

Tecnológico de Monterrey Challenge – Based Research Funding Program

Call for Proposals 2023

Ruta Azul Applied Research and Innovation Fund

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1. Ruta Azul background

Committed to a sustainable development and concerned about the global climate emergency, Tecnológico de Monterrey seeks to impact nationally and internationally through assertive actions to face climate change and the global environmental crisis.

Ruta Azul is the name of Tecnológico de Monterrey's 2025 Sustainability and Climate Change Plan. It is the path we have traced to contribute towards a sustainable future and become a model institution of sustainability. Our aspiration is:

To build a sustainable future by adopting a proactive culture in the face of the climate emergency, reflected in actions of MITIGATION, ADAPTATION, EDUCATION, RESEARCH and OUTREACH, which will lead us to BE A MODEL OF A SUSTAINABLE INSTITUTION.

Ruta Azul consists of six areas or pillars of action: culture, mitigation, adaptation, education, research, and outreach. Each area has a specific mission and goals set for 2025.



2. Research pillar in Ruta Azul and Challenges

Particularly in its research pillar, Ruta Azul has the mission of promoting interdisciplinary research to provide systemic solutions to address the complexity of climate change and contribute towards a more sustainable development, and by 2025 it has proposed to meet the following objectives:



- 1. To create a fund for the promotion of interdisciplinary research in sustainability and climate change.
- 2. To make our campuses living laboratories for applied research.

2.1 Living laboratories for innovation in sustainability and climate change solutions

The concept of living laboratories refers to a systemic process of concretion in research and innovation in a given territorial context. In these interaction spaces, different actors collaborate to prototype, validate and test new technologies, services, products, theories of change and systems in real-life contexts.

For Ruta Azul, we consider that our facilities and communities function as fertile ground available for proposed solutions to be tested, monitored, and implemented and thus help the institution achieve the goals established in the 2025 Sustainability and Climate Change Plan and solve regional sustainability challenges.

This may be possible because university campuses can function as a microcosm of society and because the integration of teaching, research and sustainability-related operations must involve all members of the university community, allowing sustainability to be experienced on campus and motivating the adoption of sustainable behaviors. So, innovation in sustainability is part of the daily activities of our campuses inhabitants.

3. Call objectives and Challenges

RUTA AZUL, THROUGH ITS RESEARCH PILLAR, AND IN COLLABORATION WITH THE VICE PRESIDENCY OF RESEARCH OF TECNOLÓGICO DE MONTERREY CALLS FOR:

Research professors from Tecnológico de Monterrey to propose innovative solutions that can be tested and implemented in our campuses through one of the following challenges:

Challenge 1. Water Challenge

Aid to achieve the goals of Ruta Azul by 2025 in water consumption and circular water management with the implementation of technologies, strategies, or processes for saving or reusing water in the infrastructure and operations of the campuses and with the development of scenarios or models that aids us to minimize our water footprint.

Ruta Azul Goals to 2025:

- To reduce our water consumption by 20%
- To achieve circular water management in our operations.



Chal	lenge 2.	Waste	Chal	lenae

Aid to achieve the goals of Ruta Azul by 2025 in waste management with the development of circular economy strategies applied to the management of organic and inorganic waste generated on our campuses or in their surrounding communities, for its integration into value chains or other production processes.

Ruta Azul Goals to 2025:

- That 100% of our campuses have a sustainable waste management model.
- To prevent 40% of our waste from reaching landfills.

Challenge 3. Challenge in sustainable mobility	
Support to achieve the goals of Ruta Azul by 2025 in reducing greenhouse gas emissions with the implementation of logistics systems, models, and sustainable mobility projects for the transfer of our students, teachers, collaborators and other possible allies to our campuses and surroundings.	 To reduce our

Ruta Azul has an established fund of 10 million pesos to be allocated to the chosen projects proposed in accordance with the decision of the evaluation committee established by the Vice Presidency of Research, leaders of Ruta Azul and the National Operations Office of Tecnológico de Monterrey. The funds granted per proposal could be up to 2.5 million pesos.

This call also offers researchers the opportunity of implementing or piloting projects on a larger scale, focused on the real needs of the campuses under the living laboratory model and having feedback from Tecnológico de Monterrey's operations environment.

3.1 Attributes of the proposals

We seek to fund projects:

- 1. With preliminary evidence that the outcome of the project will lead to improved and/or transformative products, processes, policies, or services that will benefit the institution and help achieve the goals of Ruta Azul.
- 2. Related to any of the challenges listed above.
- 3. With an execution time of 12 months.



- 4. Original and innovative.
- 5. We encourage projects to be of interdisciplinary nature. All disciplines are also encouraged to apply to this call.
- 6. Projects with a solid and clear financial plan.
- 7. Projects that align to the local and regional context of the chosen challenge and show the potential to be replicated on other campuses or to be transferred to the city or region.
- 8. The projects must be scientifically rigorous to address the selected challenge. In addition, the proposal must consider the technological and social megatrends when choosing its course of action, and an investigative intelligence study on the knowledge niche to verify opportunities to generate a relevant social or economic impact. The Office of Research Intelligence can produce and deliver intelligence studies on research niches and identify the top 10 universities in the world in the research niche. To get the corresponding Intelligence Report, please fill out the request form at the following URL before October 6th: https://forms.gle/xpSStdEjNS3mdzjG6

4. Who can apply for this call?

Research Model Professors from National Schools and Interdisciplinary Institutes can apply as Principal Investigators for this call.

Team members may include:

- Full-time research professors (Research Models: 75%, 50%, 25%)
- Postdocs
- PhD students
- Experts for specific tasks: Professors from Tec (Vitalidad Intelectual) and strategic universities.
- Research units from the Interdisciplinary Research Institutes can invite professors from school to develop specific tasks/products using their allocated time to do research.
- Research groups from the National Schools are allowed to invite professors from institutes to develop specific tasks/products using their allocated time to do research.
- Professor Researchers involvement in projects (2022) and new projects (2023) should be less than 100%

A key component of the evaluation is the composition of the team, it is highly recommended to include Early-Career Researchers.



5. Important dates

The following table outlines dates and activities all teams must be aware of. Applications (including the formats and additional documentation) must be submitted in their entirety from August 22nd until October 20th at 23:59 p.m. No proposals will be accepted after this date.

Date	Activity
August 22 nd , 2023	Call for proposals opens
October 6 th , 2023	Intelligence Report Requests deadline
October 20 th , 2023	Call for proposals' deadline
October 20 th , 2023 - January 11 th , 2024	Evaluation period
January 12 th , 2024	Selected projects publication
January 15 th - 19 th , 2024	Funding for selected projects period

6. How to submit your proposal

Applications should be submitted online no-later than October 20th, 2023, at 23:59 p.m.:

- 1. To submit a proposal for this Call, teams (PI and participants) must create an account in **Science Connexion** platform: <u>https://scienceconnexion.com/</u>
- 2. Once logged in to the platform, identify the Challenge-Based Research Funding Program 2023 and select Apply to create your proposal registration. The Principal Investigator is responsible for the submission.
- 3. PI can add each team member through the Talent Tank (each member must create an account in Science Connexion previously). For more information, please check the following video:
- 4. The application must include all documents listed in section 7. Checklist of documents to include in the proposal. All formats must be duly filled out and named



using the key described in the following paragraph (point 5). Incomplete proposals will **not** be considered for evaluation.

5. To facilitate management of the files for the evaluation committees, the files names must follow a specific format, according to the nomenclature outlined below. It is important to name the files as indicated below, otherwise, the proposal might not be deemed eligible.

Before uploading each file, use the following key to name them:

- Name Key: Unit + Challenge (Water, Waste or + File + Ruta Azul Key Sustainable_Mobility) Name
- Examples: IFE001 Water Application Form Ruta Azul.docx IFE001 - Waste - Research Impact Planning Canvas - Ruta Azul.pptx IFE001 - Sustainable_Mobility - Project Timeline and Milestones Template - Ruta Azul.xlsx

For "Unit/Group Key" see Annex III. Directory of Research Units (Institutes) and Research Groups (Schools).

6. Science Connexion allows to work in the proposal development at different time points, when the proposal is ready you must submit it. Once submitted you won't be able to edit the proposal.

7. Checklist of documents to include in the proposal

- 1. Application Form
- 2. Research Impact Planning Canvas
- 3. Project Timeline and Milestones Template
- 4. Budget Template
- 5. Intelligence report. Universities TOP10 in the areas of the Institute use to propose strategic partners
- 6. Letter signed by PI and the Regional Sustainability Leader of the corresponding campus in which their proposal would be implemented, that shows a first contact was established between the PI and the campus (see Annex II. Letter template).



8. Funding scope (building your budget)

The grants will not finance additional time for researchers, all professors in the research model have allocated time to do research. If one professor who is not in the research model is invited, she/he will participate in her/his intellectual vitality time.

All expenses and hirings must be aligned to the institutional policies established by *"Talento, TecServices Adquisiciones, Mis Viajes".*

The following items are considered eligible expenses:

ltem	Description
Postdocs	Postdoctoral positions are an eligible cost (up to one position per project). It must be justified based on productivity and impact expected from the position. Postdoctoral positions already assigned does not add cost to the budget but should participate as a team member in the proposal with specific activities and outcomes in the work plan.
Doctoral Position	If any problem considering the CONAHCYT scholarships for doctoral students, then, special attention should be given to these positions.
Technology Development Expert by Services - External	Services for specific tasks and products: The budget can be allocated to finance internal or external services to develop a solution to a technological development problem. The deadline for developing the specific task cannot exceed 12 months. Contract and payment must be aligned with the institutional policies established by "TecServices Acquisitions"
Technology Development Expert by Fixed Time Contract	 Experts with a fixed time contract (as Tec de Monterrey collaborator): Teams can contract experts with "<i>Contratos de tiempo determinado</i>", to develop specific tasks or products required to deliver the products and outputs of the project. The time frame to develop specific tasks cannot exceed 12 months, additionally they are <u>not subject</u> to renewal. The duration of the contract cannot exceed the duration of the grant operation period. Payment must be aligned to the institutional policies established by "<i>Talento</i>".

a. Talent



b. Research Stays

ltem	Description
Short-term Research Stays	 It is considered a short-term research stay a travel to be hosted in other institution (strategic partner university/company) with the following features: Up to 60 days. Professors and post-docs (the recipient must be a current employee at the moment of the stay). It is necessary the approval of the Academic Department and Direct Leader along with complying with academic regulations and policies established by <i>"Talento, Mis Viajes"</i>. The short-term stay costs are covered as travel expenses through CONCUR platform. The expenses should always be in accordance with the institutional policies and rates. Additionally, the budget must include migratory processes and medical insurance with international coverage for accidents and illnesses. The research stay must contribute significantly to relevant project activities and/or outcomes declared in the Application Form.

c. Materials and Experimentation

Item	Description
Internal and External Services, includes prototype development / Proof of Concept	 This item is meant for payment of expenses related to hiring services that are required to supply the specific needs of the project. 4. Core Labs and internal laboratory-services: payment of the services offered by Core Labs and internal laboratories services. 5. External services: d. External Laboratory Services, including Laboratories at research centers and national or foreign universities. e. Data services and database generation, and software. f. Prototypes: Materials and external services required to produce prototypes. g. Proof of concept services: Materials and services to validate if a product or idea is feasible to take to the commercialization stage. h. Intellectual property: Expenses related to the registration of intellectual property TRL1 to TRL4. For further information on the Technology Transfer process contact: Technology Intelligence Associate Office (TTO): Nidya Solis (nidya.solis@tec.mx). IP management, regulatory issues, and Technological Observatory.



Prototype	It is considered a prototype a permanent item either for use or display. For the budget, it is necessary to include a description of the prototype and its components in the Budget.
Equipment	 Laboratory equipment: Acquisition of equipment needed for the project execution (costs must include maintenance, guarantee fees, import costs, transportation, delivery fees, etc.) In the case of Institutes, researchers must validate with the Director of the Institute to ensure no equipment duplicity. In the case of National Schools, researchers must validate with the Associate Dean for Research to ensure no equipment duplicity. At the end of the project, a specific analysis will be made to define if the equipment is part of the Core Labs. The acquisition of computational equipment, tablets, cellphones, etc. is not allowed. In case, the team considers this kind of equipment is crucial for the execution of the project, the requirements will be validated by the Director of Data CoreLab. For equipment with a cost greater than \$150,000 MXN or that requires installation/maintenance, it is necessary the approval of Finance Department, CoreLabs Director and Associate Dean for Research (Schools)/Director of the
	Institute (Interdisciplinary Institutes). Acquisition of tools and devices without inventory identification number,
Materials and supplies	according to the project requirements and with sufficient justification, such as: consumable materials for experimental labor, live specimens, chemical reagents, gasses, diverse substances, agrochemicals, lab glassware and instruments, photographic and video liquids and consumables, software licenses, data/information portal services, books, amongst others.

d. Publications

ltem	Description
Open Access journals and conferences	Payment of scientific publications can be allocated in the budget, payment for open access in selected journals and registration fees for selected conferences. The publication of 1 research article can be funded. All publications expenses must comply with the guidelines of FAP (<i>Fondo de Apoyo a Publicaciones</i>), available at: <u>https://tecmx.sharepoint.com/sites/ServicioaInvestigadores/SitePages/Publi</u> sh.aspx ,the list of journals and conferences that are considered acceptable can be found here as well.



e. Travel expenses

Item	Description
Research Travels	It includes transportation costs, cost of lodgings, and food expenses for the project members, always in accordance with the institutional policies and rates, exclusively for expenses related to the project activities. This includes company visits and local transportation (such as cabs, highway stalls, and fuel, these costs; however, do not include meals). All financed travels should clearly contribute to the project outcomes.
Travel expenses related to publish articles in conference	Expenses related to conference participation. This includes transportation costs, cost of lodgings, and food expenses for the project members, according with the institutional policies and rates, exclusively for expenses related to the project activities. It must comply with the guidelines of consult FAP (<i>Fondo de Apoyo a Publicaciones</i>) available at: <u>https://tecmx.sharepoint.com/sites/ServicioaInvestigadores/SitePages/Publi</u> sh.aspx

Not Eligible Expenses:

- 1. Payment of additional research time for professors, postdocs, students, and other Collaborators of Tec de Monterrey.
- 2. Payment of additional benefits for faculty, staff, and students, such as meals and tuition.
- 3. Expenses to attend conferences as a participant.
- 4. Memberships in professional or scientific associations.
- 5. Hiring of personnel for the management of projects or administrative activities.
- 6. The exchange of financial resources between institutions is not allowed, except for contracts for the development of experimentation in university laboratories.
- 7. Long term research stays are not eligible in this modality.



9. Evaluation process and selection criteria

9.1 Evaluation process

In this modality, a three-step evaluation will be conducted.

The first evaluation process will have two stages. The goal is to improve the quality of the proposals:

- 1. The first stage will analyze the format and possible interactions of the proposals, we will accept a re-submission.
- the requested formats and documentation are complete. In case of incomplete proposals, the Evaluation Committee will contact PI to re-submission.
- the team members have defined specific contributions and outcomes for the project,
- the requested budget complies with the eligibility guidelines,
- the productivity committed in publications and technological development is in accordance with the level of development of the professors.
- With similar proposals, the Evaluation Committee will contact PIs to merge proposals if applies.

2. The second stage will be the external peer2peer evaluation.

These teams will be made up of at least three researchers who are experts in the topics of the challenges. The members of these committees will be researchers from outside Tec de Monterrey, and will evaluate the technical quality of the proposals and its results:

- The proposed objective represents an innovative, disruptive solution for the challenge posed.
- The work plan and the description of the methodology reflect scientific rigor to obtain the results of the project.
- The selected line of work has the potential to generate a relevant impact.
- The knowledge sought to be generated is relevant and differentiated from what other research groups outside the Tec are developing.
- The technology sought to be developed is innovative, the level of development committed is realistic to achieve in the specified time frame, and the concept has the potential to continue advancing to promote a scientific-technological based enterprise for a specific market.
- The impact of the project can be substantive due to its technological results, scientific products, and type of solutions.

3. Third evaluation step

At the third process, an internal committee for Ruta Azul will evaluate the best projects out of the first process. In this stage, the committee will consider:

- Feasibility of operational implementation in the campus mentioned in the proposal.
- Impact on Ruta Azul goals by 2025 mentioned in the challenges.
- Region and campus priorities.



It is after this stage that the chosen projects will be announced.

9.2 Evaluation Criteria

The following aspects will be evaluated in the first evaluation process:

- 1. <u>Impact</u>. The Problem definition and hypothesis will enhance the knowledge aligned to the Scope of the Challenge. This includes the Research Impact Planning Canvas Template to reflect the medium- and long-term scientific, societal, and economic impact of the project.
- 2. <u>Objectives</u>. A general and specific objective aligned to the problem's definition offers valuable solutions.
- 3. <u>General research methodology</u>. It considers a scientific approach and carefully designed plan to carry out the project's activities that will lead to the desired outcome reaching valid conclusions. The research methodology includes general and specific activities, such as experimentation, product definitions, team members' responsibilities, and the outcomes according to the modality of choice: journal papers, conference papers, intellectual property, innovative products, technology transfer activities, business development, and public policy proposals.
- 4. <u>Products and outcomes</u>. The proposed products and outcomes of the project will significantly contribute to the goals of the selected challenge and accordingly to the modality, both in quality and quantity, including exceptionally high-impact original generation of knowledge, external funding, technology transfer, and productive partnerships with industry or other stakeholders. The scientific productivity goals, both as a team and as individuals, must be challenging and clearly stated.
- 5. <u>Team configuration:</u> The team reflects disciplinary complementarity to perform the different activities of the project. For modalities 2, proposals should involve an interdisciplinary team of researchers drawn from units of the institute, other institutes, research groups, or top universities to deliver societal and industry-related products and outcomes.
- 6. <u>Talent development</u>. The research plan considers the improvement of the research capabilities of all team members. Clear goals for individual and group research indicators must be established (including students, post-docs, etc.).
- 7. <u>National and international research strategic partners.</u> A clear definition of external national and international collaboration (centers, institutes, universities or researchers that strategically collaborate with the project and strengthen it). The



definition of the professor(s) from the partner university as well as their role and expected contributions to the project.

- 8. <u>Stakeholders.</u> The proposal must declare potential stakeholders (partners, beneficiaries and users involved or interested in the project or its results) that will benefit from the project results and those who find the proposed results valuable or relevant.
- 9. <u>Project Financial Sustainability</u>. The proposal should state how to achieve external financial support beyond national funds and describe the team's strategy to attract funding. List the organizations, international funds, philanthropic organizations, companies, or others set as primary targets to contact and the amount of funding to request. It is highly recommended use Pivot-RP (<u>https://pivot.proquest.com/</u>) to identify funding opportunities.

9.3 Additional Elements to evaluate during project operation

During the project operation, research teams will have to:

- 1. Present a technical progress report and a financial statement progress report each July 15 and December 1.
- 2. Prepare an annual special report to communicate to the Board the progress and impact of the project when requested.
- 3. If necessary, get approval from Ethics Research Committee (More information: <u>https://comiteinstitucionaletica.tec.mx/es</u>)
- 4. The Project's financial operation must abide by internal rules and regulations, and it is subject to internal audits.
- In case of delay in the budget exercise, it will be possible to request to transfer the unused budget, based on technical and financial justification. In case of need contact the Director of Research Management, Ana Lilia Benavides (<u>abenavides@tec.mx</u>), the budget carry-over will also require the Financial Officer's approval (Ma. Alejandra Venegas, <u>mavenegas@tec.mx</u>).
- 6. Any other issue not considered in this call will be analyzed by the VP of Research, any other expert appointed by the VP of Research and Ruta Azul Research pillar.

9.4 Additional considerations



- 1. Proposals will be ranked according to Compliance and Experts Evaluations, to ensure the approval of the best proposals. All proposals will receive feedback with technical recommendations.
- 2. There is a limited budget to support National Schools and Interdisciplinary Institutes' proposals. Therefore, the number of projects to finance will depend on budget availability, and the impact, generation of new knowledge, and scientific productivity of the proposal.
- 3. It is expected that all professors can propose disciplinary or interdisciplinary solutions to the defined challenges. According to the financial plan, a new call for proposals to create solutions for new challenges will open next year.

10. Contact information

Any element not established clearly in this document will be subjected to review by Ruta Azul Research pillar. Any questions about this call, please contact:

Misael Sebastián Gradilla msgradilla@tec.mx

Sandra Reyes Sandra.reyes@tec.mx



Annex I. National Directory of Regional Sustainability Leaders

Name	Region	Campus	Mail
Alejandro Olayo	Ciudad de México	Ciudad de México, Santa Fe, Estado de México, Chiapas, Toluca	alejandro.olayo@tec.mx
Héctor Benavides	Monterrey	Monterrey, Laguna, Saltillo	hector.benavides@tec.mx
Saúl Aguilar	Occidente	Cd. Juárez, Cd. Obregón, Aguascalientes, Guadalajara, Sonora, Morelia, León, Chihuahua, Zacatecas, Sinaloa	saul.aguilar@tec.mx
Armando García Caballero	Centro-Sur	Tampico, Cuernavaca, Hidalgo, Irapuato, Puebla, Querétaro, SLP,	armando.caballero@tec.mx



Annex II. Letter Template

[Your Name]
[Your Title/Position]
[Your Unit]
[Email Address]
[Date]

Evaluation Committee

Subject: Validation and Endorsement for Proposal Submission to Ruta Azul Applied Research and Innovation Fund

This letter is presented as endorsement for the proposal I am submitting to the Ruta Azul Applied Research and Innovation Fund, specifically under the [Water Challenge/Waste Challenge/Sustainable Mobility Challenge]. As a Research Model Professor from [National School/Interdisciplinary Institute] at Tecnológico de Monterrey, I am excited to present an innovative solution that aligns with the objectives and challenges outlined in the Call for Proposals 2023Ruta Azul.

My proposal, titled "[Title of Your Proposal]," aims to address the pressing challenges faced by our institution and the broader community in [Water Management/Waste Management/Sustainable Mobility]. Through this project, we intend to contribute to the achievement of Ruta Azul's goals by [Year], specifically targeting [Brief Overview of Your Project's Objectives].

I have thoroughly reviewed the Call for Proposals and ensured that our proposal adheres to the attributes sought by Ruta Azul.

I understand that an essential requirement for this application is to receive validation from the Regional Sustainability Leader, or other operational area, of the corresponding campus where the project would be implemented. I am pleased to inform you that I have already initiated communication with the Regional Sustainability Leader, [Name of Sustainability Leader] to ensure that our proposal aligns with the campus goals and needs, integrates seamlessly with ongoing efforts, leverages the resources available at [Campus Name] and its surroundings. I am excited to share that [Name of Sustainability Leader] has expressed their enthusiasm for the project and has agreed to collaborate closely with us in the event that our proposal is selected.

Thank you for your time and consideration. I am confident that, with your guidance and support, our proposal can make a meaningful contribution to the objectives of Ruta Azul.

Sincerely,

[Your Signature]

[Your Printed Name]



Annex III. Directory of Research Units (Institutes) and Research Groups (Schools)

This tables shows the reference for the Research Units, Interdisciplinary Research Groups (IRG), and Research Groups from National Schools, see column "CVE-ITI" to include the key in the name of the templates.

Institute	CVE-ITI	Unit
Institute for the Future of Education	IFE001	IRG – Scaling complex thinking for everyone (R4C)
	IFE002	IRG – Socially Oriented Interdisciplinary STEM Education Research Group (SOI-STEM)
	IFE003	Competency Based Education
	IFE004	Educational Technology
	IFE005	Effective and engaging learning models
Institute of Advanced Materials for Sustainable Manufacturing	IAMSM001	Competitive Intelligence and Public Policies for Sustainable Manufacturing (MTY, Mixcoac)
	IAMSM002	Accelerated Materials Development MTY (Lightweight materials and smart materials)
	IAMSM003	Accelerated Materials Development EDOMX (Advanced polymers and smart materials)
	IAMSM004	Manufacturing processes for advanced materials CDMX (High performance manufacturing)
	IAMSM005	Manufacturing processes for advanced materials <u>MTY</u> (Processes and technologies for CO ₂ capture, use and reduction in manufacturing, Bioproduction systems in manufacturing processes)
	IAMSM006	Enabling technologies for the development of advanced materials GLA (AI/ML/KBES)
	IAMSM007	Enabling technologies for the development of advanced materials CDMX. (AI / DataScience/ Digital Technologies)
	IOR001	Healthy foods
Institute for Obesity Research	IOR002	Bioengineering and medical devices
	IOR003	Integrative biology
	IOR004	Experimental medicine and advanced therapies
	IOR005	Public health policy



<u>School</u>	<u>Clave-Gl</u>	Group Name	
<u>EIC</u>	<u>EIC-GI01</u>	Molecular and systems bioengineering	
EIC	EIC-GI02	Emerging food technologies and nutraceuticals	
EIC	<u>EIC-GI03</u>	Advanced manufacturing	
<u>EIC</u>	EIC-GI04	Nanosensors and devices	
<u>EIC</u>	<u>EIC-GI05</u>	Photonics and quantum systems	
<u>EIC</u>	<u>EIC-GI06</u>	Advanced artificial intelligence	
EIC	EIC-GI07	Smart supply chain and logistics	
<u>EIC</u>	<u>EIC-GI08</u>	Innovation in smart digital technologies and infrastructure	
EIC	EIC-GI09	Cyber physical systems	
EIC	EIC-GI10	Water science and technology	
EIC	<u>EIC-GI11</u>	Energy conversion, storage and management	
EIC	EIC-GI12	Descarbonization, Climate Change and Circular Economy	
EMCS	EMCS-GI01	Diagnostic and therapeutic innovation in chronic degeneration diseases	
EMCS	EMCS-GI02	Advanced therapies in visual sciences	
EMCS	EMCS-GI03	Global health and emerging diseases	
EMCS	EMCS-GI04	Research in breast cancer	
EMCS	EMCS-GI05	Developmental biology and comprehensive well-being in childhood	
EMCS	EMCS-GI06	Neurological sciences and neurorestoration	
EN	EN-GI01	Leadership and effective organizations	
EN	EN-GI02	Development of conscious businesses	
EN	EN-GI03	Impactful entrepreneurship and innovation	
EN	EN-GI04	Organizational strategy and industries transformation	
ECSG	ECSG-GI01	Legal systems innovation	
ECSG	ECSG-GI02	Economies of the future	
ECSG	ECSG-GI03	Democracy and global affairs	
ECSG	ECSG-GI04	Government and public entrepreneurship	
EAAD	EAAD-GI01	Sustainable Territorial Development	
EAAD	EAAD-GI02	Advanced Design Processes for Sustainable Transformation	
EHE	EHE-GI01	Educational innovation	
EHE	EHE-GI02	Digital humanities	
EHE	EHE-GI03	Humanities for sustainable evelopment	