

# Agenda

## Neapolis Innovation Summer Campus 2020

	Thursday August 27 <sup>th</sup>	Friday August 28 <sup>th</sup>	Monday August 31 <sup>st</sup>	Tuesday September 1 <sup>st</sup>	Wednesday September 2 <sup>nd</sup>	Thursday September 3 <sup>rd</sup>	Friday September 4 <sup>th</sup>	Saturday September 5 <sup>th</sup>	Sunday September 6 <sup>th</sup>
09:00	Welcome	USART & Serial Streams	Embedded Development Patterns	IC level Communications: SPI & I2C	Generating squarewave with PWM	Precise Positioning overview: GPS & GNSS	System on Chip Challenges		
09:15	Hardware and software check								
09:45	RTOS Overview and ChibiOS								
		HackFest overview							
10:45	Break	Break	Break	Break	Break	Break	Break	Break	Break
11:00	Embedded Applications development with ST nucleo board	Versioning & Bug Tracking	First approach to textual interfaces	Software & Firmware Requirements Specification	Interrupt Capture Unit	Firmware Testing	Team Project Work	HackFest Challenges	Non-stop team "speed dating" with Q&A and Peer voting
									Evaluation Committee decisions
12:30	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Feedback
14:00	Using GPIO peripherals	Debugging	Sampling analog signals with ADC	Team Project Start	Team Project Work	Team Project Work	Team Project Work	HackFest Challenges	Awards
									End
15:30	Break	Break	Break	Break	Break	Break	Break	Break	Break
15:45 - 17:00	Using GPIO peripherals	Review of previous sessions	Team Working & Multicultural Organization	Team Project Work	Team Project Work	Team Project Work	Team Project Work	HackFest Challenges	

- Is the Summer Campus on-line this year?

Yes, the Summer Campus is on-line. You will need a good unlimited data internet connection. We also suggest a good 4g hotspot as a backup.

- Do I meet the requirements to take part in the Summer Campus?

If you are a university student enrolled in a Bachelors or Masters degree or similar in engineering or computer science or something related and want to participate in a 9-day intensive practical interactive course on 32bit microcontrollers, then you are eligible. You must have a good knowledge of "C".

- How do I enroll?

You need to visit <http://www.neapolisinnovation.info/blog/events/summer-campus-2020/> where the enrolment links will be updated. One link for Universities that are partners of NeaPolis Innovation and one link for all other universities who are on or around the same time zone as the Summer Campus headquarters.

- Are places limited?

Places are limited to around 100 and distributed to maximize the number of universities. If you are accepted please make sure you really do participate. If your plans change then let us know as soon as possible in order to give the place to someone else

- Where is the Summer Campus located?

As we said the Summer Campus in 2020 is on-line. We will use Microsoft Teams platform. The location is from your home or wherever you have a good internet connection. You could also be near the beach, in the mountains.

- What should I also have with me?

At least a PC with a MS Windows 64bit and administration rights. In case of Linux or MacOS you should install a MS Windows virtual machine. We will provide you with all the devices and tools needed to develop your project. You will need to install tools in advance and collect devices from STMicroelectronics in Naples in advance. In case of logistics problems we will send you the devices by DHL.

- Is an agenda of the Summer Campus available?

Follow the NeaPolis Innovation Facebook page to be updated. The Summer Campus will start every day at 9am and end at 5pm, except on Sunday 6 September when we end at 3pm.

- The agenda looks challenging. Will I be able to complete it?

Don't worry, all exercises are step-by-step with Tutors and Student Tutors available to guide you. What you must do is actively participate and be prepared to work in a team.

- Is lunch available?

No, we are sorry but this year you will miss out on the great Italian food from the Summer Campus canteen including the freshly made pizzas and local coffee. (However your Tutors have been granted special privileges and might keep you informed).

- Do I need to speak Italian?

Preferably since all our Tutors and Student Tutors will be speaking Italian in the main activities, however documentation is mainly in English. If you want to practice your Italian, it could be good opportunity. There will be a lot of team working and if you prefer to be in a team happy to speak English then let it be known during registration.

- How much does the Summer Campus cost?

The Summer Campus is for free. There is no cost. The objective is mainly for engineering and computer science students to gain practical hands-on experience in developing 32bit microcontroller projects.

- Can the Summer Campus contribute to my degree?

The main purpose is for YOU to gain practical hands-on experience in developing 32bit microcontroller projects, you also meet up with new people and have some fun. Many universities and degree courses also give credits for participation in the Summer Campus. Ask to your reference professor further information.

- I been accepted but have some more questions.

We suggest you to get in touch with tutors using the private participants Facebook group



- I do not have Facebook. Is it mandatory?

No, it isn't but we suggest you create a temporary profile. The group will be used to share knowledge and to get technical support through all the event.

- What's the Summer Campus followup?

We especially thank the alumni of the Summer Campus who come back as Student Tutors: candidate yourself as a Student Tutor for next year!