

8-10 June 2027

Palau de Congressos de Catalunya, Barcelona, Spain

2027 Student and Young Engineer Opportunities Programme

Call for entries





Welcome to the FISITA 2027 Student and Young Engineer Opportunities Programme (SOP)

The FISITA 2027 Student and Young Engineers Opportunities Programme is a global competition designed to inspire and showcase the next generation of automotive and mobility engineers.

It provides students and young engineers with a unique platform to develop, present and demonstrate innovative solutions to real-world mobility challenges, combining technical excellence with practical application, commercial viability and environmental impact.

Through the programme, participants gain invaluable hands-on experience in engineering design, analysis, project management, teamwork and presentation skills, while connecting with an international network of industry experts and peers.

The programme encourages creative thinking, local innovation and scalable solutions that can help shape the future of sustainable mobility around the world.

Call for entries

We're inviting students as well as young engineers from across the globe to apply their skills and creativity to briefs that focus on the most pressing social and environmental challenges the technology of mobility industry is facing. The **SOP** aims to support innovative students and young engineers to take up a career in engineering.

The SOP offers a perfect platform for students and young engineers to showcase their expertise and experiment with creative solutions within the industry. Participants will have the opportunity to display their technical analysis, engineering design, and manufacturing capabilities.

Through this process, individuals gain valuable experience in teamwork, time management, project planning, budgeting, and presentation skills. These experiences will equip them with the necessary skills desired by potential employers and prepare them for a successful career in engineering.

We are looking for at the idea and the execution, with analytical work tied in to practical analysis, including a cost/benefit analysis (which could be estimates/forecasts) as well as a business plan, from your respective countries with applications on local ground and scalability; and which aspect could be interesting for other countries; and including the benefit to the Environment. Participants can work on a strategic piece or focus on one specific problem to solve:

Topic 1 – Sustainable and Resilient Electric Mobility: Materials, Energy, and Systemic Transition Challenges

Topic 2 – Cooperative, Connected and Automated Mobility (CCAM): Autonomous Vehicles and Shared Urban Mobility Services

Topic 3 – Human-Centered Intelligent Mobility: Software, Data, Policy, and Inclusion in the Vehicle of Tomorrow

Topic 4 – Advanced Chassis Engineering





Programme activities

In addition to attending the WMC conference and social programme, there will be a dedicated Student and Young Engineers Opportunities Programme of activities which will include:

- ✓ **"Meet the experts" sessions** – speak with industry leaders to explore the most pressing themes and questions of the mobility industry.
- ✓ **Poster session** – get the opportunity to present to and speak with the experts and delegates at the WMC conference, make meaningful connections, and expand the awareness of your work.
- ✓ **Student employability sessions** – exploring the key topics for future career development with industry experts including HR.



Entry criteria

- ✓ Students who have either recently completed or currently studying on any of the below engineering-based university courses:
 - Bachelors
 - Masters
 - PhD
- ✓ Or young engineers who are in their first work placement following university graduation, having started within the last 18 months.
- ✓ Students should specify if they are answering the challenge as part of university course or if working. You can enter as an individual or a team of 4 maximum. To ensure that the expected output is appropriate to each level of study, the deliverables are proposed per Bachelors, Masters, PhD.
- ✓ Applicants are required to complete the application form and provide a copy of their CV and proof of student or graduate status.

How to apply:

- ✓ Please complete your application as a team/ individual for this competition by following this [link](#) to the application form. There is a form to complete and instructions on how to upload the files required.
- ✓ Via the link, you will be able to submit your entry, where it will be reviewed by the FISITA Academic Committee and leading global experts from the mobility industry. Responses will be sent according to the timeline.
- ✓ Please email WMC SOP@fisita.com for any queries



Why enter the FISITA 2027 Student and Young Engineer Opportunities Programme

- ✓ Free to enter
- ✓ Present your innovative ideas and solutions to the identified problem(s) with over 1,000 of the world's top mobility innovators and businesses at the FISITA World Mobility Conference in Barcelona.
- ✓ Build & expand your professional network by connecting with international experts from the forefront of tomorrow's mobility, all gathered under one roof.
- ✓ Engage with peers and industry professionals, ranging from fellow students to CTOs.
- ✓ Contribute to shaping the future of mobility as the industry drives towards a clean, safe, and sustainable evolution.
- ✓ Participate in the dedicated WMC Student Programme, featuring a poster session, opportunities to meet with industry experts, and much more...

The finalists will receive:

- ✓ An automatic entry for the WMC poster competition.
- ✓ An inclusion within the WMC event proceedings where their submission will be published.
- ✓ Recognition for the winner of the poster competition via FISITA's communication channels.
- ✓ Free access to the FISITA Digital Library.
- ✓ The finalists will receive a free entrance ticket to the Barcelona 2027 event inc. accommodation (prize applies to one person attending per team, if applicable)*

*note that travel will not be included in the prize offer



Entries are invited on one and/or multiple of the following

Topic 1 – Sustainable and Resilient Electric Mobility: Materials, Energy, and Systemic Transition Challenges

Project: Net Zero Mobility 2040 – Securing Materials, Energy, and Resilience in Circular Transport Systems

Students will assess the life-cycle footprint and supply chain resilience of EV materials and energy pathways, and propose an integrated Net Zero mobility solution. Expected work includes a life-cycle assessment of EV batteries and critical materials, supply chain risk mapping, crisis/vulnerability scenario analysis, techno-economic and emissions comparison of decarbonization architectures, and a policy brief on securing sustainable material supply chains.

Topic 2 – Cooperative, Connected and Automated Mobility (CCAM): Autonomous Vehicles and Shared Urban Mobility Services

Project: Trust the Machine? Designing Safe, Connected, and Accepted Autonomous Mobility Services

Students will design a connected/automated mobility service and examine the safety, regulatory, and societal conditions for its acceptance. Expected work includes service design (use case, operating domain, fleet sizing), a simplified safety case with V2X/cooperative perception considerations, a comparative regulatory and liability analysis across regions (EU, US, China, Japan/Korea), and a public trust and acceptability mini-study.

Topic 3 – Human-Centered Intelligent Mobility: Software, Data, Policy, and Inclusion in the Vehicle of Tomorrow

Project: Smart, Safe, Comfortable, and Inclusive – Designing the Software-Defined Vehicle for All

Students will address the software, data, and inclusion dimensions of the software-defined vehicle. Expected work includes data governance, privacy-by-design and cybersecurity/functional safety analysis, an algorithmic fairness and inclusivity audit, a socio-psychological study of user trust and human-vehicle interaction with AI features, an over-the-air update/lifecycle concept, a policy and legal analysis, and a prototype, simulation, or business-model demonstration for inclusive access to software-enabled features.

Topic 4 – Advanced Chassis Engineering

Project: Smart Chassis – Integrated Control for Next-Generation Vehicle Dynamics

Students will develop an integrated chassis control concept covering steering, braking, suspension, and comfort. Expected work includes a chassis architecture concept integrating multiple actuators, a vehicle dynamics model and control strategy (e.g., torque vectoring, active steering), a comfort-oriented cabin design, simulation or test-bench validation of handling and safety performance, and an assessment of comfort, energy efficiency, and integration trade-offs.



Entry Format

- ✓ Need to be original content
- ✓ Written in English

Level	Written Deliverable	Poster	Evaluation / Validation
PhD	4-page technical paper. The IEEE conference template is recommended. Other formats are accepted, provided the page limit is respected and the paper is written in English	Yes – A0 poster, standard WMC template	Paper endorsed/validated by the PhD supervisor prior to submission; reviewed by the topic committee
Master's	2-page technical paper (condensed format)	Yes – A0 poster, standard WMC template	Paper endorsed by the academic/project supervisor; reviewed by the topic committee
Bachelor's	None	Yes – A0 poster, standard WMC template	Poster reviewed by the Education Committee only

AI tools may be used as writing and editing support only (e.g. language, structure, proofreading). The research, analysis and conclusions must be the original work of the students or young engineers, who remain fully responsible for the content. The work must be validated by their academic or project supervisor.

Poster Format

- ✓ Common A0 poster format across all three levels, using a standard WMC template (to be provided) to facilitate comparison and exhibition during the event.
- ✓ Poster should present: context/objective, methodology, key results, and conclusions/next steps.

How to submit your paper, poster and concept video

To submit your paper, please visit [Link](#). Submitted papers will be reviewed by the FISITA Education Committee and leading global experts from the mobility industry.

Concept Video

- ✓ This must not exceed 3 minutes.
- ✓ It should allow the audience to understand the content of the paper in that time frame.
- ✓ Storytelling techniques are encouraged.



Technical paper requirements

The paper should contain clear descriptions of the main scientific, technical, economic and/or practical points to be addressed for the challenge, applied methodology and achieved results paying particular attention to those aspects of the work which are new, innovative, and unique.

The following should be included in the paper:

- ✓ Title, authors and affiliations
- ✓ Abstract (max. 150 words)
- ✓ Introduction: problem, context and objective
- ✓ Methodology
- ✓ Results and discussion, including limitations
- ✓ Conclusion: main findings, novelty, next steps and, where relevant, a short note on feasibility, scalability and cost/benefit
- ✓ References

Evaluation Criteria

- ✓ Technical relevance and quality of the proposed solution relative to the topic.
- ✓ Research impact (for PhD students)
- ✓ Clarity and rigor of methodology (scaled to level of study).
- ✓ Quality of communication (written paper where applicable, and poster).
- ✓ For PhD/Master's: supervisor endorsement confirming the scientific soundness of the work.





Key dates

29 January 2027: abstract submission (max. 150 words) with the application form (topic and level, team members, CV and proof of status)

15 February 2027: notification of accepted abstracts

31 March 2027: submission of the technical paper by accepted authors (Master's/PhD)

7 April 2027: feedback from reviewers to authors

19 April 2027: upload of final paper and poster (Bachelor's: poster only), video optional (but recommended)

8-10 June 2027: event in Barcelona

Please note, entries accepted on to the FISITA 2027 Student and Young Engineer Opportunities Programme will be published in the conference proceedings and the FISITA Digital Library.

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Please contact us for any questions: WMCSOP@fisita.com
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Permissions and copyright assignment

ALL authors submitting a full written paper must assign copyright of their materials to FISITA for it to be published. By entering the competition, you are giving permission for copyright to be assigned to FISITA. The submissions will be available to FISITA WMC attendees and FISITA members after the event and by agreeing to take part in the event, you are giving permission for content to be used in this manner.

The World Mobility Conference is organised by FISITA, the global membership organisation for the automotive and mobility systems engineering community. It now combines hundreds of thousands of engineers across four member-category types including Automotive Engineering Societies, Corporate Members, Strategic Partners, and Academia. NE 2027





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CONFERENCE
BARCELONA Spain 8–10 June 2027

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