## SUGAR Program

### Coordinator
Eric Guerci, Associate professor, Economic & management department/
Vice President for Student Entrepreneurship
Silvia Marchini, Innovation designer & Open Innovation programme coordinator, ICE

### Format/location
- Classroom/Campus? Online synchronous/asynchronous?
- Replay available?

<table>
<thead>
<tr>
<th>Weekly Workshop</th>
<th>Presence</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 weekly workshop</td>
<td>In presence*</td>
<td>@Espace Vernassa, Economics and management campus</td>
</tr>
<tr>
<td>1 weekly coaching session</td>
<td>In presence*</td>
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</tr>
</tbody>
</table>

Few meetings and visits will be hosted at the IIT research centre, either at the branch involved in this project, which is located in Turin (Ita), or at the IIT headquarter in Genoa (Ita)*.

During the second semester the students will travel (at least) once to visit the university partner team in Bologna, Italy*.

The final event of the SUGAR program, in June, will take place in San Francisco*.

*Changes may occur according to the pandemic evolution.

### Capacity
**Number students**
2

### Prerequisites
Specify the prerequisites here or type « No prerequisites »

The applicants must possess a good english proficiency, a teamwork attitude, a strong motivation, flexibility, adaptability, and the will to venture into different disciplines.

## Lecturer(s)

The Sugar Program is divided in 2 main modules, each of them entails multiple lectures* (see the schedule).

<table>
<thead>
<tr>
<th>Learning module</th>
<th>Lecturer</th>
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</thead>
<tbody>
<tr>
<td>Design thinking &amp; Service design &amp; innovation project management</td>
<td>Silvia Marchini, Innovation designer &amp; Open Innovation programme coordinator, ICE</td>
</tr>
</tbody>
</table>
* The lectures are structured as workshops with a learn-by-doing approach

** Other workshops will be organized according to the specific exigencies of the program with national and international experts

## Learning Outcomes

Students from different disciplines have the opportunity of practicing their competencies in a real project. They acquire experience-based knowledge.

- Design thinking proficiency: Design Thinking is the innovation process developed at Stanford, which was launched by IDEO and has fuelled a large part of the entrepreneurial culture in Silicon Valley. At the heart of the process is the notion that to innovate, it is necessary to connect with people, understand the real needs of the user and explore the whole project context with a constant attitude to research, undertaking a non-linear path characterized by uncertainty and the freedom to make mistakes and create new ideas
- Qualitative research
- Development of a real service system application UX
- Development of a business strategy based on a digital solution
- Development of AI-based functionalities
- Development of a forward-looking data collection and management system
- Competence in presenting and pitching an innovation project.
- Project management (of a real company project)
- Team working
- Stakeholders relationship management
- International relation management
Summary

SUGAR Program- general overview: the SUGAR Innovation program is promoted by SUGAR, a global network that involves over 20 top-ranked international Universities and over 26 international companies. The SUGAR Network aims at bridging the gap between academia and industry: corporates propose innovation design challenges and collaborate with international teams of students to solve them. Each international team is made up of students coming from two universities from different countries. This year the team from Université Côte D'Azur will collaborate with the University of Bologna, the corporate partner is the Italian Institute of Technology (IIT). The teams are supported by innovation coaches as experts in design thinking.

Length: from october 2021 to july 2022
Language: english
Economic contribute: students receive a scholarship of about 2.000/2.500 €
Academic accreditation: Since the Sugar programme lasts 9 months, is going to be recognize as a personal project (6ECTS) and an internship.

The format: The SUGAR Innovation program is an experience based learning path. Students work in a team and apply their knowledge to real world design challenges.
The program format entails the following activities:
• about 20 workshops targeted for the Université Côte D’Azur students (on Thursday morning) where students receive theoretical pills which are immediately applied through practical activities.
• local team working sessions (which can be scheduled autonomously by the team members from Université Côte D’Azur)
• international team working sessions (which are scheduled by the team members from Université Côte D’Azur and University of Bologna)
• weekly coaching session (scheduled autonomously by the team member and the coach)
• international travels to visit the partners and gather with the network (if allowed by the pandemic).

The Design challenge
The research question posed by the Italian Institute of technology is: “How might we identify an application for the “Artificial photosynthesis technology” and create a business opportunity based on the digital service system derived from it?
The project is aimed at identifying possible applications and market opportunities for an innovative technology capable of converting carbon dioxide (CO2) into chemical energy. This technology is named “Artificial photosynthesis technology” since its working principle is based on solar energy and recalls the system adopted by plants to create oxygen from CO2. The project consists in the analysis of the technology abilities and the hypothesis of several possible application fields which will be therefore tested and iterated until the selection of the final case to develop. Once the market case is identified, it will be necessary to design the digital service system which allows stakeholders to interact and control this technology (controlling activity, monitoring activity, information, etc…). The service system design must take into consideration the future implications of the Artificial photosynthesis technology in the selected field (ex. which data can be collected to unlock future functions such as data based process optimization, consumption predictions etc…).

In terms of business development, the technology has to be considered as a whole, together with the digital service system which makes it usable, designing the strategy to create a startup out of it.
References: https://iris.polito.it/retrieve/handle/11583/2837210/378266/proof.pdf
## Schedule

**Reminder:**
Fall semester is from mid-October to mid-December. Spring semester is from mid-February to mid-April. Synchronous session MUST be on Thursday mornings.
In case of asynchronous courses, live tutorial sessions should be settled on evenings.

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Event Details</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>13/09-17/09</td>
<td>Team &amp; challenge presentation + desk research</td>
<td>@Espace Vernassa</td>
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<tr>
<td>18/10-22/10</td>
<td>Local Kick-off &amp; Meeting with the company (+ User needs?)</td>
<td>TBD Genoa - Italian Institute of Technology</td>
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<tr>
<td>25/10-29/10</td>
<td>Sugar Global Kick-off (25-28 october)</td>
<td>Remote</td>
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<tr>
<td>01/11-05/11</td>
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<tr>
<td>8/11-12/11</td>
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<tr>
<td>15/11-19/11</td>
<td>Insights and Personas</td>
<td>@Espace Vernassa</td>
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<tr>
<td>22/11-26/11</td>
<td>Early prototypes</td>
<td>@Espace Vernassa</td>
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<tr>
<td>29/11-03/12</td>
<td>Challenge reframe</td>
<td>@Espace Vernassa</td>
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<tr>
<td>06/12-10/12</td>
<td>Teamworking</td>
<td>@Espace Vernassa</td>
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<tr>
<td>13/12-17/12</td>
<td>Fall presentation &amp; report delivery</td>
<td>@Espace Vernassa</td>
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<tr>
<td>03/01-07/01</td>
<td>Solution Space exploration &amp; Design thinking questionnaire</td>
<td>@Espace Vernassa</td>
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<tr>
<td>10/01-14/01</td>
<td>Teamworking</td>
<td>@Espace Vernassa</td>
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<tr>
<td>17/01-21/01</td>
<td>Ideation</td>
<td>@Espace Vernassa</td>
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<tr>
<td>24/01-28/01</td>
<td>Teamworking</td>
<td>@Espace Vernassa</td>
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<tr>
<td>31/01-04/02</td>
<td>Dark horse prototype</td>
<td>@Espace Vernassa</td>
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<tr>
<td>07/02-11/02</td>
<td>Teamworking</td>
<td>@Espace Vernassa</td>
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<tr>
<td>14/02-18/02</td>
<td></td>
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</tr>
<tr>
<td>21/02-25/02</td>
<td>Design principles &amp; Vision</td>
<td>@Espace Vernassa</td>
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<tr>
<td>28/02-04/03</td>
<td>Teamworking</td>
<td>@Espace Vernassa</td>
</tr>
<tr>
<td>07/03-11/03</td>
<td>Get ready for your Winter presentation</td>
<td>@Espace Vernassa</td>
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<tr>
<td>14/03-18/03</td>
<td>Winter presentation</td>
<td>@Espace Vernassa</td>
</tr>
<tr>
<td>21/03-25/03</td>
<td>teamworking and report delivery</td>
<td>online</td>
</tr>
<tr>
<td>28/03-01/04</td>
<td>Hunting plan</td>
<td>@Espace Vernassa</td>
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<tr>
<td>04/04-08/04</td>
<td>Part x is finished prototype</td>
<td>@Espace Vernassa</td>
</tr>
<tr>
<td>11/04-15/04</td>
<td>Teamworking</td>
<td>@Espace Vernassa</td>
</tr>
<tr>
<td>18/04-22/04</td>
<td>Business Model Canvas &amp; Strategy</td>
<td>@Espace Vernassa</td>
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</tbody>
</table>
25/04-29/04  28/04  h9-12  Teamworking  @Espace Vernassa
02/05-06/05  05/05  h9-12  Refinement  @Espace Vernassa
09/05-13/05  12/05  h9-12  Teamworking  @Espace Vernassa
16/05-20/05  19/05  h9-12  Get ready for the Final presentation & Final documentation  @Espace Vernassa
23/05-27/05  26/05  h9-12  @Espace Vernassa

30/05-03/06  Full time week  TBD Expo  San Francisco
06/06-10/06
13/06-17/06  TBD  possible local final presentation
20/06-24/06
27/06-01/07  Final report deadline

**Evaluation**

The evaluation of each student is structured as follows:
- 50% individual score which is based on a brief questionnaire about design thinking and a peer to peer evaluation
- 50% group score which is based on the team’s reports and presentations

<table>
<thead>
<tr>
<th>Type of evaluation</th>
<th>Date or Submission deadline</th>
<th>Time</th>
<th>Location (for on-site exams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall presentation</td>
<td>december</td>
<td>9-12</td>
<td>@Espace Vernassa</td>
</tr>
<tr>
<td>Fall documentation</td>
<td>december</td>
<td>00:00</td>
<td>//</td>
</tr>
<tr>
<td>Design thinking questionnaire</td>
<td>January</td>
<td>9-12</td>
<td>//</td>
</tr>
<tr>
<td>Winter presentation</td>
<td>march</td>
<td>9-12</td>
<td>@Espace Vernassa</td>
</tr>
<tr>
<td>Winter documentation</td>
<td>march</td>
<td>00:00</td>
<td>//</td>
</tr>
<tr>
<td>Final presentation</td>
<td>june</td>
<td>9-18 TBD</td>
<td>To Be Defined</td>
</tr>
<tr>
<td>Final documentation</td>
<td>july</td>
<td>00:00</td>
<td>//</td>
</tr>
<tr>
<td>Peer to peer evaluation</td>
<td>July</td>
<td>00:00</td>
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**Additional Information**

Students should consider that the SUGAR program is a unique opportunity to practice their skills in an international environment and with real stakeholders, within a unique network of prestigious companies and universities. For this reason, the commitment required by the program may vary depending on the aptitude of the team and the development of the project. This is because it is a real project that involves a way of working that is more professional than academic. Participants must therefore be highly motivated, flexible, and adaptable.
The SUGAR Program is a project where multidisciplinary teams of students work on real company projects in order to develop innovative solutions through the design thinking approach.

**Who**
IA2 et Stratégie digitale

**Language:**
English

**Length:**
9 months (not full time)

**Format**
1 weekly workshop + teamwork & coaching

**Location:**
Nice + international travels

**Incentives:**
international travels
Bonus entrepreneur

**Academic accreditation:**
In semester 3 this project will take the form of a work equivalent to 6 ECTS.
In semester 4, the continuity of this project will replace the end of master internship.
SUGAR Program

Challenge: "how might...?"

Innovative solution

University

Company

University
Design thinking is the design approach born in the Stanford Design School, which has fueled much of the entrepreneurial culture of Silicon Valley. This approach is human centered because it is based on the concept that real and lasting innovation requires a deep understanding of the context and the needs of the people for whom it is designed. Our process consists of three main stages: Discover (Research), Design, Develop.
Design thinking

**Brief-challenge:**
How might we extract value from the data gathered by Bonfiglioli Products according to the customers’ needs in order to develop a range of services that generates new business opportunities for the company?
The challenge

**Brief-challenge:**
“How might we identify an application for the “Artificial photosynthesis technology” and create a business opportunity based on the digital service system derived from it?”
Design thinking

**Need finding**
- User research
  - desk research
  - stakeholder map
  - interviews
  - observations

**Ideation**
- Ideation
  - brainstorming
  - prototypes
  - user testing

**Definition**
- Definition
  - prototype definition
  - solution concept presentation
  - Business model design & roadmap
SUGAR Program

Challenge
"how might we enable sustainable long distance travelling?"

Innovative solution
SUGAR Network

250 Multicultural & Multidisciplinary Students

26 Universities

15 Different countries

26+ Sponsors companies and projects.

50+ professors and coaches

200 Past collaboration with enterprises.

2$+ Millions in project funding
SUGAR Program

- **December**: Fall presentation & report
- **March**: Winter presentation & report
- **June**: Final presentation & report

**Timeline Events**
- **21.10**: University partner visit
- **25-29**: Global kick-off online
- **30/05-03/06**: Final Expe San Francisco
- **End of June**:
SUGAR Program
9 Good reasons to pick this project

• Learning to innovate with Design Thinking process
• A chance to expand your knowledge out of your regular field of study
• Learning and training necessary skills for the future jobs
• Working with an awesome multidisciplinary team
• Learning from a coach, researchers & professors from all over the world
• Lectures you’ll immediately put into practice
• Deep diving in a specific challenge
• Making lots of good friends
• Making your mind and your CV shine!
SUGAR Program

Who are we looking for?
• Master’s degree students from all disciplines and departments
• Fluent in English (previous international experience)
• Strong team player (Enjoy working in group, previous teamwork experience)
• Ambitious & hardworking (Willing to go out of your comfort zone, willing to compromise your Saturday beer to go an extra mile)
• Curious & proactive (not waiting a to-do list, able to try, fail, learn and find your way by yourself)
SUGAR Program

Commitment

• Weekly workshop on Thursday morning
• Teamwork and coaching
• Availability to travel
• Full time commitment during the Global events
SUGAR Program

Application procedure
Send an e-mail to silvia.marchini@univ-cotedazur.fr by October 3rd 2021.

The mail should contain the following information:

Resume
☐ attach your resume to the e-mail

Link to your self-presentation video*:
Create a 2-minute (max) video IN ENGLISH to present yourself:
☐ What’s interesting about you (university path, personal passions)
☐ extracurricular experiences (projects, associations, working experience)
☐ previous teamwork experiences, inside or outside the university.
☐ explain the reason why you would like to join the SUGAR Program.
Paste the link** to access the video in the e-mail.

* We don't ask for professional content, just an amateur video covering the points listed above. The video can be recorded with your laptop or smartphone with no post-production activities.
**How can you create a link to access your video? You can upload your video on a digital platform such as "Vimeo" or "Youtube" or on a cloud space (like google drive); each platform has its way to create the link to access the video.