

## ABOUT US

This team which is part of the European Project Semester (EPS) at Instituto Superior de Engenharia do Porto (ISEP) consists of 5 students will combine their knowledge and skills in order to work together towards the same goal which is stimulating sustainable food production by designing a smart vermicponics system for city buildings.



## CONTACT US

+351 729 118 931  
+351 945 127 756  
R. Dr. António Bernardino de Almeida 431, 4200-072 Porto



# SMART & MODULAR VERMIPONICS



Plants grow fresh and healthy in a nutrient-rich soil



Composting will help the food waste problem



Worms live in a healthy environment



## THE SUSTAINABLE SOLUTION

Food waste will be always a problem. We believe that we can encourage people to make composting a part of everyday life. Everyone can grow their own healthy food and compost it after consuming. Vermicomposting helps rebuilding the soil with rich nutrients which leads to a garden that grows fresh and healthy food. This environment is great for the worms, they get to live into a fertile soil. We can all get to protect our planet.



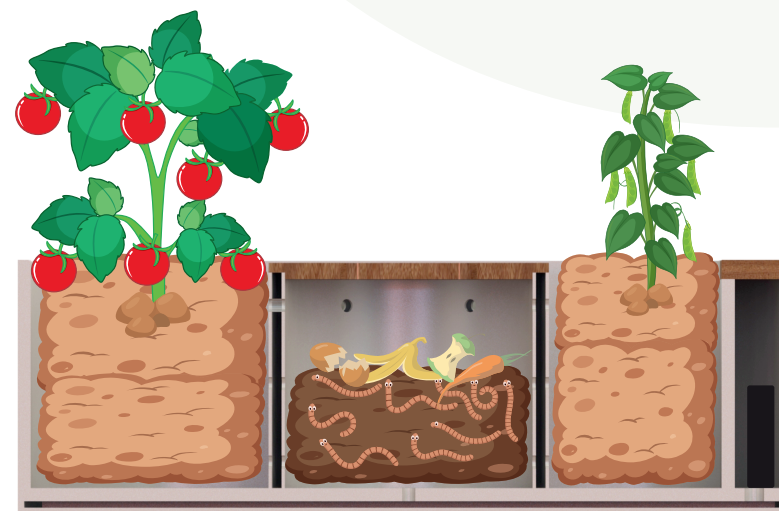
## WHAT'S THE SMART & MODULAR VERMIPONICS?

It is a concept made with the main purpose of bringing people together. The vermiponics modular system contains 6 pots in which composting is performed in a more efficient way. Everyone can grow their healthiest plants that uses the nutrients from worm castings and at the same time throw away their food waste, saving the planet. Composting never been that easily.



## THE FOOD WASTE PROBLEM

It's normal after a meal to have leftover food, important it's what we do with it in order to make a difference. Between 33-50% of all food produced globally is never eaten. We believe that everyone can learn how to take care of the planet together.



## HOW IT WORKS?

Our product has many flower pots which contain 2 concentric cylinders with holes to enable the worms movement, connected with tube that has light sensors for detected the worms. The vermicomposting is produced in those cylinders and the 'worm-tea' is going into the soil through the same holes. The technical components, which are used to detect the umidity and the temperature of the soil, are safely separated by a wall. Each information is transmitted by the microcontroller to an application that can be read by users. The food waste is easily placed in composting cylinders to start the process.

