## Seasonal School on

## 5G/6G networks transforming the digital society (ARTIST)

	Mon, 31/1/2022	Tue, 1/2/2022	Wed, 2/2/2022	Thu, 3/2/2022	Fri, 4/2/2022
Venue	TECIP (Blue Room)	TECIP (Blue Room)	TECIP (Blue Room)	TECIP (Blue Room)	TECIP (Laboratories, 1 <sup>st</sup> floor)
Session Name	Cellular architectures	Networking Technologies	Networking Services	Advanced 5G Applications	Hands-on session
09:00- 10.00	Welcome and self- introduction, School program (Prof. Castoldi, Prof. Valcarenghi)	SDN/NFV programmable networks (Prof. Castoldi)	5G services, based on eMBB/ULLRC/mMTC/ MEC (Prof. Castoldi)	e-health and Telemedicine (Prof. Castoldi)	Team Building and Lab Tour (Prof. Castoldi/Prof. Valcarenghi)
10:00- 11:00	Evolution of cellular system and the networking echo-system (Prof. Castoldi)	SDN/NFV programmable networks (Prof. Castoldi)	5G services, based on eMBB/ULLRC/mMTC/ MEC (Prof. Castoldi)	e-health and Telemedicine (Prof. Castoldi)	Hands-on sessions, up to 3 Groups. Supervisors: Dr Sgambelluri, Ing. Pacini, Dr. Cecchetti, Dr. Ruscelli, Dr. Paolucci, Ing. Scano.
11:00- 12:00	Cellular and wireless architecture (Prof. Castoldi)	Disaggregated Optical Networks (Ing. Cugini)	Zero-touch-5G Networks (Prof. Valcarenghi)	5G electromagnetic pollution: myth or reality (Prof. Chiaraviglio, UNIRM2)	Hands-on sessions, up to 3 Groups. Supervisors: Dr Sgambelluri, Ing. Pacini, Dr. Cecchetti, Dr. Ruscelli, Dr. Paolucci, Ing. Scano.
12:00- 13:00	Cellular and wireless architecture (Prof. Castoldi)	Disaggregated Optical Networks (Ing. Cugini)	Zero-touch-5G Networks (Prof. Valcarenghi)	Guided Tour Communication Area Labs (Prof. Castoldi)	Hands-on sessions, up to 3 Groups. Supervisors: Dr Sgambelluri, Ing. Pacini, Dr. Cecchetti, Dr. Ruscelli, Dr. Paolucci, Ing. Scano.
13:00- 14:00	Lunch	Lunch	Lunch	Lunch	Lunch
Session Name	5G architecture and transport	Advanced Networking Technologies	Advanced 5G Applications	EU/Industrial perspective	Supervised time to wrap-up hands-on sessions
14:00- 15:00	5G Standards and evolution (Prof. Valcarenghi)	P4-based traffic conditioning (Dr. Paolucci)	5G for logistics (Ing. Martini)	5G and beyond: a European view (Dr. Cerutti, Joint Research Center)	Student Groups prepare presentation about hands- on sessions
15:00- 16:00	5G Standards and evolution (Prof. Valcarenghi)	Power consumption (Prof. Castoldi)	Al-driven vehicle control (Prof. Valcarenghi)	Industrial case by Ericsson (Ing. Sabella)	Student Groups prepare presentation about hands- on sessions
16:00- 1700	Backhaul optical networking (Prof. Valcarenghi)	Network Telemetry (Dr. Sgambelluri)	Road user localization (Dr. Cecchetti)	Industrial case by WindTre (TBC)	Student Groups prepare presentation about hands- on sessions
17:00- 18:00	Backhaul optical networking (Prof. Valcarenghi)	Time-Sensitive Networking (Dr. Sambo)	Industry 4.0 (Dr. Maggiani, Sma-rty)	B5G towards 6G (Telecom Italia, TBC)	Closing Remarks (Prof. Castoldi, Prof. Valcarenghi)
Evening	Get-together At Sant'Anna Main Building				