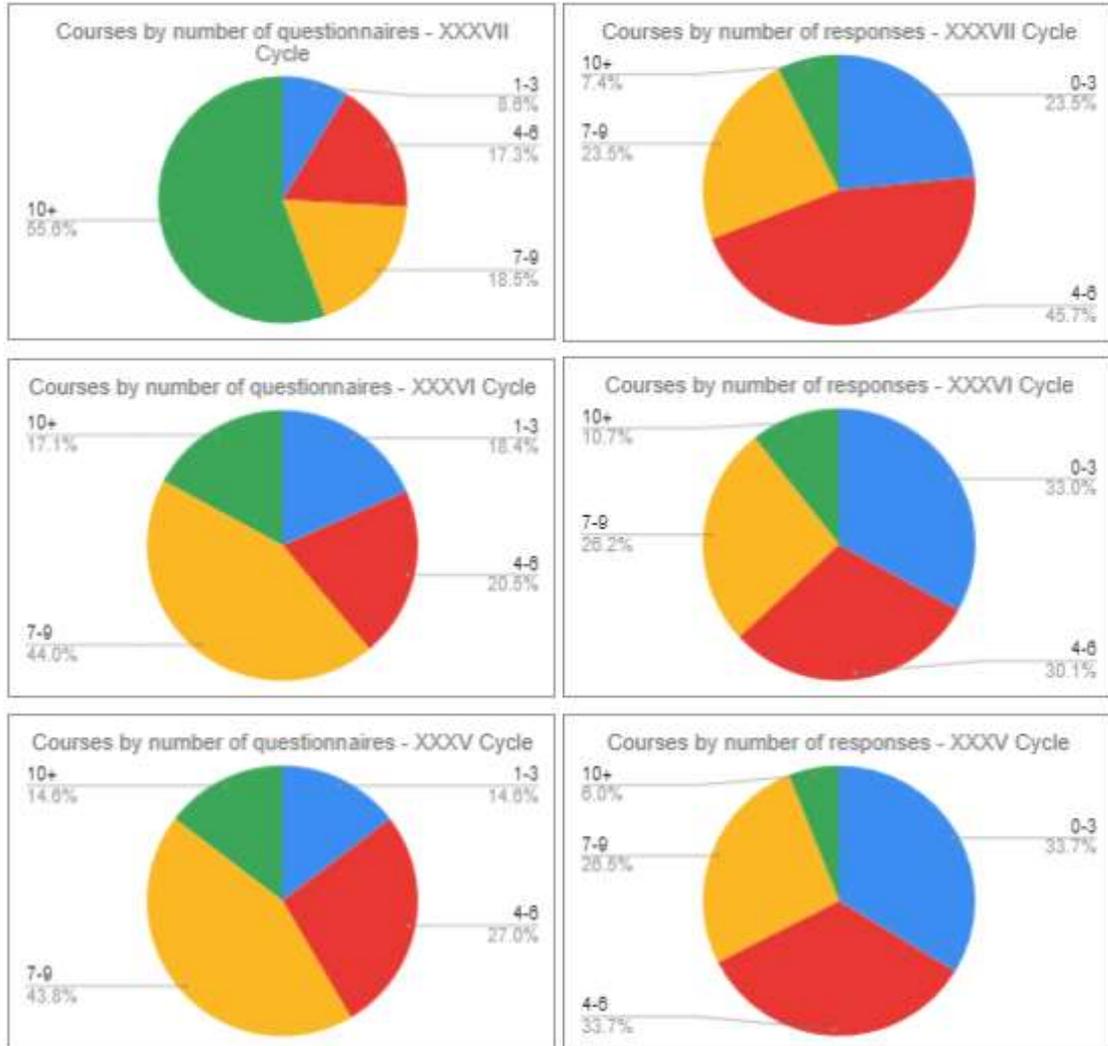
The following analysis of students' opinions in cycles XXXV-XXXVII regarding the School's educational offerings focuses on multiple-choice questions Q1-Q10. The questions include five possible responses: strongly agree, agree, neutral, disagree, strongly disagree. To provide summary results, the evaluations provided by the students were aggregated at the track/doctoral level for each cycle and used to calculate a percentage indicator of satisfaction. In this regard, the questionnaire data for each course are imputed to the track that has that course in its teaching schedule and not to the track to which individual student belong. In cases where a course is in the scheduling of more than one track, data are imputed on all of them. This indicator corresponds to the weighted average of the responses, where the weights range from 0 (strongly disagree) to 4 (strongly agree). The weighted average thus calculated was then divided by four to obtain an indicator between 0 and 1 and, finally, multiplied by 100 to obtain a percentage. The values thus obtained for each question and each cycle and track/doctoral combination are shown in Table 5. Figure 2 graphically depicts the data by individual track.

Table 5: Summary indicator of students' opinions by track/doctorate and cycle (cycles XXIV-XXXVI)

| Cycle	Program	Track	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Total
XXXV	CCS	AMCH	85.3	92.5	63.1	87.6	86.6	85.5	91.5	90.9	93.5	93.5	87.0
		CCSN	95.0	86.4	79.3	86.8	91.7	88.0	94.9	93.7	96.1	94.0	91.8
	CCS Total		90.1	89.4	71.2	87.2	89.1	86.7	93.5	92.5	95.0	93.8	89.7
	SS	CSSE	87.6	91.9	77.7	86.6	84.2	84.5	91.9	91.9	93.3	91.9	88.6
		ENBA	84.9	89.0	76.5	84.8	86.4	85.6	87.8	85.9	91.2	91.7	86.6
	SS Total		85.9	90.0	76.9	85.5	85.6	85.2	89.4	88.2	92.0	91.8	87.4
XXXV Total			**87.7**	**89.8**	**74.4**	**86.3**	**87.2**	**85.9**	**91.2**	**90.2**	**93.3**	**92.7**	**88.4**
XXXVI	CCS	AMCH	80.7	90.3	64.9	81.0	84.7	84.6	83.1	81.5	86.9	84.8	81.8
		CCSN	84.4	87.0	72.4	80.0	85.1	84.3	88.8	86.4	94.0	94.8	87.7
	CCS Total		82.8	88.4	69.2	80.4	84.9	84.5	86.7	84.6	91.3	91.1	85.5
	SS	CSSE	93.6	95.7	86.5	91.6	90.7	87.8	95.1	93.7	96.4	94.6	92.9
		ENBA	83.4	89.6	80.7	80.0	82.3	80.9	84.2	80.8	87.1	92.6	84.3
	SS Total		87.7	92.2	83.2	84.9	85.9	83.8	89.3	86.7	91.4	93.5	88.3
XXXVI Total			**85.5**	**90.5**	**76.9**	**82.9**	**85.4**	**84.1**	**88.0**	**85.7**	**91.4**	**92.3**	**86.9**
XXXVII	CCS	AMCH	74.9	82.5	55.3	76.2	76.0	73.8	74.6	74.9	80.1	82.0	74.9
		CCSN	85.7	90.2	75.6	84.5	88.2	88.6	88.5	88.8	90.8	93.5	87.7
	CCS Total		79.8	86.0	64.6	80.0	81.5	80.5	81.1	81.4	85.1	87.3	80.9
	SS	CSSE	92.5	92.9	83.7	89.7	87.0	88.1	94.1	92.1	94.4	95.4	91.0
		ENBA	80.0	92.2	75.3	83.1	84.9	85.1	83.1	84.6	88.6	92.2	84.8
	SS Total		83.4	92.4	77.6	84.9	85.5	85.9	86.1	86.6	90.2	93.1	86.5
XXXVII Total			**81.8**	**89.6**	**71.9**	**82.8**	**83.8**	**83.6**	**83.6**	**84.0**	**87.6**	**90.2**	**83.7**
Total			**85.1**	**90.0**	**74.7**	**83.9**	**85.5**	**84.5**	**87.8**	**86.6**	**90.9**	**91.8**	**86.5**

In general, there is lower satisfaction with Cycle XXXVII in all questions, although this decline never exceeds five percentage points. Q1, Q3, Q7 and Q9 show the most notable declines in satisfaction. At the track level, the

satisfaction level of CSSE remained very high, in agreement with previous cycles; the same is true for ENBA, whose values increased except for question Q3; CCSN maintained high levels of satisfaction, while for the most noticeable decrease occurred within the AMCH track, where there is a decrease in satisfaction in all questions administered at cycle XXXVII, in line with the negative gap that already existed in the comparison of cycle XXXVI with cycle XXXV. It should be noted that substantial changes have been made to the latter track starting with the present cycle, XXXVIII. Changes are also designed to remedy these problems by refining the organizational structure of the track.

The Board points out that the summary opinion indicator for question Q3, "Was the course relevant and useful for my research project," is often below average, particularly evident when looking at the AMCH track. The reasons for this deviation can be many. For example, at the course evaluation time, some students still need to clearly identify their research project. In such a case, it is possible that such students, not knowing how to answer the question and not having the option of not answering this question, provide a neutral answer. In addition, the Board believes that question Q3, as currently posed, needs to be revised in terms of the quality of teaching. Indeed, given its multidisciplinary structure, the School offers highly specialized and basic courses necessary for creating shared knowledge among students from different disciplines. Such basic courses may not be entirely in line with the development of specific research projects, but this should not make them any less positively evaluated. For this reason, the Board sees with satisfaction the acceptance of the suggestion, in the new TEQ format in effect as of the XXXVIII doctoral cycle, to reformulate question Q3 from a perspective that is attentive to the different objectives at which the various courses offered by the School may aim (see below, section IV.2.6).

Figure 2: Radar plot of summary indicators of learner opinions by track and cycle
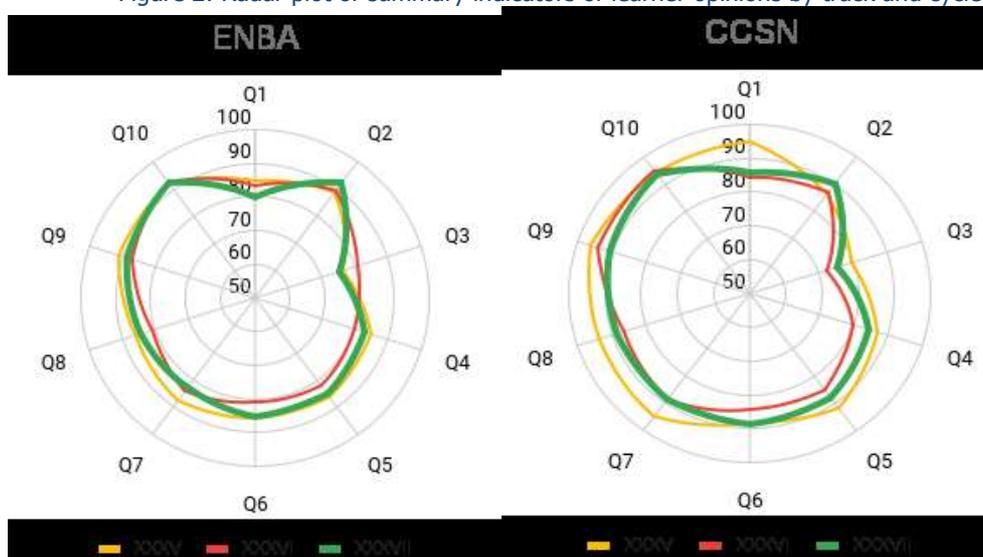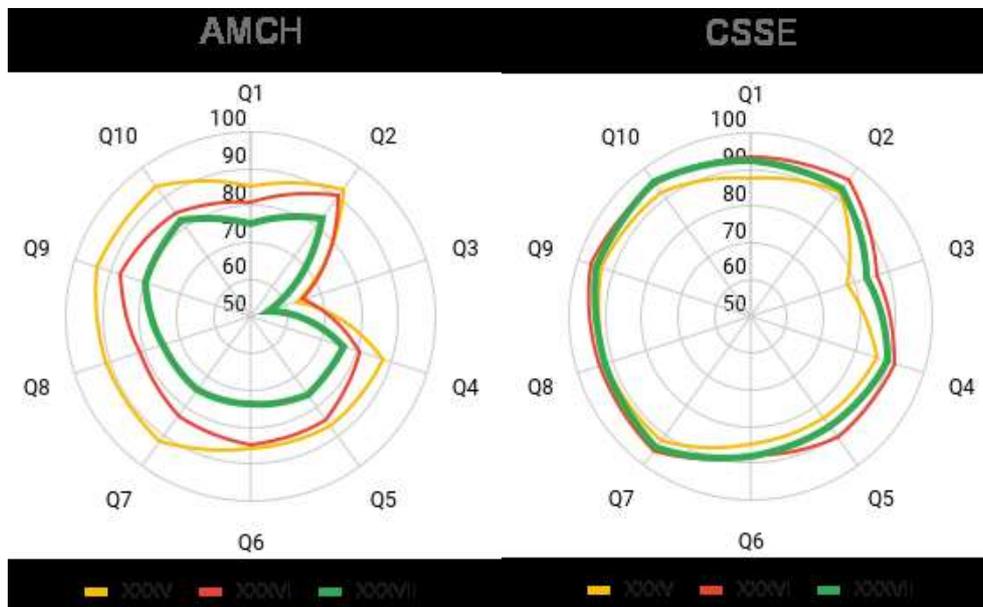
For educational planning, it is particularly interesting to analyze whether there is a significant difference in opinions referring to compulsory courses (compulsory) and those referring to elective and specializing courses. More specifically, it is possible that compulsory courses are penalized compared to elective courses because the latter (i) are voluntarily chosen by the student, and (ii) if an elective course is not of interest to the student, the latter may decide not to pursue the course. In sum, there may be a bias in the students' opinions about individual courses according to their type (compulsory or choice) due to the possibility of self-selection by the students in the case of choice courses.

Figure 3 shows the summary indicators for individual questions by course type for cycles XXXVI and XXXVII. In general, indicators referring to compulsory courses tend to be lower than those referring to elective courses, especially in XXXVII cycle students. This gap is particularly pronounced in question Q3 in both cycles. This may be partly because courses that present basic topics necessary for forming shared knowledge among students often become compulsory. In addition, compulsory courses are typically delivered at the beginning of training, when students are most likely to have yet to define their research project clearly.

It should be emphasized that the analysis was not carried out at the track level because, as pointed out in previous reports, there are significant differences between tracks in terms of the relative presence of compulsory and elective courses: at one extreme in the AMCH track the vast majority of courses are found to be compulsory while at the other extreme in the CSSE track all courses are found to be elective.

Figure 3: Radar plot of the summary indicators of student opinions, cycles XXXV and XXXVI
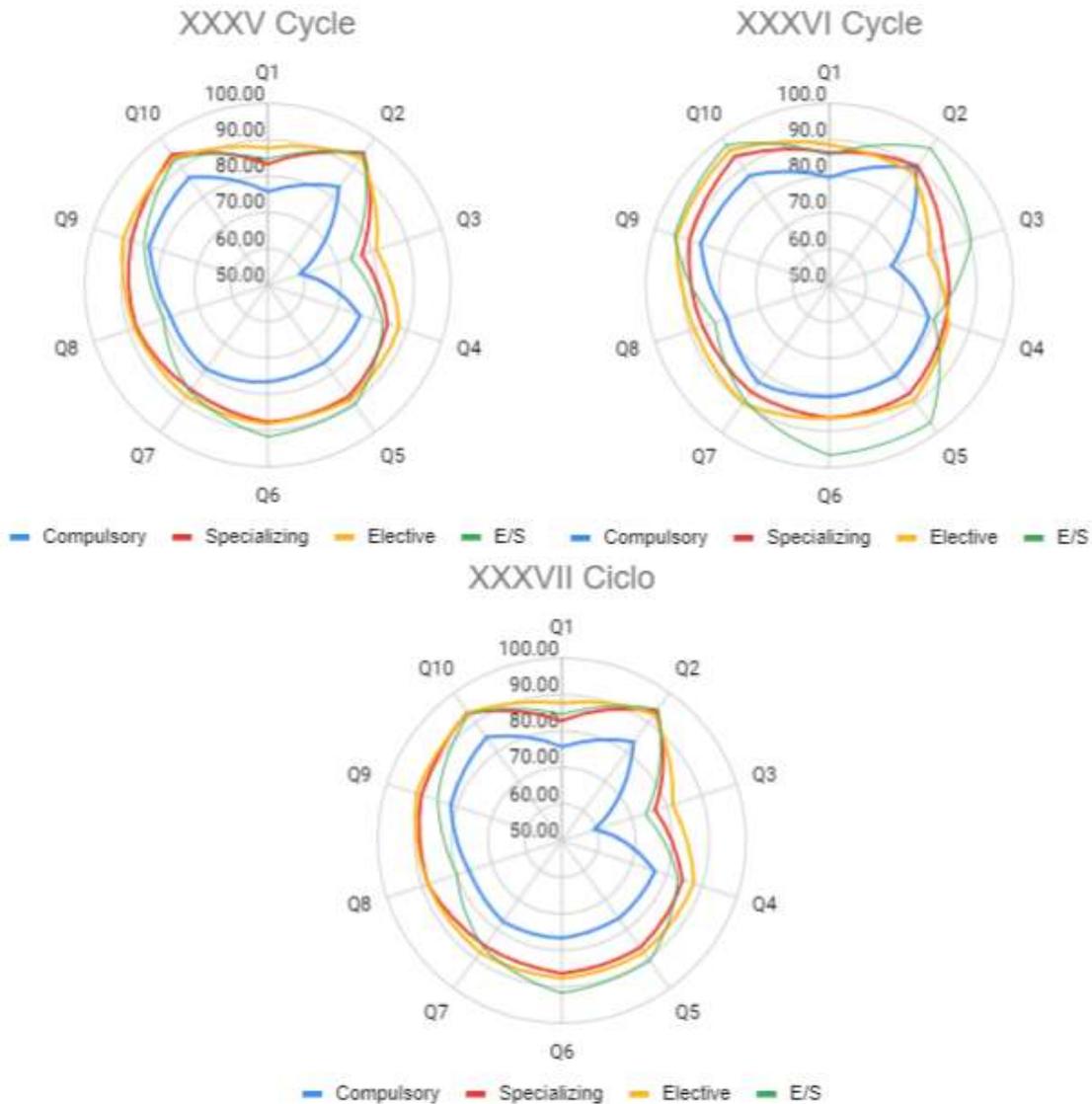
Another relevant aspect concerns the analysis of possible differences in students' opinions based on the affiliation of the lecturer who taught the course. About 80 percent of the courses were taught in the cycles considered by faculty affiliated with the School. Differences between tracks are also observed on this front. In particular, the AMCH track is the one that makes greater use of external faculty, while the other tracks show significantly less use of external faculty. Considering this heterogeneity and, more specifically, the small number of courses taught by external faculty in three out of four tracks, the Board decided to analyze this at the cycle level. Figure 4 shows a gradual divergence in the average opinions of students between courses taught by School faculty and courses taught by external faculty. The satisfaction indicator is significantly higher for courses taught by internal faculty. Comparing cycles XXXV and XXXVI, there is substantial stability in the opinions associated with courses taught by internal faculty. In contrast, the remaining courses experience a decline, further increasing the difference between the two types of

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courses. It should also be noted that the most pronounced difference is consistently observed in question Q3 regarding the usefulness of the course for the development of one's research project.

Figure 4: Summary indicators according to teacher affiliation
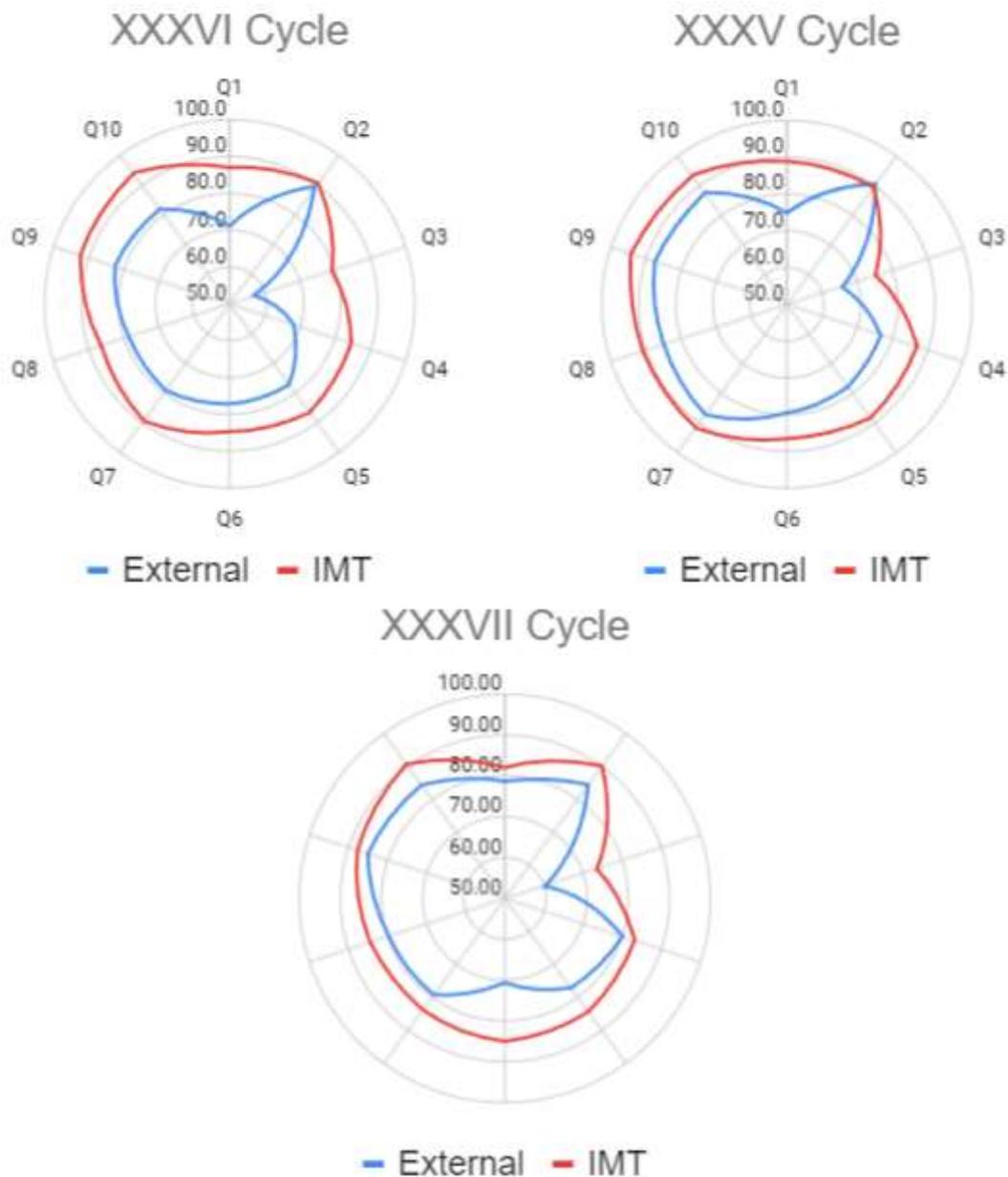
A final relevant aspect concerns any differences in the opinions expressed by School students compared to those expressed by external students attending the same courses. This analysis is possible for the XXXVI and XXXVII cycles because the School has implemented a differentiated administration of the questionnaires between the School

and external students. This analysis also highlights substantial differences between tracks: in the XXXVI cycle, for the AMCH track, there are no courses taken by external students, while eight courses taken by external students are observed for the ENBA and CSSE tracks and ten courses in the case of the CCSN track. In cycle XXXVII, AMCH still has no courses taken by external students, while SS has eight courses (5 ENBA and 3 CSSE). In contrast, there are two courses taken by outsiders in CCSN. In Figure 5, a difference in average opinions is observed regarding the CCS doctoral program (the only CCSN track), where the summary indicator is lower for the School's students than for external students. In contrast, an opposite trend is observed in the case of the SS doctoral program.

Figure 5: Summary indicators by type of respondents and doctoral program
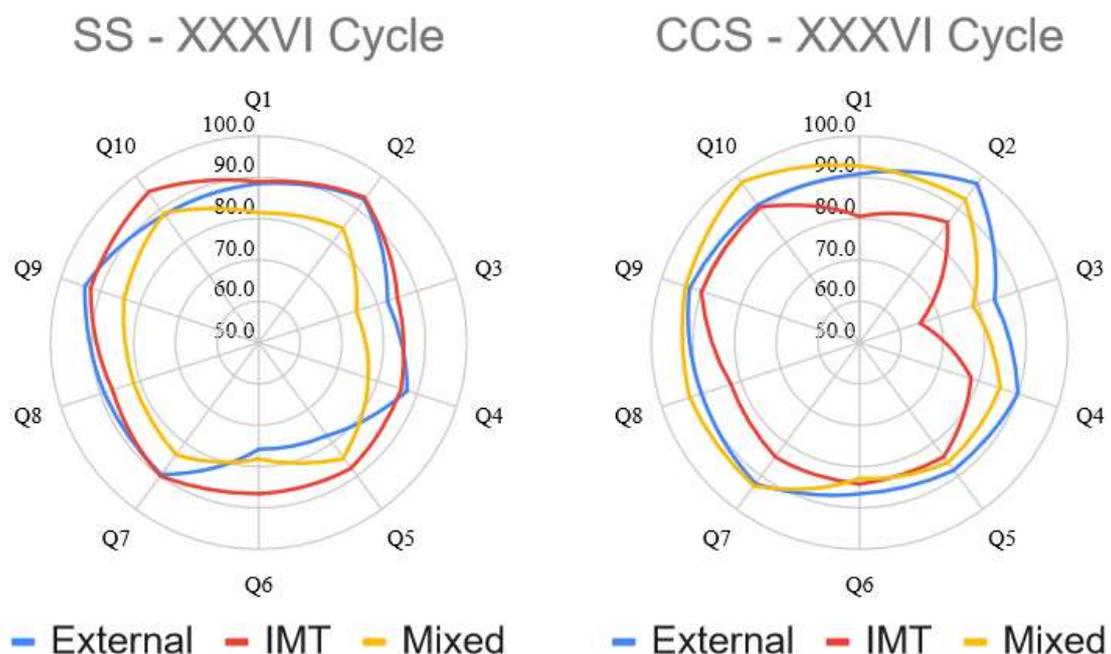
In Conclusion, the **average evaluation** of the School's educational offerings tends to be positive and stable, reflecting the effectiveness of Quality Assurance tools in ensuring constant but non-invasive monitoring and promoting continuous improvement of educational offerings. A stasis in the average response rate is noted. In this regard, the Board recommends that the School raise further awareness regarding the importance of completing end-of-course questionnaires to improve perceived quality internally and externally at the IMT School (see section IV.2.6 below).

IV - FRAMEWORK C: ANALYSIS AND PROPOSALS REGARDING OTHER ASPECTS OF TEACHING ACTIVITIES

IV.1 Issues related to AY 2021-2022

IV.1.1 Calendaring of courses delivered in AY 2021-2022

It is useful here to monitor the extent to which the calendars of the courses delivered during AY 2021-2022 have complied with the calendaring criteria that, at the urging of the Board, were discussed at the October 9 and October 22, 2019, meetings of the Teachers' Board, and have since been taken into account by the administrative offices when establishing class calendars.

Criterion 1 - Completion of all courses by the end of the academic year in question.

Most of the courses in educational scheduling are finished by October 31, 2022. Of note are only: 2 courses that started in AY 2021-2022 but ended in the following year, and two courses and eight course modules that are yet to be scheduled. These are mainly taught by external faculty.

Criterion 2 - Maximum daily (8 hours) and weekly (36 hours) commitment per learner calculated based on hourly commitment per track.

No deviations were detected, confirming full compliance with the criterion already recorded in previous academic years.

Criterion 3 - Maximum length of each lesson (3 hours for internal teachers and 5 hours for external teachers)

In the rare cases we had, the presence of blocks greater than 3 hours has been justified either by the methodology of teaching the specific subject or by the presence of many outside students.

Criterion 4 - Time interval between classes (minimum 24 hours - not applicable to outside teachers - and maximum ten days)

The criterion was met at the calendar planning stage. Only rare cases should be noted in which the teacher needed to make retrospective shifts, and it was impossible to reschedule lessons by complying with this criterion. In some of these cases, the shift of the lecture was requested by the learners, or the lecture involved the delivery of a paper by the students that took longer than ten days, or the lecture was an "off-site lecture" for which the scheduling is closely related to the availability of the on-site contact persons.

IV.1.2 Review of end-of-year and doctoral evaluation questionnaires completed in AY 2021-2022

In the End of Year Questionnaires, a series of questions are administered to the students regarding various aspects, such as the quality of the training activities provided by the School, the student's relationship with his or her Advisor and Advisory Team, the opportunities to present his or her own research, the evaluation of the period of research carried out externally, if any, the presence of relational problems (both professional and personal) that arose with one's Advisor/Advisory Team or, more generally, with a member of the School community, the use of psychological support channels and reporting of issues, and, finally, some questions regarding the pandemic and Covid-19, such as whether and what effects the pandemic had on one's research work. The overall assessment that emerged from the 'analysis of the responses provided by the 57 students who participated in the survey (out of 115 potential respondents, according to a percentage of 49.6 percent) is basically positive. Using the correspondence "Strongly agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly disagree = 1," for most questions, the average score was between 3 and 4.5. Only for questions concerning pandemic management, the average was slightly below 3.

As for the PhD Program Evaluation Questionnaire, it was completed by 50 students out of 81 potential respondents, according to a rate of 61.7 percent. The survey generally covered the student's experience at the School, courses and classes taken, the Campus and services offered, and his/her own research. Again, a positive picture of the School emerges, with students generally satisfied with their experience during their doctoral years. Using the correspondences "Strongly agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly disagree = 1" and "Excellent = 5, Very good = 4, Good = 3, Poor = 2, Very poor = 1," for all questions the average score was between 3 and 4.5.

It would have been possible for both questionnaires to analyze the results separately for each doctoral curriculum. However, in view of the recent change in the number and designations of the different doctoral programs (discussed below), and the real possibility of further changes in the future, the Board did not feel that a separate analysis was necessary, which would not have been comparable either with last year's results or probably with those of future years.

Some critical issues that emerged in both types of questionnaires include: the need to have less first-year teaching and more focused on one's needs; the need to have more assistance with one's research, such as an Advisory Team rather than a single Advisor, who is often very busy, and the possibility of having moments of discussion with other members of one's RU; the need to have more news about conferences and any other news of interest to students; the need to have faster reimbursements during the period abroad; and finally, better management of the pandemic emergency, particularly about the time of return to Campus.

Students could also highlight the most appreciated aspects of the doctoral course in a dedicated section. In this regard, several strengths of the School emerge, such as the diversity, both disciplinary and cultural and geographical, of the student and faculty body, the freedom of research, the opportunity to collaborate with other universities and external professors, and last but not least the many services offered by the School, with particular emphasis on the administrative support offered by the Offices.

IV.2 Issues related to AY 2022-2023

IV.2.1 New structuring of the **School**'s doctoral courses.

With the doctoral call for cycle XXXVIII, the School has significantly restructured its educational offerings. During internal consultations, the Board gave its opinion about the new training offer. In general, the Board finds the new doctoral architecture that is being determined agreeable and appreciable, with the articulation of the first of the two previous doctoral programs ("Systems Science," SS) into four new tracks (LC, CM, CoSyN, Software Quality) as opposed to the previous two (CSSE, ENBA), the proposal of a new doctoral program ("Economics, Analytics and Decision Sciences," EADS) as a derivation of the previous ENBA doctoral pathway of "Systems Science," and the division of the second of the two previous doctoral programs ("Cognitive and Cultural Systems," CCS) into three separate pathways (AMCH, CCSN, and MUSST) as opposed to the previous two (AMCH, CCSN). This is likely to contribute positively to the enrichment of the School's educational offerings, the enhancement of the available teaching and research resources, and the increase of its national and international attractiveness.

One perplexity that the Board expressed concerns **the new timing of the duration of all doctoral programs (three years)**, reduced from the previous four years (three plus one), reversing the recent shift from three years to four. The Board is aware of the external contingencies that motivated the School to provide for the

aforementioned three-year duration of the various doctoral courses planned for the XXXVIII cycle but noted that the number and amount of compulsory course hours appear to remain high despite the reduction in the overall duration of doctoral programs, with foreseeable reductions in the breadth and quality of doctoral research outputs. The Board hopes that better communication will take place regarding the reasons for this important choice and that precise indication will be provided regarding the modalities of the possible extension of the three-year doctoral fellowship to a possible fourth year, which it is expected may not cover all students.

Finally, at the level of doctoral presentation to the outside world, the Board would like some clarification on the different internal articulation of the three doctoral programs (consisting of 4 tracks, no tracks, and three tracks, respectively) so as to avoid any possible impression of unevenness to an outside observer or possible applicator. In particular, a brief initial document common to the three doctoral programs (or a repeated paragraph at the beginning of each) could usefully illustrate the general structure and articulation of the doctoral programs (also in the form of a diagram), explaining that all courses are usable by all students, and providing other such general information.

IV.2.2. Newly established doctorates

The Board reviewed the documentation (accreditation forms) regarding the Doctorate of National Interest in Cybersecurity to the Doctorate in Management of Digital Transformation. The Board expressed a favorable opinion regarding the establishment of these two new doctorates, expressing only concern that they are two three-year doctorates with many compulsory teachings. The Board also took the opportunity to reiterate the concern already expressed regarding the establishment of the Doctorates in "Systems Science," "Cognitive and Cultural Systems," and "Economics, Analytics and Decision Sciences"-regarding the duration of the doctorates mentioned above, which is planned to be three years. Given the high number of training courses planned for the first year and their considerable number of hours, the Board expressed its concern about the quality of the results that the doctoral research will put. More specifically, in the two doctoral programs in question, against the total three-year course duration, the first-year teaching schedule includes 26 courses (25 with examination) totaling 520 hours, plus 120 hours of specialized training between the first and second years, for "Cybersecurity," and 25 courses (20 with examination) totaling 460 hours for "Management of Digital Transformation." Such a concentration of courses during the first year will predictably lead to compressing the research aimed at the thesis in the next two years alone.

IV.2.3 Course scheduling for the AY 2022-2023

The Board notes that as of mid-November 2022, the teaching schedule for the XXXVIII cycle has yet to go through the approval of the Scientific Boards. As released at the establishment stage, the current course list is updated based on information received between September and November before the start of the academic year. The course calendar for the EADS doctoral track is ready, while the calendars for the other doctoral tracks are in the process of becoming ready, but most of the courses are already on the calendar. In particular, the calendar for the MUST track is in the making because many of the faculty are external and will be teaching at IMT for the first time.

The Board is also pleased to note that some of the suggestions given by the Board itself in the 2021 report have been taken up: in fact, starting from AY 2022-2023, all classes will begin after the inauguration of the academic year (set for November 18 of each year), so that new students can arrive in Lucca and settle in on Campus before classes begin and, in addition, some doctoral programs have already scheduled final exams for their courses.

IV.2.4 Sharing teaching materials

The Board was pleased to hear that, starting from AY 2022-2023, the teaching materials of all courses will be made available to the entire School community (students, professors and assistants). These materials (syllabuses, slides and others) will be shared via folders on Google Drive (one for each teaching included in the teaching schedule) for:

- Support the student in choosing optional courses and completing the curriculum;

- Enhance student learning by ensuring full access to learning materials and other resources;

- highlight possible duplication in the course content (critical issue reported in the 2021 Board report);

- Promote synergies with other faculty.

The folders are available only to IMT students and IMT faculty. By default, all users other than the course instructor can access the folders as "viewers" (read-only permission). The course instructor will be able to modify the folder permissions for students enrolled in the course (if necessary) and grant access to external students (if any).

It is pointed out that uploading the course syllabus by lecturers is mandatory while sharing other materials is optional. The Board hopes that all lecturers will gladly adhere to this initiative and that there will be full sharing of material from all teachings. The Board will monitor this aspect.

IV.2.5 Pre-courses

The Board notes that, as suggested by the Board itself in the 2021 report, some pre-courses in online mode were provided in October this year for new students to strengthen and standardize their preparation for the courses they will have to take starting in November.

IV.2.6 Questionnaires related to individual courses.

The Board notes with satisfaction that the new TEQ model, just approved by the Committee and in force as of the XXXVIII doctoral cycle, provides - based on suggestions sent by the Board to the Committee - for the **possibility of not answering each of the questions in the questionnaire**, ensuring that students who do not wish to express their opinion on specific aspects of the course, or on the course as a whole, can refrain from doing so. In this context, **question Q3** of the current TEQ ("The course was relevant and useful for my research project/ The course was relevant and useful for my research project") **has been appropriately rephrased** as "The course was relevant and useful for my research goals and/or doctoral education," to be commensurate with the status of students who have not yet developed a thesis project. Finally, the guidelines for the administration of the questionnaires, also recently approved by the Committee, stipulate that for each course, the survey is to be addressed to students who have attended at least 80 percent of the lectures, **clarifying what is the threshold above which a student can be considered attending.**

The Board also believes that one way to increase the percentage of completed questionnaires is for **lecturers to share the feedback they received in the previous academic year's questionnaires** in their own lectures and, in particular, to inform students of any changes they have made to their courses to meet the needs expressed by the previous year's students so that they realize the impact that the opinions expressed in the teaching evaluation questionnaires have. This suggestion has been taken up, and as early as AY 2022-2023, the following sentence has been included in the lecture register of each teaching:

"To ensure the widest participation in the teaching quality evaluation process, the School invites each faculty member for each teaching:

- to illustrate in the first lesson the results of the learner opinion survey related to the previous delivery of the same teaching (if available), focusing on the critical issues that emerged and the actions promoted to solve them;

- On the occasion of the last lecture, please reserve an interval for completing the teaching evaluation questionnaires whenever possible.

To ensure the widest participation in the evaluation process, the School invites each professor to:

- illustrate the results of the previous year's course evaluation (if available) during the first lesson of the course, focusing on the critical issues that emerged and on the proposed corrective actions;

- if possible, please allow the students a break during the final lesson of the course and invite them to complete the TEQ. "

The Board proposes the following additional interventions where their implementation still needs to be in progress or planned. The interventions are aimed at:

1. **Improve the amount and timing of data transmission of individual course questionnaires to** ensure a comprehensive analysis of course satisfaction.
2. **Make it possible to register for the exam (where present) only after the learner has completed the TEQ, thus ensuring** that students taking the exam will complete the questionnaire.
3. To study special ways of collecting student opinions enrolled in the **Doctor of National Interest in Cybersecurity, the doctoral track in Museum Studies and the inter-university Master's Degree "Software: Science and Technology," in light of the many stakeholders involved**; to **prepare ad hoc questionnaires for Level II Masters and Executive Courses**; these will not be part of the analysis given their different nature, but will serve as a complement and comparison to the TEQs analyzed above.
4. Adopt **differentiated questionnaires for surveying students' opinions for seminar and laboratory activities**.

IV.2.7 New wording of end-of-year questionnaire and doctoral evaluation questionnaire

The Board gave its opinion regarding the new versions of the two questionnaires in question, which will be distributed from AY 2022-2023. Overall, there was a general appreciation of the new way the two questionnaires were structured. The Board only gave suggestions for some improvements, all of which were accepted. In particular, it agreed to automatically ask for a written comment when the student strongly disagrees or disagrees with a certain statement. Also, concerning one of the questions in the doctoral evaluation questionnaire, the Committee raised the need for students to indicate the recommended number (for each doctoral track) of publications for a doctoral student to be competitive in the academic system. This issue was brought to the attention of the Committee.

V - FRAMEWORK D: ANALYSIS AND PROPOSALS CONCERNING SERVICES OFFERED TO STUDENTS

This section analyzes the services offered to students/staff based on the findings of the Good Practice questionnaires administered in 2022 (and relating to the services provided by the School in 2021, scored from 0 to 6) while at the same time not neglecting issues otherwise brought to the Board's attention. In selecting items worthy

of further study, it was deemed appropriate to focus attention on those services that were found to be the most critical harbingers or that the Board often needed to address during its meetings.

V.1 Analysis of Good Practice Questionnaires

When possible, the Board compared the results of the Good Practice questionnaires collected in 2022 and 2021. However, it should be noted that major changes to the questionnaire (the number of questions was reduced and some questions were rephrased) prevented a thorough comparison.

In this regard, it is worth noting that three out of the ten free comments received through the appropriate section of the questionnaire point out the inadequacy of some of the questions in the questionnaire itself, calling for caution in analyzing answers that were deemed to have little relevance to the reality of the School. This perception on the part of students may explain, along with other factors, the low response rate to specific sections of the questionnaire (e.g., the section on the evaluation of research support).

Before examining individual services, it is worth noting **some general results of the Good Practice 2022 questionnaire.** Sixty students responded to the questionnaire (out of 167 potential fillers, i.e., 36 percent, compared to 47 percent last year), of whom 45 were Italian. The overall average rating for all questions was 4 (3.96) out of 6. In assessing this figure, however, it should be remembered that the response rate to the different sections of the questionnaire varies widely (e.g., all responded to questions related to the University's internal and external communication, very few to specific questions about research support services).

To the concluding question, "With reference to all aspects considered, with regard to the support provided by the 'Athenaeum in technical and administrative services, do you feel satisfied overall?" the 60 compilers indicate an average rating of 4.2 out of 6. To the question "With reference to the support provided by the Athenaeum in technical and administrative services, how do you consider the performance of the Athenaeum in comparison with the previous year?", Nine students (15 percent) answered "better," 23 (38 percent) "the same," 7 (12 percent) "worse," and 21 (35 percent) make use of the "don't know" option. Thus, there is a fair degree of satisfaction among respondents, more than half of whom rate the services provided as equal to or better than last year. In particular, it is worth noting that some critical issues highlighted in previous reports seem to be on the way to being resolved, for example, the management of mission reimbursement (average value of 4.18 points out of 34 responses, +0.37 compared to 2020, when there were 27 responses on a very similar though not identical question).

V.1.1) Canteen

The Good Practice questionnaire for 2021 still needs to show satisfaction with canteen services (mean value of 3.66 points out of 60 responses, -0.24 compared to 2020, when there were 74 responses). As can be learned from the section on free comments (as in two of them there is precise criticism of the canteen service), the variety of meals on the one hand, and slowness in dinner service due to an insufficient number of staff members on the other hand, are contested.

V.1.2) Internal and External University Information.

The Good Practice questionnaire for 2021 shows that there is less satisfaction with the information provided by the University on the organization, roles, and ways of accessing different services (mean value of 3.56 points out of 60

responses, -0.54 compared to 2020 when there were 74 responses). As can be learned from the section on free comments (as in two of them there is precise criticism on this point), some lack of clarity, inefficiencies and rigidities are complained about regarding access and use of administrative services. In addition, there is less satisfaction with the "dissemination of information regarding environmental and energy sustainability" (mean value of 3.12 points out of 60 responses, a figure not fully comparable with 2020 due to the change in the questionnaire questions) and the dissemination of information via social media (mean value of 3.55 points out of 60 responses, -0.47 compared to 2020, when there were 74 responses).

V.2) Other themes that emerged

In addition to the critical issues that emerged from the analysis of the Good Practice questionnaire, the Board received additional reports that were discussed at its meetings.

V.2.1) Housing

With the end of the most critical phase of the state of emergency due to the COVID-19 pandemic, the School has been reallocating, starting in July 2022, the students in double rooms, according to the organizational model normal before the pandemic. Although the School was able to ensure adequate accommodation for all students despite the shortage of rooms on the San Francesco Campus, the Board had to note a general discontent created in the student body. In this regard, student representatives on the Board called several general meetings to understand the reasons for this discontent and mediate with the administrations. In particular, the students expressed to their representatives strong disagreement with the proposal to allocate single rooms for a monthly fee of €100. It was proposed that those with a medical certificate applying for a single room would be exempt from paying this amount.

V.2.2) Management of Erasmus trips and research periods abroad

Another critical issue repeatedly reported to the Board concerns the timing of the payment of Erasmus grants and the increase of the doctoral grant during the research period abroad (visiting period). In particular, some students complain about delays in payments and the arrival of additional funds. The Board brought this problem to the attention of the Offices, suggesting that students be informed in advance about the timing of payments and the reasons for any foreseeable delays so that students can properly plan their stay before leaving Italy. In addition, the Board proposed using research funds to advance the payment of these amounts, replenishing the funds later as Erasmus scholarships arrive. Finally, the Board pointed to the possibility of introducing figures who could support staff in the offices and assist them in carrying out the required procedures (see V.2.3).

V.2.3) Selection of new tutors to support administrative staff

The Board proposed that the School's management consider selecting new mentors to support staff in the administrative offices, who sometimes appear undersized for the tasks they have to perform. The School had already announced an internal selection for technological tutors in 2021. The Board proposed to increase the number of these resources to:

- Assist administrative staff in managing Erasmus trips and research periods abroad (see V.2.2);

- Assist the administrative staff in supporting international students, especially in the application procedure for residence permits;
- Assist the administrative staff in verifying the fulfilment of the criteria for teaching scheduling, processing the results of questionnaires administered to students, and extracting data regarding international students (see below, section VI.2.1).

V.3) Board actions and proposals

In its work, the Board has undertaken the following initiatives.

V.3.1) Reorganization of spaces in the San Francesco complex.

The Board ensured that all spaces for community use, present within the San Francesco complex, could be properly used by the students. In this regard, the Board promoted the rearrangement of the baggage room in the San Francesco complex jointly with the staff of the School's offices. A voluntary delegation composed of students united with their representatives from the Board proceeded to rearrange the baggage room. The result led to the increase of the space inside the room to enable the students who will travel abroad for research to deposit their personal belongings easily. The contents of the luggage room, enriched through the additional contribution of the entire School community, were donated to the St. Vincent de Paul Association of the Archdiocese of Lucca. An account of this initiative appeared in some local press organs.

V.3.2) Convention with the university language centers of Tuscan universities

To meet the needs of the students, the Board proposed to the relevant offices to activate a series of agreements with language centers at other Tuscan universities. The offices promptly responded to the solicitation, contacting the following institutions:

- The Language Center (CLI) of the University of Pisa,
- The University of Florence's Language Center (CLA),
- The Language Center (CLA) of the University of Siena,
- The University for Foreigners of Siena.

At present, agreements are in place with the CLI of the University of Pisa, with which an agreement had already been activated last year, the CLA of the University of Florence and the CLA of the University of Siena. The agreement with the University for Foreigners of Siena is still being finalized. Thanks to the activated agreements, the students and staff of the School can access the courses offered by the Language Centers (also in online mode) with a discount of about 50 percent on the total cost of the course. To protect and facilitate the School's international Community, the Board recommends activating the agreement with the University for Foreigners of Siena, with which international student/s will be able to relate and expand their network not only from a linguistic but also a community perspective.

VI - FRAMEWORK E: ANALYSIS AND PROPOSALS WITH REGARD TO SERVICES OFFERED TO INTERNATIONAL STUDENTS

The year 2022 witnessed a growing interest in better understanding the status of international students at the School. The Board, continuing a reflection begun in 2021 and availing itself of the presence of an international

student among the student representatives, has begun to systematically investigate the history, satisfaction, and placement of international students enrolled at the School. Intending to better understand this constituent asset of the School, it welcomes the appointment of a Rector's delegate for international policy at the end of 2022.

VI.1 - Data currently available

As a material basis for analysis, the Board was able to make use of statistics regarding applications and matriculations of foreign and Italian students in the years ranging from 2010 (XXV cycle) to 2021 (XXXVII cycle), received from the PhD and Higher Education Office (see Figures 6-8). Data for the year 2022 have yet to be made available.

Figure 6: Applications for admission (domestic and international) to doctoral cycles XXV-XXXVII (2010-2021)
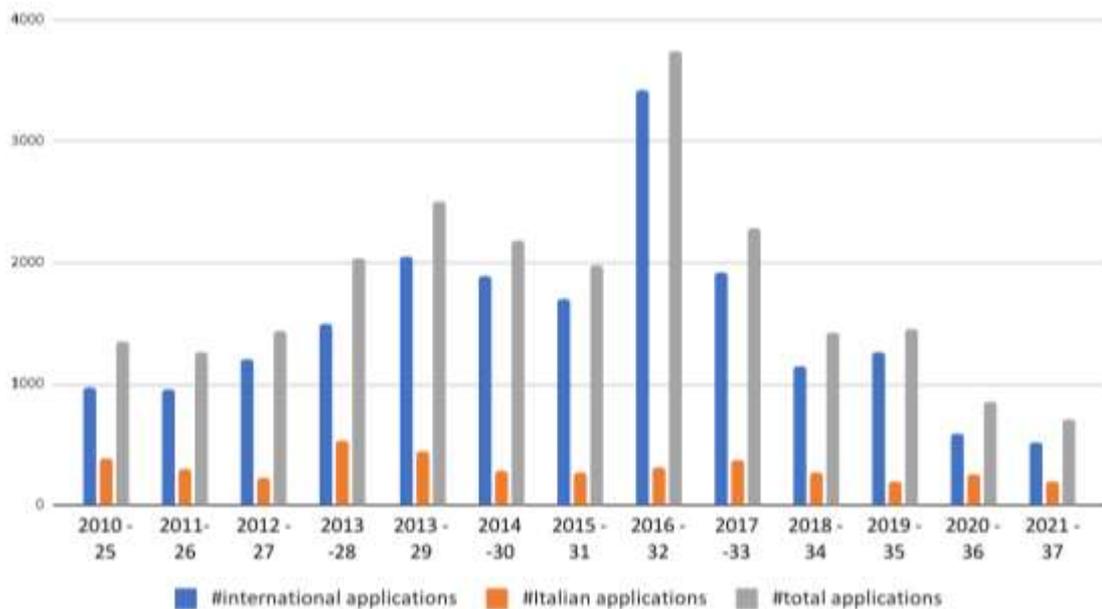
Figure 7: Enrollees in doctoral cycles XXV-XXXVII (2010-2021)
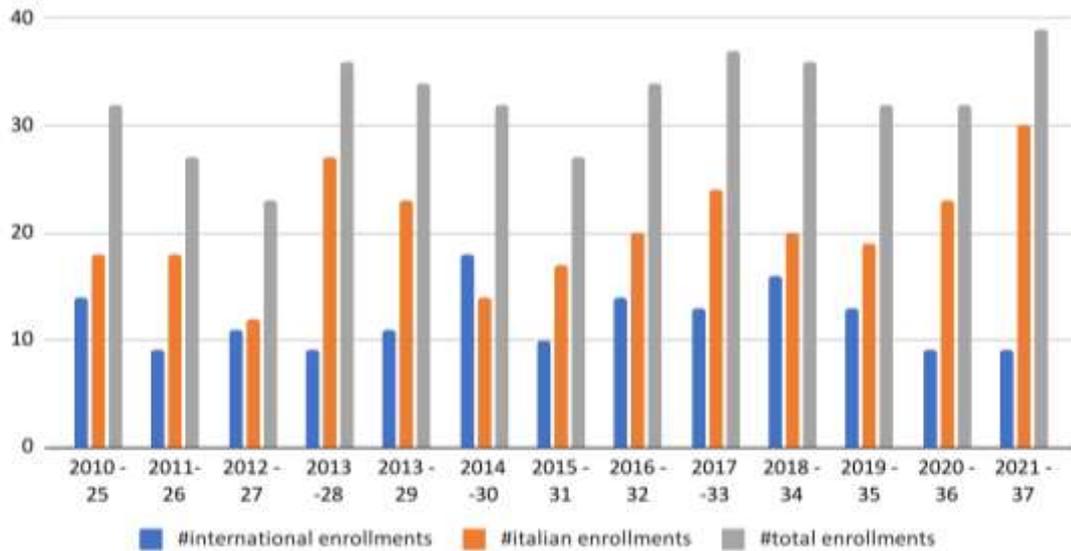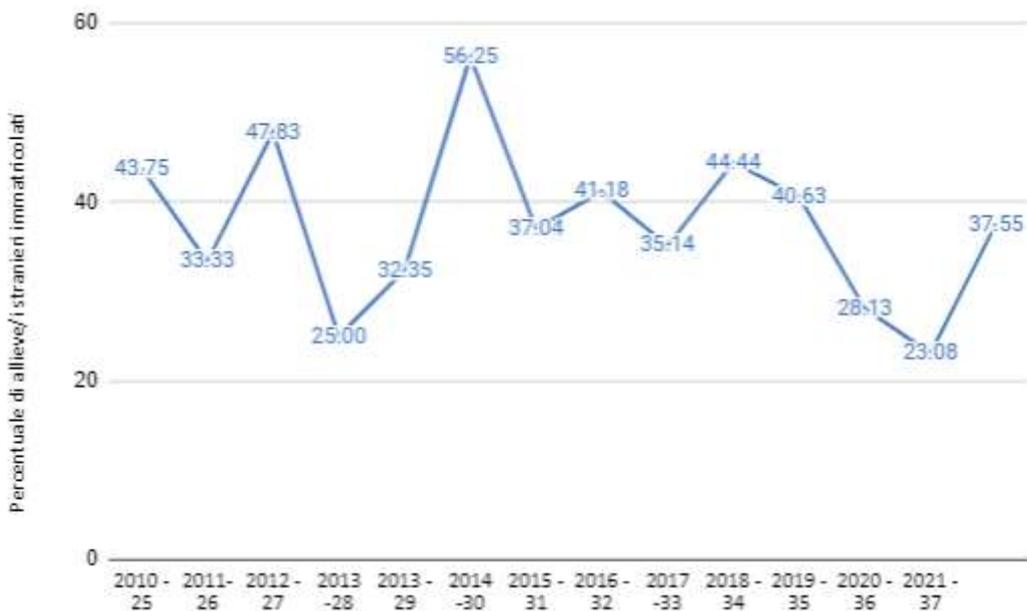

Figure 8: Percentage of international students enrolled in doctoral cycles XXV-XXXVII (2010-2021)

Based on the currently available data, the Board first noted the large discrepancy between the number of international applicants (Figure 6) and the number of international matriculations (Figure 7). International applicants have always outnumbered Italian applicants, while Italian admitted students have almost always outnumbered international ones. This trend has been common to all eleven years under review, except for the 30th cycle in 2014,

the only year in which the number of international students admitted exceeded the number of Italian students admitted (Figure 8). The Board also noted that 2016 had the highest number of applications. This is likely due to a better marketing strategy for the doctoral call for applications, something that, if confirmed, could be better researched to make the School's doctoral calls more effective internationally in the future. While there was a predictable significant decline in domestic and international applications in the years affected by the Covid-19 pandemic, most of the total number of applications during this period remained foreign. Whether the decline in overall applications in the Covid-19 years 2020 and 2021 is due only to the pandemic or may result from a more general loss of attractiveness on the part of the School is something that only the data for 2022 and subsequent years can clarify. What is important to note is that 2021 marked the largest ever difference between international and domestic admissions to the benefit of the latter.

In addition to the above data, the Board was also able to use the results of a survey conducted by the Career Services of the PhD and Higher Education Office and the International Student Union in March 2022. The survey was carried out at a meeting with the Career Services external staff member assigned to this survey and the School's international students on topics relevant to their work. The survey included seven international students who were asked to rank the issues they felt were most problematic educationally (Figure 9) and to suggest possible solutions (Figure 10). On average, students ranked "Goal setting," "Stress, anxiety, other mental-health related issues," "Communication, conflict management," and "Career Design" as the most relevant issues. In second place were the themes "self and time management" and "mindfulness, meditation, and self-care." In third place were the themes "relationships and networking," "support (financial, technological, living, facilities etc.)," and "immigration laws/regulations." In the "Others" section, students mainly recorded the importance of seeking job opportunities as international students.

In the second part of the survey (Figure 10), Career Services presented a range of initiatives that could be implemented to support international students better, asking students to rank them in order of importance, from favorite (1) to least favorite (12). The results show that students are mostly interested in domestic and international internships and future job opportunities. They are equally interested in company presentations and career days/job fairs in English. Subordinately, they considered specific presentations for international students and mentoring programs useful. Students ranked the proposals "international student group discussions," "intercultural assistant to provide an understanding of the cultural dimension and the difficulties to adapt to a new culture," "career initiatives," "career tracking," or "alumni meetings" at a lower level.

Figure 9: Classification of the relative importance of problems (international students)
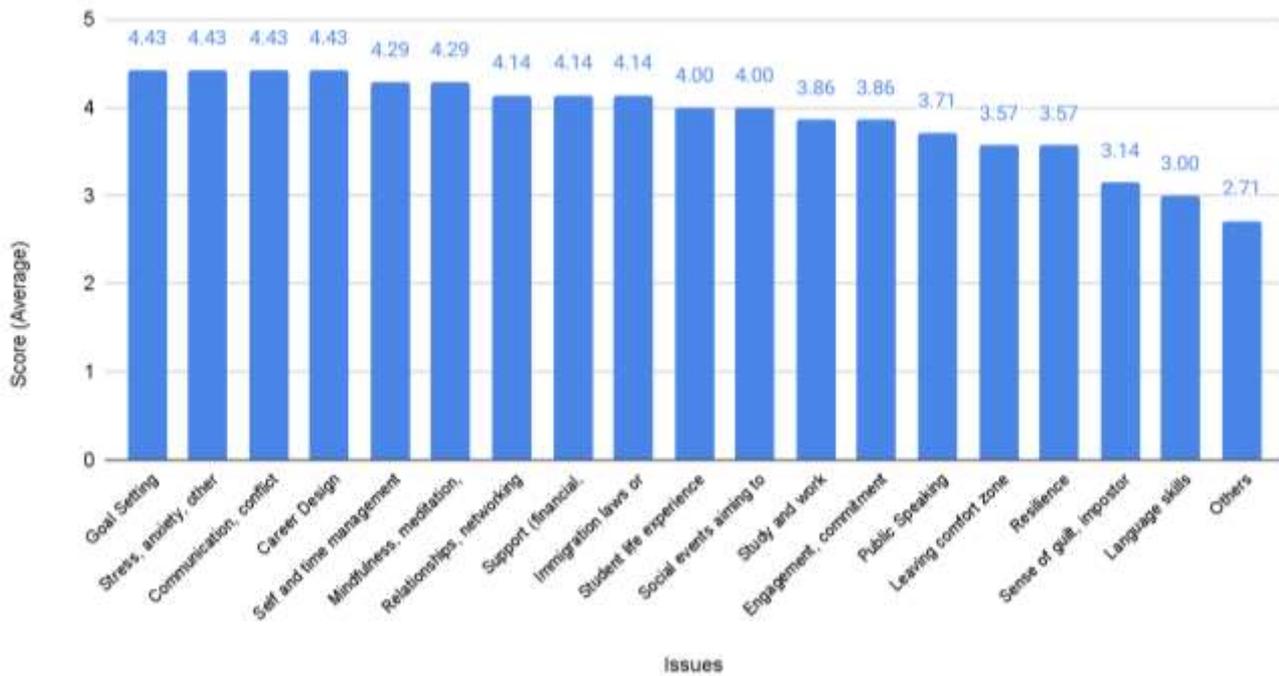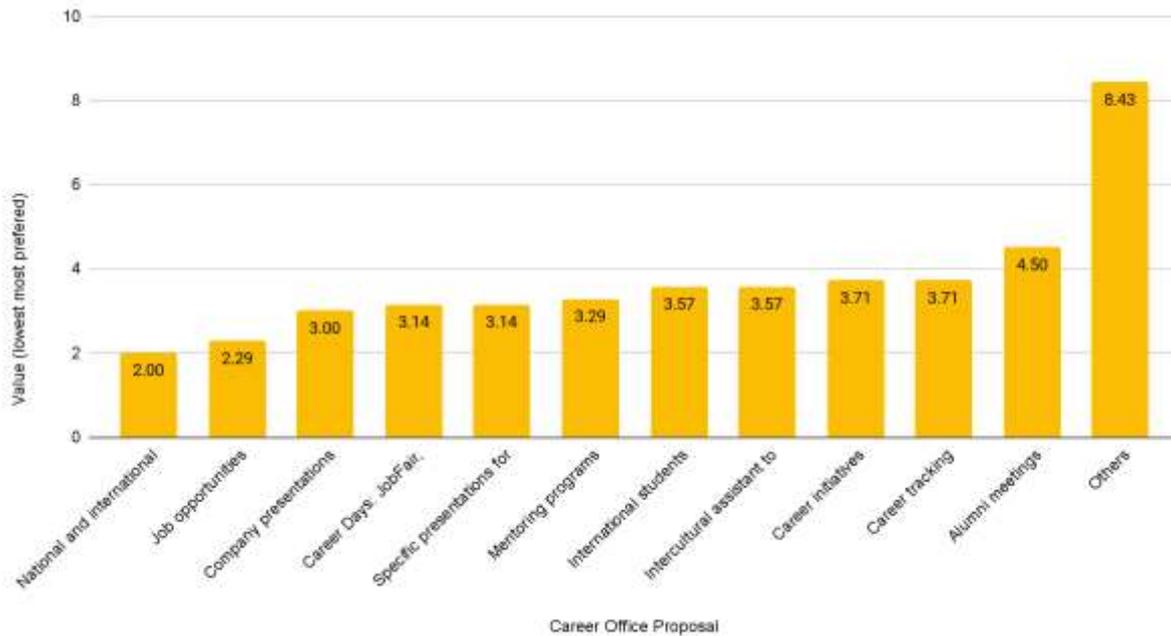

Figure 10: Ranking of the importance of initiatives to be undertaken (international students). Lower values correspond to preferred initiatives

VI.2 Suggestions of measures to be taken

Although the two types of data summarized in the previous section shed light on the history and needs of international students at the School, further steps can be taken to understand even better the status of international students at the School and identify areas of support that could improve their needs. With this in mind, the Board suggests three measures to increase the available data regarding international students.

VI.2.1 - The first recommendation is to increase the amount of data available on applications and admissions of international students. The category of "international" is too broad and vague, and it would be important to know more precisely the nationality of foreign students (non-Italian EU nationals and non-EU nationals) in both applications and admissions. Other data, such as age and gender affiliation, would also be relevant for a complete picture. The Board is fully aware that the PhD and Higher Education Office currently needs more staff resources to retrieve the huge amount of data that would be needed to deepen the analysis over ten years. To this end, the Board has proposed to the Committee that a portion of the total number of hours of technological tutors recruited from among the students to help the staff of the PhD and Higher Education Office in this task. A useful, immediately implementable measure would be to distinguish the nationality of the School's international students starting from the current academic year.

VI.2.2 - The second recommendation is to add a "filter" to some of the existing questionnaires. By asking, "are you an international student?" at the End of Year and PhD. Program Evaluation questionnaires and the Good Practice questionnaires, the Board could begin to analyze some of the differences in the evaluations of services and doctoral offerings expressed by international students in comparison with Italian students. This could be used to assess whether international students express an evaluation of the quality of services provided by the School, their relationship with their thesis supervisors, or other issues addressed in these questionnaires differently from Italian students.

VI.2.3 - However, the Board believes that international students have specific problems that need to be discussed in the existing questionnaires. Issues such as culture shock, difficulty relating to learning materials or classmates, the effectiveness of the types of social support received as an international student, and the evaluation of Italian language courses are not measured annually. Drawing on best practices of surveys for international students adopted by other universities in Italy and abroad, the Board has developed some themes and questions for a survey specifically concerning international students to be conducted in English. This survey may be an additional questionnaire to be addressed exclusively to international students or guidelines to be considered in a dedicated focus group. At the time of dismissing this report, the Board has made contact with the Committee to jointly consider how to proceed. Whatever mode of implementation is chosen, the Board believes that a survey of this kind will be useful in monitoring the status of international students, their needs and the quality of support provided to them by the School from year to year. An excerpt of the survey in question in its current form is proposed below for illustrative purposes. It is important to point out that the survey to which the excerpt below refers is still provisional and purely indicative. In due course, the final version will be submitted to the Committee for appropriate evaluations on its use.

The first topic of the survey concerns prior knowledge of the School, arrival and stay in Lucca, and overall liking of the School, with questions such as "how did you hear about IMT?" and "why did you choose IMT?" open-ended, and "when did you arrive at IMT?", with month/year indication, and "Was it your first time in Italy?", with "Yes/ No" option. The question "how much culture shock did you experience?" involves a five-point Likert scale,

from "not at all" to "a great deal." Another Likert scale involves the answer to the question "how often do you stay in Lucca?" from "never" to "always." It is useful to ask students to evaluate similarities and differences between Lucca and their place of origin or provenance, in terms of size and cultural aspects, with questions such as "size and population of the city," "types of food available," "places of worship available," "sports and entertainment available," and "ways of socializing." Responses to these questions are given on a numerical scale of 1 to 5 (whole numerals) to increase the clarity of the response and maintain uniformity with the Likert scale used previously. Finally, to track overall satisfaction with the School and monitor the promotional activity that students can perform toward prospective applicants, questions from "how likely are you to recommend IMT to a prospective international student?" and "how likely are you to recommend IMT to a prospective Italian student?" can be formulated from "very unlikely" to "very likely."

The second theme of the survey concerns teaching. While international students will continue to fill out the questionnaires common to all students at the School, some questions may specifically capture their teaching experience as international students. Four questions seem relevant: "As an international student, I encountered difficulties with online classes...; please briefly explain," "As an international student, I encountered difficulties with in-person classes...; please briefly explain," "As an international student, I encountered had trouble relating to the material...; please briefly explain," and "As an international student, I encountered difficulties relating with my classmates...; please briefly explain," according to a five-point Likert scale from "strongly disagree" and "strongly agree" and a free text for each question.

The third theme of the survey is the support networks that international trainees can find upon arrival and during their doctoral journey. Using a matrix format, students will be asked to rate the level of support they receive from different social groups. An example of this question and format is provided below.

* How much support do you get from these social groups?
Note: Social support refers to people you have in your life who: listen and talk with you, help you with any difficulties, provide information, keep you company etc.

	Not at all	Just a little	Moderately	Quite a lot	Very much
Family in Italy	○	○	○	○	○
Family abroad	○	○	○	○	○
Co-nationals	○	○	○	○	○
Other international students from different cultures than mine	○	○	○	○	○
Italians	○	○	○	○	○
Other	○	○	○	○	○

The fourth and final theme of the survey is future job opportunities and career services, according to questions such as "what is your plan after completing the PhD?" with multiple choices ranging from "get a job in my own country," "get a job in another country," "get a job in Italy," "continue in higher education in my own country," "continue in higher education in another country," "continue in higher education in Italy," "undecided," to "other," with free-text response options. Regarding placement services, relevant questions are "How satisfied are you with the career and networking opportunities for international students provided by IMT?" and "How satisfied are you

with the Italian language courses offered by IMT?" with a five-point Likert scale from "very dissatisfied" to "very satisfied." The question, "I believe IMT provides adequate support for international students...; please briefly explain," involves a Likert scale of "strongly disagree" to "strongly agree" as an answer. As a concluding question, with a free text response, "Do you have any suggestions for improving the quality of support from IMT?"

In the Committee's opinion, a survey structured in the above manner - without prejudice to the final form it will take and how it will be implemented, to be agreed upon with the Committee - will make it possible not only to gather more information on the special needs of international students, thus contributing to improving the quality of their stay at the School, but also to provide useful indications, more generally, for internationalization strategies, with a view to a desirable increase in applications for admission to doctoral courses from quality international students. Surveys such as these will be useful in ascertaining whether the School currently has adequate material, administrative and teaching infrastructure to attract future foreign doctoral students and increase its international prestige.

VII - FRAMEWORK F: SUMMARY OF THE MAIN PROPOSALS IN THIS REPORT

Issue	Proposal	Target Audience
1) The results of some TEQs reach the Board too close to the end of the calendar year, and the data are not optimally structured for analysis	Improving the timing (possibly well in advance of the end of the AY) of data from all TEQs and efficiently structuring the data for conducting subsequent analysis (taking advantage, for example, of technological tutors, see V)	Prorector for Didactics and Information Services; Committee
2) Scarcity of information in the free-text sections of existing questionnaires and low level of response (especially for End of Year and PhD Program Evaluation Questionnaires)	Raising awareness of the importance of filling out the various types of questionnaires. To increase the response rate to TEQs, one could make it mandatory to answer the questionnaire to register for the course examination (see IV)	Doctoral Program Coordinators; Bodies and Committees responsible for Quality Assurance

3) New timing of the lengths of doctoral programs (three years) with reversal of the recent shift from three years to four and with substantial unchanged teaching load (see IV)	The Board is aware of the external contingencies that motivated the School to provide for the three-year duration of the various doctoral courses planned for the XXXVIII cycle. However, it noted that the number and amount of compulsory course hours appear to remain high despite the reduction in the overall duration of doctoral programs, with a foreseeable reduction in the breadth and quality of doctoral research outputs. The Board hopes that a broader discussion - further than the communication held in the School's governing bodies - will take place regarding the reasons for this important choice and that precise indications will be given on the modalities of the possible extension of the three-year doctoral fellowship to a possible fourth year	Scientific Board
4) Although the School was able to provide adequate accommodation for all students despite the shortage of rooms on the San Francesco Campus, the Board had to note a general discontent created in the student body, mainly due to the poor communication and criteria adopted by the School in managing the spaces.	Student representatives on the Board called several general meetings to understand the reasons for this discontent and mediate with the School administration. The reasons for this discontent have been presented to the School's administrative leadership. The Board would like better communication regarding the critical issues related to space.	School Administration; Spaces Committee

5) Delays in payment of Erasmus grants and doctoral grant increases during the research period abroad (visiting period). Specifically, delays in payment and the arrival of additional funds.	The Board has reported the problem to the Offices, suggesting that students should be informed in advance about the timing of payment and the reasons for any foreseeable delays so that students can properly plan their stay before leaving Italy. In addition, it is suggested that research funds could be used to advance the payment of these amounts, replenishing them later and that the administrative staff, which appears to be understaffed, could be increased or supplemented with external collaborators (see V).	School Administration; Committee
6) Understaffing of the School's administrative staff and lack of useful data regarding educational offerings and internationalization	Use technological tutors to assist administrative staff: in the management of Erasmus trips and research periods abroad (see V.2.2); in supporting international students, especially concerning the application procedure for residence permits; in verifying the fulfilment of criteria for the scheduling of teaching, processing the results of questionnaires administered to students and extracting data regarding international students (see VI.2.1).	School Administration
7) To encourage researchers' stays abroad and the school's international dimension, the Board proposed to the relevant offices to activate a series of agreements with language centers of major Tuscan universities. The offices promptly took action; however, there need to be more agreements with language centers deemed strategic (the agreement with the University for Foreigners of Siena is still being signed).	The Board recommends finalizing the activation of the agreement with the language center of Siena University for Foreigners.	School Administration

8) Additional measures to better understand the status of the School's international students and identify areas of support that could improve their needs.	The first recommendation is to increase the amount of data available on international student applications and admissions. The second recommendation is adding a "filter" to some existing questionnaires. In addition, the Board believes that there are specific problems of international students that are not currently discussed in the existing questionnaires (see VI).	School Administration

VIII - CONCLUSION

The Covid-19 emergency - effectively managed by the School according to the Board, as documented in the reports of the years 2020 and 2021 - entailed three critical issues for the School, which can somehow be considered as many aspects of "long academic Covid." From the point of view of educational offerings, the PNRR post-pandemic restart plan entailed new academic training opportunities, which on the one hand, made it possible to increase and differentiate the doctoral offerings that began to be implemented in the AY 2022-2023, and on the other hand, impacted the pre-existing doctoral offerings in terms of reduced doctoral duration timelines and consequently increased teaching load, leading to the critical issues reported in Section IV. On the service side, the return to normal campus life has necessitated the suspension of students' accommodation in single rooms and the reinstatement of their accommodation in double rooms, leading to the critical management issues reported in section V. Finally, concerning the School's international attractiveness, the pandemic may have accentuated a downward trend in the number of applications and admissions to the doctoral program of international students compared to Italian students already in place previously (with particular reference to the years after 2016), as documented in Section VI. Regarding the first item, a more detailed assessment of the new doctoral offerings and the critical issues related to them that the Board has preliminarily reported is deferred to the 2023 annual report. Regarding the second item, the School has implemented reasonable and consistent measures, and the resulting management difficulties depend solely on the complexity of the subject matter to which they relate. Regarding the third item, the degree of the School's international attractiveness over time and the specific services for international students that it provides to increase this attractiveness are part of a broader area of reflection, the importance of which the School has emphasized with the appointment of a new delegate for international policies. The Board generally expresses its satisfaction with the School's attention to the reported issues and looks forward to desirable and foreseeable positive future developments.

At the level of data analyzed, it is worth noting the difference in the time frame and nature of the data for some of the survey factors on which the Board based this report: while the individual course satisfaction questionnaires (see I, aa above) refer to the AY 2021-22, the Good Practice questionnaires (see supra I, ad) refer to the calendar year 2021 only; similarly, the data for the End of Year Questionnaires (ab) were made available to the Board in aggregate form, summing distinct course years, while distinguishing doctoral tracks, for greater assurance of the anonymity of the compilers; the same aggregation, for the same purpose, concerns the doctoral tracks of the PhD Program Evaluation Questionnaires (ac). Only sometimes, then, has the data for the individual

questionnaires covered in this report been made available to the Board according to the same type of classification and accuracy of analysis as in previous years. Given the low response rate of some of these questionnaires (see what is noted in [Section IV](#) about the End of Year Questionnaires in particular), a **comprehensive rethink** on measures to increase the effectiveness of this form of probing the opinions of students in terms of increasing the response rate, the completeness of the feedback provided, and the accuracy of analysis of the results may be useful. The consideration of the possible specific questionnaire for foreign students drafted by the Board in [Section VI](#) should be included in this perspective.

To ensure that students are given **immediate feedback** on the solicitations received, to implement **measures that will incentivize** them to appeal to the Board on matters within its competence, and to enable them to **become full participants** in the Quality Assurance processes, the Board hopes that this report, like those of past years, be made the subject of **public restitution**, open to the entire academic Community of the School, at a meeting, to be held in English in early 2023, to which all components of the School are invited, as an opportunity for exchange of views and further reflection on the issues addressed, and that the Practice of returning the Board's annual report continues to remain customary. This meeting may provide a useful first opportunity to **reiterate to the entire School Community the prerogatives, duties and importance of the Board within the** School's Quality Assurance system. To encourage as much participation as possible at this meeting and to facilitate communication within it, the Board requests the suspension of all other academic activities and the addition of a convivial moment at the end of the proceedings.

Lucca, December 22, 2022

The Joint Students and Teachers Board.