

ie UNIVERSITY

Campus Re-opening Action Plan

ie
UNIVERSITY



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Introduction

In February 2020, IE University launched an action plan to address the health crisis. The aim of this plan was to protect the health of students, faculty, and staff, and guarantee the continuity of academic activities in any given scenario. In the light of events, the Segovia and Madrid campuses began working in hybrid learning model in the last week of February, with students following classes both in person and remotely.

A few days later, the more than 7,000 students from 140 countries participating in IE University's undergraduate and graduate programs received access to the institution's online training platforms in order to continue all of their studies remotely. By this stage, many students had already returned to their home countries. Thus, IE University adapted timetables, and recorded sessions when necessary, so that students could attend class during reasonable hours regardless of their location.

Since then, IE University has been working to continuously improve the learning experience with new methods, interactive solutions, tools, and technology platforms. The faculty and program heads have adapted the academic programs (syllabi, format, timetables) and assessment methods to take place online and to the highest standards.

It is not yet clear when it will be possible to re-open the campus. The Spanish governments timeline for a gradual resumption of activity does not include specifics related to higher education, beyond the re-opening of laboratories. That said, the complexity of a re-opening process means that a variety of protocols must be implemented at least six weeks in advance.

Our aim is to be ready to open the campus and re-start on-site academic activity as soon as the authorities allow us to do so, strictly in line with public health regulations and under the supervision of our Occupational Health and Safety Service – and to be prepared to do so by the end of June/beginning of July.

Objectives of the Plan

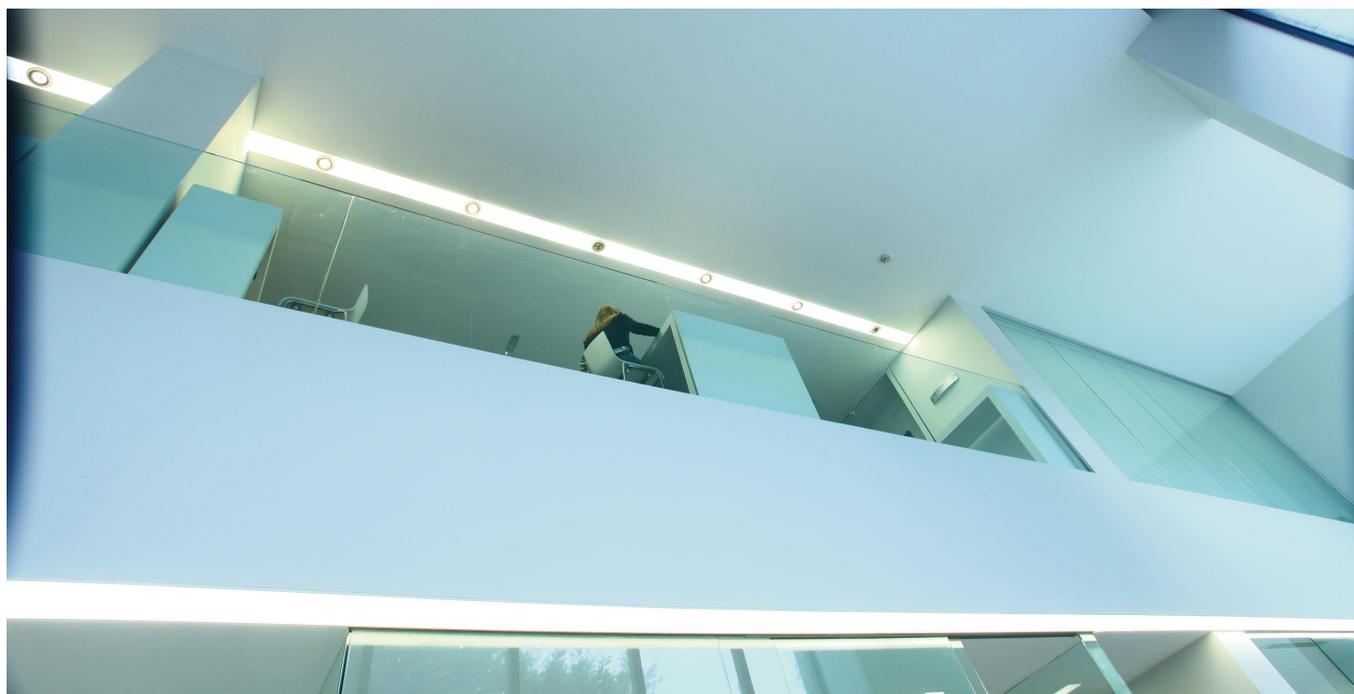


Since the start of the health crisis, IE University has endeavored to meet three basic commitments:

1. To protect the health of all members of the IE community: students, faculty, and staff.
2. To guarantee the continuity of academic activities at the same high standard of quality, efficiency, and rigor.
3. To provide timely and transparent information.

This Action Plan details all the necessary steps required to re-open the campus as soon as possible in the safest conditions, while providing a top-quality academic experience and ongoing dialogue amongst all members of the IE community.

Framework of the Plan



The re-opening of the campus requires the simultaneous coordination of three tasks:

- I. Establishing measures to protect health and track possible COVID-19 cases.
- II. Adapting a hybrid learning model to the management of the campus and academics.
- III. Providing timely and transparent information.

**CAMPUS RE-OPENING
ACTION PLAN**

**I.
Health protection
measures and
tracking possible
COVID-19 cases.**

I.1. Before de campus is re-opened

I.1.1. Analysis of the health situation of the IE community members invited to return to the campus: students, faculty, and staff.

In the days prior to the re-opening of the campus, the IE University Medical Service will ask those students, faculty, and staff returning to campus to fill out a questionnaire regarding their health, including history of COVID-19 infection and whether they or the people they live with have any vulnerable conditions.

The questionnaire has five parts and includes questions regarding the following:

1. Evidence of infection/contact with the SARS-CoV-2 virus and relevant prior medical tests
2. Other illnesses
3. Cohabitation with vulnerable people
4. Current symptoms associated with the COVID-19 disease
5. History of symptoms

(* APPENDIX A 'Seroprevalence questionnaire')

Why conduct a health questionnaire?

COVID-19 is often a symptom-free, or mildly symptomatic, disease for many whom it infects, but it can become serious for individuals with underlying conditions or other risk factors (cardiovascular, pulmonary, kidney diseases, diabetes, high blood pressure, immunodeficiencies, pregnancy, etc.). In addition to possible personal conditions, it is necessary to consider whether people with whom you live might be vulnerable. Accordingly, and in order to tailor health recommendations to the specific situation of each member of the IE community, it is important to determine these socio-health conditions.

How is the questionnaire completed?

The questionnaire will be accessible via a web App on the Servicenow platform (the incident reporting system used by IE University.) This application will also collect the results of the tests carried out and log the daily record of possible COVID-19 symptoms inputted by all the members of the IE community and those who plan to continue with in-person classes after graduation.

I.1.2. Serological test for all members of the IE community before access to campus upon re-opening: students, faculty, and staff

I.1.2.a Individuals with no compatible COVID-19 symptoms on the date of the serological test

After completing the initial questionnaire, those students, faculty, and staff who intend to access campus and **who have no symptoms compatible with COVID-19 at that time** will be asked to take a serological test. This test quantifies the antibodies produced by individuals in response to an infection and shows whether a person has been in contact with the SARS-CoV-2 virus and, if so, whether the infection is still active but has no symptoms, or is in remission.

IE University has commissioned a laboratory to carry out these tests and analyze the presence of antibodies (IgM and IgG type immunoglobulins) in blood samples. The correct identification of the samples and their safe transfer to the laboratory will be guaranteed at all times, as will the confidentiality of the results. Results will be sent to the patient and to the medical team in charge of evaluating them and issuing the necessary recommendations (see APPENDIX B).

Samples will be taken by qualified staff over an eight-day period in the first half of June at testing points in Madrid and Segovia, with one-way entrance and exit routes for the people tested that will stop them from coming into direct contact with each other.

Samples will be taken on campus over an eight-day period by qualified staff from PreverSalud, IE University's health service provider. Six testing points will be set up in the buildings at María de Molina 31, María de Molina 31 Bis, and Velázquez 130 with one-way entrance and exit routes that will prevent people being tested from coming into direct contact with one other. The aim is to carry out these tests during the first half of June.

The results of the serological test will be added to the information gathered by the individual’s questionnaire. This comprehensive information will enable the medical service to make three types of recommendations for IE community members (see decision algorithm in APPENDIX C):

1. When the serological test reveals active infection, individuals need to self-isolate at home where they should temporarily follow course programs online and telework. In these cases, access to the campus will not be permitted and the medical service will activate an individual tracking protocol until the infection disappears and the patient is medically cleared. Spanish legislation requires that all COVID-19 cases be reported to the public health authorities; the campus medical service will report the case on behalf of the IE community member.
2. When the test is negative and there are no compatible COVID-19 symptoms or when the infection has gone into remission, individuals will have full access to the campus. Each day before accessing the campus, all individuals who receive this recommendation must take a daily self-assessment of symptoms and log the results in the University’s COVID-19 web App [see section I.2.1 Self-assessment of compatible symptoms and daily login on the COVID-19 App].



3. Finally, individuals who are not infected and do not have compatible COVID-19 symptoms, but have prior medical conditions that make them more vulnerable or live with vulnerable people, will be advised to continue their program or their work remotely.

I.1.2.b Individuals with compatible COVID-19 symptoms on the date of the serological test

People with compatible COVID-19 symptoms on the date of the serological test, will be considered “suspected cases” by the medical service and will be monitored individually. In these cases, the medical team will perform a test to detect viral RNA by real-time PCR (RT-PCR). These people will also be instructed to self-isolate at home until the COVID-19 diagnosis is medically cleared, unless there are grounds to suggest otherwise, and to continue their programs online and telework as possible, depending on their health condition.

When will I be able to access the campus if I have the COVID-19 virus?

Individuals who test positive for COVID-19 after taking the serological test should observe home isolation, so long as the home environment meets isolation requirements. An RT-PCR test will also be performed to confirm the positive serological result. These individuals can return to campus after 14 days of isolation from the date of diagnosis if they no longer have any symptoms. An additional RT-PCR test will be provided at this point in order to ensure that the case is in remission. If the second RT-PCR test is positive, home isolation should continue for an additional seven days, after which the individual will take another RT-PCR test.

The health authorities will be informed of the confirmed case of COVID-19 and the individual and his or her symptoms will be actively monitored throughout the period of home isolation.

[See APPENDIX C Flows in managing individuals with symptoms and infected individuals.]

It is important to clarify that the definitive lifting of isolation restrictions is handled by the public health authority in each autonomous region.

When can I access the campus if I have compatible COVID-19 symptoms on the date of the serological test and am therefore considered as a “suspected case”?

Individuals with compatible COVID-19 symptoms on the date of the serological test should observe home isolation, so long as the home environment meets isolation requirements. An RT-PCR test will be provided to confirm the diagnosis, and, in the event of a positive result, home isolation should be maintained for up to 14 days since the onset of symptoms. After this period of 14 days, an additional RT-PCR test will be provided and if the result is still positive, home isolation should continue for an additional seven days, after which the individual will take another RT-PCR test. [See APPENDIX C]

It is important to clarify that the definitive lifting of isolation restrictions is the responsibility of the public health authority in each autonomous region.

*[*APPENDIX B ‘SEROLOGICAL TEST: WHAT IS IT, HOW IS IT PERFORMED AND HOW ARE THE RESULTS INTERPRETED’]*



I.1.3 COVID-19 App

IE University is working on the development of a web App on the Servicenow platform that will centralize all data from the questionnaire, information from the serological tests completed by the health services, and symptoms data. The data collected in the App will only be accessible to each individual who, in accordance with Spanish legislation, is the sole owner of his/her data. The external IE University medical service may also be given access to the data if authorized.

The App will inform the student and IE University of the type of recommendation issued by the medical

service regarding access to the campus.

The App will also include a symptom form that each user must complete in order to monitor and re-assess their individual situation.

The App will collect and provide access to relevant information about the COVID-19 virus, as well as the rules of coexistence on campus and health recommendations.

Note that, once the campus has re-opened, testing will be provided for any member of the IE community who was unable to participate in the initial testing process, in order to access the campus.

[APPENDIX D COVID-19 TRACKING APP LEGAL TERMS AND CONDITIONS]*



I.1.7. Campus disinfection

In order to ensure hygiene after the collection of samples for serological tests, all campus surfaces will be thoroughly cleaned and disinfected two weeks prior to the re-opening of campus, in addition to while the testing takes place. Biocidal products will be used for cleaning, especially those containing viricidal agents known to be effective against coronaviruses (sodium hypochlorite, ethanol, etc.).

[SEE APPENDIX F DISINFECTION PROTOCOL]*

I.2. On campus



1.2.1. Self-assessment of compatible symptoms and daily login on the COVID-19 App

Each member of the IE community is required to make a daily self-assessment of COVID-19 compatible symptoms before accessing the campus. The COVID-19 App contains a form that students, faculty, and staff must fill out daily to report symptoms that may be compatible with the virus so that they can be monitored by the medical service.

When the web app detects a “suspected case,” it will activate the individual tracking protocol and will follow up on the suspected case’s contacts, paying particular attention to their classmates, and especially to those who have been sitting near and around them.

1.2.2. Mandatory use of face masks

Every individual accessing the campus must wear a protective mask at all times. Face masks do not entirely prevent contagion, but they significantly reduce the possibility, particularly when everyone wears them. At the time of writing this Plan, when there are still some supply issues with masks, IE University has acquired 200,000 units that will be distributed in packs of 50 to students, faculty, and staff at the time of their serological test.

[APPENDIX G Technical specifications of face masks, instructions for use, how they reduce the spread of infection]



I.2.3. Hand washing

Hand washing is one of the best and most effective ways to prevent the spread of the epidemic and minimize transmission of SARS-CoV-2 virus and other infections. Hygiene recommendations should be followed both on the IE University campus and throughout the day, in any environment. The WHO's recommendations can be found here: [WHO Hand Hygiene](#), and at the end of this document.

To facilitate hand hygiene, hand sanitizer will be distributed for personal use. Hand sanitizer dispensers will also be installed on campus.

I.2.4. Physical distancing

From an epidemiological point of view, the concentration of people in small spaces is a risk factor for transmission during an infectious disease outbreak, especially when it is transmitted by respiratory droplets as is the case here. In addition, the existence of group transmission of the infection is exacerbated by patients who have no or only very mild symptoms. Therefore, and taking into consideration the way these droplets are dispersed, physical distancing of more than 1.5 meters is recommended to reduce the risk of contagion.



1.2.5 Entering and leaving classrooms

Students must enter the classroom in an orderly manner, maintaining minimum physical distancing of 1.5 meters from their classmates, faculty, and staff. Crowding must be avoided and blocking entrances is strictly prohibited. Once in the classroom, each student shall sit down and remain in his/her seat until the faculty member arrives.

The faculty members shall be the last to enter the classrooms and the first to leave. Any queries that have not been answered during the session will be resolved online, by e-mail or by the video-conferencing systems available to students. Once the faculty member has arrived in the classroom, no student will be allowed to enter. Both the faculty member’s and the students’ desks must be cleared after each class to make it easier for IE University’s service staff to clean.

1.2.6 Non-compliance with regulations

All the rules of conduct set out in this document will be mandatory to ensure that community members make an ethical commitment to the health of others.

1.2.7 Cleaning of facilities

The transmission of the SARS-CoV-2 virus through its ability to survive for hours or days on surfaces makes it necessary to establish protocols for additional cleaning and disinfection of spaces and surfaces using specific disinfectants to reduce the risk of infection.

IE University has procured the appropriate cleaning products and supplies and has increased the number of staff available to clean the classrooms after each 90-minute session. This cleaning process pays special attention to the frequently touched surfaces such as handrails, doorknobs and door handles, access buttons, etc., as described in the document “Recommendations for cleaning surfaces ie_coronavir19 “ drawn up by the health services.

Finally, IE University has developed specific protocols for cleaning staff, reinforcing both the hygiene of the facilities and the personal protection and safe interaction of these teams with the environment.

[* APPENDIX F Disinfection protocol]

I.3. Off campus



All the recommended hygiene measures become useless if they are not also applied outside the IE University campus. The risk of SARS-CoV-2 infection is present in many day-to-day activities (transport, shopping, sport, etc.) and until an effective vaccine becomes available, compliance with hand hygiene, respiratory etiquette, and physical distancing are the most effective tools for protecting people. Thus, it is important to constantly maintain these measures throughout the day, no matter the situation and environment.

**CAMPUS RE-OPENING
ACTION PLAN**

**II.
Adapting facilities
and academic
activities**

IE University has approved measures to adapt the campus in order to promote a hybrid learning model and comply with the demands and restrictions inherent to the management of the crisis.

II.1. Adapting facilities



II.1.1. Installation of thermographic cameras at entrances

In addition to community members taking their own temperature every day, thermographic cameras will be installed at the entrances of campus buildings. Should an individual have an above-normal temperature, he or she must return home in accordance with their ethical commitment to the health of others, and the medical service will be notified so that the “suspected case” protocol can be activated.

COVID-19 is not the only disease that involves an increase in body temperature. However, this symptom is found in more than 80% of the cases of infection and is one of the easiest parameters that people can use to monitor their own health.

*[*APPENDIX H Characteristics of thermographic cameras]*



II.1.2. Installation of hand sanitizer dispensers

Hand washing is one of the best ways to prevent the spread of the epidemic and minimize transmission of micro-organisms. In order to encourage hand washing, hand sanitizer dispensers will be installed at the entrances and in the corridors of those buildings open on campus.

II.1.3. Installation of protective screens for staff that deal with the public

As an additional barrier, staff who have regular contact with the public will have plastic screens fitted to their workstations to protect them.

Protective panels and partitions will also be installed in the vending and cafeteria areas. At the time of writing this Plan, confirmation is pending from our suppliers in regard to this measure, though IE University suppliers always comply with the regulations established for food and drink facilities.



II.1.5. Checking and adapting ventilation in the facilities

To contain the spread of respiratory infection, it is advisable to adapt and optimize measures aimed at improving air quality [air renewal and filtering] inside buildings. This renewal will help purify suspended micro-droplets.

II.1.4 Signposting of one-way entry and exit routes

One of the most effective measures to prevent the spread of SARS-CoV-2 is physical distancing. In order to avoid direct contact with other members of the community, separate one-way entry and exit routes will be set up to prevent facility users from crossing paths and to maintain the appropriate physical distance at all times.

These routes are being signposted. The IE University security team will ensure compliance.

To this end, three basic measures will be implemented:

- cleaning and sanitization of air filters
- replacement of any unreliable filters
- elimination of means used to reutilize air in favor of maximum ventilation with fresh air.

In order to improve ventilation, as many doors and windows as possible will remain open. This measure also reduces the use of doorknobs and door handles and repeated door contact, thus minimizing transmission.



II.1.6. Use of communal areas and protocol for security staff

Given that elevators are confined spaces and offer poor ventilation, they will be used on an individual basis only, except in the case of people with reduced mobility who need assistance to operate them.

Community members are encouraged to use the stairs to prevent people from gathering as they wait for the elevator.

Restroom access will also be restricted. Only one person will be allowed to use the restroom at a time. Likewise, some toilets will be put out of service in order to guarantee distancing measures.

Security and reception staff will be provided with guidelines on how to handle different scenarios, measures to be implemented if possible cases are detected, and procedures to ensure compliance with legislation.

II.2. Classroom arrangement

I.1.2. Classroom arrangement

II.2.1. Adapting classrooms to a hybrid learning model

All real-time sessions can be followed simultaneously in person and remotely. In order to improve the educational experience and the integration of the classroom students with online students, IE University will reinforce its technological resources and set up protocols to encourage the technological immersion of students and guarantee a premium academic experience.

Devices will be installed in strategic locations to provide a broad view of the classroom, the faculty member and the teaching resources and materials. The web cameras will give remote students excellent visibility and immersion in the classroom experience. Microphones will be installed to relay and record the voices of the faculty member and of other students during the sessions. In addition, classrooms will be equipped with an extra screen so the faculty member and students can see the students connected remotely.

We will be using videoconferencing systems, as they allow excellent interaction between users and the visibility of all students in a class simultaneously.

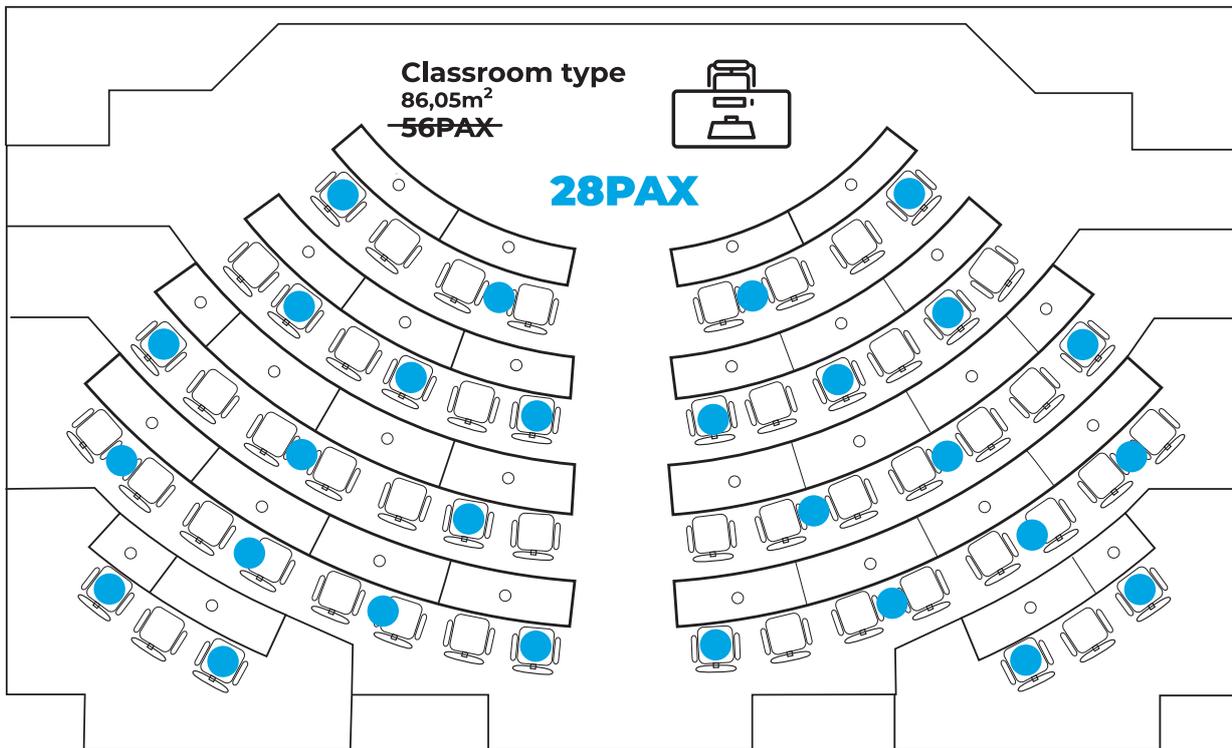
We will be working with the Zoom videoconferencing system, though other systems are also compatible.

The faculty will be continuously supported by the program heads and by the IT support teams who will ensure the sessions run smoothly.

Any work that needs to be done in groups will be conducted online, as the availability of workspaces will be limited in order to guarantee distancing measures. These areas will be reserved for use as a study or work area for students who do not have access to basic study conditions at home.

II.2.2. Classroom occupancy rate

Students must always leave a free seat between them and the next student, and seats will be marked accordingly, as shown in the diagram below:



If seating issues make it impossible for all students to physically attend a session, one of three measures will be taken, in this order of preference. The strategy is to:

1. Divide the number of students studying the subject into two groups and teach the session(s) twice.
2. Move the sessions to a larger room in order to ensure distancing measures can be maintained.
3. Arrange to take turns to physically attend the sessions, working with the students and the program heads to organize this.

Class times in adjacent classrooms will be scheduled so that students do not coincide in the corridors and communal areas before or after their classes.

II.3. Adapting programs and timetables

Liquid Learning at IE University is a transformational and interactive educational experience that transcends single methodologies and platforms to blend physical, digital, and natural environments so that students obtain a world-class education no matter their location, profession, or situation.

This new educational format pioneered by IE University is called Hybrid. Thanks to the University's multimedia resources and a classroom redesign to include enhanced audiovisual equipment and technological solutions that encourage interaction, hybrid programs join face-to-face and remote students in the very same program, cohort, and classroom. These students will learn alongside one other and work together in teams. Hybrid brings together the human, digital, and natural worlds into a seamless whole and enables IE University to be – and offer to students and faculty – a truly global campus.

Hybrid programs are flexible, and students can choose to study from the geographical location most convenient for them. A program section, for example, might have half of the students physically present in Madrid/Segovia and the other half located in a dozen or more locations around the world.

At the beginning of the health crisis, to provide online training to our more than 7,000 students in all programs, IE University moved all sessions to remote learning mode and reorganized subjects and programs to adapt them to the digital environment. Since then, our classroom sessions have been given through videoconferences, forums, and “non-classroom learning”. When the campus is re-opened with distancing measures and a percentage of online students, these measures will be maintained and adjusted as necessary to ensure that the best methodology is applied to each classroom session.

In order to sustain our commitment to top quality education, we will be reviewing each subject and each session to apply the best academic approach to maximize learning and enrich the student experience.

The IE University teams are working to adapt timetables so that students outside Spain, in very different time zones than Madrid, can still participate in classes in real time.

**CAMPUS RE-OPENING
ACTION PLAN**

**III.
Transparency**



The Communication and Marketing teams are working to create the necessary content to share the main components of this Campus Re-opening Action Plan with all our stakeholders: candidates, students, alumni, faculty, staff, the educational and business community, the authorities and society as a whole, in coordination with the different teams and Schools.

From the outset of the health crisis, IE University's aim has been to provide timely and transparent information regarding all measures approved through internal and external channels, in both the media and on social media.

**CAMPUS RE-OPENING
ACTION PLAN**

APPENDICES

APPENDIX A.

Seroprevalence questionnaire

Seroprevalence questionnaire for COVID-19 virus infection			
1. USER DETAILS			
Name			
Surname			
Gender Male Female Other			
Date of birth (DD/MM/YYYY): / /		Age [if not date of birth available]	
Tel. No. (mobile)			
Email address			
Current Address (Autonomous Community, Province, Postal Code, City)			
Program/department/area			Academic year
Have you or any of your household members been to work on a regular basis in the last 21 days?	Me Date of the last time you went to work (DD/MM/YYYY): / /	Household member Date of the last time you went to work (DD/MM/YYYY): / /	No
Have you or someone close to you visited a health center for a purpose unrelated to COVID-19 in the past 21 days?	Me Date of visit (DD/MM/YYYY): / /	Household member Date of visit (DD/MM/YYYY): / /	No
Have you had any contact with anyone suspected or diagnosed as being infected with the COVID-19 virus?	Yes Date of contact (DD/MM/YYYY): / /	No	
Do you live with or are you responsible for any vulnerable people (elderly, chronically ill, pregnant women, etc.)?	Yes	No	
Have you been previously tested for the presence of the virus?	Yes date of the test (DD/MM/YYYY): / / Please state the type of test performed Rapid Laboratory Other	No	
Have you been previously tested for the presence of antibodies?	Yes date of the test (DD/MM/YYYY): / / Please state the type of test performed Rapid Laboratory Other	No	

2. CURRENT SYMPTOMS		
As of today , do you have any of the symptoms listed below?	Yes (Dropdown)	No
Please specify the date of onset of the symptoms (DD/MM/YYYY): / /		
Temperature $\geq 38^{\circ}\text{C}$	Yes	No
A cold	Yes	No
Tiredness	Yes	No
Muscle pain (myalgia)	Yes	No
Sore throat	Yes	No
Cough	Yes	No
Runny nose (rhinorrhea)	Yes	No
Breathing difficulty (dyspnea)	Yes	No
Abnormal breathing sounds	Yes	No
Chest pain	Yes	No
Other respiratory symptoms	Yes	No
Headache	Yes	No
Nausea/vomiting	Yes	No
Abdominal pain	Yes	No
Diarrhea	Yes	No
Other		

3. HISTORY OF SYMPTOMS			
Since the pandemic began, have you had symptoms?	Yes (Dropdown)	No	
START date (DD/MM/YYYY): / /			
END date (DD/MM/YYYY): / /			
Temperature $\geq 38^{\circ}\text{C}$ (100 $^{\circ}\text{F}$)	Yes	No	
A cold	Yes	No	
Tiredness	Yes	No	
Muscle pain (myalgia)	Yes	No	
Sore throat	Yes	No	
Cough	Yes	No	
Runny nose (rhinorrhea)	Yes	No	
Breathing difficulty (dyspnea)	Yes	No	
Abnormal breathing sounds	Yes	No	
Chest pain	Yes	No	
Other respiratory symptoms	Yes	No	
Headache	Yes	No	
Nausea/vomiting	Yes	No	
Abdominal pain	Yes	No	
Diarrhea	Yes	No	
Other			
Did you need medical attention for any of these symptoms?	Yes	No	
Did you have to leave work or school for any of these symptoms?	Yes	No	
Were you hospitalized for any of these symptoms?	Yes	No	
4. OTHER ILLNESSES			
Do you have any other health conditions? [Diabetes, heart disease, high blood pressure, chronic obstructive pulmonary disease (COPD), immune deficiency (congenital or acquired), pregnancy, other]	Yes	No	Don't know

APPENDIX B.

Justification and test results

Dr. Gabriel Jesús Rodríguez

Justification. Currently, the diagnosis of infection in a susceptible population is mainly carried out through the identification of viral RNA in samples taken from the respiratory system [nasopharyngeal, oropharyngeal and bronchoalveolar lavage, etc.] by RT-PCR [reverse transcription polymerase chain reaction]. However, given the complexity of this technique in terms of time, equipment and the need for trained staff to carry it out, among other factors, alternative tests have been established in daily practice to study the infection.

The first of these are rapid tests that detect the presence of viral antigens in biological samples [respiratory tract secretions, blood, etc.] and the second are rapid tests that enable the identification of specific antibodies [IgA/IgM/IgG] produced to fight the infection. *Despite the many advantages of both tests, such as easy sample processing and shorter time to obtain results, there are also some disadvantages, such as low sensitivity [the main disadvantage of antigen detection tests]; the risk of cross-reaction to the presence of antigens from other viruses belonging to the same family of coronaviruses [of particular concern in antibody tests]; partial knowledge of the dynamics of how antibodies are produced for this new strain of coronavirus; and the presence of diseases that condition an effective immune response [primary or secondary immunodeficiencies], among others. Likewise, it should be noted that the approaches to studying the infection are divided into those aimed at diagnosing the infection [mainly in the acute phase] and those that determine the presence of the antibodies that have been produced [seroprevalence] a posteriori*

by the infected individual's body [convalescence or recovery phase]. Rapid tests and laboratory tests that determine the seroprevalence of a given infection, either by qualitative or quantitative methods, fall into this second category. Therefore, they cannot be used to diagnose the infection, but rather to provide evidence of previous contact with a given microorganism.

Finally, in certain contexts and phases of an epidemic, knowledge of the prevalence of antibodies to a given infection in a population is especially important, mainly because this knowledge enables us to better estimate the degree of susceptibility of that population to the infection; and also because it makes it easier to deal with new cases and study contacts.

Recommendations. Since the objective of this study is not the diagnosis of the COVID-19 virus infection in individuals with symptoms of acute respiratory infection [cough, fever, malaise, etc.] but the assessment of the seroprevalence of the infection in the IE community, we will use the absence of these symptoms as a criterion for inclusion in the study. In addition, this strategy will enable us to reduce the risk of infection for the staff in charge of taking samples and testing them. Once we have obtained the informed consent form duly completed and signed by each of the participants in the IE community involved in the study, we will carry out the following procedures:

a) Completion of the IE community seroprevalence questionnaire. In order to identify the susceptible population and their social and health conditions, a questionnaire has been drawn up to collect data on the history of infection, the presence of comorbidities or other non-health-related circumstances [cohabitation with risk groups with complications in the event of infection, etc.].

b) Invitation to all members of the IE community to take a serological test. IE community members will be given recommendations to take a laboratory [qualitative or quantitative] test to determine the presence of COVID-19 antibodies [IgM/IgG]. In cases where clinical signs of COVID-19 infection are present but there is no evidence of the presence of antibodies, another type of test [RT-PCR] should be performed to demonstrate acute COVID-19 infection.

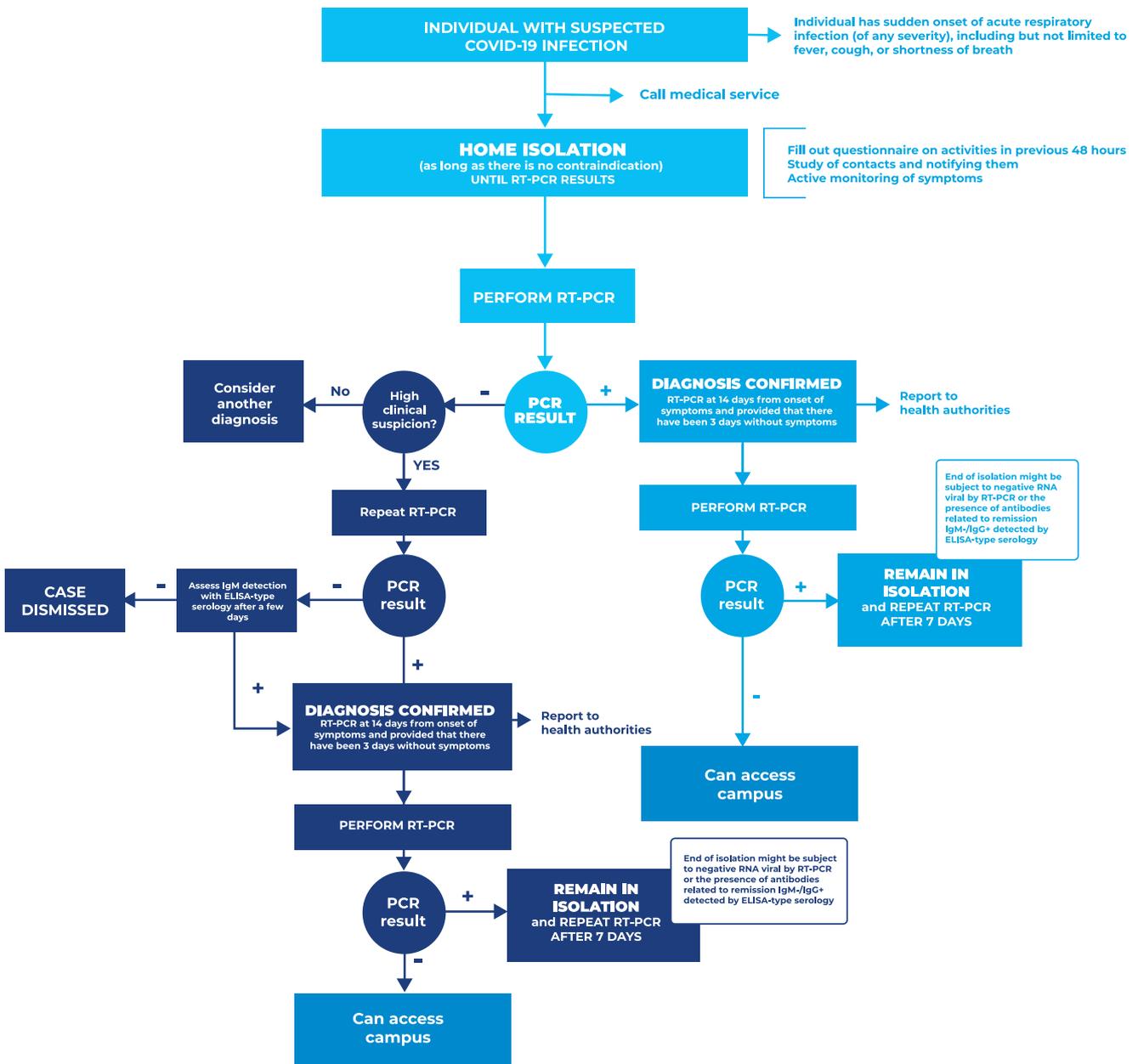
c) Test assessment based on the detection of antibodies. Preference shall be given to laboratory tests based on ELISA [Enzyme-Linked ImmunoSorbent Assay] and Immunochemoluminescence techniques for quantitative antibody assessment over qualitative assessment tests. This type of laboratory serological test was chosen, after evaluation by experts at IE University, for its high diagnostic reliability.

SEROLOGICAL TEST RESULTS IN ASYMPTOMA INDIVIDUALS				
IgM [+] IgG [-]	IgM [+] IgG [+]	IgM [-] IgG [+]	IgM [-] IgG [-]	
ACTIVE INFECTION	PAST INFECTION	ABSENCE OF INFECTION	EARLY STAGE OF INFECTION	
HOME ISOLATION [1]	RETURN TO ACTIVITY WITHOUT RESTRICTION	RESTART ACTIVITIES SUBJECT TO RESTRICTIONS	RT-PCR REQUEST depending on exposure risk	
<p>ISOLATION 14 DAYS [from when sample taken]</p> <p>REPORT TO HEALTH AUTHORITIES</p> <p>Consider RT-PCR test after isolation [1] if there is no contraindication</p>	<p>RESULT COMPATIBLE WITH HAVING BEEN INFECTED</p> <p>POTENTIAL IMMUNITY Passive monitoring of symptoms</p> <p>Consider RT-PCR test</p>	<p>SUSCEPTIBLE individual</p> <p>ACTIVE MONITORING of symptoms</p> <p>Other recommendations based on comorbidities and other variables</p>	<p>RT-PCR [-]: ABSENCE OF INFECTION</p> <p>Susceptible individual</p>	<p>RT-PCR [+]: EARLY STAGE OF INFECTION</p> <p>ISOLATION [for 14 days]</p> <p>REPORT TO HEALTH AUTHORITIES</p> <p>RT-PCR and/or serological test after completion of isolation</p>

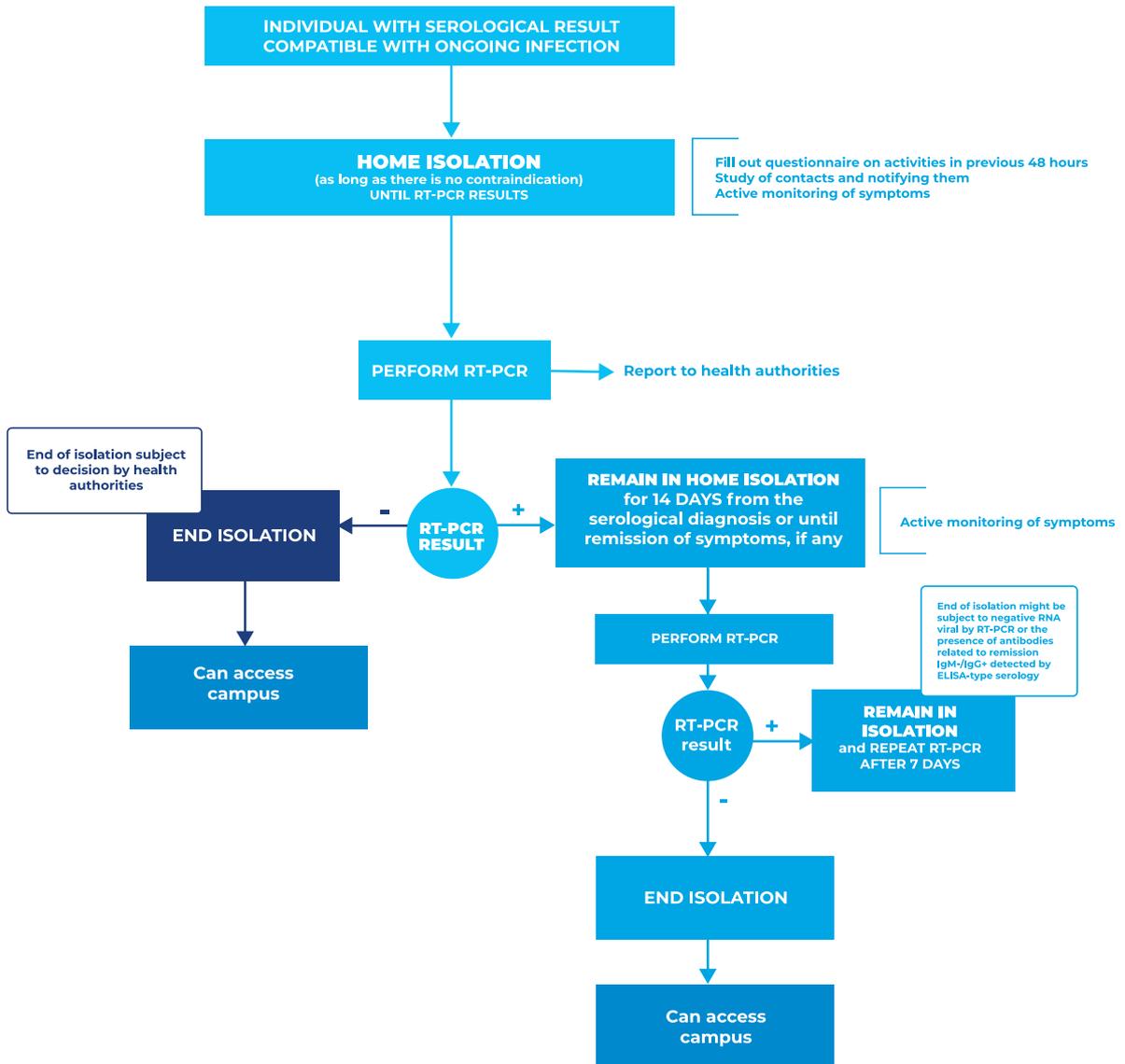
APPENDIX C.

Flows in managing individuals with symptoms and infected individuals

FLOWCHART FOR MANAGING “SUSCEPTIBLE” INDIVIDUAL WITH SYMPTOMS



FLOWCHART FOR MANAGING INDIVIDUALS WITH ONGOING INFECTION ACCORDING TO SEROLOGICAL TEST



APPENDIX D.

COVID-19 Tracking APP

APPENDIX E.

How to use the digital thermometer

The instructions on how to use the digital thermometer are defined by the manufacturer. However, the following tips should be taken into account:

- a) Avoid hot drinks, physical exercise, and hot showers before taking your temperature.
- b) Once you have decided where you are going to take your temperature (underarm, mouth, etc.), the probe (the end of the thermometer that measures the temperature) must be correctly positioned. In the case of the underarm, the probe must be placed vertically in the underarm fold. In the case of the mouth, the probe must be inserted under the tongue and the mouth must be closed firmly.

c) The temperature measurement result will enable us to confirm:

Normal temperature: less than 37.4°C (99.3°F)

Low-grade fever: between 37.4°C and less than 37.8°C (99.3°F – 100°F)

High-grade fever: over 37.8°C (100°F)

d) It is important to remember that body temperature can vary throughout the day. In general, in “suscep-

tible” individuals, it is advisable to take a daily temperature reading in the morning, around 8 am to 10 am. In the case of individuals under active monitoring because they have been in contact with a suspected or confirmed case of COVID-19, it is advisable to take their temperature twice a day (at 8 am–10 am and 8 pm–10 pm).

APPENDIX F.

Disinfection protocol

APPENDIX G.

Additional information about face masks

RECOMMENDATIONS FOR THE USE OF FACE MASKS *Source: Spanish Health Ministry			
WHAT	WHO	WHEN	WHY
Surgical or medical face mask (approved medical device)	People with COVID-19 symptoms or diagnosis [1,2]	When a person enters a room or is attended to at a distance of less than 2 meters.	Surgical masks reduce the release of respiratory droplets into the air, thus preventing the transmission of the virus to other people
	People who have been in close contact with someone diagnosed with COVID-19 in the last 14 days.	When they are with people they live with at home and if they have to go outside.	
	People looking after COVID-19 patients [3,4,5,6]	When looking after a patient at a distance of less than 2 meters. The patient should also wear a surgical mask.	Surgical masks have a barrier effect if used properly and are associated with preventive measures.
	Vulnerable people [people over 60, with high blood pressure, diabetes, cardiovascular disease, chronic lung disease, cancer, immunodeficiencies and pregnant women, as a precautionary principle].	When going outside or coming into contact with other people.	

Community or hygiene face masks (non-medical device, self-made or commercial)	Generally healthy population [not in contact with COVID-19 patients] [7, 8, 9, 10, 11]	When physical distancing measures cannot be maintained in situations such as commuting to work going shopping, or in enclosed spaces.	The use of hygiene masks may help to reduce transmission by people without symptoms or with mild symptoms, provided that this is combined with preventive measures.
		When using public transport.	
Mask not advised	Children under 3 years of age, people who have trouble breathing and people who have difficulty removing their mask without assistance [12, 13]	A mask should not be worn unless recommended by a healthcare professional.	For masks to have a barrier effect they must fit the face snugly and allow proper breathing. Precautions must also be taken to ensure that masks are used correctly.

1. Infection prevention and control protocol when dealing with patients with COVID-19 14.04.20: any patient with respiratory symptoms or a confirmed or probable case of COVID-19 should wear a surgical mask.

2. Protocol for dealing with COVID-19 at home 17.03.20: if the patient must use communal areas, a surgical mask must be worn and hand hygiene must be observed when leaving a room and before entering it. If caregiving requires approaching the patient at a distance of less than one metre, the caregiver must wear a surgical mask.

3. Infection prevention and control protocol when dealing with patients with COVID-19 14.04.20: visitors must wear a surgical mask.

4. Protocol for dealing with COVID-19 at home 17.03.20: the gloves and masks used by the caregiver shall be placed in waste bag 2. The person responsible for cleaning should be protected by gloves and mask (if available).

5. Home isolation infographic 11.04.20: includes the caregiver wearing a mask when sharing communal areas (no indication of whether surgical or hygiene).

6. Hygiene measures for preventing the transmission of COVID-19 06.04.20: anybody cleaning areas with COVID-19 patients should wear a mask (if available). The gloves and mask used by the caregiver should be placed in waste bag 2.

7. Good workplace practices 11.04.20: a non-medical face mask should be worn if using public transport.

8. UNE technical specifications for the manufacture of reusable hygiene masks: hygiene masks are intended for adults and children over 3 years of age without symptoms who are not suitable for using surgical masks or particle filtering masks, in accordance with the measures established in the technical document "Infection prevention and control when dealing with patients with COVID-19".

9. ECDC 08.04.20: the use of non-medical face masks in public spaces may help reduce the spread of infection in the community by minimising the excretion of respiratory droplets from infected individuals who have not yet developed symptoms or who remain asymptomatic. The use of a face mask in the community could be considered, especially when visiting busy, enclosed spaces such as supermarkets, shopping centres, or when using public transport, etc. The use of face masks in the community should only be considered as a complementary measure to preventive measures.

10. CDC: recommends using cloth face coverings or covering one's face in public settings where other physical distancing measures are difficult to maintain, especially in areas of significant community-based transmission.

11. WHO: in its document on "non-pharmaceutical public health measures for mitigating the risk and impact of epidemic and pandemic influenza", the WHO conditionally recommends the use of face masks in community settings for asymptomatic people in severe epidemics or pandemics to reduce transmission in the community.

12. CDC: cloth face coverings should not be placed on young children under age 2, anyone who has trouble breathing, or is unconscious, incapacitated or otherwise unable to remove the mask without assistance.

13. UNE technical specifications for the manufacture of reusable hygiene masks: state that these masks are suitable for children over 3 years of age and warn that adult supervision to fit, use and remove the mask is required (for children's masks)

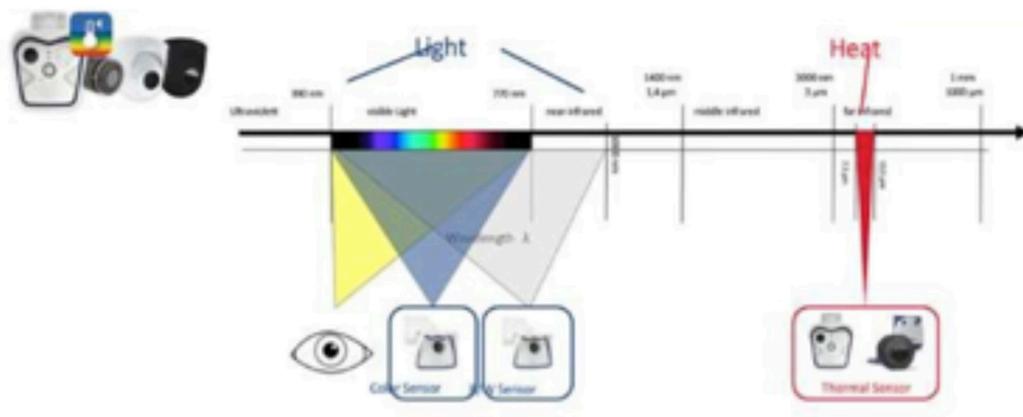
APPENDIX H.

Characteristics of thermographic cameras

The thermographic cameras being installed on campus have the following characteristics:

- The products have been developed and are manufactured in Germany.
 - Based on ONVIF standards, they can be integrated with any ONVIF IP CCTV system on the market.
 - IP66, IK07, PoE Class 3, with built-in PIR sensor, recorder, speaker and microphone.
 - The solution delivers non-invasive, non-contact alerting of access to premises by people whose body temperature is within a certain range.
 - The alert can be sent to a mobile device, a desktop app, contact closure for door locking, email, the camera's speaker, etc.
- Access records and videos are stored along with their measurements.
 - On-screen temperature information with a **+/- 0.1° centigrade actual accuracy range.**
 - It displays a “normal” image with the thermal zone in the detection range superimposed on it to enable seamless identification of the person.

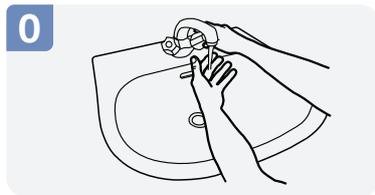
Thermal & Thermal Radiometry: What is Thermal Imaging?



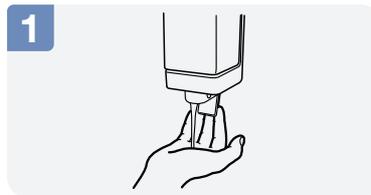
Thermographic Cameras Detect radiation in the Infrared Range Of the Electromagnetic Spectrum

WASH HANDS WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB

 **Duration of the entire procedure: 40-60 seconds**



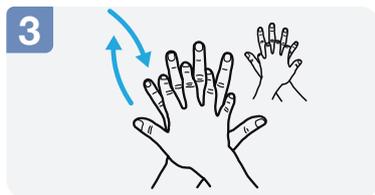
0 Wet hands with water;



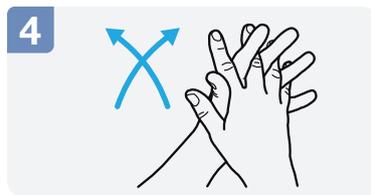
1 Apply enough soap to cover all hand surfaces;



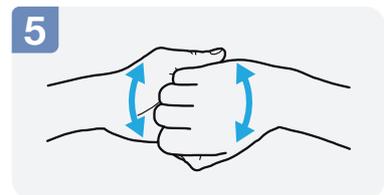
2 Rub hands palm to palm;



3 Right palm over left dorsum with interlaced fingers and vice versa;



4 Palm to palm with fingers interlaced;



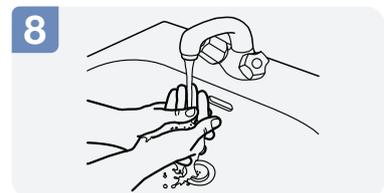
5 Backs of fingers to opposing palms with fingers interlocked;



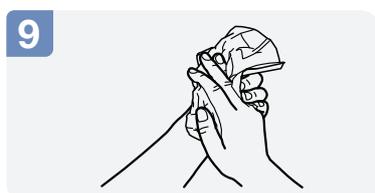
6 Rotational rubbing of left thumb clasped in right palm and vice versa;



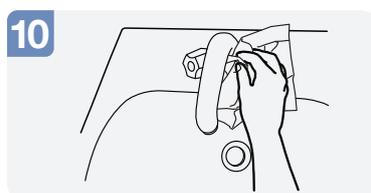
7 Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



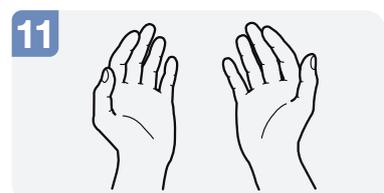
8 Rinse hands with water;



9 Dry hands thoroughly with a single use towel;



10 Use towel to turn off faucet;



11 Your hands are now safe.



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SAVE LIVES
Clean Your Hands

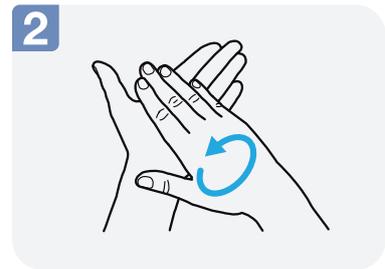
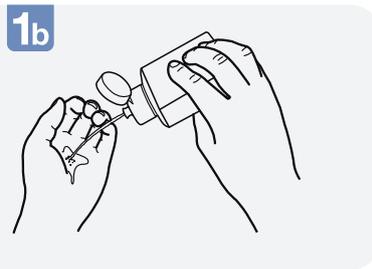
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RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

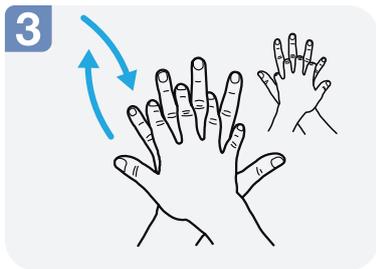
 **Duration of the entire procedure: 20-30 seconds**



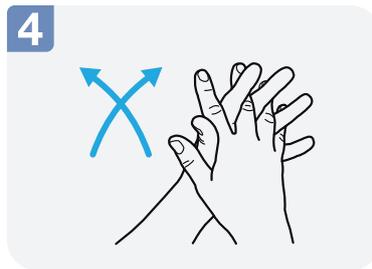
1a Apply a palmful of the product in a cupped hand, covering all surfaces;



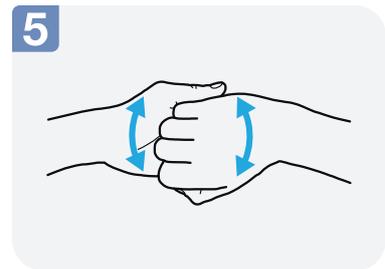
2 Rub hands palm to palm;



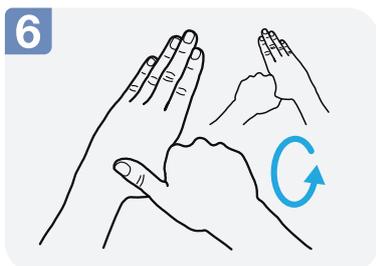
3 Right palm over left dorsum with interlaced fingers and vice versa;



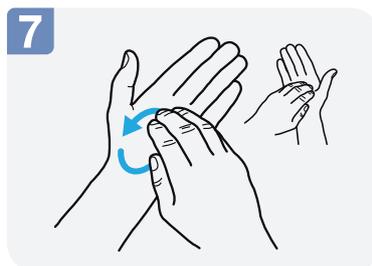
4 Palm to palm with fingers interlaced;



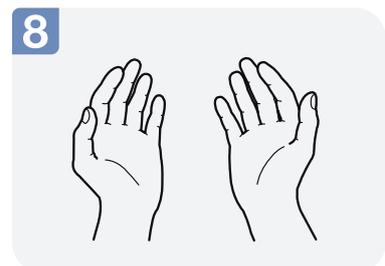
5 Backs of fingers to opposing palms with fingers interlocked;



6 Rotational rubbing of left thumb clasped in right palm and vice versa;



7 Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;



8 Once dry, your hands are safe.



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SAVE LIVES
Clean Your Hands



**Campus
Re-opening
Action Plan**

June 2020