

CALL FOR PROPOSALS 2021

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. Additional Motivating Context of the Call for Proposals

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, the GFA allowed more than 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://summerschool20.future-iot.org/>
- "Intelligent Cars on Digital Roads" - <https://www.summerschool.bmw/en>
- "Trustful AI for Industry" - <https://ai4industry.sciencesconf.org/>
- "Human Factors Aspects of Cooperative Systems Design" - <http://afa-hufaco.eurecom.fr/>
- "Data Sharing for manufacturing industry" - <https://www.internationaldataspaces.org/data-sharing-winter-school/>

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. Outcomes

The GFA supports:

- The **production** of online courses to complete the GFA portfolio,
- The **organization** of summer/winter schools, hackathons, technological challenges,
- The **initial phase** of the conception of executive educational programs for professionals,
- **Scientific workshops** or scientific symposia,
- **Projects** regarding education and life-long learning aspects for students, young graduates and companies.

5. 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.

6. 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€. Decisions will be taken on an individual basis.

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.

7. 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.

8. 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.

9. Time Frame

Launch of the call: **Monday, March 1st, 2021**

Deadline for submission: **Monday, May 3rd, 2021**

Evaluation Committee: **Mid-May 2021**

Notification of the selected projects: **Mid-May 2021**

Kick-off of the project: **June 2021**

10. 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.

- Morwenna Joubin: morwenna.joubin@tum.de

- Paul-Guilhem Meunier: paul-guilhem.meunier@imt.fr

CALL FOR PROPOSALS 2021

Education & Knowledge

1. Acronym and title of the initiative

xx

Keywords / Application areas

xx

Type of initiative

(summer/winter school, online courses, executive educational programs, scientific workshops, hackathons, others).

xx

2. Applicants

TUM		IMT	
Principal investigator		Principal investigator	
Name		Name	
Institute		Institute	
E-mail		E-mail	
Other contact person in charge of the project		Other contact person in charge of the project	
Name		Name	

Institute		Institute	
Function in the project		Function in the project	
E-mail		E-mail	

Please provide a short description of the people involved in the project. (complementarity, joint experience in other projects, etc.)

xx

3. Other partners

Please mention if other partners will be committed in the project. (associated researchers, industrial partners).

xx

In case of an event (summer/winter school, scientific conferences), provide a list of potential speakers.

4. Project outline (1-2 pages)

Please provide a description of the project addressing following points:

- Motivation and addressed topics,
- Relevance in terms of initial and vocational education and/or life-long learning,
- Scientific and educative objectives of the project,
- Added-value of the German-French collaboration,
- Target group(s),
- Implementation methods and measures,
- Dissemination methods,
- Expected impact on academia and industry,
- Perspectives of the project.

xx

5. Finance plan

Please provide a balanced finance plan mentioning the expenses (type of expenses) and revenues (own funds, third-party funding and requested funding from the GFA).

6. Project timeline

Please provide a Gantt chart including milestones and personnel planning with a relative timing from the project start.

- We contacted the GFA coordinators in order to have more detailed information and advice on our planned initiative.**

- We are aware of and able to invest the required own resources, in particular our required own time, to execute the project.**

Date, signature(s) of the author(s):