

MCH

MAS in Collective Housing



POLITÉCNICA

ETH zürich

o1 Master UPM/ETH in Advanced Studies in Collective Housing



Co-director UPM and founder

José María de Lapuerta

Chair of the Design Studio Department
Polytechnic University of Madrid, ETSAM



Co-director ETH

Andrea Deplazes

Chair for Architecture and Construction
Swiss Federal Institute of Technology, ETH Zurich

In 2006, the Polytechnic University of Madrid presented the first edition of the Masters Degree in Collective Housing, a **postgraduate professional program of advanced architecture design**, focused on housing, city and energy studies. The value of this unique program lies in its **excellence and practice-oriented** synthesis of design with integrated disciplines and theoretical issues.

MCH was created to become a reference amongst international postgraduate courses in advanced architecture and today we can confirm this success.

In 2016, UPM and ETH joined forces to offer the first UPM / ETH Diploma: **“Master of Advanced Studies UPM/ETH in Collective Housing”**. ETH Zurich, the most prestigious technology university in the world, signed

an agreement with UPM that officially recognizes MCH as one of its MAS programs, validating this master with the same recognition than existing further postgraduate courses offered at ETH Zurich. This agreement is based on the importance and commitment of MCH with excellence since its foundation.

From 2017 on, every year's program is co-designed with UPM-ETH professors: an unique, excellent and comprehensive course of further education on the subject of Housing. For ETH, it offers an unique opportunity for cooperation, in that there is no need to invent and build up a similar course at ETH itself. It is an opportunity for mutual exchange and for the expansion of these Universities' respective networks within the Latin and German/Anglo-Saxon cultural environments.

The MCH diploma issued at course completion entitles participants which had a successful performance as “Master of Advanced Studies UPM/ETH in Collective Housing”, with a certificate that will display both UPM and ETH logos.

Participants will be evaluated following a three-grades scale: A Superior, B Advanced and C Basic. This final evaluation will also be displayed in their Diploma.

03



Academic program

o4

Madrid. January to July

1

60 ECTS / 600 Hours

c

SPECIALTIES

1. URBAN DESIGN & LANDSCAPE

José María Ezquiaga

Ginés Garrido

2. HOUSING THEORY

Carmen Espejel

3. ENERGY & SUSTAINABILITY

Javier García-Germán

4. CITY SCIENCES

Alejandro de Miguel

5. CONSTRUCTION & TECHNOLOGY

Ignacio Fernández Solla

6. BUSINESS, MANAGEMENT &

INTERNATIONAL ACTIVITY

Sacha Menz

7. LOW-COST & EMERGENCY

HOUSING

Belén Gesto

8. SOCIOLOGY, ECONOMY & POLITICS

Jesús Leal

9. HOUSING PROJECTS

WORKSHOPS

WS1. Hrvoje Njirić

WS2. Felix Claus

WS3. Andrés Cánovas, Atxu Amann,
Nicolás Maruri

WS4. Cino Zucchi

WS5. Andrea Deplazes

WS6. Dietmar Eberle

WS7. Alison Brooks

* Workshop and specialty leaders MCH'2019 to
be confirmed.

o5 Workshops



Hrvoje Njirić



Felix Claus



Andrés Cánovas



Atxu Amann



Nicolás Maruri

One-week workshops offer participants a place to further develop the acquired knowledge during the year. During that week, there is a change of pace in which they take a break from the other specialties and intensify their work in the workshops to make the best out of it.

The topic and approach for every workshop is different and the methodology used by

the invited architect is also meant to vary in order to give the participant a wide range of cases to learn from.

Some of the topics used along the nine MCH editions were related to the analysis of the gradient public-private, new housing programs, public residential equipment, urban implosion and explosion, densification processes, adaptation to

environment, residential landscape, housing and city, building depth, complexity, high-rise building...

Each workshop leader is matched with a young local architect, who acts as teaching assistant.

Each workshop consists of 25 teaching hours (7x 2.5 ETCS), although exceptions



Cino Zucchi



Andrea Deplazes



Dietmar Eberle



Alison Brooks

may occur. However, workshop leaders usually take their task as a full-day activity and invest more time than expected. All workshop and specialties are mandatory in order to receive the MCH Diploma.

The Master of Advanced Studies in Collective Housing is keen on teamwork because it is the way offices and research labs function today.

It is the interaction between teachers and participants that generates the greatest results and production each year.

The reduced number of participants allows a close contact with professors as well, who use to respond in a generous way, helping participants to increase their career improvement opportunities.

In the past years, MCH has built a close relationship with great architects such as Dietmar Eberle, Felix Claus, Anne Lacaton, Frits van Dongen, Anna Heringer, Hrvoje Njirić, Juan Herreros, Dick van Gameren, Riken Yamamoto, Cino Zucchi, Jacob van Rijs, Alejandro Aravena, Andrea Deplazes, Max Risselada or Wiel Arets, who are regular workshop leaders.

o7 Urban Design & Landscape

1 José María Ezquiaga & Ginés Garrido

c 4,5 ETCS / 45 Hours



The aim of this module is to study in depth the ideas, approaches and knowledge related to residential urban design. Along a solid theoretical basis, we will study the way in which the housing project materializes into different urban situations, with special emphasis on new housing and sites.

At the same time, a design workshop will be held in a real situation. This work will also be helpful to approach different aspects and distribute information dealing with specific elements of residential urban design, such as density, space aspect, typology, public space, urban management, sociology, program, urban facilities, traffic, etc,...



Based on the historical context of the 20th century housing, this course will analyse the different solutions of each time, figuring out the elements to recognize an architecture that stands away from trends and becomes a reference because of its universality.

Participants will develop their critique skills on the most relevant projects in the recent history of multi-family housing, through research and debate. Likewise, critique methods will be studied deeply to avoid superficial analysis and to be able to recognize a reasonable architecture.



o9 Energy & Sustainability

1 Javier García-Germán

c 4,5 ETCS / 45 Hours



This module considers the discussion on thermodynamics and sustainability as an opportunity for architecture and urbanism to rethink its traditional apparatus: structure (spatial structure and built systems), performance (climate and use through time) and its connections and exchanges with the environment.

The aim of the course is to merge the scientific and technical knowledge with its cultural contextualization; these two tracks, the technological and the theoretical, will crisscross throughout the course to transmit a critical perspective on energy and sustainability that can propel effective applications on design.

The module overlaps seminars and studio work, offering the possibility to implement the theoretical ideas discussed during the seminar as design tools. It includes an array of guest professors – featuring not only the design fields but other disciplines such as physics, biology, ecology and applied engineering – among which speculative debate is fostered.

Cities will attract 2.5 billion inhabitants by 2050 as stated in 2014 by the Population division of the UN Department of Economic and Social Affairs. Thereby, cities will need an intensive housing development in the coming years. The key of this growth is being sustainable.

Cities are the natural ecosystem for architects but cities are a complex system difficult to be understood. This module provides the main tools to manage the complexity of the city backed by its twinned Master in City Sciences.



11 Business, management & international activity

1 Sacha Menz

c 4,5 ETCS / 45 Hours



The knowledge of management tools is an important factor that determines the quality of the education that this course offers. By these means, the architect not only becomes the project designer, but also the economic manager.

Participants will learn basic concepts of management such as value, cost, price and time, which will help adding realism to their architecture proposals and enabling them to be part of the economic debate during the building process.

This specialty is enclosed in a context determined by globalisation and deals with the experience of professional architects and companies that have spread their activity worldwide.

Ignacio Fernández Solla

1

4,5 ETCS / 45 Hours

c

The aim of this course is to analyse the building as a physical system within the technical and integration systems in the design process. The theory is focused on the description of the main solutions given by architects in their most relevant buildings and the analysis of the different technical systems that make up the building.

Highly experienced professionals in housing construction and design will transmit their experience and knowledge in these fields.



13 Low-cost & emergency housing

1 Belén Gesto

c 4 ETCS / 40 Hours



Three fourths of the world's dwellings have been built without the presence of an architect or under any normative rule. This specialty seminar analyses the essential shelter conditions under emergency conditions.

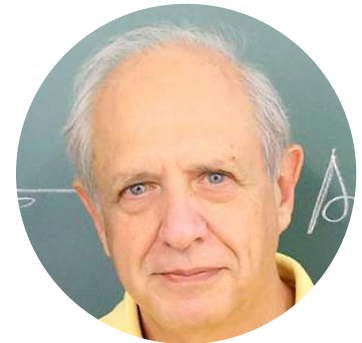
Based on a case study approach, customs and rules capable of generating an urban environment will be withdrawn. Likewise, a specific case will be developed under real circumstances.

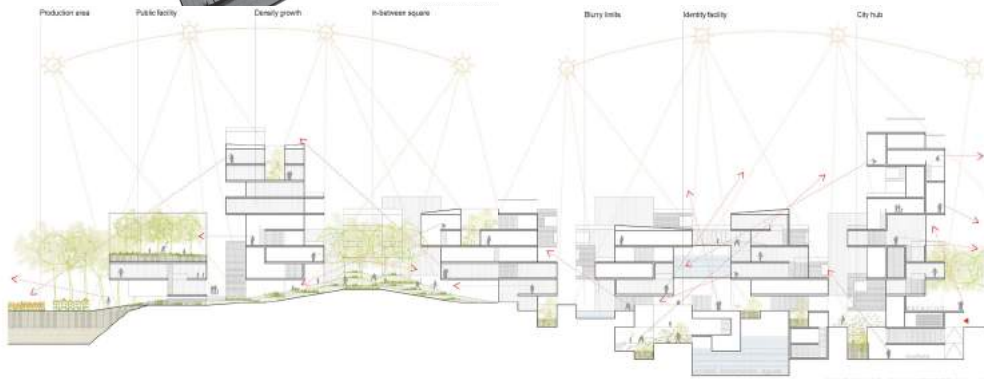
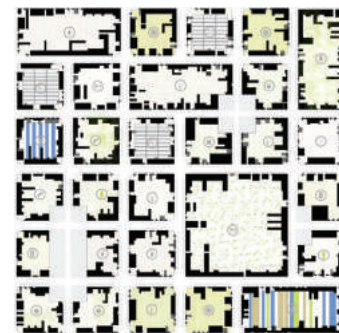
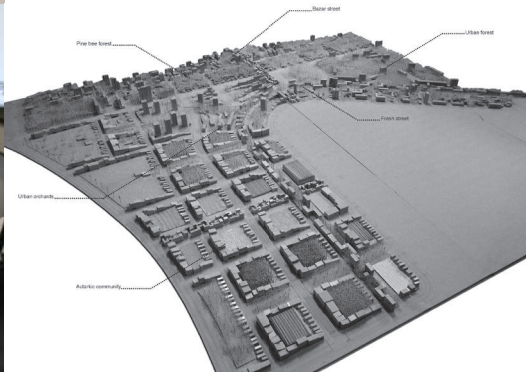
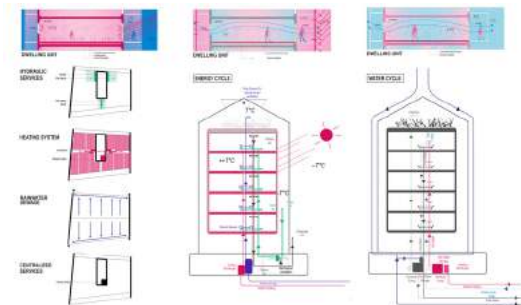
Specialised researchers in the processes and architecture generated in these settlements will present their contributions in diverse locations during the last decades.

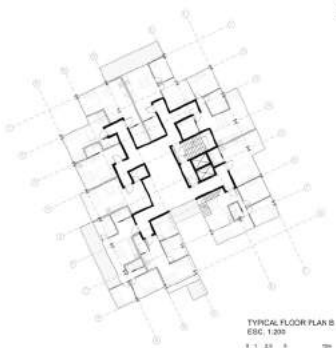
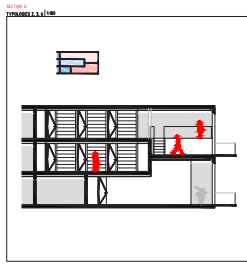
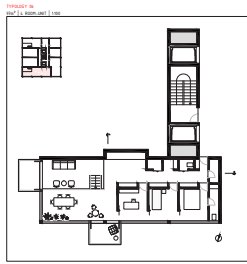
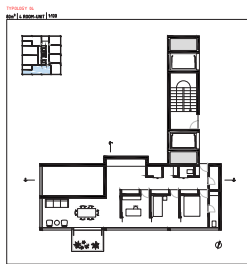
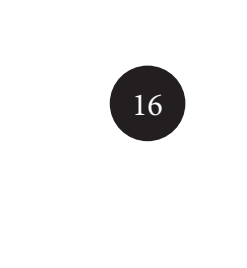
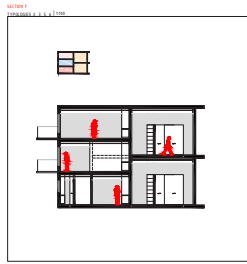
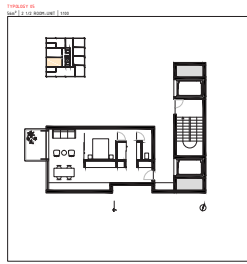
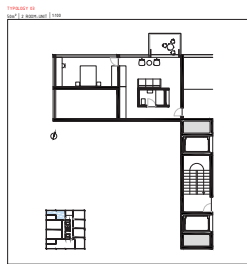
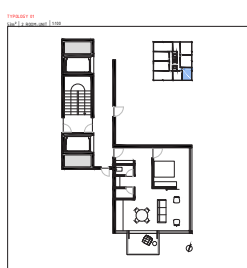
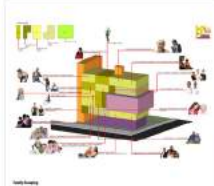
This course, which is subdivided into three other specialties, deals with housing from the disciplines that complement the other architecture-related fields. The scope of work of the three disciplines is tightly related, overlapping each other in many cases.

Sociology will include the study of residential behaviour, housing demand and characteristics, evolution and changes in households, typology and land use development, among others.

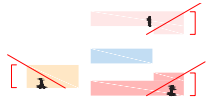
Economy will study financing and valuation, the economic impact on housing production, house emancipation and youth housing, patrimony and investment, among others.



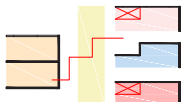




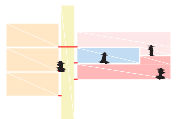
TYPICAL FLOOR PLAN B
ESC. 1:200



LIGHT EXPOSURE

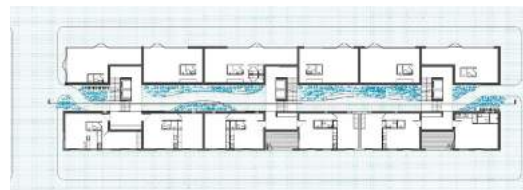
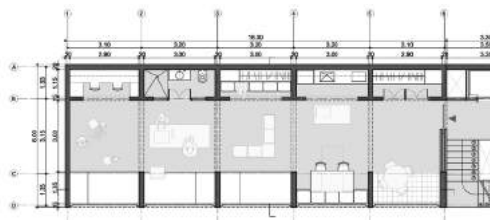
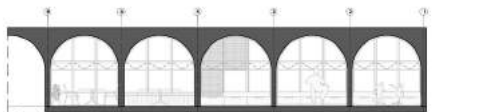
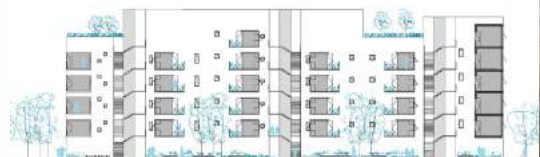
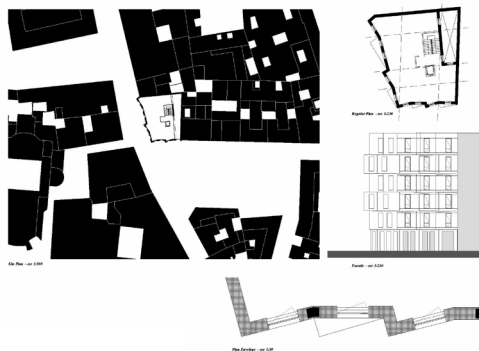
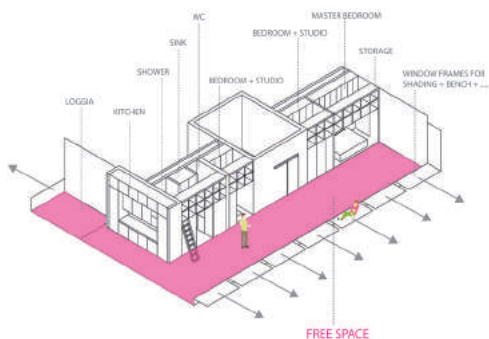


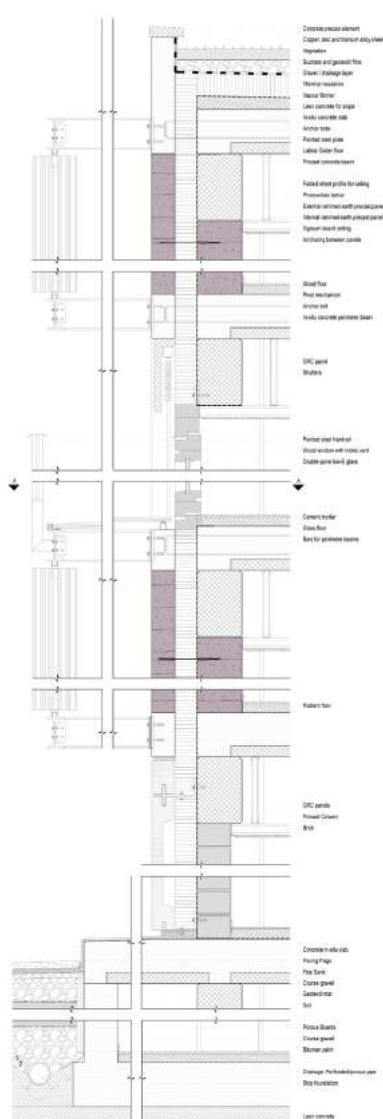
DOUBLE HEIGHT



ONE CENTRAL CORE CONNECTING
DIFFERENT LEVELS







19 Preliminary schedule

The program begins every year in January, with lessons till the end of July and the submission of the MCH final master work in September.

The MCH Opening day in 2019 will be Monday, January 14th 2019. The course is planned to finish on the last week of July, unless last-minute changes happen. It is important that foraing students don't plan to leave Madrid before the end of July, in order to finish the last submissions. The final master work can be sent by ordinary mail from abroad.

Lectures are normally held Monday through Friday, every afternoon (16.00 to 21.00, with a half-hour break). During this time, it is strongly recommended a full-time dedication in order to develop and complete practical work.

Every architect directing a workshop has total freedom of designing schedule objectives and organizing the working teams.

When the course starts, students will receive a detailed program and a preliminary schedule that will be updated every month. These are subject to change without previous notice.

Holidays:

January 29th. Santo Tomás
March 26th - April 2nd. Easter
May 1st. Worker's day
May 2nd. Madrid regional holidays
May 15th. San Isidro





There are planned trips in Madrid and abroad, where buildings subject of study, housing-related institutions and universities will be visited, accompanied by architects and/or experts.

Travel costs as well as hotel reservations, visits and shuttle buses are included in the tuition fee (personal expenses are not).

In previous editions, MCH has travelled to The Netherlands, France, United Kingdom and Switzerland. In this trip participants will have a chance to experience at first hand some of the most relevant housing buildings, architecture offices and housing-related companies.

In past editions, MCH has established collaboration agreements with ETH Zurich, Architectural Association in London and TU Delft, fostering the interaction between teachers and students.









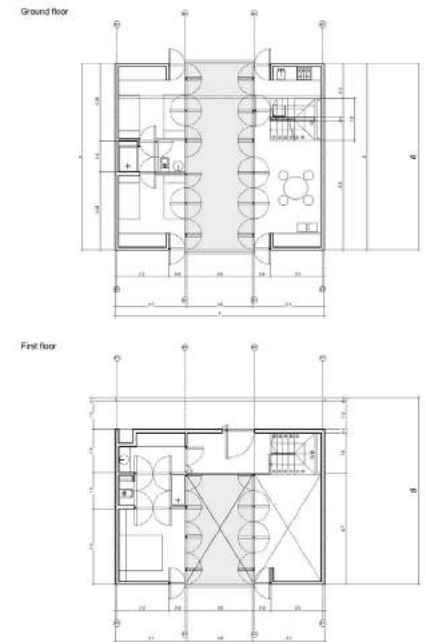
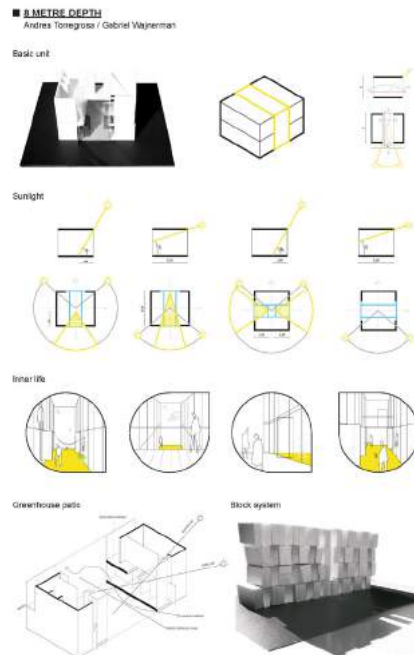
Participants will have to deliver a master's project, which will have a portfolio format and will include a selection of the projects produced during the year. It will act as their new portfolio, which adds on to their previous projects.

One of MCH publications, the MCH Papers 2011, is a compilation of participants' results during that edition.

The MCH Final master work can be sent from abroad (ordinary mail).

ETSAM is closed during August.

In any case, all portfolios must be received prior to the second week of September 2019.



Tuition fee

17.900€, to be paid prior to the beginning of the course.

The price of the study trip (transport tickets, hotel reservations, visits and shuttle buses) are included in the tuition fee. Personal expenses will not be covered in any case.

The payment may be completed in three payment terms:

- 1) 1.000€ Reservation fee. Non refundable, to be paid 7 days after receiving the admission letter.
- 2) 5.370 € (30% of the tuition fee).
- 3) 12.530 € (70% of the tuition fee). To be paid before January 2019. For the second and third payments, a personal payment calendar will be defined, according to the admission date.

Scholarships

We want to help you achieve your goal of attending MCH.

Although MCH doesn't have a scholarship program, candidates are helped to find their best financial option. At the website, a list of outside scholarship programs as well as scholarships' agreements between MCH and several institutions can be found.

MCH takes place mainly in Madrid, where participants will attend to lessons daily.

The School of Architecture (ETSAM) is located on the Universidad Politécnica de Madrid's Campus, which sits on the limit between the city centre and one of the largest green areas of the city, Casa de Campo. The UPM campus houses 6 universities, over 20 schools, a wide range of sports facilities, cafeterias and student residences, and can be accessed by bus, subway or on foot (walking distance from the centre). Accommodation can be found in the surroundings, where students gather.

MCH participants will have access to the IT centre, located in the pabellón antiguo, X floor (-1) and to the Library, on 1st floor, in the same building.

UPM, supported by its prestige and experience, offers an unique working space at ETSAM, reserved exclusively for MCH participants, where MCH takes place: Classroom 0S5.

Participants will have their own working space, personal attention and access to the university library, services, academic and cultural events.

The MCH Workspace includes a WIFI network, plotter, A3 printer, scanner and foam cutters.

At MCH Office there will be a specific housing library at participant's disposal. Those books are to be used within the classroom. No paper, modelling material or ink cartridges will be supplied by the MCH office, unless previously agreed with the workshop leader or specialty director.





Architects from all nations willing to increase their knowledge and research field in collective housing and high density cities, and able to demonstrate good skills developing projects in the time given, are invited to enroll our selection process.

Completed architecture degree

As MCH is a postgraduate degree, candidates will already have a Diploma as architects, a master's degree according to the European Higher Education Area Framework* or equal level degree. The actual naming of the degrees may vary from country to country.

High motivation

The only way to offer the best architecture postgraduate master in the world is to count with a group of highly motivated and engaged professionals, willing to give their

best during the seven intensive MCH months. The skills and attitudes shown during the admission process and candidates' personal interest will be an essential part to get the MCH admission letter.

Outstanding CV and portfolio

Candidates' portfolio has to include their best academic, research and professional projects. Technical and graphic skills, group work and other achievements are considered.

Professional experience

Two years' professional experience and evidence of detailed engagement with housing issues would be advantageous.

English C1

The official language is English, therefore participants must be able to communicate in this language. English level required is C1. Speaking other languages will be positively considered.

Program changes or cancellation

MCH keeps the right to make changes in this program.

Note that the Master in Collective Housing or the FGUPM (Fundación General de la Universidad Politécnica de Madrid) is not responsible for any prejudice as a result of the cancellation of the program due to reasons beyond our control.

The admission period for MCH 2019 is opened till 31.12.2018 or until vacancies are filled.

Candidates have to follow a three-step process:

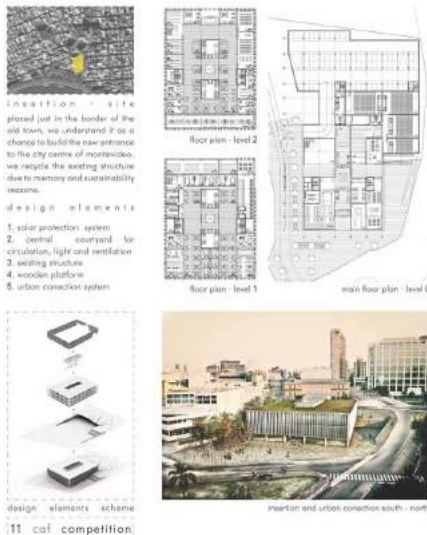
1. Fill in the online application form (www.mchmaster.com/ask-apply/), including following documents:

- CV (pdf, max. 2 MB)
- Portfolio with a sample of their best academic, research and professional projects. This portfolio must be optimized for on-screen visualization (pdf, max. 8 MB). Technical and graphic skills, group work and other achievements are considered.

- Motivation letter (pdf, max. 2 MB)
- 2 Recommendation letters (pdf, max. 2 MB each)

2. The Academic Committee considers the received applications and select some candidates, who are called for a personal interview by skype with a member of the Committee.

3. After the profile is evaluated by the Academic Committee, the candidate receives an email with the result of the deliberation. If positive, the candidate will have to pay the reservation fee (1.000€, non refundable) within 7 days after admission.



Attendance

It is compulsory to attend everyday classes unless justified, e.g. medical assistance must be submitted to the Secretary's Office.

There will be a daily control of attendance. Participants will be asked to sign a sheet and signature controls will be done from time to time to avoid cheating. Signing the attendance sheet and leaving, or signing on someone else's behalf will be considered a felony.

Participants will have a maximum of 5 minutes to go in the classroom before the class starts. Once the lecturer has started, participants won't have access to the classroom until the break. Likewise participants will not leave the class during a lecture.

Participants are allowed to have a maximum of 5 absences, that must be documented and justified. If exceeded, the participant shall not receive the MCH Diploma.

Attention

The use of mobile phones in the classroom is not permitted.

Laptops will be turned off and closed during lectures.

Smoking is not permitted inside the University buildings.

Work submittal

Participants are obliged to carry out all the work and projects proposed. These will have to be submitted within the established deadline and cannot extend it. The submission documents have to be sent as pdf files to info@mchmaster.com.

The level achieved by the participants after the course, personal interest shown and the quality of the work presented will be an essential part to receive the MCH Diploma.

Course withdrawal

If a participant decides to quit the course by his/her own will, he/she will not receive the partial or complete reimbursement of the fee, as the University policy indicates.

Expulsion

Any behavior noted by the MCH Office as incompatible with the correct development of the course, will be punished with the participant's expulsion.

Management team

The MCH Office is located on X floor (-1), at ETSAM, next to Classroom XG5. Opening hours: Monday to Friday, 9.30 to 15.30.

Direction: José M. Lapuerta and
Andrea Deplazes.

Management: Rosario Segado.

MCH: MAS UPM/ETH in Collective Housing

Avda. Juan de Herrera, 4 28040

Ciudad Universitaria, Madrid

Office: +34 913 364 222

Manager: +34 678 672 773

info@mchmaster.com

www.mchmaster.com