

MODERN MECHATRONICS SUMMER SCHOOL



sunday
15
JULY

STUDENTS' ARRIVAL (TRANSPORT FROM VENICE AIRPORT)

SYLLABUS

monday 16 JULY	8. ⁰⁰ – 8. ⁴⁵	Breakfast
	9. ⁰⁰ – 9. ³⁰	Welcome and introduction to the school and mechatronics
	9. ³⁰ – 12. ³⁰	Theoretical mechanics and robotics
	12. ³⁰ – 14. ⁰⁰	Lunch
	14. ⁰⁰ – 17. ⁰⁰	Introduction to automatic control theory
	17. ¹⁵ – 18. ⁴⁵	Guided tour of Udine
	19. ⁰⁰ – 20. ³⁰	Dinner

tuesday 17 JULY	8. ⁰⁰ – 8. ⁴⁵	Breakfast
	9. ⁰⁰ – 12. ⁰⁰	Introduction to automatic control theory. Analog and digital electronics fundamentals
	12. ⁰⁰ – 14. ⁰⁰	Lunch
	14. ⁰⁰ – 18. ⁰⁰	Analog and digital electronics fundamentals. ARM processors: architecture and programming
	18. ⁰⁰ – 19. ⁰⁰	Free Time
	19. ⁰⁰ – 20. ³⁰	Dinner

wednesday 16 JULY	8. ⁰⁰ – 8. ⁴⁵	Breakfast
	9. ⁰⁰ – 12. ⁰⁰	Sensors and measurement technologies
	12. ⁰⁰ – 14. ⁰⁰	Lunch
	14. ⁰⁰ – 17. ⁰⁰	Sensors and measurement technologies. ARM processors: architecture and programming
	17. ⁰⁰ – 19. ⁰⁰	Free time with a tutor, on demand
	19. ⁰⁰ – 20. ³⁰	Dinner

thursday 19 JULY	8. ⁰⁰ – 8. ⁴⁵	Breakfast
	9. ⁰⁰ – 12. ⁰⁰	Active control of noise and vibrations
	12. ⁰⁰ – 14. ⁰⁰	Lunch
	14. ⁰⁰ – 16. ⁰⁰	Modeling, design and simulation of mechanical systems via finite element analysis tools (Lab. Aula CAD - Rizzi)
	16. ⁰⁰ – 19. ⁰⁰	Free time with a tutor, on demand
	19. ⁰⁰ – 20. ³⁰	Dinner

friday 20 JULY	8. ⁰⁰ – 8. ⁴⁵	Breakfast
	9. ⁰⁰ – 12. ⁰⁰	Modeling, design and simulation of mechanical systems via finite element analysis tools (Lab. Aula CAD - Rizzi)
	12. ⁰⁰ – 14. ⁰⁰	Lunch
	14. ⁰⁰ – 18. ⁰⁰	Fundamentals of Signal and Image processing and coding
	18. ⁰⁰ – 19. ⁰⁰	Free time with a tutor, on demand
	19. ⁰⁰ – 20. ³⁰	Dinner

saturday 21 JULY	7. ⁰⁰ – 7. ⁴⁵	Breakfast
	8. ³¹ – 10. ⁴⁵	Train to Venice
	11. ⁰⁰ – 12. ³⁰	Guide Tour of Venice
	12. ³⁰ – 14. ⁰⁰	Lunch
	14. ³⁰ – 16. ³⁰	Free time with a tutor, on demand
	17. ¹⁵ – 19. ³⁰	Way Back to Udine
	20. ⁰⁰ – 21. ⁰⁰	Dinner

sunday 22 JULY	8. ⁰⁰ – 8. ⁴⁵	Breakfast
	9. ⁰⁰ – 12. ⁰⁰	Free activities with a tutor to be defined
	12. ⁰⁰ – 14. ⁰⁰	Lunch
	14. ⁰⁰ – 19. ⁰⁰	Free activities with a tutor to be defined
	19. ⁰⁰ – 20. ³⁰	Dinner

monday 23 JULY	8. ⁰⁰ – 8. ⁴⁵	Breakfast
	9. ⁰⁰ – 12. ⁰⁰	Artificial intelligence and parallel computation architectures (Lab. Elettronica)
	12. ⁰⁰ – 14. ⁰⁰	Lunch
	14. ⁰⁰ – 17. ⁰⁰	Introduction to artificial vision
	17. ⁰⁰ – 19. ⁰⁰	Free time with a tutor, on demand
19. ⁰⁰ – 20. ³⁰	Dinner	

tuesday 24 JULY	8. ⁰⁰ – 8. ⁴⁵	Breakfast
	9. ⁰⁰ – 12. ⁰⁰	Artificial intelligence and parallel computation architectures (Lab. Elettronica)
	12. ⁰⁰ – 14. ⁰⁰	Lunch
	14. ⁰⁰ – 17. ⁰⁰	Power and industrial electronics
	17. ⁰⁰ – 19. ⁰⁰	Free time with a tutor, on demand
19. ⁰⁰ – 20. ³⁰	Dinner	

wednesday 25 JULY	8. ⁰⁰ – 8. ⁴⁵	Breakfast
	9. ⁰⁰ – 12. ⁰⁰	Introduction to wireless communication systems in industrial applications
	12. ⁰⁰ – 14. ⁰⁰	Lunch
	14. ⁰⁰ – 18. ⁰⁰	Introduction to advanced digital and additive manufacturing techniques. Industrial internet of things (Lab. LAMA - FVG)
	18. ⁰⁰ – 19. ⁰⁰	Free time with a tutor, on demand
19. ⁰⁰ – 20. ³⁰	Dinner	

thursday 26 JULY	7. ⁰⁰ – 7. ⁴⁵	Breakfast
	9. ⁰⁰ – 12. ⁰⁰	Bus to Porcia (PN)
	9. ⁰⁰ – 12. ⁰⁰	Visit to Sistec Porcia (PN)
	12. ⁰⁰ – 13. ⁰⁰	Way back to Udine
	13. ⁰⁰ – 14. ⁰⁰	Lunch
14. ⁰⁰ – 18. ⁰⁰	Electric machines and drives for mechatronic applications	
18. ⁰⁰ – 19. ⁰⁰	Free time with a tutor, on demand	
19. ⁰⁰ – 20. ³⁰	Dinner	

friday 27 JULY	6. ⁰⁰ – 6. ⁴⁵	Breakfast
	7. ⁰⁰ – 10. ⁰⁰	Bus to Polpenazze del Garda (BS)
	10. ⁰⁰ – 13. ⁰⁰	Visit to Camozzi, Polpenazze del Garda (BS)
	13. ⁰⁰ – 14. ⁰⁰	Lunch
	14. ⁰⁰ – 16. ³⁰	Visit to Garda Lake
16. ³⁰ – 20. ⁰⁰	Way back to Udine	
20. ⁰⁰ – 21. ⁰⁰	Dinner	

saturday 28 JULY	8. ⁰⁰ – 8. ⁴⁵	Breakfast
		Students departure (transport to Venice Airport) According to the Flight Time

DIDACTIC INFO

DIRECTOR OF THE SCHOOL:
Prof. Roberto Petrella
<https://people.uniud.it/node/1138>

ORGANIZATIONAL INFO

We require students to use for their arrival/departure the International Venice Marco Polo Airport and to use possibly the same flights.