



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA



SWEDISH UNIVERSITY
OF AGRICULTURAL
SCIENCES

International student challenge:



URBANFARM2023

Guidebook

UrbanFarm Student Challenge 2023

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PREFACE

This Guidebook is a summary of information, terms and condition for university students involved in the international student Challenge UrbanFarm2023. The challenge intends to promote multidisciplinary and international cooperation between students belonging to the University of Bologna Alma Mater Studiorum in Italy and the Swedish University of Agricultural Sciences in Sweden.

THE CHALLENGE

The competition is for university students wanting to contribute to the field of sustainable urban agriculture. The organizers will construct an international composition of student teams participating in the projects. The groups will be announced on March 23th at the first mutual meeting.

The objective of the competition will be the Botildenborg area in Malmö that will be renewed following the three pillars of sustainability (economic, environmental and social).

The evaluation will focus on choices and solutions related to the growing systems and climate management, as well as the strategies for water, mineral nutrition and integrated pest management. The interventions must also have a strong social and entrepreneurial connotation, promoting the generation of new forms of employment for disadvantaged users. The competition will take place in English language and will be evaluated by a mixed jury of professors and international experts of the field.

The Aim

The aim of UrbanFarm2023 is to design innovative urban agriculture systems that integrate the best architectural and technological innovations to produce food in urban environments.

Requirements for participation

Teams is composed by university students regularly enrolled in the courses of:

- **Urban Agriculture** (Master in Global Change Ecology and Sustainable Development Goals), University of Bologna Alma Mater Studiorum.
- **Smart Horticulture** (International Master in Horticultural Sciences), University of Bologna Alma Mater Studiorum.
- **Urban Farming** (International Master in Horticultural Sciences), University of Bologna Alma Mater Studiorum.
- **Urban Agriculture and Social Interactions** (international master course open for all SLU students at master level), Swedish University of Agricultural Sciences, Alnarp, Sweden.

Team registration

Students must fill in the [survey](#), available on the [website](#), on March, 23th 2023. **The survey is mandatory for the participation to the challenge.** Teams will be created according to the results of the survey by the organizing committee and will be announced on the same day.

To find more information about challenge conditions please continue reading this handbook or go to the [website](#).

Challenge Clarification

1. Teams will design new functions or renovate the existing spaces in peri-urban setting of **Botildenborg**.
2. Teams will choose crops that are essential to the connection with people in the neighborhood and city and important for your business model.
3. The developed concept should be applicable and scalable on similar locations.
4. The technological innovation is a crucial element of the project. Teams will consider the processing of the crops and main urban farming innovations.
5. Teams will design the food production systems and ensure circular resource flows. The food production systems will need to be appropriate to the typologies of users that will work on them.
6. Sustainable solutions will need to address the concept of circularity. Therefore, contribution to the circularity of the neighborhood or city, as well as integration of recycle and upcycle strategies are a plus.
7. Food production, environmental issue and social inclusion are the key functions, and are essential to the business model(s) teams will develop. It is not mandatory for food production to be the main source of income for the building or to take place on a commercial scale.

INTRODUCTION OF THE LOCATION

Despite the general objectives, it is important to remember the specificities of the location and therefore the aspects on which focus shall be made.

THE BOTILDENBORG PROJECT – CASE DESCRIPTION

Botildenborg is a small urban farm and meeting place in Malmö, integrating the three sustainability spheres, namely social, ecological, and economical. The farm focuses on market gardening and social farming. The enterprise operates a mix of for-profit and non for-profit activities, which allows for both applying for funding for social projects as well as enabling to bring profit to the farm through sales, workshops and others.

Botildenborg appears as an urban space on the city's outskirts and next to the city's bypass. On a broader scale, Skåne – the county, is a traditional agricultural landscape with great conditions for farming, such as flat topography, good soil, and mild weather. The soil consists mainly of heavy clay, and the site is on a slow slope from west to east, benefitting from solar radiation throughout the year but also being highly exposed to wind. Accordingly, throughout the year, it is windy on site; the winters are wet, with main rain and little snow, whilst the past summers have been very hot and dry. The land is leased by Malmö Stad (the local municipality), while Botildenborg owns the building.

Detailed description of the space and information material can be found [here](#).



Figure 1: Botildenborg urban farm in Malmö, a graphical illustration of the site (Hugo Settergren 2021).

ROUNDS and DEADLINES

The challenge is organized in three steps: Round 1, Round 2 and the Grand Finale.

Round 1

Round 1 will run until **April, 12th 2023** and includes moments **1) abstract, 2) video presentation and 3) IRL pitch presentation (online)**. Within this deadline, each must submit the project's abstract and a 2-minutes video illustrating the design concepts to urbanfarm@unibo.it.

Abstract

The abstract is a summary of the project. The abstract must be sent both in word and pdf format, following [the template](#) available on the urbanfarm website. Send the abstract to urbanfarm@unibo.it by email. Maximum range of the abstract is 500 words. Please, indicate the name of the team, name, surname and affiliation of each team member, in addition to the project title. In the second page you should insert a photo of your team, landscape-oriented (1920x1080 px). Please make sure to have renamed your abstract file as ABSTRACT_NAMEOFYOURTEAM prior to submission.

Video Presentation

Each team has to produce a 2-minutes video (MP4) introducing the team, the rational behind the concept and the innovation targeted. Video must be sent to urbanfarm@unibo.it using a file sharing software (e.g., WeTransfer). **Before sending it, rename your MP4 file by using only the NAME OF YOUR TEAM** (or its acronym).

During the afternoon session of **April, 13th 2023**, each group will have a separate meeting with the jury no longer than 15 minutes. The session will consist in a 3-minutes PowerPoint presentation during which each team will expose their own project ideas. The following 12 minutes will be dedicated to further questions, mentoring and final feedback. We will provide you with the link for the session.

Evaluation criteria

- Abstract: up to 10 points (considering clarity of the concept, innovative aspects, adaptation to the local environment)
- Team Video: up to 10 points (considering quality of the video and capacity to engage the viewer)

Per each criterion under assessment, scores will ranked as follow: 0-2 insufficient; 2-4; weak; 4-6: Fair; 6-8: good; 8-10: excellent.

Round 2

The deadline to hand-in the final project is set on **May, 5th 2023**.

Each team will have to send:

- *the final project proposal*;
- *proof of the concept* and/or graphical designs;

In the text below, you will find detailed conditions regarding how to send and prepare the material for the submission:

Project proposal

The project proposal describes the whole concept of your project. The [template](#) contains all the instructions needed for the projects' submission. **The use of the template is mandatory.**

Send the document to urbanfarm@unibo.it by email. **Before sending it, rename your file by using only your TEAM NAME or ACRONYM. The document must be sent both in word and pdf format.** Illustrations, when relevant, should be included in the annexes.

The final project will be composed of 6 sections, organized as follow:

- **Title page with all general information (team name, name of project, participants)**
- **General introduction of the project (200 words)**
- **Agricultural section (600 words)**
- **Environmental sustainability section (400 words)**
- **Economic section (400 words)**
- **Social and educational section (400 words)**
- **Annexes (max 5 pages)**

Proof of concept

Proof of concept is the demonstration that a design concept is feasible, typically resulting from an experiment or pilot project. You are asked to provide a demo of key technologies/innovations in the form of a prototype, a video, an architectural model, etc., depending on the type of innovation. It is not required to innovate on all criteria. It is suggested to innovate at the level of the total concept, while selecting at least one (1) environmental, (2) economic, (3) social. It is possible to provide multiple proofs of the concept. The document must be sent as a PDF file to urbanfarm@unibo.it.

Evaluation criteria

- Overall project concept: up to 10 points
- Agricultural innovation and credibility: up to 10 points
- Environmental sustainability: up to 10 points
- Economic sustainability: up to 10 points
- Social and educational sustainability: up to 10 points

Per each criterion under assessment, scores will ranked as follow: 0-2 insufficient; 2-4; weak; 4-6: Fair; 6-8: good; 8-10: excellent.

_Online voting

Online voting will be available on the challenge website from **April, 20th 2023** to **April, 30th 2023**. General audience can vote online the preferred team video. Participation to online voting will be promoted by student teams, mentors and through social media channels of the challenge. 5 points will be attributed to the team with the most voted video. The results of the online voting procedure will be published on **May, 10th 2023** on the challenge website.

_Grand Finale

The Grand Finale will take place at **SLU campus, Alnarp May, 16th 2023**. All the teams will pitch their projects to the local communities and the international jury.

_Pitch

The final pitch should not be longer than 5 minutes. Teams can independently choose how to organize their pitch (e.g., including videos, slides, interactive discussion). Each team will present its project to the public and jury and then undergo a 5 minutes session of questions from the jury. The jury will evaluate pitches up to 25 points, based on the quality of the projects (innovation, feasibility and sustainability, appropriate choice of technologies) and the presentations and the capability of the teams to present and stand questions.

_The Award

The main award is the Young Mind Award of the International Society for Horticultural Sciences (ISHS). This includes a complementary 1-year membership to the ISHS for one year for each of the team members. Organizing institutions will give symbolic awards to the winning team.

_Rating Criteria

	Deadline	Evaluated material	Score	Assessors
Round 1	12/04/23	Abstract + Video	20	Scientific committee
Round 2	05/05/23	Full project + Proof of concept	50	Scientific committee + International Jury
Online voting	30/04/23	video	5	General audience
Pitch	16/05/23	5' pitch + 5' questions	25	International Jury

_The Jury

Members of the Jury include professors and researchers from UniBO and SLU together with members of the Botildenborg farm. Please see the dedicated [webpage](#) for further information on the International Jury composition.

Contact information:

urbanfarm@unibo.it

AFTER THE CHALLENGE

After the challenge, each participant will receive an attendance certificate. The University of Bologna will publish the materials developed during the competition in an open access book of proceedings, identified by a Digital Object Identifier (DOI).

Intellectual Property Rights

Each team has intellectual and industrial property rights to data, designs, information, prototypes developed and submitted or transmitted under this Challenge.

By entering the Challenge, each participant agrees to grant the University of Bologna, as the owner of the challenge, a perpetual, **royalty-free** and irrevocable license of use of the documents, prototypes, materials and information submitted within the Challenge for research and educational purposes, including the production of scientific publications aimed at communicating and promoting the Challenge's results. In addition, each participant agrees to grant to the general public the license to view and use data, designs, prototypes and information submitted, exclusively for the purpose of urban regeneration covered by the Challenge. Furthermore, each participant authorizes the ALMA MATER STUDIORUM - University of Bologna to publish photos and videos taken during the Challenge, including the final event, as well as to publish on its website the names of the participants, the names and identifying signs of the projects for promotional and advertising purposes closely related to the challenge or in other ways considered valid for the dissemination of the results of the competition.

PRIVACY

The data provided will be processed for the purpose of carrying out the institutional activities of the University and will be stored in accordance with the provisions of the European Privacy Regulation EU 2016/679 and D.Lgs. 196/2003 ss.mm.ii.

The data will be processed by computer and not. The provision of data is required to present Ideas and Projects in the context of this challenge. Such data will be communicated and/or diffused only in execution of precise normative dispositions.

The Data Controller of the data provided is Alma Mater Studiorum - University of Bologna, with registered office in via Zamboni, 33 - 40126 Bologna, in the person of the Rector as legal representative.

Contact details: privacy@unibo.it; scriviunibo@pec.unibo.it

Contact details of the Data Protection Officer (RPD/DPO): privacy@unibo.it.

The Internal Responsible for the reply to the interested party is the Director of the Department of Agricultural and Food Sciences.

As data subjects, participants enjoy the rights set out in sections 2, 3 and 4 of Chapter III of Regulation (EU) 2016/679 (e.g. to ask the data controller for: access to and rectification or erasure of their personal data; to request the restriction of the processing of their personal data; to object to the processing of their personal data; to have the right to data portability).

PARTNERS AND SPONSORS

Organizers:



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA



Promoter:

