“Become a Maker”

Epitech and ESME Sudria Summer School 2021 ONLINE

Program Details:

- Dates: July 5-23, 2021
- Format: Online
- Cost: 900 €
- Credits: 6 ECTS
- Level: Introductory Robotics
- Language of Instruction: English
- Program schedule: 4 hours of live instruction/activities per day. Time will be determined in function of the program participants’ schedules.

Application Information:

- Open to motivated and interested students in all fields
- Proof of B2 English level required
- Transcripts in English or in French
- Experience: basic knowledge in science and technology, basic knowledge in programming
- Apply now via our Application Form
- Apply by May 31, 2021

Contact international-relations@epitech.eu or international@esme.fr for more information.

Curriculum

Our Summer School has been designed to make participants understand and take part in the “Maker Movement”. More specifically, the goal of the program is to help participants build knowledge in the fields of Creative Coding, Design, Generative and Interactive Arts, Digital Manufacturing, Electronics and Robotics in a fun and informal way. This program is the perfect crash-course for students looking for some exposure and experience in robotics.

Our online program encompasses intensive courses and practical workshops led by our experts as well as Survival French and Pop Inter-culture Workshops. In just three weeks, you will study and work both individually and in teams in a creative and inspiring environment, transporting you away from your own couch.

At the end of this program, you will have your own robot which will compete against other robots to win the Robot Challenge and have created your own Interactive Art piece.
Experiments & learning outcomes

<table>
<thead>
<tr>
<th>Technical skills</th>
<th>Soft skills</th>
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<tr>
<td>ROBOTICS, CREATIVE CODING, DESIGN, ELECTRONICS, DIGITAL ARTS</td>
<td>DESIGN THINKING, CO-WORKING, TROUBLESHOOTING, PROJECT MANAGEMENT</td>
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- Ability to use a set of digital tools and methods to build a product
- Ability to solve problems independently (DIY) and as a team (DIWO)
- Ability to coordinate multiple, interdisciplinary tasks in order to achieve a goal
- Ability to apply newly learned information to define, design and lead a project
- Ability to drive a project and to meet deadlines

Week #1: Creative Coding

During the first week, you will discover the general principles of Creative Coding, followed by two days on Generative and Interactive Design.

This week will end with your First Creative Challenge: you will use the skills acquired on Generative and Interactive Design.

Tools:
- Processing and ReactiVision.

Week #2: Robotics & Design

During the second week, you will assemble and learn how to program your robot using your at-home kit. You will try to design the best solutions for the final robotic challenge. For the Second Creative Challenge, you will also meet the robot creators and they will help you design your own 3D parts and hack your robot.

Tools:
- Arduino and Electronics
- TinkerCAD
- At-home robot kit

Week #3: Final Challenge

During the last week, you will learn the basics of graphic design to create your team style and logo. Last but not least, you will prepare for the three different parts of the Final Creative Challenge:

1) Presentation of each robot (use some of your survival French as an extra challenge!)  
2) Interactive Design Challenge  
3) Robot Challenge