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Integration Week 2025

Spain



European Master Course in Advanced Structural
Analysis and Design using Composite Materials

November 24 to 28, 2025



UNIVERSITÀ DEGLI STUDI
DI NAPOLI FEDERICO II



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GIRONA



ORGANIZING COMMITTEE

Cristina Barris, **UdG**
Luís Correia, **UMinho**
José Sena-Cruz, **UMinho**

Bruno Castanié, **INSA/UT**
Marco Di Ludovico, **UNINA**
Andrea Prota, **UNINA**

WELCOME

The Integration Week 2025 will be hosted by the University of Girona, from November 24th to 28th, 2025. This week-long programme has been thoughtfully prepared to offer a rich blend of academic, technical, and cultural experiences for our EMJM FRP++ students.

Throughout the week, participants will engage in exclusive visits to leading industrial partners, seminars and laboratory visits in the field of composite manufacturing and research & development.

A dedicated session will allow students to collaborate and finalize Assignment 1 of Unit FRP++6. Students will have the opportunity to visit Menzolit company and to explore the state-of-the-art AMADE-UdG laboratories, where innovative work in mechanics, materials, and structures is carried out. The programme also features two keynote lectures delivered by distinguished experts in the field of composite materials — offering exclusive insights into cutting-edge topics and future trends. In addition to the technical and academic aspects, the program features social events such as a formal dinner designed for relaxation, networking, and celebrating the achievements of the week. On the final day, participants will engage in a guided tour of Girona's historic downtown, offering insight into the city's rich heritage and distinctive charm.

All EMJM FRP++ students are warmly invited to attend this Integration Week in person. Welcome to Girona — we look forward to an inspiring and memorable week together!!

VENUE

The University of Girona (UdG) is a prominent public university within Catalonia, known for its commitment to high-quality teaching, research, and social development across various disciplines such as science, technology, humanities, social and health sciences, and the arts. UdG not only drives economic and cultural growth in its region but also maintains a global outlook in academics and exchange.

The University's origins date back to 1446, when King Alfonso the Magnanimous established the Estudi General, beginning a longstanding tradition of academic excellence. The institution was closed in 1717 under the Nova Planta Decree but re-emerged in the 19th century as the "Free University of Girona" offering courses in law and pharmacy until 1874. The current University of Girona was officially created in 1991 by Act 35/1991 of the Catalan Parliament.

In the last thirty years, the University has grown substantially. For the academic year 2024-2025, UdG has 15,877 students, supported by 1,624 teaching and research staff and 627 administrative and service staff members. The institution covers about 197,496 m² across three campuses, housing nine faculties and schools, 24 departments, 12 research institutes, and three CERCA program centres.

Currently, UdG's academic and research activities are located on the city centre, Montilivi, and Barri Vell campuses, strengthening its position as a leading multidisciplinary institution in the region.



ROOMS & FACILITIES FOR INTEGRATION WEEK

The sessions of the Integration Week at University of Girona will take place in the following rooms within the School of Engineering (Escola Politècnica Superior) campus:

- Day 01: Welcome and Ice breaker activity [PII-09]
- Day 02: Group discussions and presentation [PIV Sala d'actes (morning) / PII-010 (afternoon)]
- Day 04: Keynote Lectures and Closing ceremony [PII-01B]

Participants are encouraged to familiarise themselves with the building layout and available facilities in advance. Please visit the campus site to view the installations and their locations: [\[UdG – Edificis & Instal·lacions\]](#)

This prior overview will help you navigate easily between sessions and workspaces during the week.

Montilivi



- | | | | |
|---|-----------------|----|----------------------|
| 1 | P4 | 8 | CIAE |
| 2 | P2 | 9 | Faculty of economics |
| 3 | Workshops | 10 | Faculty of law |
| 4 | P1 | 11 | Faculty of science |
| 5 | P3 | 12 | Shared classrooms |
| 6 | Central modules | 13 | Greenhouse |
| 7 | Library | 14 | Sports service |
| | | 15 | Heavy |

HOW TO GET TO GIRONA

BY PLANE

Girona-Costa Brava airport:



Girona-Costa Brava airport is located at approximate twelve kilometres from Girona. This airport nowadays receives flights from different European cities, mainly by the Ryanair Company. Pay attention: many times, those companies write Girona-Costa Brava (Barcelona) as the name of the airport.

The trip between the airport of Girona and the city can be done by taxi or by bus.

If you take a taxi the price can be around 30-35€.

There is a bus line that covers from Airport to Girona city centre. Bus departures are every hour from 5h30 to 0h30 (you can find the timetable in the following [web page](#)). The ticket sales office is located on the ground floor, in the arrival's hall, beside the car hire offices. Price is 2.75€ one-way ticket.



<https://www.sagales.com/en>

Barcelona “El Prat” airport:

However, so many times, getting to Girona by plane means arriving at the airport of Barcelona “El Prat” and coming to our city from there. There are two ways to reach Girona from BCN airport: by bus or by train.

The bus service from the Barcelona airport “El Prat” to Girona city is run by the company *Sagalés Airport Line*. The trip lasts 1.5 hours and price is 19 Euros. You can make the reservation or see the timetable in:



<https://www.sagalesairportline.com/en>

To use the **train option**, you must catch a train-shuttle from the airport to the *Barcelona-Sants* station, where you can change train for Girona. The train- shuttle is next to the terminal T2-B and departures are every 30 minutes.



If you arrive on terminal T1 you must take a bus-shuttle until T2 (you can find the bus out of T1). In spite of changing trains, when you buy the ticket at the airport station, you can buy it for the whole Barcelona Airport-Girona trajectory.

 <https://www.sagalesairportline.com/en>

Be aware that the last train from Barcelona-Sants to Girona is at 22h56. There are different types of trains: Regional and MD (they take 1.5 hours approximately) and High-Speed Trains-AVE/ AVANT- (more expensive) but they take only 36 minutes.

You can find here timetables and prices:

 <http://www.renfe.com/EN/viajeros/index.html>



BY TRAIN



The City of Girona is well linked by rail with numerous trains to and from Barcelona as well as to and from EUROPE. You will find that at Girona station there are two types of trains, the Regional or 'Media Distancia', and the high-speed (AVE). On the website and at the ticket offices, you can buy tickets for both types, with the same procedure, but the physical access to the platforms are separated. Long distance journeys are normally covered by the high speed (Madrid and other European cities). Although these have a higher price, but you can also find these trips for "low cost" with the names AVANT and AVLO.

For further information:



+34 912 320 320



<https://www.renfe.com/es/en>

BY ROAD

Girona connects directly with Europe and Barcelona with Motorway AP-7 and National Highway A-2. There also exists a coach-lines providing service from a wide range of European cities with a stop in the bus station of Girona.

OVERVIEW OF TRANSFER OPTIONS TO GIRONA

For attendees traveling from Toulouse, and Naples, we've organized the travel options into a concise table to help you plan your journey to Girona:

Origin	Flight to Girona-Costa Brava Airport	Flight to Barcelona "El Prat" Airport	Train (Direct/Transfer)	By Road
<i>Toulouse</i>	<i>Direct flights available, then taxi or bus to city</i>	<i>Flight to Barcelona, then bus (1.5 hrs) or train to Girona</i>	<i>Direct trains to Girona</i>	<i>Direct connection via AP-7 and A-2</i>
<i>Naples</i>	<i>Direct flights available, then taxi or bus to city</i>	<i>Flight to Barcelona, then bus (1.5 hrs) or train to Girona</i>	<i>Train to Barcelona, then transfer</i>	-

For more detailed information on bus and train schedules, as well as taxi services from Girona-Costa Brava Airport, please visit the:

- Sagalés website: <https://www.sagales.com/en>
- Renfe's website: <http://www.renfe.com/EN/viajeros/index.html>



ACCOMMODATION DETAILS

We are pleased to confirm that participants of the Integration Week 2025 will be accommodated at **Hotel BESTPRICE Girona**, located at **Carrer Barcelona 1, 17002 Girona**. [\[google maps\]](#)



Below you will find key details and practical information for your stay:

ROOMS & FACILITIES

Rooms are modern with parquet flooring, air-conditioning/heating, flat-screen satellite TV, free Wi-Fi (~300 Mb) and a desk for work use. Private bathrooms include shower or bath as specified, shampoo & shower gel, hairdryer and towels.

Reception operates 24 hours; luggage storage and bicycle storage available on request.

CHECK-IN / CHECK-OUT & PRACTICAL DETAILS

- Check-in starts at 15:00.
- Check-out is required by 11:00.
- Parking: If you are arriving by car, please note that parking is external to the hotel and subject to an additional daily fee. Charging points for electric vehicles are available nearby.

TIPS FOR OUR STAY

- Because of the location in the city centre, rooms may be compact; please expect a focus on efficiency rather than luxury.
- If you anticipate working after hours (e.g., for the assignment work-session during IW), the room desk + Wi-Fi setup is suitable—but bringing your own headphones may help for quiet focus.
- For arrival later in the evening: the 24-hour front desk ensures check-in flexibility.
- Breakfast is not included at the hotel. While several cafés are located nearby, we recommend students have breakfast at the campus of the Polytechnic School of the University of Girona, where morning sessions will take place. Arriving early on campus will ensure you're refreshed and ready for the day's programme.



LOCATION & ACCESS

Hotel BESTPRICE Girona enjoys an excellent central location, just a short walk from the city's main transport hubs. The Girona train and bus stations are less than 5 minutes on foot, making it convenient for students arriving from Barcelona, the airport, or other regions.

The hotel's address is Carrer Barcelona 1, 17002 Girona, within easy walking distance of local cafés, supermarkets, and the historic city centre.

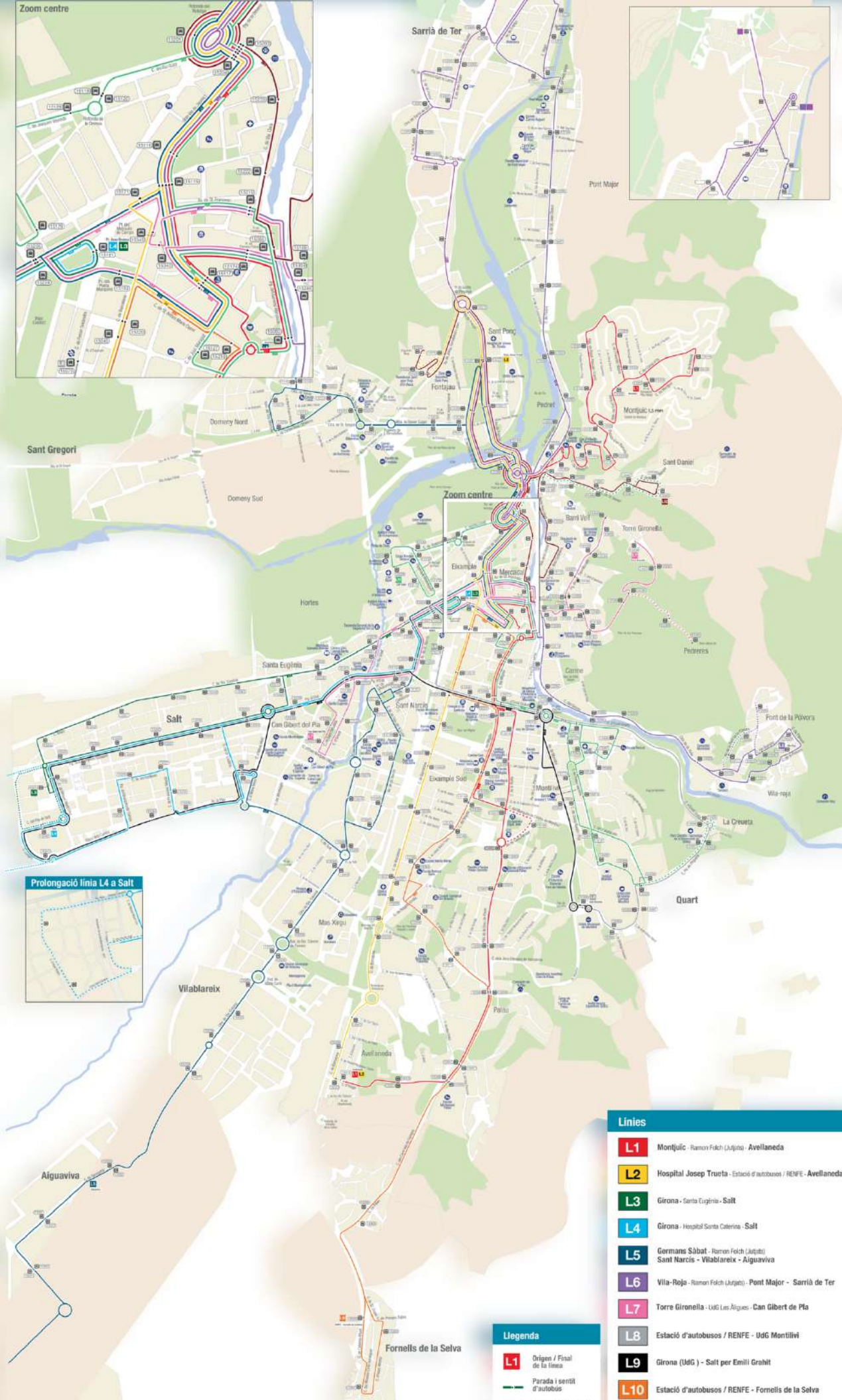
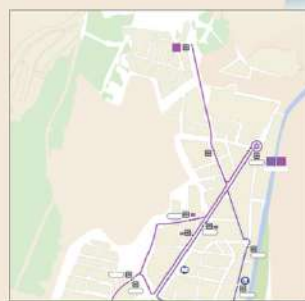
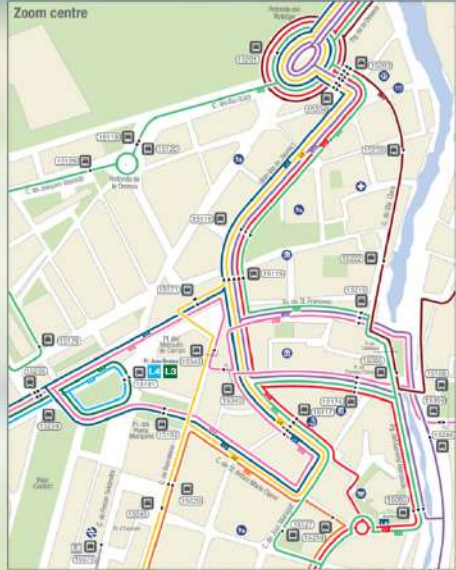
GETTING TO THE UNIVERSITY OF GIRONA (UDG – ESCOLA POLITÈCNICA SUPERIOR)

To reach the School of Engineering (Escola Politècnica Superior – EPS) campus from Hotel BESTPRICE Girona, you can use Girona's urban bus network:

- Bus Line L9 – “Estació d'Autobusos – Montilivi”
- Bus Line L11 – “Estació d'Autobusos – Universitat de Girona”

Both lines depart regularly from the Girona Bus Station, located just a few minutes' walk from the hotel. The journey to campus takes approximately 10–15 minutes. For the full public transport map and schedules, please consult:

 <https://web2.girona.cat/tmg/docs/ATM-Girona-2025-Planol-General.pdf>



Línies	
L1	Montjuïc - Ramon Folch (Jutjats) - Avellaneda
L2	Hospital Josep Trueta - Estació d'autobusos / RENFE - Avellaneda
L3	Girona - Santa Eugènia - Salt
L4	Girona - Hospital Santa Caterina - Salt
L5	Germans Sàbat - Ramon Folch (Jutjats) Sant Narcís - Vilablareix - Aiguaviva
L6	Vila-Roja - Ramon Folch (Jutjats) - Pont Major - Sarrià de Ter
L7	Torre Gironella - UdG Les Aigües - Can Gilbert de Pla
L8	Estació d'autobusos / RENFE - UdG Montilivi
L9	Girona (UdG) - Salt per Emili Grahit
L10	Estació d'autobusos / RENFE - Fornells de la Selva
L11	CAP Güell - CAP Santa Clara - CAP Montilivi - UdG-Montilivi - St. Daniel
L12	Av. Ramon Folch (Jutjats) - Sant Vici - Sant Daniel - Puig d'en Roca
L16	Sant Julià de Ramis - Sarrià de Ter - Girona (per l'Hospital Josep Trueta)

Llegenda

- Origen / Final de la línia
- Parada i sentit d'autobus
- Itinerari alternatiu
- Dodi de parada
- Parades a demanda



OVERALL PROGRAMME

Period	DAY 1 24/11	DAY 2 25/11	DAY 3 26/11	DAY 4 27/11	DAY 5 28/11
Morning	Traveling to reach Girona	Assignment 1 of Unit FRP++6 – Final steps	Technical Visit to Menzolit	Keynote I	Check out
		Lunch*		Lunch*	
Afternoon	Check in	Assignment 1 of Unit FRP++6 – Presentation	Visit AMADE Labs (mechanical lab)	Closing Ceremony	Traveling to return to the hosting Institution of the Course work
	Welcome + Ice breaker		Visit Compoxi	Tour of Girona	
			Visit AMADE Labs (structural and thermal characterization labs)		
Light Dinner*		Dinner*			

Note: (*) The EMJM FRP++ Consotium will financially support lunches from 25th to 27st of November, a light dinner on 24th and the Diner on 26th of November.

DETAILED PROGRAMME

Day 1 24/11/2025	
	Arrival in Girona
15:00-17:00	Check-in at Hotel
17:00-19:00	Welcome and Ice breaker activity UdG-EPS: Classroom PII-09
19:00-20:30	Light Dinner UdG-EPS: Classroom PII-09
Day 2 25/11/2025	
<i>Morning</i>	
09:00-12:15	FRP++6 - Assignment 1: Concluding activities UdG-EPS: Sala d'actes P-IV
<i>Afternoon</i>	
13:00-14:00	Lunch
14:00-17:30	FRP++6 - Assignment 6: Oral Presentation UdG-EPS: Classroom PII-010
Day 3 26/11/2025	
<i>Morning</i>	
07:45-08:00	Departure for Menzolit UdG
09:00-11:00	Seminar from Menzolit Hotel Ciutat de Granollers
11:00-11:30	Coffee Break
11:30-12:30	Visit to Menzolit company
13:00-14:00	Return to Girona
<i>Afternoon</i>	
14:00-15:00	Lunch
15:15-16:00	Visit to Parc Tecnològic AMADE lab
16:00-17:00	Visit to Compoxi company
17:15-18:00	Visit to UdG-EPS AMADE labs
20:00-21:30	Social dinner at L'Arcada (Rambla)
Day 4 27/11/2025	
<i>Morning</i>	
09:00-10:30	Keynote Lecture by Iryna Tretiak (U. Bristol) UdG-EPS: Classroom PII-01B
10:30-11:00	Coffee Break
11:00-12:30	Keynote Lecture by Paolo Carraro (U. Padova) UdG-EPS: Classroom PII-01B
<i>Afternoon</i>	
13:00-14:00	Lunch
14:00-14:30	Closing ceremony UdG-EPS: Classroom PII-01B
17:00-18:30	Tour of Girona Meeting point: Tourism Office in la Rambla.
Day 5 28/11/2025	
<i>Morning</i>	
08:00-11:00	Hotel Check-out
	Departure from Girona

KEYNOTE LECTURE



Dr. Iryna Tretiak
University of Bristol

**TRANSFORMING
COMPOSITE
MANUFACTURING
USING AI**

Nov 27th
09:00 – 10:30

Dr. Iryna Tretiak is a Lecturer in Composites Manufacture at the Bristol Composites Institute (BCI), University of Bristol. With a background in Aerospace Engineering from the National Aerospace University in Kharkiv, Ukraine, she has gained experience as a researcher at the National Aerospace University and École Centrale de Nantes, and as a stress engineer at Progresstech Ukraine, Boeing Design Centre (Kyiv). Dr. Tretiak obtained her PhD at BCI, sponsored by Rolls-Royce, and now leads research at the intersection of composites manufacturing and Artificial Intelligence. Her work also focuses on manufacturing defects, composites characterisation using novel experimental techniques and NDT methodologies, as well as discontinuous composite materials. She supervises multiple industry-linked PhD/EngD projects in collaboration with Airbus, BAE Systems, Magma Global and others, and is the founder and co-chair of the first international conference Artificial Intelligence for Composite Materials (AIComp25).



Paolo Carraro
University of Padova

**FATIGUE DAMAGE
IN COMPOSITE
MATERIALS:
OBSERVATIONS
AND MODELLING
APPROACHES**

Nov 27th
11:00 – 12:30

Paolo Andrea Carraro is associate professor of mechanical design at the Department of Management and Engineering of the University of Padova. He has worked for 15 years in the field of composite materials and has a consistent spectrum of more than 200 publications in the field, including 57 papers in peer reviewed international journals. His scientific and research interests are focused on the study of the structural response, the damage mechanics and structural health monitoring of composites, also obtained by 3D printing, mainly under fatigue loadings.

He is assistant editor for the international journal Composite Science and Technology and member of the council of the European Society for Composite Materials (ESCM).

He took part in the organizing and scientific committee of several international conferences and summer schools.

Paolo Andrea Carraro is also co-funder and CTO of the spin-off company Rescomp Engineering, aimed at commercializing innovative tools for the fatigue design and structural health monitoring of composite parts.

ASSIGNMENT 1 OF UNIT FRP++6

November 25th will be dedicated to Assignment 1 of Unit FRP++6. Therefore, during the morning the groups will meet to conclude the assignment and prepare the presentation. In the afternoon each group will have 20 minutes of presentation following by 10 minutes of discussion.



MUDRY CAP 232

CARBON WINGBOX





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FRP++

Advanced structural analysis and
design using composite materials