

# **JOINT STUDENTS AND TEACHERS BOARD: 2020 ANNUAL REPORT ON THE 2019-20 ACADEMIC YEAR**

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## I - INTRODUCTION

The Joint Students and Teachers Board (henceforth "Board") of the IMT School for Advanced Studies Lucca (henceforth "School") was **established**, under art. 2, paragraph 2, letter g) of Law 240/2010, by a Director's Decree on **November 7, 2018**. The Board acts as the primary internal evaluator of the educational activities and comprehensively monitors the Quality Assurance of the educational offering and student services. The Board is made up of three student members and three faculty members appointed by the Director. The Board took office on **March 6, 2019**. Student representation changed on **July 2, 2020**, upon the termination of office of the previous representatives (Sara Landi, Anna Pirri Valentini, Stella Simic, to whom the sincere gratitude of the Board for the excellent work done goes) from the institutional positions they held in the other governing bodies and committees of the School. The representatives of the Faculty have remained unchanged. At the time of the publication of this report, the Board consists of:

- **Student members:** [Livia Baldinelli](#) - Academic Senate student representative; [Erica Ordali](#) - Board of Governors' student representative; [Sedric Zucchiatti](#) - Assessment Board student representative.
- **Faculty members:** [Amos Bertolacci](#) - Full professor (as Chairman); [Irene Crimaldi](#) - Associate professor; [Massimo Riccaboni](#) - Full professor.

The composition and act of appointment of the Board are available on the IMT institutional website (<http://www.imtlucca.it/it/the-imt-school/governing-bodies-and-committees/commissione-paritetica-docenti-student>), where you can also find the 2019 Annual Report concerning the academic year 2018-19, its translation into English (by the PhD and Higher Education Office of the School, in the person of Chiara Magini, to whom the heartfelt gratitude of the Board goes), the guidelines governing the activities of the Board (which the Board helped prepare in 2020), and the calendar of ordinary sessions scheduled for the academic year 2020-21.

From a gender representation perspective, it is to be noted that the representation of women on the Board is equal in number to that of men.

### **Communications between students and the Board** took place through **four** principal **channels**.

- a) The Board had access to three types of satisfaction questionnaires administered to and completed by the students: questionnaires related to individual courses, administered to students of the XXXV cycle; questionnaires related to the entire doctoral program, administered to students who completed their doctoral program after August 2019; the Good Practice project questionnaires, relative to services provided by the School and sent to all IMT students regarding the year 2019.
- b) Student representatives on the Board held regular consultation meetings with the student body. Their capacity as student representatives on other governing bodies and committees of the School (Assessment Board, Board of Directors, Academic Senate) has facilitated their role as liaison between students and the Board.
- c) The Board was contacted directly via the email address: [commissione.paritetica@imtlucca.it](mailto:commissione.paritetica@imtlucca.it), as indicated on the above-mentioned page of the School's website, which students can freely use. The same email address was used for internal communication among Board members.
- d) Another communication channel has been added to the previous ones since this academic year: this is the public communication of the 2019 annual report, which took place on **May 8, 2020**, through a teleconference to which the entire School Community was invited. The discussion that followed the annual report presentation by the then student representatives on the Board was an opportunity for exchange and dialogue between students and Faculty on all the points the report had addressed.

In the calendar year 2020, the Board **met six times in ordinary session** (April 22; July 7; September 2; October 2; November 3; December 2) and **twice in extraordinary session** (September 17; October 9) in conjunction with the most critical moment of the Covid-19 emergency for the School. An additional meeting (December 16) served to fine-tune the work to draft this report. The higher concentration of meetings in the second half of the year was due, on the one hand, to an operational delay in organizing the communication of the 2019 annual report that should be reduced for the communication of this report in 2021, and on the other, to the Covid-19 emergency, which impacted on the work of the Board by delaying its regular course. The results of the six ordinary

and two extraordinary **convenings**, with the related agenda, were summarized in separate **minutes**, each submitted for approval by the Board at the following meeting. All sessions were held online. In addition to the above-mentioned meetings, the **conference** of May 8, **dedicated to communicating** and sharing **the results of the 2019 annual report** with the School Community, must be included. Members of the administrative staff of the School (Human Resources Office; PhD and Higher Education Office), whom the Board would like to thank for their collaboration, were invited to many of the sessions for appropriate consultations.

The major areas of focus of the Board were the same two already examined in the 2019 report, namely the educational offering and the student services. Regarding the educational offering, the Board, in addition to analytically examine the course satisfaction questionnaires, paid attention to various aspects of the relationship between students and Advisors, the thesis delivery and defense procedure, course scheduling, and the related sharing of the academic calendars. With regard to services, the timing of the reimbursement of mission expenses and mobility funds (50% increase in the scholarship and contribution for Erasmus mobility), the quality of the canteen, the effectiveness and extension of the coverage of the Wi-Fi network within the Campus, and the availability and adequacy of workstations were considered. In addition to education and services, the management of the Covid-19 emergency has become the main focus of attention for much of the Board's activity during 2020. The unexpected appearance of this important and urgent issue, the implications of which have affected the entire life of the School and its relationship with the local health and administrative authorities, has resulted in only a partial discussion of the third topic previously programmed as worthy of attention, namely the analysis of the access to information by students and the internal and external communication of the School. In this context, the Board has worked towards a first important improvement, namely the sharing of the calendars of all the XXXVI cycle courses with all interested students and Faculty.

The survey of these four areas and the related issues resulted in **seven communications addressed to the Quality Enhancement Committee** (henceforth "Committee") (April 25; July 8; September 19; October 10; October 12; October 14; November 23); all these communications concerned, on a greater or lesser extent, the management of the Covid-19 emergency, in progress or retrospectively. Due to the extreme urgency of some critical issues reported, some communications to the Committee were for immediate release to all the subjects of the School appointed to manage the Covid-19 emergency (Campus Management and Front Office; PhD and Higher Education Office; Prof. Marco Paggi as a representative of the Space Committee of the School; Administrative Director; Director) or sent in copy to these other subjects, for their information. Also, the Chairman of the Board had a **meeting** about the Covid-19 emergency with the above subjects on **October 15**, to fully explain the critical issues reported in the specific communications that, in October, followed one after the other. The content and outcomes of this meeting were emailed to the other members of the Board. The last communication in chronological order to the Committee was intended to clarify the role that the Board is called to play in emergencies such as that determined by Covid-19 and the opportunity of its direct interaction, in reporting critical issues and/or proposing solutions, with subjects of the School other than the Committee itself and the Assessment Board.

As already highlighted in the 2019 report, the **interaction and unity of purpose** between the student members and the Faculty members on the Board were in general extremely fruitful, as were the excellent communication and collaboration with the other Governing bodies and committees of the School that are responsible for quality assurance in education and research (Committee and Assessment Board, with the addition of the Operational Management Group) and, more generally, with the administration of the School. From this perspective of synergy, with specific reference to the Covid-19 emergency management and following the previously mentioned meeting of October 15, on November 9, the Board sent a thank-you letter to the participants in the meeting, expressing sincere appreciation for the promptness in taking on the requests and the effort from all the interested parties in striving to fulfill the recommendations. On November 12, the Director replied to the letter of the Board expressing his sincere gratitude for the Board's work. The acknowledgments of the Director were followed by those from Prof. Marco Paggi.

**This report** summarizes the activity of the Board in 2020 into **five main sections: II - Framework A:** Status Report: 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. **III - Framework B:** Report on the management of the Covid-19 emergency. **IV - Framework C:** Analysis and recommendations for the administration and use of the student

satisfaction questionnaires. **V - Framework D:** Analysis and proposals concerning other components of the educational activity. **VI - Framework E:** Analysis and recommendations for student services (Teaching Support, Residential, and Non-Residential Services). An additional critical factor, which had emerged from an assessment undertaken by the Board at its inception, namely the quality and effectiveness of the School's internal and external communication and expected for this report, was reviewed only partially for reasons of force majeure represented by the Covid-19 emergency. This element will hopefully be subject to the special attention of the Board's work during the 2020-21 academic year. Framework IV analytically reviews the teaching evaluation questionnaires of the individual courses for PhD cycle XXXV, considering the results of those courses that had ended at the time of drafting this report. Frameworks VI looks into the critical issues that stemmed from the 2019 Good Practice questionnaires, together with additional input that the Board received through other channels. The infrequent results of a third type of questionnaires, namely those administered to students at the end of their doctoral program (lasting three years up to cycle XXXV included), suggest deferring the analytical examination of this important additional source of students' opinion in the future when their administration and completion are more regimented and regular.

At a methodological level, it is worth emphasizing the time lag of some official data on which the Board based this report: while the questionnaires of the individual courses refer to the academic year 2019-20, the questionnaires on services refer to the calendar year 2019 only. The different timeframe of the two questionnaires had a significant impact on this report because the questionnaires on services currently available do not evaluate the management of the Covid-19 emergency, and, to account for it, the Board had to refer to personal remarks received from students at different times and in different ways.

## II - FRAMEWORK A: STATUS REPORT

Before moving on to analyze the specific problems related to 2020 in detail, it seems helpful and necessary to review the critical issues and the resulting recommendations that were presented in the 2019 report and reiterated during its communication, to have a complete picture of the present situation, the resolved issues and those to be dealt with.

### II.1) Course Evaluation

An important part of the work carried out by the Board lies in the analysis and processing of the students' responses to the evaluation questionnaires of each course. In 2019 this analysis detected some critical issues, schematically summarized in **Table 1**.

*Table 1: Critical issues concerning the teaching evaluation questionnaires emerged in the 2019 report.*

Detected issue	Status	Description
<b>Reduced sample number (general)</b>	--	Characteristic due to the very nature of the School, and therefore <b>not modifiable at the moment</b>
<b>Reduced sample number (specific)</b>	<i>In progress</i>	More uniform participation by all students can and must be promoted; proposals to encourage or make mandatory the compilation of questionnaires
<b>Limited relevance of some questions</b>	<i>Initiated – under review</i>	The process of reviewing and evaluating the questions constituting the questionnaire has begun, proposing the elimination and consequent modification of the most critical points to respect the underlying structure and allow a more effective student evaluation

## II.2) Teaching

Many of the critical issues related to teaching and highlighted in the 2019 report have already been resolved in the course of last year. Of the remaining, some issues have started to receive an adequate response, while others are still awaiting a solution. More information is given in **Table 2**.

*Table 2: Critical issues concerning teaching emerged in the 2019 report.*

<b>Detected issue</b>	<b>Status</b>	<b>Description</b>
<b>Flexibility of study plans (mandatory courses and maximum number of hours)</b>	<i>Resolved – evolving</i>	The study plans are flexible depending on the student profile; the maximum hours of compulsory courses have been reduced according to the needs of the relevant track
<b>Compilation of study plans</b>	<i>Resolved</i>	Online compilation via a new intranet service; in this manner, the study plan is immediately submitted to the PhD and Higher Education Office and can be modified without a specific deadline
<b>Early planning of educational activities</b>	<i>Resolved</i>	The full annual calendar of each track is available to students at the beginning of the academic year (approximately mid-November)
<b>Distribution of educational activities over the weeks</b>	<i>Evolving</i>	Courses for each subject have been planned and distributed in such a way as to maintain a good balance of hours per course on the same day, with some deviations highlighted in section V.5. There remain some specific issues concerning classes held by external lecturers, who stay in Lucca for only a few days, and a general question on the number of hours suitable for distance learning (see V.5 below).
<b>Exam overlapping</b>	<i>In progress</i>	For some courses, the improvement in course scheduling has resulted in a better distribution of the exams.
<b>Syllabi</b>	<i>Resolved</i>	Courses may present a syllabus with the recommended materials to be viewed before participation. This information is e-mailed to the students.
<b>Course attendance and maximum absence</b>	<i>Resolved</i>	Introduction of an "attendance log" that each lecturer fills in at the beginning of each lesson. This information is shared with the PhD and Higher Education Office, which compares the attendance logs to the students' study plans. However, there is still no fixed rule on the number of excused absences.
<b>Grading system</b>	<i>Resolved</i>	There is an agreement on the use of both the International Grading System and a competence assessment [A, B, C, D, E, F and pass with distinction, pass, fail], depending on the exam
<b>Procedures for retaking exams</b>	<i>Resolved</i>	The student agrees on a retake date with the lecturer. A course is not passed following two consecutive failures, and the Scientific Board evaluates the expulsion of the student on a case-by-case basis
<b>Exam deadlines</b>	<i>Unresolved</i>	The exam deadlines are still at the discretion of each lecturer, with different examination methods (oral presentation during one of the last lessons vs. written test after the end of the course), which affect the exam schedule accordingly
<b>Payments of Visiting Professors/external lecturers</b>	<i>Resolved</i>	Payments of the external lecturers, who held courses at the School, have been made following the communication of the exam records to the PhD and Higher Education Office

<b>Exam registration procedure</b>	<i>Unresolved</i>	There is currently no uniform exam registration procedure for students
<b>Validation of exams taken abroad or at other institutions</b>	<i>Unresolved</i>	Exams taken at other institutions do not show in the study plans unless students attended the course at institutions that share programs with the School (example: Sant'Anna School of Advanced Studies)

### II.3) Services

In the 2019 report, the Board also treated the evaluation of the services provided to students. The CEVS visit for accreditation in November 2019 reaffirmed the importance of this evaluation and highlighted some actions that should be undertaken for a further general improvement of the School and its student services. An analysis of the critical issues that emerged about the services offered by the School is shown in **Table 3**.

*Table 3: Critical issues concerning services emerged in the 2019 report.*

<b>Detected issue</b>	<b>Status</b>	<b>Description</b>
<b>Allocation of individual workstations</b>	<i>Initiated – in progress</i>	The plan for the assignment of individual workstations has been developed; the execution, however, was delayed by the need to make further changes due to the Covid emergency (fewer stations available to keep distance)
<b>IT Services (Wi-Fi)</b>	<i>In progress</i>	The Wi-Fi service is more stable than last year. However, coverage problems persist in some areas of the Campus
<b>Canteen</b>	<i>In progress</i>	The proposal of personalized menus is not feasible in the short term. Furthermore, the contract with the current service provider is expiring
<b>Erasmus funds and reimbursements to students</b>	<i>Initiated – in progress</i>	The timeframe for the disbursement of the Erasmus funds or the reimbursement of missions to students depends on external (request processing time by the bank, other bureaucratic issues related to the funds) and internal factors (number of applications to be managed at the same time, short-staffing of the office that handles refunds)

## **III - FRAMEWORK B: REPORT ON THE MANAGEMENT OF THE COVID-19 EMERGENCY. STRATEGIC PLAN, CRITICAL ISSUES, SOLUTIONS**

### III.1) Introduction

The Board wishes to express its heartfelt thanks to all those who managed and are managing the Covid-19 emergency at the School in this uncertain and hectic period. Appreciation is addressed primarily to the Administration of the School and extended to the Campus Management and Front Office, the Space Committee, and all the other parties involved. Above all, the promptness in dealing with the comments and the effort from all the interested parties in seeking a possible implementation of the many recommendations presented were appreciated.

The ongoing Covid-19 emergency was the first case of "extraordinary" work for the Board and the entire School, in a "stress test" phase for everyone, and a valuable opportunity to fine-tune the operating and response mechanisms to critical issues. The numerous measures put in place by the Board (extraordinary meetings; communications to the Committee and to the other subjects appointed to manage the emergency; dedicated encounters), referred to in point I) of this report, aimed at providing the fastest possible response to the issues raised by the students. They also had the beneficial consequence of testing the effectiveness and timeliness of the communications across the School, clarifying the remit of the Board and the number of institutional subjects the Board can interact with, in emergency situations.

The plans formulated by the School, the arisen critical issues or unexpected events, and the rapid solutions implemented, sometimes at the request of the Board, are illustrated below.

### III.2) Initial Strategic Plan

With the end of the summer vacations, the problem of managing the return of students to Campus and the resumption of the academic activities urgently arose. Notably, after the lockdown in March and April, most of the students had returned to their homes or their countries of origin, thus leaving their room at the San Francesco Campus virtually vacant. To ensure that the security measures were abided by on Campus, it was made sure that **each student resident on Campus** (about 20 people) **had a room for single use**, using the rooms that were vacant at that time.

In this first period, some **special Committees** were established for the management and design of solutions that would allow the School and its Campus to be fully operational while guaranteeing safety standards.

During the summer, when **planning the students' arrival** and to ensure maximum transparency and equal treatment to all, the School was required to comply with current legislation on distances, sanitation of spaces, and safety guarantees.

For this purpose, the School and the Administrative Management surveyed students to understand how many of them wanted to return to Campus at the end of the summer vacation and the extended lockdown period. It was, therefore, necessary to manage a **structural problem of the School** due to space availability: the Campus was designed to have 65 double rooms, which, in normal situations, were more than adequate to handle the number of housed students.

Having to adapt the premises to the safety guidelines for the prevention of the spread of the virus and wishing to guarantee the possibility to return to Campus to all students, without discrimination, the School has decided to assign each available room for single use (thus halving the number of available places) and compensate the shortage of rooms with additional space for student accommodation made temporarily available by the CRL Foundation or retrieved at other private facilities.

**These are the final numbers** that have made possible the actual return of the students, staggered between the end of August and the first weeks of September:

- Estimated number of students arriving (divided into different periods): 100 approx.
- Single rooms in the San Francesco Campus: 65
- Rooms at the San Micheletto Complex: 6
- Rooms in other hotels or residences: 15 (until January 31, 2021), which can be increased if necessary.

To further guarantee the safety of students and teachers, **serological tests** were arranged at a private analysis laboratory, which the newly arrived groups could, in turn, undergo free of charge upon arrival to check possible infectiousness. While waiting for the results (available on the same day), students were recommended to self-isolate, maintain maximum distance, and wear a mask across the School. The first serological testing session was scheduled for September 4th.

Then the Administration has been working to secure the **influenza vaccine** for all School members who wanted to use it.

**Preliminary guidelines** on the behavior to adopt in the event of a positive result in the serological test/swab or the appearance of typical symptoms of Covid-19 were also drafted.

**The resumption of teaching activities** was planned in blended mode, with the possibility of attending lectures, conferences, and seminars both in person, for those who were on campus, and online. For this purpose, the maximum number of people who could be present in each classroom was determined (14), and the classrooms were equipped with adequate technological support. During the summer, benefitting from the funds allocated by the MUR, the School acquired new technological tools (virtual whiteboards, software for online teaching) to introduce blended mode learning.

In relation to **workspace organization**, it was established to adapt the offices and study rooms available to guarantee a distance of at least 1.8 meters between individual student workstations, including possible spaces at the School's Library in Piazza San Ponziano.

To ensure further safety concerning arrivals and monitor the flow of people accessing the San Francesco Campus every day, the Space Committee resolved to **close all the entrances to the Campus, except the main one**. That would allow a check of the staff entering Campus every day for current symptoms (thanks to a thermo-

scanner placed at the entrance) and contacts with possible positive cases (thanks to an online form to be completed to access any School building different from that of origin).

Finally, the School made sure to **adapt the guidelines for the doctoral thesis delivery** and defense, considering the difficulties that had arisen for the students. For the same purpose, **support funds were allocated** to provide an extension (up to 5 months) of the PhD scholarship to XXXIII-cycle students.

### III.3) Emerged Critical Issues

Despite the measures introduced, unforeseen events and other unexpected situations have put the new implementations of the School to the test, revealing some critical issues.

**III.3.1) Quarantine for some students at the School.** Following the serological tests conducted (on September 4, 2020), some students tested positive, triggering the quarantine for them and their contacts inside the School for an estimated period of 14 days, with the consequent interruption of the arrivals of other students, at least until September 20, 2020.

On the evening of the serological test, the students subjected to isolation were reached by e-mail communications, which contained information about the services arranged to manage their situation (meal service, cleaning service). In the following days, the students were also given information about follow-up exams (nasopharyngeal swab) and other useful numbers and contacts to reach in case of symptoms, other problems, or psychological distress.

Despite the swiftness in their implementation, **some critical issues in the operation of these measures were initially observed, specifically concerning the delivery of meals** to students in quarantine and the information issued privately and separately to all those directly affected, increasing communications and growing the uncertainty of the students themselves. Problems were also encountered in the management of follow-up swabs and health procedures, but these critical issues are not due to the direct management of the School.

**III.3.2) Return of students from "at-risk" countries.** Once the quarantine was completed and the arrival process reopened, it was necessary to manage the return of students from other countries, especially if those had specific rules for entering Italy, as for Spain, Greece, Croatia, and Malta. As a matter of fact, according to Italian legislation, students from these countries should either have a nasopharyngeal swab performed 72 hours before arrival in Italy or within 48 hours following arrival. In this regard, the Tuscany region provided a free service at the Campo di Marte hospital.

Three of the six interested students were able to book and take the required swab in their countries, while this was not possible for the other three.

In this case, **the School asked the interested students to spend the quarantine required to obtain the swab result** outside the Campus, to return only after a negative outcome. However, **this communication proved to be tardy compared to the students' arrival plans** (in one case with a gap of only one day) and caused uncertainty about the management of individual situations and organizational problems to the interested parties, who were informed with a few days' notice they would have to find alternative accommodation for an unspecified number of days.

In this regard, there was the additional problem of managing the arrival of students from countries that had different recommendations for compliance than those mentioned above.

**III.3.3) Access to Campus from doors other than the main one.** Although the measure established by the specific Committee regarding the closure of the doors is useful and necessary to monitor the flow of people who enter and exit the San Francesco Complex every day, **it is not practical for students who reside on Campus.** These find themselves having to re-enter the main door every time, even for small movements within the premises.

### III.4) Solutions and adjustments

The solutions to the critical issues outlined above were quickly put into practice, adjusting the plans to almost all the problems that arose as they happened.

First of all, a **"Covid Manager" was established**, namely a person in charge of filtering and managing all requests or problems reported by students in this regard. The specific Committees, which were established in March to deal with the School's structural difficulties, were confirmed and have continued their activity of

functional change. Besides, **new and more definite guidelines** on the behavior to adopt in the event of positive serological tests/swabs and in general at the School were drafted.

A **request** to the North West Tuscany Local Health Authority for the administration **of influenza vaccines** to the entire School Community was **formalized**. Unfortunately, however, at present, it has not yet been possible to administer the flu vaccine as initially planned due to its scarce availability at the national level.

The **meal problem** was immediately resolved by the students, who took it upon themselves to bring the meals to their classmates in isolation. There have been no more quarantines involving large numbers of students, but single sporadic cases that students have handled directly. In any case, **it was planned to add a unit to the canteen personnel, in case this happens again**, to avoid students' exposure to the risk of contagion during meal distribution and the interference of this voluntary service with their academic schedule.

The international students, who were asked to observe a quarantine outside the School while waiting for the swab result, were **provided accommodation** at a private facility (hotel) the School had stipulated an agreement with until January 31, 2021. This accommodation (entirely paid for by the School) remained available to the students during the time necessary to obtain the results. Furthermore, quarantined students could **claim the reimbursement for their take-away meals**, up to a maximum of €30 per day. Once they received the swab result, the students could return to their assigned room on Campus and then took (like the rest of the students) the serological test sponsored by the School.

**International students from other countries received an informative email about the actions to be taken** (nasal-pharyngeal swabs, quarantine outside the Campus, other requests according to the current regulations).

The **workstations** for students and researchers **were surveyed** by the student representatives in the Space Committee, kicking off the process of adjusting the number of desks available in the various buildings (San Francesco and Library). The rationale for the assignment of desks, which is still in progress, considered the presence or absence of a desk in each student room and other specific needs **to ensure that everyone could use an adequate workstation**.

The procedure to access the Campus **has not changed**.

The **deadlines for the delivery of the final thesis and other related time limits have been eliminated** to help all students reach this goal regardless of the hardship they face. Thesis defense sessions will be scheduled based on the demands.

A Supporting Fellowship (a 5-month scholarship extension) **was awarded to all students** (not receiving a Frontier Proposal Fellowship) **who applied for it**.

#### **IV - FRAMEWORK C: ANALYSIS AND RECOMMENDATIONS FOR THE ADMINISTRATION AND USE OF THE STUDENT SATISFACTION QUESTIONNAIRES**

Within the Quality Assurance System, the survey of the students' opinions and their satisfaction with the individual courses offered by the School plays the dual role of reviewing the effectiveness of each class, opposed to the educational objectives of the doctoral program, and allowing the continuous improvement of the educational offering.

At present, the survey of student opinions is conducted for each course offered by the School through the administration of an anonymous online questionnaire. This questionnaire is sent to each student having the specific subject in their study plan; it includes multiple-choice questions with a rating scale articulated on five levels (strongly agree, agree, neutral, disagree, strongly disagree) and open questions. The structure of the teaching evaluation questionnaire is illustrated in **Table 4**.

Some courses comprise several modules, each taught by a different lecturer. That is relevant because, in the evaluation questionnaire, the questions that refer exclusively to the lecturer (Q7 - Q10) are repeated for each module of the course and receive a higher number of responses.

Before proceeding with the analysis of the teaching evaluation questionnaires of the School, it is important to recall some methodological considerations.

First, the analysis is based on data relating to the last three doctoral cycles, from the XXXIII to the XXXV cycle. This decision is motivated by considerations about the comparability of the data. XXXIII, XXXIV, and XXXV cycle students were administered the same teaching evaluation questionnaire. Adopting the same questionnaire allows the comparative trend analysis of the quality of teaching perceived by students of different cycles and the detection of possible changes that are taking place because potential confounding factors associated with variations of the questionnaire are absent. Concerning the XXXV cycle, it should also be noted that it was not possible to analyze the data for all the planned courses because some of them were postponed due to the Covid-19 health emergency, and their specific questionnaires are currently not yet available. Although the analysis of the XXXV cycle is partial, the data available allow to indicatively highlight the evolution of the students' perception of the quality of teaching in any case. For this reason, we have decided to summarize the partial results in this report to ensure timely feedback to the Governing Bodies and committees of the School and support the continuous improvement of the quality of teaching. We reserve the right to communicate the complete results of the analysis in the next report.

**Table 4: Structure of the teaching evaluation questionnaire.**

<b>NO.</b>	<b>QUESTION TEXT</b>	<b>RESPONSE TYPE</b>	<b>SCOPE</b>
Q1	The course was intellectually stimulating	Multiple choice	Course
Q2	The official schedule of lessons was respected	Multiple choice	Course - Teaching
Q3	The course was relevant and useful for my research project	Multiple choice	Course
Q4	The course was well organized	Multiple choice	Course
Q5	The assigned work was reasonable	Multiple choice	Course
Q6	The examination method was appropriate	Multiple choice	Course
Q7	The lecturer clearly explained the educational objectives, responsibilities, and requirements of this course	Multiple choice	Teaching
Q8	The lecturer clearly explained the arguments of the course	Multiple choice	Teaching
Q9	The lecturer was well organized and prepared for the class	Multiple choice	Teaching
Q10	The lecturer was available for information and clarification outside of regular class time	Multiple choice	Teaching
Q11	What aspects of the course or the instructor's approach contributed most to your learning?	Open	Course - Teaching
Q12	In which ways you benefited the most for your research project?	Open	Course - Teaching
Q13	What aspects of the course or the lecturer's approach would you change to improve the learning that takes place in the course?	Open	Course - Teaching
Q14	Other Suggestions?	Open	Course - Teaching

Secondly, it is worth noting that many of the courses offered by the School are available for selection in the study plans of students from different tracks. This undermines the ability to adequately review the assessment of

teaching by the doctoral program (CCS, SS) and track (AMCH, CCSN, CSSE, ENBA) because no data is available on the actual composition of the classes as the questionnaires are anonymous. Considering the analyses by program and track of particular importance, the Board has decided to achieve them by associating each course with one track and, consequently, with one doctoral program. The association was made according to the following criteria: (i) consistency between cycles: if a course is associated with a track for a given cycle, the association also applies to the other PhD cycles and (ii) a course available to different tracks affiliates with the lecturer's track/area.

Thirdly, the Board decided not to include seminars and presentations of the student research activities in the analysis (on the contrary, long seminars without exams were included). The Board believes that the teaching evaluation questionnaire is not appropriate to evaluate these activities, especially concerning the evaluation of the quality of teaching. Furthermore, courses exclusively attended by external students were not included in the analysis. The Board believes that the survey of the students' opinions and satisfaction with the doctoral programs of the School or, at least, the resulting conclusions should be based on the evaluations provided by the students enrolled in the School's programs. As already mentioned, one of the main objectives of the survey consists of reviewing the effectiveness of the individual courses compared to the educational objectives of the PhD course they pertain to; this review must necessarily be based on the contextual opinions provided by the students about the School's doctoral programs.

Concerning this third point and in anticipation of a progressive expansion of the educational offering and the participation in doctoral courses by students from other training programs, the Board wishes to introduce a questionnaire specifically designed for surveying student opinions about seminars or advanced seminars and procedures for administering the evaluation questionnaire designed to allow the distinction between responses provided by the students of the School and external students.

From the analysis carried out applying the above criteria, it appears that, during the last three doctoral cycles, the School has offered 248 courses (325 modules), of which 72 (100) in the XXXIII doctoral cycle, 85 (113) in the XXXIV and 91 (112) in the XXXV cycle. There are 11 more courses planned for the XXXV cycle for which evaluations are not yet available, nine of which from the CSS doctorate (five from the AMCH track and four from the CCSN track). Furthermore, we can observe that over time the ENBA track is the one that offers more courses: in the XXXV cycle, 30 of the 91 courses provided (almost 33%) are associated with the ENBA track. With the only exception of CCSN and, albeit to a lesser extent, CSSE, the presence of courses characterized by multiple modules is not particularly frequent, as can be seen by comparing the number of courses offered and the corresponding number of modules. The values for each track/program and cycle combination are shown in **Table 5**.

**Table 5: Number of courses offered, modules offered, and courses whose assessments are not available by track/program and cycle.**

Track	XXXIII			XXXIV			XXXV		
	Courses	Modules	N/A	Courses	Modules	N/A	Courses	Modules	N/A
AMCH	17	22	0	17	21	0	23	23	5
CCSN	13	21	0	18	29	1	20	30	4
CSS	30	43	0	35	50	1	43	53	9
CSSE	16	25	0	18	28	0	18	25	2
ENBA	26	32	0	32	35	0	30	34	0
SS	42	57	0	50	63	0	48	59	2
<b>Total</b>	<b>72</b>	<b>100</b>	<b>0</b>	<b>85</b>	<b>113</b>	<b>1</b>	<b>91</b>	<b>112</b>	<b>11</b>

To evaluate the courses offered, the School sent out 1,950 questionnaires, of which 625 refer to cycle XXXIII, 599 to cycle XXXIV, and 726 to cycle XXXV. However, out of 1,950 questionnaires administered, only 1,199 responses were received, with an average response rate for cycles XXXIII-XXXV equal to 61.5%. The response rate significantly increased in the XXXIV cycle (65.1%) compared to the XXXIII (51.9%), while in the XXXV (65.1%), it was

substantially steady compared to the previous cycle. It is worth emphasizing that, based on the examined cycles, there is a divergence between the response rates of the two doctoral programs. If the data relating to the XXXIII cycle suggest comparable response rates between the two programs (CSS: 51.5%, SS: 52.2%), the same does not seem to apply to the next two cycles in which the response rate for the CSS program first changes to 71.1% and then to 79.4%, while the corresponding figures for the SS program are 65.0% and 54.9%. Finally, it should be noted that the significant increase in the response rate for the CSS program is substantially driven by an increment in the response rate for the AMCH track, which went from 44.1% in the XXXIII cycle to 90.2% in the XXXV cycle. On the other hand, for the other tracks, no particularly significant trend changes are observed. More information is provided in **Table 6**.

The observed response rates may, however, underestimate actual student participation rates. The teaching evaluation questionnaire is sent to all students who have a specific course in their study plan without checking class attendance. Therefore, when study plans are not promptly updated or students suspend course participation for certified reasons, some of the questionnaires may have been administered to students who have not attended the course. In this case, then, the non-response is the result of a difference between the activity indicated in the study plan and that actually completed but not yet included in a study plan update. However, this factor does not fully explain the low student participation rate in evaluating teaching. Therefore, the Board hopes that measures to significantly increase student participation in the teaching evaluation process will be taken. As already indicated in the previous report, the Board also considers it appropriate to combine the use of questionnaires with other tools for surveying opinions on an aggregate basis, increasing the use of free-text questions compared to quantitative surveys.

**Table 6: Number of questionnaires sent, responses obtained, and response rates for track/program and cycle.**

Track	XXXIII			XXXIV			XXXV		
	Sent	Responses	Response Rate	Sent	Responses	Response Rate	Sent	Responses	Response Rate
AMCH	163	72	44.1%	141	104	73.8%	147	131	90.2%
CCSN	143	88	61.1%	139	89	69.6%	129	88	67.9%
CSS	306	160	51.5%	280	193	71.7%	276	219	79.4%
CSSE	112	67	58.8%	124	91	75.5%	224	139	66.0%
ENBA	207	95	48.2%	195	120	58.9%	226	115	49.0%
SS	319	162	52.2%	319	211	65.0%	457	261	54.9%
<b>Total</b>	<b>625</b>	<b>322</b>	<b>51.9%</b>	<b>599</b>	<b>404</b>	<b>67.7%</b>	<b>726</b>	<b>473</b>	<b>65.1%</b>

The average number of questionnaires sent per course was 8.7, 7.2, and 9.2 respectively for the XXXIII, XXXIV, and XXXV cycles, while the average number of responses received by the questionnaires went from 4.5 to 4.8 and, finally, to 6.0. When distributing these data by doctoral program or track (as reported in **Table 7**), no particular trends are observed. It is worth highlighting the data relating to the CSSE track for the XXXV cycle, which is notably influenced by the presence of the *Model Predictive Control* course for which 101 evaluation questionnaires, receiving 50 responses, were sent. However, it is important to stress that the differences between cycles or doctoral programs/tracks in the response rates and the teaching evaluation cannot be considered statistically significant.

The analysis of course distribution by the number of questionnaires sent (**Table 8**) and the number of responses received (**Table 9**) shows how on average, in the last three cycles, nine questionnaires or fewer were administered for about 80% of the courses, while more than 50% of the courses received no more than four responses.

**Table 7: Average number of questionnaires sent and responses received by track/program and cycle (standard deviation in parenthesis).**

Track	XXXIII		XXXIV		XXXV	
	Average Sent	Average Responses	Average Sent	Average Responses	Average Sent	Average Responses
AMCH	9.6 (2.2)	4.2 (2.7)	8.3 (0.8)	6.1 (1.5)	8.6 (2.0)	7.7 (1.4)
CCSN	11.0 (6.4)	6.8 (3.8)	8.2 (5.5)	5.2 (2.7)	8.1 (3.8)	5.5 (3.4)
CCS	10.2 (4.5)	5.3 (3.4)	8.2 (3.9)	5.7 (2.2)	8.4 (3.0)	6.6 (2.8)
CSSE	7.0 (6.5)	4.2 (4.5)	6.9 (9.1)	5.1 (7.4)	14.0 (24.8)	8.7 (13.2)
ENBA	8.0 (5.5)	3.7 (2.4)	6.3 (3.4)	3.8 (2.8)	7.5 (5.2)	3.8 (3.8)
SS	7.6 (5.8)	3.9 (3.3)	6.5 (6.0)	4.2 (5.0)	9.8 (15.2)	5.5 (8.5)
<b>Total</b>	<b>8.7</b> <b>(5.4)</b>	<b>4.5</b> <b>(3.4)</b>	<b>7.2</b> <b>(5.3)</b>	<b>4.8</b> <b>(4.1)</b>	<b>9.2</b> <b>(11.7)</b>	<b>6.0</b> <b>(6.7)</b>

The number of questionnaires sent is an indicator of the number of students per class under the assumption that the students' study plans are regularly updated. In this sense, about 75% of courses are attended by eight or fewer students (nine or fewer in the XXXIII cycle), and micro-classes, consisting of three or fewer students, represent more than 10% of courses, as much as 23.8% in the XXXIV cycle.

In this regard, the small number of students per class and, consequently, of completed questionnaires is crucial not only in terms of statistical significance but also of reliability of the responses provided. The number of students attending some courses is so low that it may compromise their anonymity and produce a distortion in surveying the quality of teaching perception. There is an additional distortion factor in the case of micro-classes because they usually include students who select the course based on their research and study path and who, therefore, are often supervised by the course lecturer.

The data on course distribution by the number of responses received, as reported in **Table 9**, show that over 50% (90%) of the ratings are based on four (eight) or fewer responses on average. These data further highlight how the results obtained should be considered with due caution, given the impossibility of obtaining statistically significant analyses.

**Table 8: Number of courses and related cumulative distribution by the number of questionnaires sent for cycles XXXIII-XXXV.**

Questionnaires Sent	XXXIII		XXXIV		XXXV	
	Course Count	Cumulative Distribution	Course Count	Cumulative Distribution	Course Count	Cumulative Distribution
1	2	2.8%	3	3.6%	1	1.3%
2	4	8.4%	5	9.5%	2	3.8%
3	4	14.0%	12	23.8%	4	8.9%
4	6	22.3%	4	28.6%	5	15.2%
5	6	30.6%	6	35.7%	11	29.1%
6	1	32.0%	4	40.5%	7	38.0%
7	8	43.1%	8	50.0%	4	43.0%

8	3	47.3%	21	75.0%	26	75.9%
9	22	77.9%	6	82.1%	6	83.5%
10+	16	100.0%	15	100.0%	13	100.0%
<b>Total</b>	<b>72</b>	<b>-</b>	<b>84</b>	<b>-</b>	<b>79</b>	<b>-</b>

**Table 9: Number of courses and related cumulative distribution by the number of responses received for cycles XXXIII-XXXV.**

Responses Received	XXXIII		XXXIV		XXXV	
	Course Count	Cumulative Distribution	Course Count	Cumulative Distribution	Course Count	Cumulative Distribution
0	5	6.94%	1	1.19%	2	2.53%
1	9	19.44%	8	10.71%	3	6.33%
2	10	33.33%	14	27.38%	8	16.46%
3	6	41.67%	11	40.48%	13	32.91%
4	9	54.17%	10	52.38%	16	53.16%
5	11	69.44%	13	67.86%	8	63.29%
6	7	79.17%	6	75.00%	3	67.09%
7	7	88.89%	12	89.29%	9	78.48%
8	2	91.67%	3	92.86%	11	92.41%
9	1	93.06%	3	96.43%	1	93.67%
10+	5	100.00%	3	100.00%	5	100.00%
<b>Total</b>	<b>72</b>	<b>-</b>	<b>84</b>	<b>-</b>	<b>79</b>	<b>-</b>

The analysis of the responses to the teaching evaluation questionnaires by the students of the XXXIII-XXXV cycles focuses on the multiple-choice questions Q1-Q10. As already mentioned, these questions have five possible answers: strongly agree, agree, neutral, disagree, strongly disagree. The ratings provided by the students were aggregated at the doctoral track/program level for each cycle and were used to calculate a satisfaction rate indicator to produce summary results. This indicator is 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 from 0 to 1, and finally multiplied by 100 to obtain a satisfaction rate. The values thus obtained for each response and each cycle and doctoral track/program combination are shown in **Table 10**. **Figure 1** graphically illustrates the average ratings for each track.

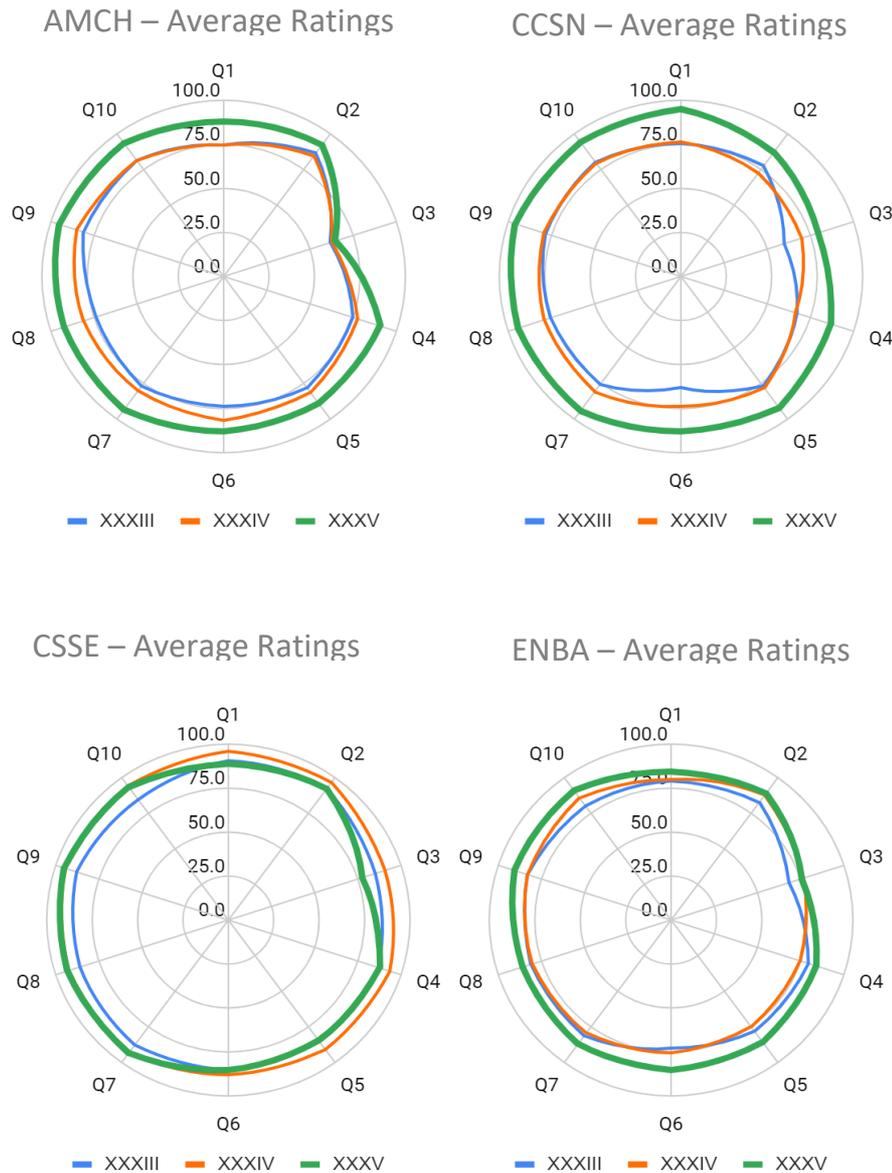
Both the AMCH and CCSN tracks show a notable increase in satisfaction in the XXXV doctoral cycle, while ENBA and CSSE recorded a substantially constant rating in the three cycles examined. This realigns the overall assessment of the two doctoral programs of the School as the SS program received a higher rating than the CSS in the two previous cycles. In any case, it should be noted that the average ratings, along with those of individual questions for each track and doctoral program in the different cycles, are very positive (generally over 75%). Yet it must also be pointed out that question Q3, "The course was relevant and useful for my research project", consistently receives a lower rating from students. The reasons for this deviation can be manifold. For example, at the time of the course evaluation, some students (especially those affiliated with the PhD in System Science) have not yet identified their research project. In this case, it is possible that these students, not knowing how to answer the question and not having the possibility not to answer this question, select a "neutral" rating. Furthermore, the Board believes that question Q3, as is, is ambiguous when referring to the quality of teaching. Due to its multidisciplinary approach, the School offers both highly-specialized courses and basic courses necessary to create collective knowledge among students from different disciplines. These basic courses may not be entirely in line with the

development of the students' specific research projects, but they should not, therefore, be evaluated less positively. For this reason, the Board has already taken steps to suggest a reframing of question Q3 attentive to the diverse goals of the courses offered by the School (as illustrated in section V.3 of this report).

For educational planning purposes, it is of particular interest to investigate whether there is a significant difference in the evaluation of teaching between compulsory and elective courses. More specifically, mandatory courses may be penalized in their evaluation compared to elective courses because (i) the latter are intentionally chosen by students and (ii) if an elective class is not of their interest, students can, in general, change their study plan by removing it. In brief, there seems to be a (positive) bias in the evaluation of elective courses due to a self-selection effect by students.

**Table 10: Average and total ratings per question divided by doctoral track/program and cycle.**

Cycle	Track	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Total
XXXXIII	AMCH	74.68	86.48	62.10	74.80	78.13	74.02	76.33	73.74	81.05	81.64	<b>76.30</b>
	CCSN	75.09	77.72	60.03	67.34	76.63	63.30	75.75	75.30	78.71	80.27	<b>73.01</b>
	CCS	74.88	82.26	61.10	71.21	77.41	68.86	76.02	74.56	79.82	80.92	<b>74.70</b>
	CSSE	90.86	92.60	85.01	86.80	85.20	85.34	87.43	86.30	88.18	84.55	<b>87.23</b>
	ENBA	79.01	82.80	68.47	79.64	78.40	72.99	81.62	80.96	82.95	80.61	<b>78.74</b>
	SS	83.75	86.72	75.09	82.50	81.12	77.93	84.41	83.53	85.46	82.50	<b>82.30</b>
	<b>Total</b>	<b>80.17</b>	<b>84.92</b>	<b>69.45</b>	<b>77.95</b>	<b>79.62</b>	<b>74.27</b>	<b>80.77</b>	<b>79.63</b>	<b>83.01</b>	<b>81.82</b>	<b>79.16</b>
XXXXIV	AMCH	74.98	84.73	62.28	77.38	81.01	81.33	80.30	81.67	84.88	81.00	<b>79.96</b>
	CCSN	76.58	72.51	69.78	66.68	78.02	74.05	80.81	78.96	79.29	79.56	<b>75.63</b>
	CCS	75.78	78.62	66.03	72.03	79.52	77.69	80.59	80.12	81.69	80.18	<b>77.23</b>
	CSSE	95.86	96.52	90.75	93.55	90.78	88.17	93.73	92.35	94.41	94.14	<b>93.03</b>
	ENBA	80.05	87.83	76.51	74.50	74.83	75.46	79.51	80.51	82.71	85.97	<b>79.79</b>
	SS	85.86	91.02	81.74	81.50	80.69	80.13	85.93	85.86	87.99	89.66	<b>85.04</b>
	<b>Total</b>	<b>81.73</b>	<b>85.94</b>	<b>75.31</b>	<b>77.62</b>	<b>80.21</b>	<b>79.13</b>	<b>83.58</b>	<b>83.33</b>	<b>85.21</b>	<b>85.47</b>	<b>81.75</b>
XXXXV	AMCH	87.88	92.59	64.77	90.22	88.93	87.97	93.12	92.80	95.16	93.27	<b>88.67</b>
	CCSN	95.14	87.01	79.06	86.77	91.78	87.66	94.33	94.01	95.85	94.10	<b>90.57</b>
	CCS	91.40	89.89	71.70	88.54	90.31	87.82	93.76	93.44	95.52	93.72	<b>89.61</b>
	CSSE	88.41	92.45	77.91	87.39	84.82	85.19	93.72	93.29	95.28	93.22	<b>89.17</b>
	ENBA	84.90	89.00	76.52	84.84	86.40	85.55	87.84	85.89	91.16	91.69	<b>86.38</b>
	SS	85.46	90.40	76.71	85.24	85.62	85.12	89.57	88.41	92.26	92.06	<b>87.38</b>
	<b>Total</b>	<b>87.97</b>	<b>90.18</b>	<b>74.59</b>	<b>86.64</b>	<b>87.60</b>	<b>86.26</b>	<b>91.26</b>	<b>90.44</b>	<b>93.58</b>	<b>92.72</b>	<b>88.31</b>
<b>Grand Total</b>	<b>83.41</b>	<b>87.09</b>	<b>73.34</b>	<b>80.80</b>	<b>82.57</b>	<b>80.14</b>	<b>85.03</b>	<b>84.33</b>	<b>87.07</b>	<b>86.51</b>	<b>83.07</b>	



**Figure 1: Radar chart showing the average of the ratings provided to questions Q1-Q10 for each track (cycles XXXIII-XXXV).**

To test this hypothesis, the average rating of required and elective courses for the XXXV cycle was analyzed. The analysis was not extended to previous cycles due to data availability, although in last year's report, we treated the subject at length through other means. **Table 11** shows the number of compulsory and elective courses for which an assessment is available, divided by track. There are significant differences between tracks as to the number of mandatory and elective courses: at one end, for the AMCH track, 15 out of 17 classes appear to be required, while

at the opposite end, for the CSSE track, all courses are elective. Instead, for both the CCSN and the ENBA track, the ratio between required and elective courses is around 4/10.

**Table 11: Number of compulsory and elective courses per track (XXXV cycle).**

Track	Compulsory Courses	Elective Courses	Total
AMCH	15	2	<b>17</b>
CCSN	5	11	<b>16</b>
CSSE	-	15	<b>15</b>
ENBA	8	21	<b>29</b>
<b>Total</b>	<b>28</b>	<b>49</b>	<b>77</b>

Given the small number of compulsory courses in the CCSN, CSSE, and ENBA tracks and the small number of electives in the AMCH, it was determined to continue with the analysis without distinction between tracks, although the results achieved by maintaining this distinction are qualitatively similar. **Table 12** shows the total average ratings and those for each multiple-choice question of the questionnaire for compulsory and elective courses in the XXXV cycle. No statistically significant differences were observed in the overall assessment of mandatory and elective courses. Similarly, no significant differences are observed in the individual questions, with the only exception of question Q3, with an average rating concerning compulsory courses nearly ten percentage points lower than the one concerning electives, and question Q5 on workloads with a difference of approximately six percentage points.

**Table 12: Average ratings (standard deviation) divided by compulsory courses and electives (XXXV cycle).**

Course Type	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Total
Compulsory Courses	86.7 (15.1)	90.1 (12.8)	69.8 (16.1)	87.6 (13.0)	83.7 (14.1)	83.0 (13.6)	90.4 (11.6)	89.5 (10.3)	94.3 (6.1)	92.0 (9.0)	<b>87.6</b> <b>(10.0)</b>
Elective Courses	89.3 (9.2)	90.0 (12.4)	77.6 (13.8)	86.5 (11.1)	90.1 (9.3)	88.4 (10.6)	92.2 (8.2)	91.2 (10.4)	93.6 (7.7)	93.3 (7.2)	<b>89.3</b> <b>(5.9)</b>
<b>Total</b>	<b>88.4</b> <b>(11.7)</b>	<b>90.1</b> <b>(12.5)</b>	<b>74.7</b> <b>(15.1)</b>	<b>86.9</b> <b>(11.8)</b>	<b>87.8</b> <b>(11.6)</b>	<b>86.5</b> <b>(12.0)</b>	<b>91.5</b> <b>(9.5)</b>	<b>90.6</b> <b>(10.3)</b>	<b>93.8</b> <b>(7.1)</b>	<b>92.8</b> <b>(7.9)</b>	<b>88.7</b> <b>(7.7)</b>

**In conclusion**, the **average rating** of the educational offering of the School is **growing steadily**. In particular, in the XXXV cycle, there was a **substantial alignment of the evaluation across doctoral programs and tracks**, without any statistically significant differences. The constant growth of the rating testifies to the effectiveness of the quality assessment mechanisms put in place by the School to promote a continuous improvement of the academic offer. However, we should note that these positive considerations cannot extend to the **questionnaire response rate**, the average levels of which **remain far too low**. It is, therefore, necessary to act promptly to improve the response rate as early as the XXXVI cycle, by increasing awareness among students of the importance of their opinions in the quality assessment process.

To this end, **the Board recommends the following actions:**

- Promptly update study plans** to avoid sending the questionnaire to students who do not attend a course;
- Introduce **the option of not answering specific questions of the questionnaire**, thus allowing students, who do not wish to offer an opinion on specific elements of a course, not to comment, such as for students who have not yet developed a thesis project in the case of question Q3, according to its current formulation (see the

proposed modification of question Q3 indicated in section V.3 of this report). **The option of not responding can extend to all the questions in the survey**, to protect the right of each student to not answer the whole questionnaire.

c) where applicable, **communicate the exam results only after students have completed their questionnaire**. Overall, students will still be guaranteed the option not to respond (point b), obtaining an overall increase in the response rate thanks to the actions at points a) and c).

In anticipation of the gradual expansion of the educational offering and doctoral program participation, the Board also hopes that **separate questionnaires** will be adopted **to survey student opinions for seminars and laboratory activities**. Furthermore, in the opinion of the Board, **the use of different questionnaires for specific educational programs** (Masters, other PhD programs in collaboration with other schools and universities) is especially significant because of an expected future increase in participation in the courses offered by the School by students not enrolled in the CSS and SS doctoral programs.

Finally, it should be noted that **the Board could not diversify the analysis of the quality of instruction according to the teaching and learning methods (distance, in person, blended)**, not being able to compare the appreciation of the same course offered in different modes. **Another valuable** factor to better analyze course effectiveness and student appreciation is the **distinction between classes held by the School's faculty and those taught by external lecturers**, which the Board will examine in the next annual report. In the next report, we also believe we will be able to conduct a detailed analysis of the impact of Covid-19 on the School's educational offering and assess the consequent actions.

## V - FRAMEWORK D: ANALYSIS AND PROPOSALS CONCERNING OTHER COMPONENTS OF THE EDUCATIONAL ACTIVITY

V.1) Aspects of the relationship between student and Advisor

**Advisor change procedure** - At the request of the Board and following its communication to the Committee on April 25, 2020, two critical issues related to the PhD Regulations were discussed during the Scientific Board meeting of June 25, 2020, about the relationship between student and Advisor. The PhD Regulations established that each student would be assigned an Advisor at the beginning of the doctoral program and could replace the appointed lecturer upon admission to the second year. The practice wanted the student to express their will to change Advisor or Co-Advisor by sending a request to the administrative offices together with the former Advisor or Co-Advisor, who had to give their approval. Believing that students should have full freedom to indicate the lecturer with whom to carry out their work, without concern toward the previously indicated or assigned Advisor or Co-Advisor, the Board requested to remove the approval of the former Advisor or Co-Advisor from the procedure under consideration. In doing so, students must address the request only to the lecturer who is to be appointed as the new Advisor (or Co-Advisor), while the responsible administrative office will have the duty of notifying the transition to the former Advisor (or Co-Advisor).

The Scientific Board, therefore, resolved to change the form currently in use by removing the signature, and consequently the approval, of the previously assigned or indicated Advisor (or Co-Advisor). Based on this modification, once they receive the approval from the new Advisor (or Co-Advisor), students will notify the offices that will promptly notify the former Advisor (or Co-Advisor). When only changing Co-Advisor, while maintaining the same Advisor, students will agree with the latter on the choice and, with their approval, they will proceed as indicated above, communicating to the offices that will notify the interested parties.

**Contact person in case of difficulties** - The Board also mentioned the need to identify someone at the School that students can reach in case of problems with the Advisor and suggested the Track Director and/or the Board itself.

The Scientific Board suggested identifying the Program Coordinators as the contact persons whom students can reach in the event of problems with the Advisor and who may be assisted by the Track Directors, if necessary. If the Track Director is also supervising the student, they may contact the Director.

**Availability of the Advisor** - In its communication of April 25, the Board brought to the attention of the Committee the difficulty, perceived by some students, of getting and maintaining constant contact with their Advisor, with the hope that the situation would be monitored and the necessary actions to solve the problem implemented.

#### V.2) Thesis delivery and defense procedure

On November 12, 2020, the administrative offices sent to the School's faculty (and through them to the students) a document concerning the new procedure for thesis delivery and discussion approved during the session of the Scientific Board of October 23, 2020, revised to include the recommendations received at that time. The student representatives in the Governing Bodies, to which the new procedure was presented, found it acceptable. The Board helped refine the document, at the email request of the Delegate for Didactics of October 15, 2020, by emailing some proposals to the Delegate for Didactics for the improvement of the first draft on October 21, 2020, and presenting the same suggestions at the session of the Scientific Board of October 23, 2020, through the Board's faculty representatives.

#### V.3) Proposed changes in the teaching evaluation questionnaires

On October 12, 2020, the Board sent the Committee a communication containing some proposals to improve the individual course evaluation questionnaires that students are invited to complete at the end of each course, with specific reference to questions Q3 ("The course was relevant and valuable for my research project") and Q6 ("The examination method was appropriate"). Regarding the first question, the Board suggested removing the reference to the research project (which some students may not have yet defined in the first year) and replacing it with an expression such as **"The course was relevant and valuable for an IMT student"** so as not to undermine courses that are not immediately useful for a possible research project and to emphasize the interdisciplinary nature of the School's educational offering.

Concerning the second question, since courses do not always end with an exam, the Board suggested **first asking those completing the questionnaire whether they took a final exam** (to adjust the question both to courses that include a final exam and to those that do not) and then, only if the answer is affirmative, to ask whether the exam method was appropriate. The Board also recommended combining this change with a revised timeline of questionnaire administration to ensure that **questionnaires are sent to students only after taking the exam if any (but before receiving the results to avoid possible retaliation)**, not before, as it sometimes happened in the past, and to allow students to assess the adequacy of the exam methods properly.

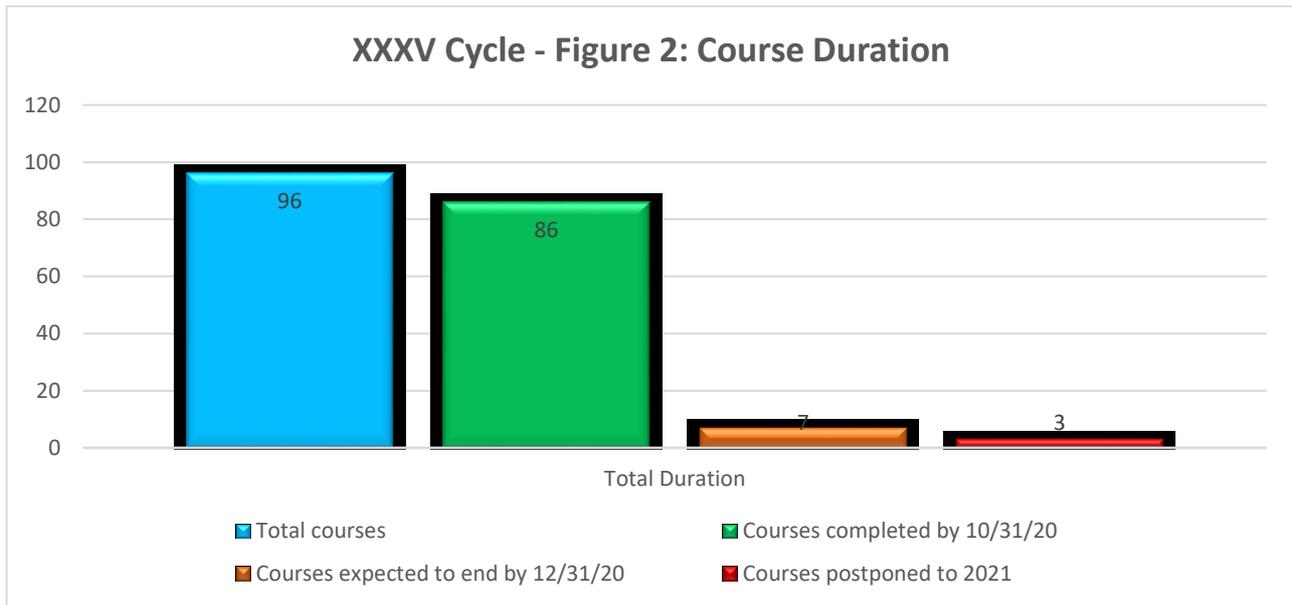
#### V.4) Sharing course calendars

Upon the Board's request and in light of recent guidelines of the Scientific Board, on November 16 and 17, 2020, the administrative offices informed the students and faculty of the School, respectively, that they could now view the academic calendars of tracks other than their own, with the goal of encouraging synergy amongst classes and collaboration amongst lecturers, starting in the academic year 2020-21. After accepting the email invitation to view the Google Calendar of the different tracks, students and lecturers can "hide" (and make visible again) one or more calendars by clicking on each of them in the "My calendars" or "Other calendars" lists on the left-hand side of the Google Calendar page.

#### V.5) Course scheduling

It is valuable to assess here to what extent the schedules of courses offered in the 2019-2020 academic year have complied with the scheduling criteria which, at the request of the Board, were discussed at the Scientific Board sessions of October 9 and 22, 2019; since then, these standards have been followed by the administrative offices when setting class schedules and have been therefore fully operational starting from the academic year under consideration.

**Standard #1** - As to the total duration of the individual courses (**Figure 2**), we can preliminarily observe that of the 96 courses of the XXXV cycle, 86 (89.6%) were completed by the end of the academic year (October 31, 2020), while ten (10.4%) ended or will end after that date. Among these, seven courses (7.3%) ended or will finish by the end of the calendar year 2020, while three (3.1%) will stretch into 2021. Among them, two courses will be held entirely in the new academic year.



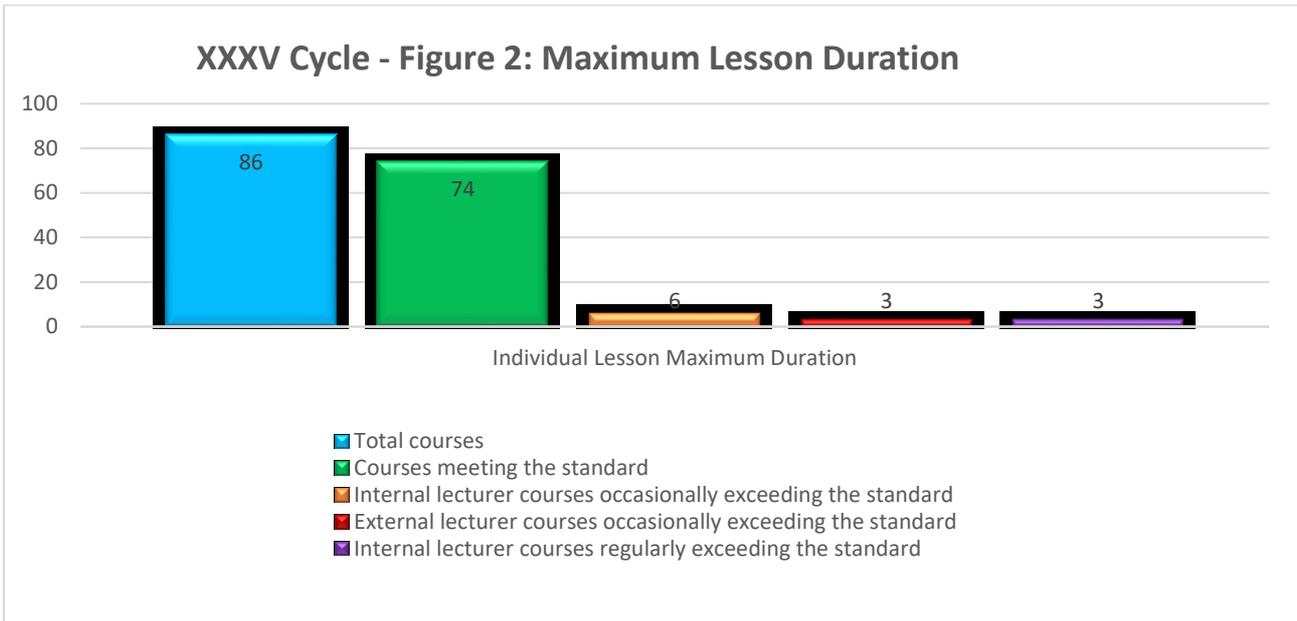
Out of ten courses postponed beyond the end of the academic year, two are taught by internal lecturers, the remaining eight (in whole or in part) by external lecturers. The two courses beginning after October 31, 2020, will both be taught by external lecturers. Some of the three courses stretching to 2021 will be attended by students of the XXXV and students of the XXXVI cycle jointly.

This delay, in addition to overlaying the didactic calendars of two separate academic cycles, prevents lecturers from receiving students' feedback in time for the educational planning of the following cycle's academic year, and also negatively affects the uniformity of the evaluation questionnaires, which in case of courses jointly attended by students of two successive cycles (in this case XXXV and XXXVI) will be assessed by students of different seniority in the School's doctoral program.

Concerning the deviation of the course calendars from the scheduling criteria relative to the 86 courses of the XXXV cycle that ended by October 31, 2020, we wish to stress the following data, which show compliance with some standards and transgression of others.

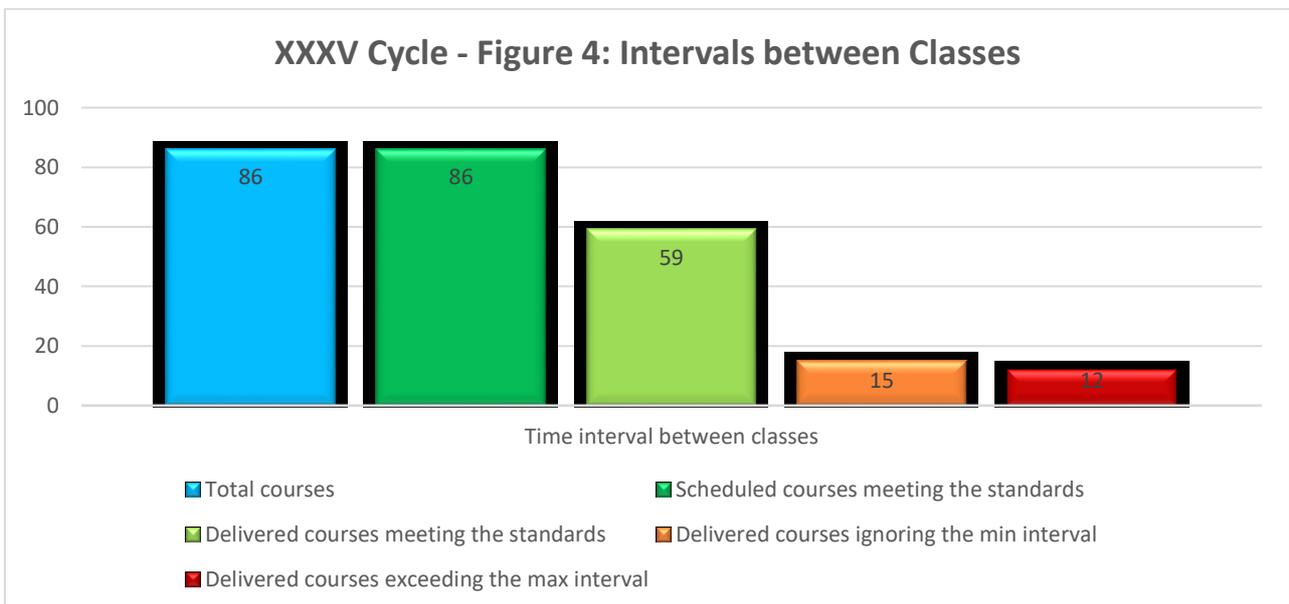
**Standard #2** - There are no deviations from the **maximum daily** (8 hours) and **weekly** (36 hours) **effort** per student, calculated according to the hourly commitment per track.

**Standard #3** - The following deviations from the **maximum lesson duration** (3 hours for the School's faculty and 5 hours for external lecturers) are observed (**Figure 3**). A total of 74 courses (86%) complied with the standard, while 12 (14%) did not. Of these, six held by internal lecturers involved a 4-hour lesson once; three courses held by visiting faculty included a 6-hour lesson once; three courses taught by the School's faculty regularly involved more than 3 hours of lessons per day.



While internal courses consistently above the expected duration limit intended to facilitate the attendance of the largest possible number of visiting students, the occasional oversight for the other internal or external courses was due to contingent reasons.

**Standard #4** - The following deviations relative to the **time interval between two consecutive classes** (minimum 24 hours - not applicable to visiting faculty - and maximum ten days) are observed (**Figure 4**). All the courses fulfilled the standard when they were scheduled at the beginning of the academic year; however, after subsequent changes to their schedule, 27 courses (31.3%) failed to comply with the criterion. Specifically, 15 courses (17.4%) occasionally did not observe the minimum pause, while 12 courses (13.6%) sometimes did not adhere to the maximum interval.



More specifically, regarding the 15 courses that did not observe the **minimum interval**: five exceptions took place to reschedule a class during times of substantial classroom overload (November 2019-February 2020); three exceptions are due to the Covid-19 emergency; two exceptions took place because the courses were condensed to facilitate the attendance of a very high number of visiting students; five omissions escaped the attention of the administrative offices when the specific class was rescheduled. Concerning the 12 courses that did not fulfill the **maximum interval**: ten exceptions are due to the Covid-19 emergency; two exceptions refer to courses including independent modules held by external lecturers who scheduled their classes independently.

The previously presented data about scheduling is still provisional, being analyzed here for the first time. The future analysis of this topic may appropriately be more targeted, dividing the data by doctoral program and track, as was done in section IV. Despite the vagueness and provisional nature of the findings, we can nevertheless draw some conclusions and some wishes for the future.

In general, the data summarized in the three previous graphs show an average deviation from the established criteria, which amounts to 13.9% (10.4% standard #1; 0% standard #2; 14% standard #3; 31.3% standard #4) and which, in the three out of four cases of actual deviation (criteria 1, 3-4), stands at 34.8%. In general, the data summarized in the three previous graphs show an average deviation from the established criteria, which amounts to 13.9% (10.4% from standard #1; 0% from standard #2; 14% from standard #3; 31.3% from standard #4) and which, in the three out of four cases of actual deviation (criteria 1, 3-4), stands at 34.8%. The total compliance with one criterion (standard #2) and the initial full compliance with another criterion (standard #4 according to the original schedule plan) are evidence of a virtuous process unquestionably underway, which the Covid-19 emergency has contributed to disrupting, with documented impacts, especially on the standard #4. The possible **comparison** in the next annual report **between the scheduling of cycle XXXV** (affected by the Covid-19 emergency during its course) **and that of cycle XXXVI** (begun with the Covid-19 emergency already in place and ad-hoc teaching methods) will be able to clarify how the failure to comply with the criteria established for scheduling presented here is affected by the Covid-19 emergency and how much instead depends on a still partial optimization of the educational offering.

Regarding standards #2-to-4, it should be emphasized that the time limits relative to the maximum daily and weekly effort, maximum class duration, and minimum and maximum interval between classes examined above were **designed for an in-person education system** and are therefore **excessive if applied to distance or blended education**. For this reason, any exceedance of these time limits must be carefully monitored both during the current academic year and in future situations where the adoption of systems different from in-person education may be advisable (for example, joint courses between the School and other universities). The subject deserves further examination, considering the **break time between classes** (15 minutes every 2 hours) **required by law**, the **conflicts that occur within the after-class coursework of concurrent courses**, and the **proximity of the final exams of different courses**. (These dates cannot always be deduced from the academic calendar; a possible improvement in this regard would be **explicitly indicating the exam date** when required, whether the exam takes place during one of the final classes or once classes are over.)

Another future enhancement of the course scheduling criteria that the Board hopes for is the **transition from their current status of mere guidelines** provided to the lecturers by the administrative offices when developing course calendars **to fundamental points of comprehensive regulations**, as first planned at the Scientific Board of October 9, 2019.

## VI - FRAMEWORK E: ANALYSIS AND RECOMMENDATIONS FOR STUDENT SERVICES

This section analyzes some critical issues regarding the services offered to students that the Board considered relevant. The analysis is based on the comparison between the data emerging from the Good Practice questionnaires - about services provided by the School in 2018, administered to students the following year and already covered in the 2019 report - and those emerging from the questionnaires about services provided in 2019, which became available in 2020. This concerns, in particular, the timeframe for the reimbursement of mission expenses (the management of missions being one of the topics covered in the Good Practice questionnaire), which

this report likens to the timeframe of the disbursement of other mobility funds, such as the doctoral scholarship increase for students working abroad and the allocation of Erasmus scholarships (VI.1); the quality of the canteen (VI.2); the effectiveness and capacity of the Wi-Fi network coverage on Campus (VI.3); and the availability and suitability of workstations (VI.4). Proposed solutions developed by the Board follow the analysis of the individual points, where possible and appropriate.

#### VI.1) Reimbursement of mission expenses and other mobility funds: timeframe

From the 2019 questionnaire, alongside a general satisfaction for the simplicity of the mission reimbursement procedures and the support received, **some discontent emerges about the timeframe of such reimbursement** (in 2019, 22 responses had an average rating of 2.68 on a scale from 0 to 6, down from 4.32 recorded in 2018 for 31 respondents).

The problem, which has been extensively discussed at various Board meetings, appears to be largely caused by the short-staffing of the Human Resources Office, which is responsible for the entire procedure, and also by the complexity of the authorization request process for the payment of the reimbursement. The Administration is currently proceeding on several fronts to expedite the process, for instance, by mapping the current situation to identify the critical issues of the process and establish methods to resolve them. On the other hand, a lower threshold to request reimbursement advances (currently €400 for students and €2,000 for professors and researchers) or preferential lanes for reimbursement for some categories of users do not seem feasible solutions, or at least not without careful reasoning to balance the various interests involved.

Although not officially emerged from the questionnaires, another issue to consider is the disbursement of doctoral scholarship increases during periods abroad, which occurs partly at the end of the visiting period, thus leaving the students to advance most of the money necessary to organize the period of stay abroad.

Also concerning the increase in PhD scholarships and the allocation of Erasmus funds, process delays were observed: one of the causes is the short-staffing of one of the relevant offices, namely the Accounting and Finance Office, which operated for some time with a reduced staff, and the complexity of the procedure, which involves several departments (specifically the PhD and Higher Education Office, the Accounting and Finance Office and the Administration of the School). Besides, it is worth recalling that the funds allocated to increase both doctoral and Erasmus scholarships fall under the so-called "Basic Requirement", which is a monthly spending limit mandated by MUR to the School: payment delays may sometimes also depend on exceeding this monthly limit. As part of the process review for quality assurance, the Administration is developing solutions to simplify this procedure too.

#### VI.2) Canteen

The 2019 questionnaire shows a **partial satisfaction for the canteen service** (39 responses in total, with an average of 4.10 on a scale from 0 to 6, slightly down from the average of 4.6 recorded in 2018 on a total of 40 respondents).

Observing what is reported in the free comment section, we can get a clearer idea of the factors that did not fully satisfy the interviewees, which had already emerged in the 2018 questionnaires, for the most part. In particular, a non-negligible variation in the quality of meals depending on the staff present in the kitchen daily, a lack of fresh food, and a diet low in foods with a high nutritional value were reported, which led the students to complain about the inadequate energy intake and the consequent discomfort in performing daily activities.

**Proposed solutions:** We wish to emphasize the need to have more (equipped) spaces to prepare meals independently, since, according to some students (who reported this issue informally), the canteen selection would be limited. In consideration of the challenges to expand this selection with the existing facilities and staff, it might be useful to provide more equipment (for example an oven, not yet present in the kitchenette), provide spaces dedicated to meals, and equip them with appliances such as coffee makers, kettles, microwave ovens, to support the canteen activity without placing an excessive burden on it.

It would also be desirable to involve users in defining the criteria to assign the new contract for the canteen service.

### VI.3) Wi-Fi coverage on Campus

From the 2019 questionnaire emerges a **partial satisfaction with the Wi-Fi coverage** on Campus (39 responses with an average rating of 4.07 in 2019 and 40 responses with an average rating of 4.1 on a scale of 0 to 6 in 2018) in line with what also reported in the 2018 questionnaire. While Wi-Fi is more stable than last year, there is still a coverage problem in some areas of the campus, especially in the rooms.

**Proposed solutions:** it is essential to act and improve coverage, perhaps by installing new routers in the less-covered areas, also in consideration of the crucial importance of this action during the Covid-19 pandemic when most of the activities (lessons, conferences, meetings) consequently take place remotely.

### VI.4) Workstations

At present, as already detailed in the 2019 report, a structural problem remains concerning the assignment of individual workstations (desks) to students due to the lack of regulation on this subject and an objective shortage of spaces the School currently holds. Attempts to solve the problem, such as taking turns at the workstations or placing workstations in the common areas or the student rooms have not been successful, because of the need for a permanent location where to install the hardware, the disruption of distance learning in the common areas or during cleaning and maintenance services in the student rooms.

**Proposed solutions:** The arrangement of new study rooms is crucial as well as the assignment of workstations, which should be addressed to establish firm rules and guarantee each student a permanent place where to work. It would be especially desirable to proceed with the assignment of a workstation together with a room.

## CONCLUSION

The Board can only note with satisfaction that, in 2020 as in the previous year, all the Governing Bodies and committees of the School responsible for quality assurance immediately took charge of the various critical issues reported, with particular regard to those particularly urgent due to Covid-19 emergency. The following can be remarked about the two types of problems described in the 2019 report, namely a) difficulties due to a defective organization of the academic and administrative system of the School, and therefore solvable in the short term and b) challenges due to structural deficiencies of the School, related to the limited size and peculiar conformation of its current spaces, the solution of which might need longer. Concerning the first point, the virtuous process already perceived as taking place in 2019 has grown in size and effectiveness. The second point, which is a critical issue the School is already well aware of and is appropriately planning the long-term solution, has been brought out and taken to the extreme in the short term by the Covid-19 emergency. The Board considers the work carried out on point a) to be well-grounded and significantly fruitful, while awaiting positive future developments, already planned and ready to be implemented, on point b).

To ensure **maximum transparency** and **immediate feedback** to students on the requests received, the Board hopes that this report, like the one from last year, will be publicly released to the community of the School during a meeting to be held in English in the first months of 2021, to which all the members of the School are invited, as an opportunity to exchange views and further reflection on the subjects covered, and that the practice of presenting the Board's annual report becomes customary.

Lucca, December 29, 2020

The Joint Students and Teachers Board