

Course Name	Robotics : practical views
Institution, Country	Saint-Cyr Military Academy, Coëtquidan, France
Event aims to the following services	All
Type of the event	Course
Event period	Monday 2020-11-30 to Friday 2020-12-04
Deadline for registration	2020-09-11
Short description	After a presentation of the challenges in nowadays robotics and in military robotics, students will learn robotics by a practical approach (sensors, actuators, 3D vision, control of robots, avoidance of obstacle, direct and inverse kinematics, path planning ...). Students will implement the moves on robots with wheels, humanoid robot -Nao- and legged robots. Help from teachers/researchers will be given including parts of scripts to concentrate the work of students on the main interesting parts. Work will be done by groups of students from different countries.
Requirements/profile of participants	Bachelor level. Basics of Rigid Bodies kinematics & dynamics, programmation skills (at least basic programming in C, C++, Matlab) and some knowledge in signal processing.
Selection of cadets	Because of the great success of this lecture and to allow the maximum of countries to send students, the number of participants is limited. St-Cyr Academy will select participants and will send confirmation to selected academy on 09/18. In case of late registrations (after 09/11), we will consider them only if some places remain free.
Working language	English
ECTS	2
ECVET	
Workload	32 h
Provided by hosts	
Additional remarks	Our school is 45km from Rennes. We are not able to send a bus to pick each cadet in Rennes on Sunday 2020-11-29. Two solutions: <ul style="list-style-type: none"> - Cadets take a taxi to St-Cyr schools. Price ~ 90€; - A bus will pick all the cadets in Rennes railway station at 11am and Rennes airport at 11:30am on Monday 2020-11-30. If needed, hotels exist near railway station and airport. You can contact "POC for administrative issues" to get a list of hotels. Departures: Saturday 2020-12-05 morning / Sunday if participation to Austerlitz Ceremony
Point of contact	Information on lectures: Yves Bergeon (yves.bergeon@st-cyr.terre-net.defense.gouv.fr) Administratives issues : cyr.international@st-cyr.terre-net.defense.gouv.fr CNE Rispal-Walker : tél. (+33) 2 97 70 75 27 ou (+33) 2 97 70 75 83 LCL Maicher (thierry.maicher@st-cyr.terre-net.defense.gouv.fr)