T.I.M.E. Projects 2022–2023

Top International
Managers in Engineering

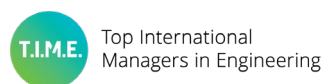## Application Form

*Deadline for submission: **December 14th, 2021***

*Please submit the completed form to: **gwenaelle.guillerme@time-association.org***

Applications must be submitted by <u>e-mail only</u>. You are required to attach a scanned copy of a <u>Letter of Support</u> signed by the Head of your Institution.

Please remember that T.I.M.E. promotes international cooperation and therefore only applications from consortia of <u>at least three</u> T.I.M.E. members in <u>three different countries</u> can be accepted.

*You will be notified of the results of the selection after the Advisory Committee meeting on **February 2022**. Projects run from February 2022 to January 2023.*

Title of Project
Global competence and the linguistic landscape at the technical university

Acronym (if any)
GALLANT

Details of the Applicant	
Name of Institution(s)	KTH Royal Institute of Technology (KTH)
Faculty/Department/Office	School of Industrial Engineering and Management (ITM), Dept. of Learning in Engineering Sciences, Division of Language and Communication
Contact Person/s and Details	Dr. Björn Kjellgren KTH Royal Institute of Technology, Teknikringen 14, 11428 Stockholm, Telephone: +46 8 790 61 25 E-mail: bjoern@kth.se

Summary of the Project (max. 2000 characters)

Global competence – the capacity to understand, communicate and work effectively and appropriately together with people from different backgrounds – is a core engineering competence, as well as a prerequisite for successful internationalisation and diversity initiatives. Language, communication and cultural (LCC) training forms the backbone of global competence education, but has traditionally had a marginalized position in engineering education. This is understandable, given our institutions' strong focus on the technical aspects, but leads to a sub-optimization, where existing LCC training is often poorly aligned with programme learning goals, and opportunities for integration and synergies are lost. Our proposed project aims at analyzing this educational landscape at technical universities against the backdrop of relevant stakeholders' perspectives, with the goal of formulating well-grounded and practically applicable recommendations for LCC training in support of optimized global competence education at engineering and technical universities.

We aim to conduct surveys directed at four groups of stakeholders: students, engineering teachers, LCC teachers, and engineering professionals. We want to explore and compare the stakeholders' perspectives on the importance of LCC competencies for practicing engineers/professionals, as well as their experiences, motivations and obstacles toward acquiring these themselves. This provides an important academic perspective by showing students' and engineering teachers' views on LCC competency acquisition and considerations, which, complemented by insights from industry provided by practicing engineers, can lead to a better integration of LCC in engineering curricula. Our findings will enable better alignment of universities' educational initiatives with stakeholder needs, support LCC teachers in adapting their curricula to students' needs and motivations as well as to industry needs, and find ways to increase student and teacher motivation to take advantage of existing LCC courses.

Reason for applying for T.I.M.E. funding (max. 2000 characters)

T.I.M.E. Association provides the perfect platform for high-quality international comparative studies of engineering education. Scholarship and industry increasingly acknowledge the value of global competence, but instead of realising their benefits for international collaboration, innovation, and inclusive and sustainable development, many institutions view these aspects rather as auxiliary factors to their technological focus. With the support from the T.I.M.E. Association, we can work towards supporting universities in fostering their global and language competencies, as well as help disseminate existing best practice models. Sharing the T.I.M.E. Association's vision for developing a strategic, global approach to higher education internationalisation, and connecting partners from the network of engaged T.I.M.E. member institutions with colleagues from other networks, e.g., the European university alliance Unite!, we believe that our proposed project will create mutually beneficial collaborations. In addition to raising awareness and developing universities' internationalisation strategies relating to global and language competencies, we see this project as an important opportunity for connecting different partner universities from within and outside the T.I.M.E. network to share experiences, expertise, and our dedication to developing excellence in higher education internationalisation and diversity initiatives. The current call brought us together to discuss our common interests, and as we believe our project has the opportunity to involve affiliated partners from existing research and development networks, we will maintain an inclusive approach, while of course not letting go of the project management responsibility. We believe that many existing T.I.M.E. projects, not least the double degree programmes, stand to benefit from our findings, as well as universities rethinking and adapting their initiatives for global competence education. Our findings promise to be of interest to anyone interested in global competence development and LCC training at technical universities or engineering schools.

Expected outputs of the project

The main direct output of our projects will be a report with practical suggestions for university management to better support technical and engineering institutions' internationalisation and diversity initiatives, based on a comprehensive analysis of current LCC training, set in relief against insights gained from stakeholders in academia (students, engineering teachers, language and communication teachers) and industry (engineering professionals). We aim to collect and compare these four groups' perspectives on global and language competencies and find ways in which current initiatives on the curricular (e.g., language classes), co-curricular (e.g., mobility experiences, including short and virtual exchanges) and extracurricular (e.g., workshops) level can be re-designed to better align with the needs and wishes of students and industry, going beyond the local languages and English. As the findings of our project are valuable for internationalisation managers and practitioners as well as for researchers, we plan to disseminate these through presentations/workshops at our universities and within our networks, as well as with a scientific publication in either conference or journal format to reach a wider audience.

Target group/s and expected impact

Students:
- Their perspectives can be integrated into initiatives aimed at improving global and language competencies, which might lead to increased awareness of the benefits of such intercultural education and higher participation in related initiatives.

- Education related to global and language competencies will be more aligned with industry needs, preparing students better for professional demands in internationalised contexts.

LCC teachers:
- They can gain insights into both their students' and industry's needs, to help them adapt their curricula and identify approaches to better convey key contents and competencies backed by empirical research.
- They can gain inspiration from good practice examples from other institutions.

Engineering teachers:
- The outcomes of this study might lead to raised awareness of the long-term benefits of a more explicit treatment of specific language and intercultural training and higher participation in initiatives related to internationalisation.

Engineering education management:
- The study will produce well-grounded recommendations with checklists to help with curricula development for optimized global competence education through systematic utilisation of LCC training.
- The study will provide helpful recommendations for institutions where local language acquisition for internationally recruited staff and international students is an issue.

Industry:
- If the project is successful, industry will receive graduates with stronger global and linguistic competencies, which constitute crucial skills for engineers in the globalised world.

Sustainability of the programme

The programme is aligned with the local research agendas of the partners, and directly addresses the UN sustainable development goal 4 by focusing on the creation of inclusive and equitable quality education, global citizenship, and promotion of lifelong learning opportunities. We hope that our findings can raise awareness of the importance of global and language competencies for engineers in a globalised world, increase the motivation of key stakeholders to partake in such lifelong learning, and support universities' re-development of their language and communication initiatives to optimise them for new global realities.

Additionally, we set up our programme in a sustainable and resource-friendly way by using online communication among partners and with stakeholders, thus avoiding unnecessary travel.

Specific deliverables

To T.I.M.E.
1) Initial Interim Report to the Advisory Committee by June 30th 2022.
2) Report on outcomes to be presented to the 2022 General Assembly in Brisbane.
3) Final Report to the Advisory Committee by January 29th 2023.

Dissemination to other stakeholders:
1) project homepage
2) A user-friendly report designed for target groups detailing findings and recommendations
3) seminar or workshops for practitioners, and
4) scientific publication for the broader scientific community

Total duration of the project

The project will start in February 2022 and be finalized by January 2023. Digital project meetings will be held regularly throughout the year.

Preliminary project plan

February 2022: Kickoff-meeting (virtual)

February-May 2022: Preparation and pre-test of survey instruments for the different stakeholder groups. Establishment of contact with prospective partner universities from the T.I.M.E. network and other collaboration partners to disseminate surveys.

May-September 2022: Surveys are sent out through our and our partners' communication channels.

August-October 2022: Analysis of findings, conference participation.

November-December 2022: Preparation of findings for the project report, project meeting, and digital workshop or seminar. Dissemination of report and other materials, scientific publication.

January 2023: Finalising project end report to contributing universities and T.I.M.E.

After the project: Continued dissemination of findings/material and work towards a larger project application, e.g., Erasmus+.

Planned budget

Project meeting and digital workshop or seminar € 2 600
Research time for main applicants: € 48 000
Research assistance and data analysis: € 6 000
Open access publication fee: € 2 000
Conference fee: € 400
Setting up and maintaining project homepage: € 300
Conference participation: € 4 000

Total sum: € 60 300

Requested financial support from T.I.M.E.

Support for research assistance and data analysis: € 6 000
Support for conference fee: € 400
Support for conference participation: € 2 000
Support for digital seminars for dissemination of results/final report € 1 600

Total sum: € 10 000

Other sources of funding

In-kind contribution (research time) from KTH: € 24 000
In-kind contribution (research time) from TUD: € 12 000
In-kind contribution (research time) from UPC: € 12 000
Support for conference participation: € 2 000
Support for open source publication from KTH € 2 000
Support for setting up and maintaining project homepage (KTH): € 300

If needed and possible, physical project meetings will be supported through Erasmus+ staff mobility grants.

Members of the consortium
KTH Royal Institute of Technology, Sweden (Coordinating partner)   TUD Technische Universität Darmstadt, Germany   UPC Universitat Politècnica de Catalunya, Spain

Key Staff (Name, Position, E-mail)
1) Dr. Björn Kjellgren, Associate Professor and Director of Studies, bjoern@kth.se (project leader)   2) Ms. Tanja Richter, doctoral student, tanjar@kth.se   3) Ms. Karen Fleischhauer, English and German as a Foreign Language Instructor and doctoral student, Karen.Fleischhauer@tu-darmstadt.de   3) Dr. Elisabet Arnó-Macià, Associate Professor of English for Specific Purposes, Universitat Politècnica de Catalunya (UPC), elisabet.arno@upc.edu   4) KTH students for assistance with research administration and data analysis

Check List

- *Attach a signed Letter of Support from the Head of the Applicant Institution* ·

  Send this form and supporting documents by e-mail only to:

  gwenaelle.guillerme@time-association.org

THE DEADLINE FOR THE SUBMISSION OF APPLICATIONS IS DECEMBER 14th 2021

Gwenaelle Guillerme

Secretary General
T.I.M.E. Association

gwenaelle.guillerme@time-association.org

Stockholm, December 8th, 2021

Letter of Support

This is to confirm that KTH Royal Institute of Technology acknowledges and fully supports the T.I.M.E. Projects 2022--2023 proposal called:
Global competence and the linguistic landscape at the technical university (GALLANT)

The coordinator for the project would be KTH and the project manager Dr. Björn Kjellgren, Associate Professor and Director of Studies.

Sincerely,

Stefan Östlund

Professor, Vice-president for Global Relations

On delegation from the KTH President

KTH Royal Institute of Technology   *University Administration, International Relations Office*   1 (1)

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