

CALL FOR PROPOSALS 2022

Education & Knowledge

1. About the German-French Academy for the Industry of the Future

The German-French Academy for the Industry of the Future (GFA) is a bilateral initiative created and officialized during the German-French digital conference on October 27, 2015.

TUM and IMT have been appointed to convert the political wish expressed by both our governments, which is to enhance the competitiveness of our economies, foster the French-German cooperation, and address the digital transformation of our industry. In order to pursue these objectives, the GFA acts in three areas: research, education and innovation.

In recent years, TUM and IMT have developed new tools to support the digital transformation in the field of Higher Education and life-long learning for future students, students, employees, professionals, and executives. These two institutions have proven expertise in diverse competencies in media and higher education pedagogy linking research in teaching and learning with the practical experience of the IMT schools and TUM faculties lecturers and the innovative teaching techniques afforded by educational technology and digitalization.

The GFA builds upon the expertise of its two institutions and has been therefore developing a set of initiatives dedicated to the initial education of graduate' students and life-long learning of professionals. In addition to the production of online courses, the GFA offers a portfolio of summer and winter schools¹ for junior scientists in cooperation with industry and provides additional support for their organization.

2. Context of the Call for Proposals

The call is addressed to researchers from TU Munich (TUM) and IMT or to researchers that want to team up with researchers of these institutions. (In the second case the GFA can help you find collaborators from these institutions. Please contact us beforehand.) It is obligatory to have minimum one funding member of the GFA (IMT or TUM) involved in your proposal.

The coronavirus crisis showed a massive increase of the use of existing and new remote tools by schools, universities, and companies. Furthermore, it highlighted the need for life-long learning formats for graduates seeking a position on the labour market in a difficult context, and for employees obliged to work short-time.

Hence, this period accelerates the digital transformation in the field of education which offers a huge potential for innovation. In 2020 and 2021, the GFA allowed more than 1.500 auditors to follow its online schools and leverage their skills and know-how on digital transformation.

¹ Following Summer and Winter Schools have been supported by the GFA:

- "Future of IoT" - <https://school.future-iot.org/>
- "Intelligent Cars on Digital Roads" - <https://www.summerschool.bmw/en>
- "Trustful AI for Industry" - <https://ai4industry.wp.imt.fr/>
- "Human Factors Aspects of Cooperative Systems Design" - <http://afa-hufaco.eurecom.fr/>
- "Data Sharing: Next Mobility" - <https://www.future-industry.org/datasharing21/>

3. Objectives of the Call for Proposals

Through this Call for Proposals, the Academy intends to:

- Foster **French-German cooperation** in digital vocational and life-long learning,
- Push forward the **development and exchange of good practices**,
- Foster **informal learning formats beyond universities' walls** (i.e., workshops, summer/winter schools, hackathons, and technological challenges),
- Promote the **delivering of future and interdisciplinary skills** (digital and non-digital key qualifications and competencies) and **technological skills** to students and existing workforce on Industry 4.0 related topics,
- Encourage **innovative education formats for virtual campuses issues** (i.e., remote exams, access to learning content, collaborative student projects, etc.),
- Encourage **knowledge exchange** between graduate or PhD students, young entrepreneurs and industrial experts.

4. Expected Outcomes

The GFA supports:

- The **organization** of summer/winter schools, hackathons, technological challenges,
- The **initial phase** of the conception of executive educational programs for professionals,
- The **initialization** of Erasmus Mundus Joint Master Degrees or Doctoral Colleges,
- **Scientific workshops** or scientific symposia,
- **Projects** regarding education and life-long learning aspects for students, young graduates and companies, especially new and creative formats.

Please note:

The production of **new online courses (MOOCs) will not be supported** in 2022's call.

5. Requirements for Workshops and Summer/Winter Schools

To make the GFA-supported Workshops and PhD Schools stand out regarding quality, there are some criteria that are obligatory:

- Frame
 - Involvement of industry partners in the PhD School
 - Positioning of the GFA logo on websites, slides, etc
 - School Series: the school should not be a single but a recurring event (annual or at least biennial)
- Format of the event
 - Length: 1 – 5 days
 - Hybrid format (on site and online)
 - On site in France and Germany or alternating in one of the two countries per year
 - Recording of the school or at least of the keynotes
- Didactical structuring
 - Keynotes and talks from partners of academia and industry
 - Active parts: hands-on, challenges, hackathons, social and networking events
 - English language: as the event should foster the German-French collaboration as well as the international collaboration the content of the event should be held in English to make it available to a broad audience

6. Topics and Collaboration Areas

The GFA focuses on activities addressing the whole spectrum of Industry 4.0 and its related challenges. This includes among others applied artificial intelligence, cybersecurity, ICT, advanced manufacturing, materials and process engineering, logistics and supply chain, robotics, human-machine interaction, agile management methods, etc.

Moreover, the GFA aims at addressing bilaterally additional scientific and technological topics of major importance for French and German governments as well as for Europe.

Keywords: AI, data sharing, hydrogen, energy efficiency, quantum computing, digital twins, 5G, digital sovereignty, DeepTech, startups.

7. Funding

The GFA funding is based on the quality of the proposals and the justification of the planned investments and ranges in total between 1.000€ and 50.000€ per project. The amount of funding is individual for each project.

The maximal allocated budget will depend on the number of selected projects and available resources.

The funding is equally split between TUM and IMT and is subject to terms and conditions of use specific to each institution.

This funding mainly aims at covering the following expenses: travel, workshops and events organization, relevant material and equipment, and limited human resources.

Please note:

TUM has specific regulations for the use of funding that must be followed. For example, 20% of the funding amount on the TUM side must be contributed by the applying TUM school itself. In addition, TUM funds cannot be used to pay for caterings or purchases with a lifetime beyond the workshop or summer school (tablets, T-shirts, etc.).

Please consult the attached document with the most relevant TUM regulations as well as the Service Compass of the TUM (“Dienstleistungskompass”) for more detailed information.

8. Complementary Funding

We strongly suggest to acquire complementary funding as the GFA might only grant partly funding of your project. We inform our network regularly about new CfPs in the community.

For example, the “Deutsch-Französische Hochschule (DFH)” (Université Franco-Allemande UFA) organizes CfPs three times a year for scientific events in a Franco-German context (these funds can for instance be used to pay for caterings): https://www.dfh-ufa.org/en/information-for/hochschulen/ausschreibungen/wissenschaftliche-veranstaltungen?noredirect=en_US

We see it also as good practice to involve industrial companies in the projects. We will be happy to get you in contact with our industrial network to find speakers and participants. Also, it is possible for companies to become a partner of your project by supporting it financially. We advise a scale, for instance like the following:

- Gold Partner: Provides the funding for a research stay for the winning team
- Silver Partner: Provides a challenge for your event in exchange for funding
- Bronze Partner: Provides gifts and goodies for participants

9. Scale for Funding of Workshops and Summer/Winter Schools

In the case of workshops and Summer/Winter Schools, we aim at recurrent events. As new events need time to get well known in the community and attract more supporting partners, we provide higher funding for new Schools as a kick-off funding and scale it down over the following editions. The scale for recurrent events is as follows:

- 1st edition of Workshop/School: up to 20 000 EUR funding
- 2nd edition of Workshop/School: up to 15 000 EUR funding
- 3rd edition of Workshop/School: up to 10 000 EUR funding
- from 4th edition of Workshop/School: up to 6 000 EUR funding

10. Application and Proposal

We strongly advise researchers to contact the coordinators of the GFA before submitting their proposal. The coordinators will provide you additional information according to your planned initiative.

Proposals should be jointly submitted by the principal investigators of the project of TUM and IMT* and should contain following items:

- Description of the involved researchers and associated partners,
- Description of the project or initiative (addressed topics, related issues),
- Relevance in terms of initial and vocational education and/or life-long learning,
- Target group(s) and selection process (in case of summer/winter schools),
- Implementation methods and measures,
- Added value of the German-French collaboration,
- Requested funding.

** Events such as summer/winter schools and workshops or symposia can be co-organised by either TUM or IMT and another French or German academic partner. However, the involvement of TUM or IMT (depending on the case) should be strived through the participation of its own researchers and PhD or Master students.*

In this case, proposals can be submitted by one principal investigator from TUM and IMT.

11. Criteria for selection

- Relevance of the topic,
- Relevance of the project and fit to the German-French Academy,
- Complementarity and planned collaboration of the teams,
- Feasibility of the project,
- Impact towards education and German-French collaboration.

12. Time Frame

Launch of the call:	Monday, April 4, 2022
Deadline for submission:	Monday, June 20, 2022, 12:00 p.m. at noon
Evaluation Committee:	Friday, July 1 st , 2022
Notification of the selected projects:	Friday, July 8, 2022
Kick-off of the project:	September 2022 (the latest)

13. Contact

Please contact the project managers of the GFA should you need any further information and help in identifying researchers at the partner institution and experts from the industry.

- Olivia Pahl, education coordinator of the GFA (on leave until Mid-May): olivia.pahl@imt.fr
- Cosima Stocker: cosima.stocker@tum.de
- Paul-Guilhem Meunier: paul-guilhem.meunier@imt.fr