



iMESC
GIVE ENERGY TO YOUR STUDIES!

GUIDE FOR APPLICANTS 2023



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1. About i-MESC

1.1. History

The MESC (Materials for Energy Storage and Conversion) Master Course was created in 2004 as the educational counterpart of a large research effort launched within the European Network of Excellence, ALISTORE. It was recognized with the prestigious label ERASMUS MUNDUS, starting September 2006 (Class#3) renewed for 5 years in September 2011 (Class#8). It was renewed again in 2018 for 6 years (Class#15), recognized as the MESC+ Erasmus Mundus Joint Master Degree of the Erasmus+ Programme (EMJMD). Now, the adventure continues since MESC+ has evolved to comply with the needs in the energy sector, and becomes i-MESC (Interdisciplinarity in Materials for Energy Storage and Conversion). The i-MESC programme was selected in 2023 to be granted a co-funding from the European Union, and is recognized for the fourth time as an Erasmus Mundus Joint Master until 2029 (Class#24).

The MESC Master Course offers a unique combination of high-level academic training (in English) with strong connections to real industrial applications in energy storage and conversion through ~20 Academic Research Laboratories all over Europe and ~15 companies gathered in the so-called industrial club of ALISTORE.

The MESC Consortium, which included in its first years of activities the Italian Universities of Roma La Sapienza and Tor Vergata, the Spanish University of Córdoba, the French University of Aix-Marseille and the Chinese University of Xiamen, is built now (since 2017) around 7 partner Universities with specific expertise in the field: Warsaw University of Technology (Poland), Université Toulouse 3 (France), Universidad del País Vasco (Bilbao, Spain), University of Ljubljana (Slovenia), Université de Picardie Jules Verne (Amiens, France), Drexel University (Philadelphia, USA) and Deakin University (Burwood, Australia).

Overall, as of today, 336 young scientists (coming from 58 different countries) have already graduated from MESC since 2006 and constitute a unique network of professionals in the field of Energy Storage and Conversion, mostly at the PhD level (more than 75 %). We are particularly proud of running such a programme which participates in the enhancement of Higher Education in Europe through multicultural exchange, and with the essential input of brilliant students from all over the world.

1.2. Summary

i-MESC is an ambitious, unique and much needed 2-years MSc. Programme aiming to prepare and guide, in the most complete and efficient manner, the next generation of professionals to the new challenges of the energy field.

i-MESC offers a highly interdisciplinary curriculum, covering scientific and technological knowledge about electrochemical energy storage and conversion at multiple scales (from the materials to the devices). The programme has a major focus on batteries, and also covers supercaps and fuel cells, from multiple angles, such as materials synthesis, devices

manufacturing, advanced characterization, artificial intelligence and digital twins. The programme also includes practices in the laboratories and in the pilot lines of the i-MESC consortium.

The i-MESC curriculum also offers complementary soft skills, such as project management, communication, ethics and integrity, preparation for professional interviews, intellectual property and start-up creation. Innovative pedagogical methods based on Virtual Reality, Mixed Reality and the metaverse are implemented and deployed to maximize the engagement and learning efficiency of the students of the complex concepts involved in the electrochemical energy storage and conversion field.

i-MESC gathers internationally recognized academic leaders with complementary expertise from four European countries, USA and Australia, all with very strong connections with industry. The consortium will be complemented with invited scholars from other (academic and industrial) institutions who will be delivering lectures and training on specific topics.

i-MESC will recruit around 36 students and 8 scholars per year from all over the world. The expected results from i-MESC include the successful training of highly qualified individuals with strong interdisciplinary skills needed to raise the production capacity of energy storage and conversion technologies toward European Energy independence.

1.3. Consortium

The i-MESC Consortium is composed of 11 partner institutions.

Five European Universities which will award the Master Degree, as full partners:

- Université de Picardie Jules Verne, Amiens, France (Coordinating institution)
- Politechnika Warszawska, Warsaw, Poland
- Université Toulouse III Paul Sabatier, Toulouse, France
- Universidad del País Vasco/ Euskal Herriko Unibertsitatea, Bilbao, Spain
- Univerza v Ljubljani, Ljubljana, Slovenia

Two non-European Universities as associated partners:

- Drexel University, Philadelphia, USA
- Deakin University, Burwood, Australia

Four Research Centres and Networks, as associated partners:

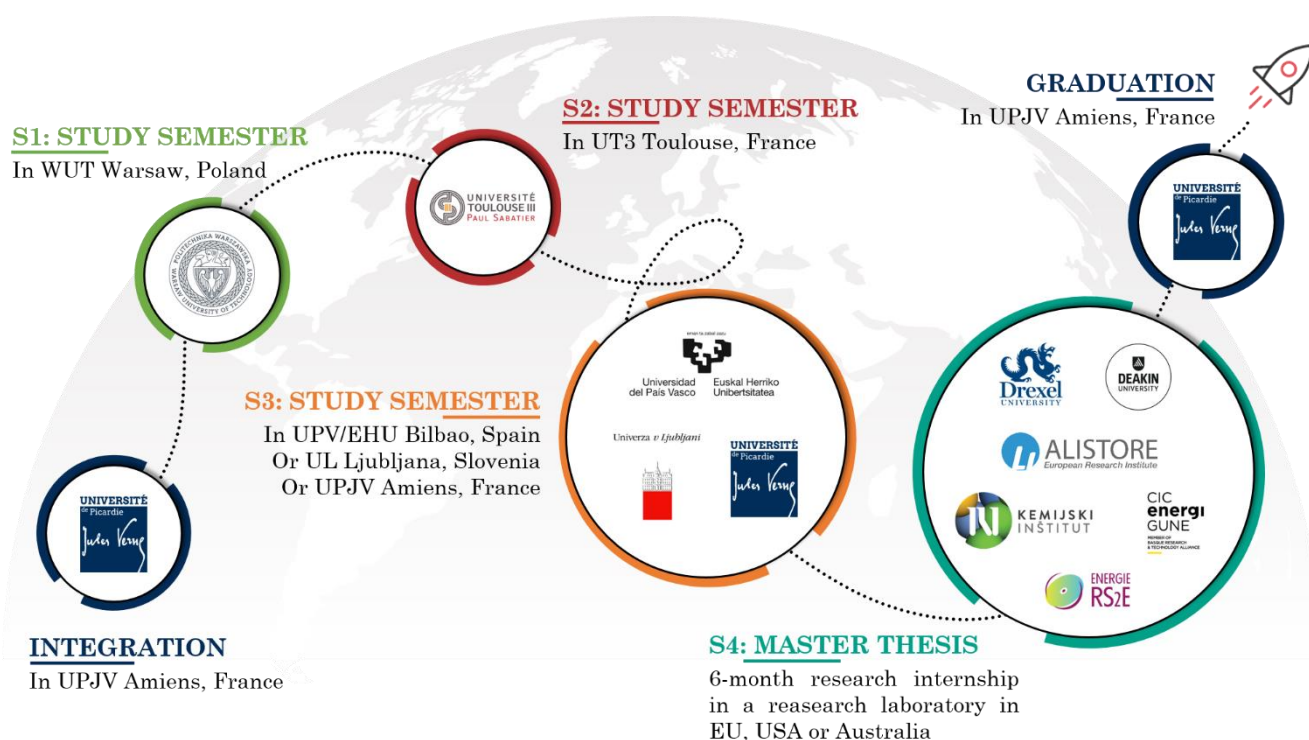
- Centro de Investigación Cooperativa de Energías Alternativas (CIC energiGUNE), Basque Research and Technology Alliance (BRTA), Vitoria-Gasteiz, Spain
- Kemijski Institut, Ljubljana, Slovenia
- Alistore European Research Institute, represented by its legal authority CNRS, DR18, Lille, France

- Réseau sur le Stockage Electrochimique de l’Energie, represented by its legal authority CNRS, DR18, Lille, France

1.4. Content of the course

1.4.1. Mobility scheme

i-MESC amounts to 120 ECTS credits divided into four semesters: three semesters of classes (30 ECTS each) plus a fourth semester in a research laboratory in Europe, USA, or Australia for a six months Master’s thesis (30 ECTS). i-MESC students (~36/ year) will be offered, depending on their individual mobility choices, to study in a minimum of two different countries, and up to four ones.



1.4.2. Curriculum

The curriculum has been jointly designed and adopted, involving all cooperating institutions of the i-MESC Consortium. This allows the incorporation of the curriculum in a synergetic way, and to benefit from the best competencies of each of the partners in the fields of materials science, electrochemistry, [energy devices \(e.g. batteries\), engineering and digitalizationsolid-state-chemistry, and energy related materials.](#)

This joint design also permits an integration of the teaching and training activities within the consortium, with **English** as the agreed upon **language** for all the courses and examinations.

Year 1 is dedicated to **the science fundamentals** associated with Energy Storage and Conversion in the fields of electrochemistry, materials science, and physical chemistry.

The first semester (S1) is spent in **Poland** (Warsaw) by the whole class, which then will continue for S2 in **France** (Toulouse).

Year 2 is focused on practical and technological aspects, covering all the levels of the value chain (synthesis of materials, assembly of energy storage devices systems, prototyping, large-scale facilities, recycling, digitalization).

Semester S3, more applied and focused on technology, will be spent in **Spain** (Bilbao), **Slovenia** (Ljubljana) or **France** (Amiens), which have recently invested massively on technology transfer and prototyping of materials synthesis and battery manufacturing. In addition to scientific and technological modules, during S1-S3, several modules for **soft/transferable skills** are provided to students, essential for future careers.

Semester S4 consists of a 6-month **Master's thesis research project** within one of the thirty participating organizations in **Europe, USA, or Australia**.

YEAR 1

Semester 1 in Politechnika Warszawska, Poland: 7 teaching units, 30 ECTS

TU1: Electrochemistry: 4 ECTS

Fundamental electrochemistry concepts; Redox couples; Thermodynamics and kinetics; Redox reactions; Electrochemical double layer; Basics of electro-analytical methods.

TU2: Solid State Chemistry: 6 ECTS

Mechanisms and kinetics of solid-state reactions; Sintering; Non-stoichiometric materials; Diffusion in solid state.

TU3: Physics for Materials Engineering: 4 ECTS

Crystallography; Chemical bonding in solids; Defects in solids; Energy bands and semiconductors; Electric and optical properties of solids; Rheology of liquids, polymers and particles suspensions.

TU4: Ionics in Electrochemistry: 4 ECTS

Physical and chemical properties of electrolytes; Conductivity mechanisms in liquid, solid and polymer electrolytes; Composite electrolytes; Electrochemical stability.

TU5: Calculations in Chemistry and Chemical Engineering: 4 ECTS

Chemical equations; Calculus in materials synthesis; Determination of equilibrium constants of reactions; Redox balance; Kinetics and electro-kinetics calculations.

TU6: English and Scientific Publication Writing: 2 ECTS

Grammar and phrase structure at CF level; Fluency in spoken and written English; Scientific texts – features, rules and tips; Preparation of reports and scientific articles.

TU7: Laboratory Practice: 6 ECTS

General chemistry practices (e.g. inorganic equilibria); General electrochemistry practices (e.g. electrolytes, conductivity, redox reactions, Galvanic cells); Structural studies (e.g. DSC, X-ray, FTiR); Rheological studies (e.g. electrode slurries).

Semester 2 in Université Toulouse 3 Paul Sabatier, France : 6 teaching units, 30 ECTS**TU8: Advanced Electrochemistry: 6 ECTS**

Electrochemistry in macro vs. micro electrodes; Electro-analytical methods (e.g. chrono-amperometry, rotating electrodes, transient state voltammetry); Advanced electrochemical techniques (e.g. EQCM, CME, EIS, PITT, GITT); Corrosion; Protection against corrosion.

TU9: Advanced Solid State Chemistry: 6 ECTS

Soft chemistry (*chimie douce*); Crystal chemistry; Nanostructured materials; Polymer molecules and macromolecules (synthesis, characterization and properties).

TU10: Advanced Physical Chemistry of Solids: 4 ECTS

Electronic structure of solids; Crystal defects and their influence on physical and electrochemical properties; Characterization tools of electrical and optical properties of solids.

TU11: English and Scientific Conference Presentation: 4 ECTS

Fluency in spoken English; Scientific presentations – features, rules and tips; Preparation of conference presentations; Lab practice: writing a scientific article and presenting orally the results .

TU12: Application of Surface Treatments to Energy Materials: 4 ECTS

Chemical conversion treatments; Electrochemical conversion treatments; Anodization; Electrochemical deposit of metals and alloys.

TU13: Energy Storage and Conversion Devices I: 6 ECTS

Energy landscape and the role of electrochemistry; History of electrochemical energy storage and conversion devices; Capacitors and electrolytic capacitors; Supercapacitors; Primary cells; Introduction to batteries (lead acid, lithium-ion, sodium-ion); Introduction to fuel cells.

YEAR 2

Semester 3, 30 ECTS, either in: Université Amiens Picardie Jules Verne, France, or in Univerza v Ljubljani, Slovenia, or in Universidad del País Vasco / Euskal Herriko Unibertsitatea, Spain: 7 teaching units, 30 ECTS

TU14: Structural Characterization of Energy Materials: 4 ECTS

Crystal structures, symmetry, diffraction; Phase identification and quantification; Use of structural databases; Crystal structure resolution; Rietveld refinement; Density Functional Theory for structure properties prediction.

TU15: Morphological and Thermal Analysis of Energy Materials: 3 ECTS

Methods for particle size measurement; Electron, IR and Raman Spectroscopy; Microscopy (optical, electron, scanning probe); Computer tomography; Thermo-analytical techniques.

TU16: Modern Techniques for the Synthesis of Energy Materials: 3 ECTS

Sol gel technique and precipitation; Hydrothermal and templating synthesis; Hybrid materials; Nanomaterials.

TU17: Energy Storage and Conversion Devices II: 4 ECTS

Lithium ion batteries; Sodium ion batteries; Lithium sulfur batteries; Lithium metal batteries; Metal air batteries; Solid state batteries; Redox flow batteries; Polymer electrolyte membrane fuel cells; Solid oxide fuel cells; Comparison between technologies and selection rules; Hydrogen production, transport and storage; Photo-electrochemical devices, Materials recycling; Environmental costs of the technologies .

TU18: Tools for Bibliography Search, Fund hunting, Intellectual Property - Soft Skills and Professional Development: 4 ECTS

Classical and advanced (*e.g.* text mining) tools for bibliographic search and bibliographic organization; EU funding; Project proposal structuring; Project monitoring and reporting; Patent structuration; Invention reports; Professional development; Entrepreneurship; Presentation rhetoric in entrepreneurship.

TU19: in Ljubljana: Hydrogen Technologies and Their Engineering: 6 ECTS

Hydrogen fuel cells (low, intermediate and high temperature); Manufacturing process of fuel cell electrodes and cells; Electrode formulation; Electrochemical characterization; Electrochemical water splitting devices.

TU20: in Ljubljana: Analytical (Electro-)Chemistry & Electrocatalysis: 6 ECTS

Analytical chemistry and electrochemistry; Atomic and molecular spectroscopy; Separation methods (GC, HPLC, IC); Electrocatalysis (nano-catalysts activity, stability and selectivity); Electro-kinetics.

TU21: in Bilbao: Thermal Energy Storage and Renewable Fuel Production: 6 ECTS

Thermal energy storage fundamentals; Synthesis and characterization of advanced thermal energy storage materials; Engineering of advanced thermal energy storage devices; Renewable fuel production from biomass.

TU22: in Bilbao: Large Scale Facilities for *In Operando* Studies of Energy Materials: 6 ECTS

Large scale facilities in EU and worldwide; Electrochemical *in situ/operando* measurements; Structural studies – *in situ/operando* X-ray and neutron diffraction; Spectroscopic studies – *in situ/operando* X-ray, ion and electron spectroscopies; Large scale facility proposal preparation.

TU23: in Amiens: Battery Technologies and Their Engineering: 6 ECTS

Manufacturing wet process of lithium-ion and sodium-ion battery electrodes and (coin, pouch, cylindrical) cells; Electrode formulation; Electrochemical characterization; Dry manufacturing processes (e.g. extrusion) of lithium-ion and solid-state battery electrodes; Battery safety and aging.

TU24: in Amiens: Numerical Simulation, Artificial Intelligence and Digital Twins: 6 ECTS

Computational modeling-based engineering of batteries and fuel cells (manufacturing processes and operation); Big data and AI; Supervised and unsupervised machine learning techniques and applications to batteries and fuel cells; Digital twins for the optimization of electrodes and cells.

Semester 4: 1 teaching unit, 30 ECTS

TU25: Master Thesis Within a Research or Company Laboratory: 30 ECTS

Master thesis internship.

1.5. Funding opportunities

1.5.1. Erasmus Mundus Joint Master Scholarship

The i-MESC programme is co-funded from 2023 to 2029 by the European Union through the "[Erasmus Mundus Joint Masters](#)" Action of the Erasmus+ programme. Thanks to this financial support, i-MESC has the opportunity to offer up to **80 EMJM scholarships** over 4 intakes:

- Intake 1: 2024-2026;
- Intake 2: 2025-2027;
- Intake 3: 2026-2028;
- Intake 4: 2027-2029.

The EMJM scholarship is calculated on the basis of a monthly unit cost of **1,400 EUR**, for a total duration of 24 months. So the maximum amount per student is 1 400 EUR x 24 months = **33 600 EUR**.

The scholarship is awarded for full-time enrolment, and will cover the entire duration of the Master programme (i.e. 24 months).

This EMJM scholarship is a contribution to the costs incurred by the beneficiary students and covers:

- Travel costs;
- Visa costs;
- Installation costs;
- Subsistence costs.

1.5.2. Industrial Scholarship

The i-MESC programme also benefits from the significant funding from some partner institutions of the Consortium and from the industrial sector. Thanks to this financial support, i-MESC has the opportunity to offer at least **40 industrial scholarships** over 4 intakes:

- Intake 1: 2024-2026;
- Intake 2: 2025-2027;
- Intake 3: 2026-2028;
- Intake 4: 2027-2029.

The fixed amount of the industrial scholarship per student is **20 000 EUR**.

This industrial scholarship is a contribution to the costs incurred by the beneficiary students and covers:

- Travel costs;
- Visa costs;
- Installation costs;
- Subsistence costs.

1.5.3. Erasmus+ Mobility grant (for non-EMJM scholarship holders)

The EMJM scholarship holders **are not eligible** for this grant.

All the European universities of the i-MESC Consortium have signed between each others Erasmus+ Inter-Institutional Agreements.

The students enrolled within i-MESC without EMJM scholarship may be eligible to this mobility grant offered by the Erasmus+ Programme, for a given semester, if they fulfil the requirements from the granting (i.e. sending) institution.

1.5.4. Specific support measures

The non-EMJM scholarship holders will be granted a **contribution to mobility and visa costs**, calculated on the basis of a **flat rate of 2 300 EUR** for the total duration of 24 months.

1.6. Fees

The registration fees cover:

- Tuition fees in each partner University;
- Worldwide comprehensive health and insurance insurance;
- Accommodation and part of the activities during the integration week;
- Local language course in each partner University;
- Part of the activities during the graduation week.

1.6.1. For EMJM scholarship holders

The Erasmus Mundus scholarship holders benefit from a **full fee waiver**.

1.6.2. For non-EMJM scholarship holders

The amount of the registration fees fixed by the Consortium and approved by the EACEA is the same for EU students and non-EU students.

- **4 000 EUR per year;**
- *i.e.* 8 000 EUR for the whole duration of the Master programme.

2. Applying for **the i-MESC Erasmus** **Mundus Joint Master**

2.1. Eligible participants

Students from all over the world can apply for the i-MESC Erasmus Mundus Joint Master.

Students who have previously obtained an EMJM scholarship are allowed to apply to join i-MESC but they are not eligible for an additional scholarship under the EMJM.

In order to guarantee a geographical diversity within i-MESC, we follow the Erasmus+ programme recommendations: no more than 10% of the candidates selected with an EMJM scholarship will be nationals of the same country.

2.2. Application timetable

6 November 2023: Opening of the online tool for students' applications;

29 February 2024: Opening of the online tool for students' applications.

2.3. Application procedure

2.3.1. Create an account

Before starting the application, the student must create a personal account following this [link](#). We advise the students to check their spam box when they have created their account if they do not receive the activation link.

Once the account is created and activated, the student must log in to access the form.

2.3.2. Complete the online form

The application form contains several chapters that the applicant has to complete carefully:

- Personal data;
- Education;
- Language skills;
- Employment;
- Additional information.

The i-MESC Consortium advises the applicants to prepare their application before completing the form online. A specimen of the application form is available in ANNEX 1 of this present guide.

Important notice: The applicant must **SAVE** and **SUBMIT** her/his application every time she/he brings any update.

2.3.3. Provide the supporting documents

A) Copy of ID Document

Accepted documents:

- Passport;
- ID card.

If the applicant's passport or ID card is expired, she/he can upload a copy of the expired one, but she/he commits herself/himself to provide the valid one upon receipt.

B) Proof of residence

Accepted documents:

- a bill (e.g. electricity, gaz, phone, water consumption);
- tax payer document;
- bank account statement;
- home insurance.

Documents not accepted :

- ID papers;
- Declaration on Honour;
- Voter card.

C) Transcripts of records

We need **certified** copies (with the stamp of the university) of these documents and they must be **translated into English by a sworn translator**.

D) Curriculum vitae

Please use the [Europass model](#)

Limited to 2 pages.

E) Statement of purpose

There is no imposed template.

Limited to 500 words.

F) Essay

There is no imposed template.

Limited to 500 words.

Here, we aim to evaluate the content and the student's ability to structure her or his ideas. Therefore, the use of AI is not recommended and should be limited. If the Selection Committee detects a massive AI generated text or plagiarism, the application will be penalized.

G) 2 recommendation letters

The applicant cannot write her/his own letter of recommendation.

There is no imposed template, but they have to be written in English, on an official headed paper, and the letter must contain an official stamp.

They should come from academics or employers that supervised the candidate in the past.

The referee's name, institution and contact details must be clearly stated.

If a referee wants to provide personally the i-MESC Consortium with the letter, they can send it by email to julie.bodelu@u-picardie.fr and jamila.tamimy@u-picardie.fr

H) Certificate of English proficiency

The applicant must demonstrate at the application stage that she/he has the minimum level of English required by our programme. To do so, she/he has several options:

- IELTS: minimum score required 6.5
- TOEFL: Minimum score required 580 (paper based) / 237 (Computer based) / 87 (Internet based)
- Cambridge English Qualifications: B2 First
- CEFR (Common European Framework of Reference for Languages): B2
- Applicants whose native language is English are exempted from taking a test.
- Applicants whose native language is English are allowed to provide a Declaration on Honour.
- Applicants who have previously followed studies in English are allowed to provide a certificate from their university of origin stating that the medium of instruction was English.
- OLS test is not a valid language certificate

Important: The ETS code of Université de Picardie Jules Verne for the TOEFL test is 5351. Please use this code to appoint UPJV a recipient of your test result. Your score will be then sent to us directly from the ETS.

3. Selection process

3.1. Stages of the selection process

STAGE 0: From 6 November 2023 to 29 February 2024

Students' applications collecting: The candidates have to apply online, using the application form available on the i-MESC website.

STAGE 1: From 1 to 8 March 2024

Eligibility check: The i-MESC Administrative Team will review all the applications collected to ensure they meet the eligibility requirements.

STAGE 2: From 9 to 22 March 2024

Academic assessment of the applications: The applications will be randomly assigned to 2 referees while checking that they represent at least 2 different countries. Each referee will first have to check the absence of Conflict of Interest before accepting to evaluate the different applications, and then will sign a non-disclosure agreement. According to the evaluation criteria (listed in the point 3.4), the referee will grade each application. The maximum grade is 150 points.

STAGE 3: From 20 to 22 March 2024

Selection Meeting: The Selection Committee will meet in the University of Ljubljana. During 3 days, they will finalize the application grading, and establish the absolute ranking list. The applicants who obtain the threshold grade of 110 / 150 will be admissible, and will then reach the Stage 4. The ones with the highest grades will be eligible for an EMJM scholarship.

STAGE 4: From 25 to 26 March 2024

Result notification: The Administrative team in UPJV Amiens will communicate the results individually to each applicant, in writing, by email.

STAGE 5: From 25 March to 4 April 2024

Appeal: During this period, if an applicant wishes to submit an appeal, she / he can do it following the instructions listed in the corresponding chapter of this guide.

AND AFTER?

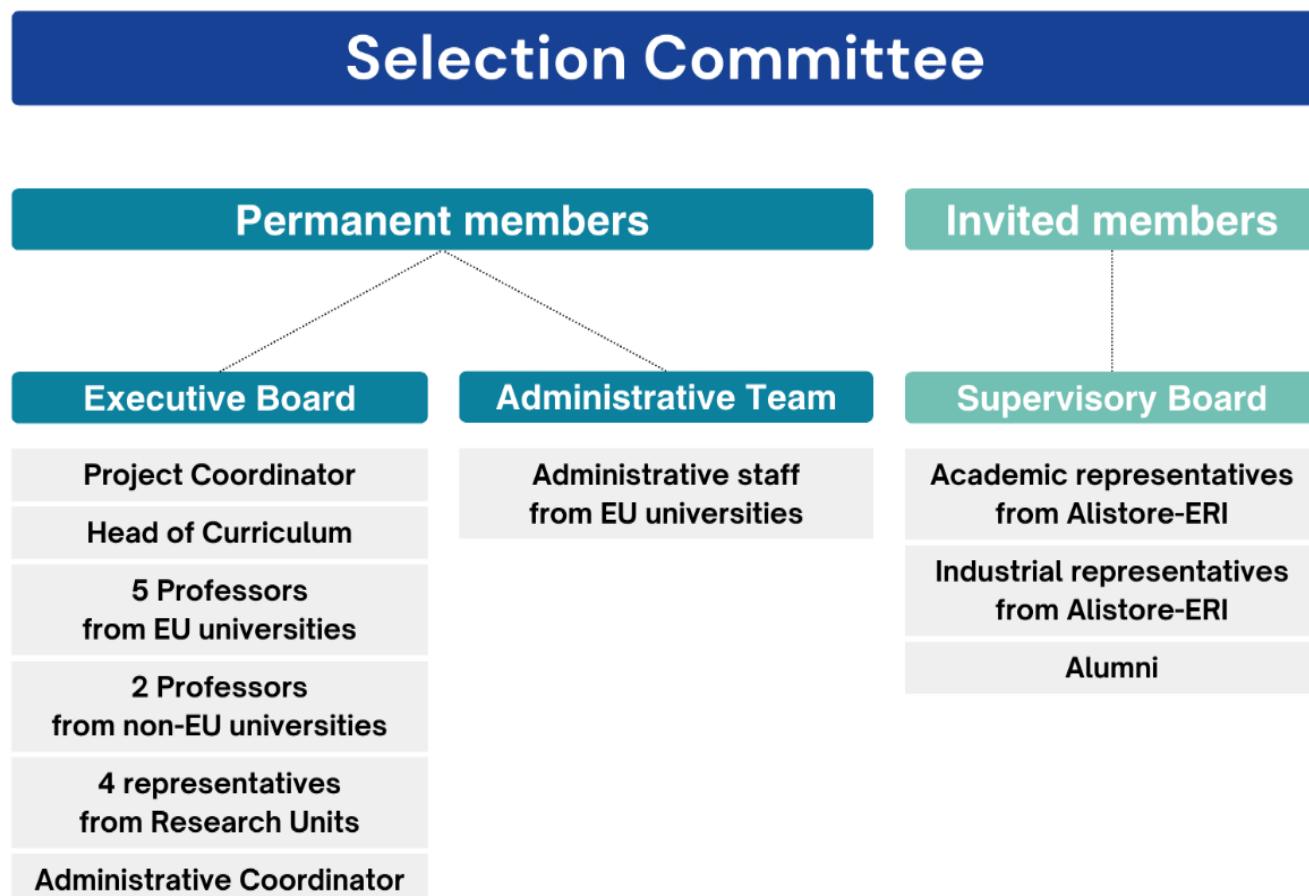
Oral interviews: The selected students will have a short online interview with the Coordinator and part of the i-MESC team to be able to introduce themselves.

They may be contacted also at this step by the industrial sponsors which would intend to grant them a scholarship.

Follow-up: The Administrative team will contact each selected student to send her / him the admission letter detailing the timetable from the selection to the beginning of the course.

3.2. Composition of the Selection Committee

In addition to the Coordinator and Head of Curriculum, the Selection Committee is composed of 12 permanent members (teaching and administrative) from the i-MESC Consortium, and of additional invited external experts in the field of materials science or electrochemistry for energy. The set of evaluators is appointed to ensure that each partner will be equally represented, gender balance respected.



3.3. Eligibility criteria

A) Nationality

Students from all over the world can apply for i-MESC

Students with a double nationality from a Partner (non-European) and a Programme (European) countries must specify the nationality under which they submit their scholarship application.

List of “**EU Member States and third countries associated to the Programme**” (**Programme countries**):

Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Germany, Estonia, Finland, France, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Türkiye.

List of “**Third countries not associated to the Programme**” (*Partner countries*):

Any country not listed above.

Complete information on eligible countries available in the [Erasmus+ Programme Guide](#).

B) 12-month rule

Students nationals from a Partner country who have carried out their main activity (studies, training or work) **for more than a total of 12 months over the last 5 years** in one or several Programme country(ies) should apply as Programme country candidate.

The wording "total of 12 months" refers to all possible cases:

- a single period in one Programme country
- several periods in one Programme country
- the sum of different periods in different Programme countries

The 5-year reference period is calculated backwards from the EMJM scholarship application deadline.

This 12-month rule does not apply to Partner country candidates who hold refugee status in a Programme country.

Students nationals from a Partner country who are not concerned by the 12-month residence rule should apply as a Partner country candidate.

C) Diploma

Students who have obtained a Bachelor or equivalent (minimum 180 ECTS).

Students who are enrolled in the last year of Bachelor level: for these specific profiles, the degree is not required at the application stage, but a certificate of enrolment from the university of origin. If the applicant is selected, she/he will have to demonstrate further that she/he has graduated by sending a certificate of success and the transcripts before 1st September.

D) Background

Bachelor in Chemistry, Physics, Chemical Engineering, Materials Science, Material Process Engineering, or Modeling applied to Electrochemistry.

We are also open to outstanding profiles with other backgrounds, as long as they are compatible with the Master curriculum.

E) APPLICATION COMPLETENESS

All the documents must be provided.

Each application that is not complete after the deadline is automatically considered as ineligible, and does not reach the Stage 2, the academic assessment.

F) RESPECT OF THE DEADLINE

The application and the required attachments must be submitted before the indicated deadline.

3.4. Evaluation criteria

Each criterion will be given scores between 0 (lowest) and 5 (highest). The maximum score is 150.

The **first** criterion is the **Excellence of Education**. Its coefficient is 7, which gives a maximum score of 35.

The **second** criterion is the **coherence of training and scientific background with the i-MESC curriculum**. Its coefficient is 6, which gives a maximum score of 30.

The **third** criterion is the **statement of purpose**. Its coefficient is 6, which gives a maximum score of 30.

The **fourth** criterion is the **letters of recommendation**. Its coefficient is 3, which gives a maximum score of 15.

The **fifth** criterion is the **essay on energy related topic**. Its coefficient is 3, which gives a maximum score of 15.

The **sixth** criterion is the **language skills**, as witnessed by TOEFL of equivalent test scores. Its coefficient is 2, which gives a maximum score of 10.

The **seventh** criterion is the **University of origin**. Its coefficient is 3, which gives a maximum score of 15.

3.5. Appeal procedure

This appeal procedure can come into play if a candidate feels that the i-MESC Consortium has not handled her/his own application in line with the scholarship application and selection process as described on their website and as presented to the Agency. In other words, the appeal cannot concern the decision itself, (usually negative) but only an alleged error made in the process that has resulted in the contested decision.

If an applicant believes that she/he has grounds for contesting the admission result, she/he needs to:

- Submit the appeal in writing, by email, within ~~7~~¹⁰ working days following the result notification. The applicant shall expose the reasons for the appeal and all the relevant elements to support it;
- Add in attachment to the email any relevant supporting documentation;
- Send the appeal to the i-MESC Coordinating Team: Professor Alejandro Franco (alejandro.franco@u-picardie.fr), Mrs. Jamila Tamimy (jamila.tamimy@u-picardie.fr) and Mrs. Julie Bodelu (julie.bodelu@u-picardie.fr).

3.6. Inclusion, diversity and equal opportunities

The i-MESC aims to help create equitable opportunities of access for everyone to our programme, in line with the [Erasmus+ Inclusion and Diversity Strategy](#).

The i-MESC EMJM proposes the following mechanisms to support and foster inclusion, diversity and equal opportunities:

Diversity and inclusion as priorities in the selection process:

In order to comply with the requirements from the EACEA, the i-MESC programme will select no more than 10% of students from the same country per intake with an EMJM scholarship.

Moreover, the i-MESC Consortium will not expect the candidates to declare any disability or chronic disease at the application stage, for transparency purposes. This information will be requested from students only after the selection stage, the aim being above all to find out their specific needs in order to provide them with the necessary support and optimize their welcome at our universities.

Accessible and user-friendly tools:

The i-MESC website is currently undergoing a major overhaul, with the integration of new features to make it more accessible to people with disabilities.

Reinforced mentorship:

One person is identified within the i-MESC Consortium to address the Inclusion and diversity issues: Mrs Jamila Tamimy (jamila.tamimy@u-picardie.fr), Administrative Coordinator in UPJV Amiens. Moreover, in each city visited, the student will benefit from the mentorship of one dedicated person that will be identified before the mobility period.

Dedicated financial support:

The i-MESC programme plans to enroll 144 students over 4 intakes. So far, the Consortium has already secured 120 scholarships:

- 60 EMJM scholarships (overall amount 33 600 EUR);
- 20 additional EMJM scholarships (overall amount 33 600 EUR) for targeted regions to enhance their participation in EMJM Action of the Erasmus+ programme;
- 40 industrial scholarships (overall amount 20 000 EUR).

If a student have a disability (that includes physical, mental, intellectual or sensory impairments, chronic disease), she/he is invited to declare it to the Consortium at the application stage (or at a later stage), and the i-MESC Consortium will provide an additional financial support to cover part of the fees related to her/his specific needs.

The students selected to join i-MESC programme without an EMJM scholarship will be awarded an additional financial support to cover their travel, mobility and installation costs (flat rate 2 300 EUR per student).

Language learning support:

In order to facilitate the students' integration in her/his local environment is to offer her/him some local language courses in each visited HEI. Free of charge for the student, they will be made available either as intensive courses at the beginning of the semester or as courses integrated into the weekly timetable during the whole semester.

3.7. Data protection

The Université de Picardie Jules Verne, acting on behalf of the i-MESC Consortium, commits itself to respect the data protection of the participants in line with the EU requirements.

The personal data collected will be processed under the Grant Agreement signed between the EACEA and the UPJV Amiens, in compliance with the applicable EU, international and national law on data protection (in particular, [Regulation 2016/67914](#)).

The i-MESC Consortium ensures that personal data will be:

- processed lawfully, fairly and in a transparent manner in relation to the data subjects;

- collected for specified, explicit and legitimate purposes and not further processed in a manner that is incompatible with those purposes;
- adequate, relevant and limited to what is necessary in relation to the purposes for which they are processed;
- accurate and, where necessary, kept up to date;
- kept in a form which permits identification of data subjects for no longer than is necessary for the purposes for which the data is processed;
- processed in a manner that ensures appropriate security of the data.

ANNEX I

SPECIMEN OF THE i-MESC APPLICATION FORM

SECTION 1: PERSONAL DATA

User name

Email Address

Online application number

Last name

First name

Gender declared on your ID document

Date of birth

City of birth

Country of birth

Nationality

I apply as a:

Partner Country candidate

Programme Country candidate

*Please note: The 12-month rule: Students nationals from a Partner country who have carried out their main activity (studies, training or work) **for more than a total of 12 months over the last 5 years** in one or several Programme country(ies) should apply as Programme country candidate.*

Type of ID document

ID document reference number

Date of issue

Date of expiry

Country of residence

Permanent address for all correspondences:

Number and street

Postcode

City

Province

Country

Marital status

Number of children

In this section, the applicant must attach 2 documents:

- Copy of ID document;
- Proof of residence.

SECTION 2: EDUCATION

This part of the application is very important.

Provide full detailed records of your education up-to-date, including University degree(s) at BSc level, and any other higher education title (specialization, MSc, PhD, if applicable).

Also, please specify any post-graduate or training programmes you have undertaken during the last three years, even if they have not led you to a degree yet.

Bachelor Degree

Country of the Institution

Official Name of the Institution (Please indicate the complete name of the institution)

Name of the Degree

Duration of the programme in semester

Number of semesters completed so far

Graduation date (provisional if you are currently enrolled in the last year)

Global mark obtained (GPA)

Ranking

Master Degree, if applicable

Country of the Institution

Official Name of the Institution (Please indicate the complete name of the institution)

Name of the Degree

Duration of the programme in semester

Number of semesters completed so far

Graduation date (provisional if you are currently enrolled in the last year)

Global mark obtained (GPA)

Ranking

Other Degree / Certificate which can be related to i-MESC

Country of the Institution

Official Name of the Institution (Please indicate the complete name of the institution)

Name of the Degree / Certificate

Duration of the programme in months

Awarding date

Global mark obtained (GPA)

Ranking

To what extent is it related to i-MESC? (Paragraph limited to 500 words)

Additional Education, training in Industry or Research Centre and/or publications (Paragraph limited to 500 words)

In this section, the applicant must attach 2 documents:

- Certified copy of transcripts of records, translated into English;
- Certified copy of the certificate(s).

SECTION 3: LANGUAGE SKILLS

English

General level

Listening

Reading

Speaking

Other language (different from native language)

General level

Explain how you acquired your linguistic skills in this language (e.g., academic curriculum in a given language and for how long; summer internships; periods abroad for study or work; etc.). This paragraph is limited to 500 words.

In this section, the applicant must attach 1 document:

- Proof of English proficiency.

SECTION 4: EMPLOYMENT

Describe, if any, your employment and /or professional experiences (from most recent to oldest). Specify also your present status (employed, unemployed, student, part-time, etc.).

This paragraph is limited to 500 words.

In this section, the applicant must attach 1 document:

- Curriculum vitae.

SECTION 5: ADDITIONAL INFORMATION

Provide any additional information that may further improve your application. Please make sure that this information is not redundant with all the other parts of the application form.

This paragraph is limited to 500 words.

SECTION 6: STATEMENTS

- I understand that if I have previously obtained an Erasmus Mundus scholarship, I am still eligible to apply to join i-MESC, but I will not be eligible for an additional EMJM scholarship.
- I have read and understood the mobility requirements of the i-MESC Master programme.
- I confirm the information on this application form is complete and correct.

Once the applicant has answered all the questions, attached all the documents and ticked all the statements, she or he can submit the application.

Annex II

STATISTICS ON PREVIOUS APPLICATIONS AND GRADUATES

First statistics: Evolution of the applications from 2006 to 2023

The first Erasmus Mundus funding period concerns the classes from MESC3 to MESC7.

- For MESC3, we collected 71 applications;
- For MESC 4, we collected 116 applications;
- For MESC5, we collected 130 applications;
- For MESC6, we collected 150 applications;
- For MESC7, we collected 184 applications.

Then, the second Erasmus Mundus funding period concerns the classes from MESC8 to MESC12.

- For MESC8, we collected 110 applications from Partner countries and 10 applications from Programme countries;
- For MESC9, we collected 134 applications from Partner countries and 13 applications from Programme countries;
- For MESC10, we collected 123 applications from Partner countries and 8 applications from Programme countries;
- For MESC11, we collected 124 applications from Partner countries and 13 applications from Programme countries;
- For MESC12, we collected 110 applications from Partner countries and 13 applications from Programme countries.

Then, we welcomed 2 classes without any Erasmus Mundus funding, MESC13 and MESC14.

- For MESC13, we collected 23 applications from Partner countries and 8 applications from Programme countries;
- For MESC14, we collected 26 applications from Partner countries and 5 applications from Programme countries.

Then, the third Erasmus Mundus funding period concerns the classes from MESC15 to MESC18.

- For MESC15, we collected 253 applications from Partner countries and 20 applications from Programme countries;
- For MESC16, we collected 242 applications from Partner countries and 22 applications from Programme countries;
- For MESC17, we collected 287 applications from Partner countries and 27 applications from Programme countries;
- For MESC18, we collected 453 applications from Partner countries and 26 applications from Programme countries.

Then, we welcomed another class without any Erasmus Mundus funding, MESC19.

- For MESC19, we collected 378 applications from Partner countries and 20 applications from Programme countries.

Second statistics: Male / Female breakdown among graduates

From its creation in 2004 to 2023, the MESC / MESC+ Master programme graduated 336 students, within 17 classes.

57% of the graduates are male and 43 % are female.

Third statistics: Breakdown of graduates by country of origin

The 336 graduates come from 58 different countries.

- 36 come from France;
- 32 come from Poland;
- 29 come from China;
- 27 come from India;
- 19 come from Spain;
- 18 come from Ethiopia and from Mexico;
- 11 come from Vietnam;
- 10 come from Iran, Pakistan and Taiwan;
- 9 come from Colombia;
- 7 come from Philippines, Thailand and Turkey;
- 6 come from Indonesia;

- 5 come from the USA;
- 4 come from Brazil, Egypt, Malaysia, Romania, South Korea and Ukraine;
- 3 come from Ghana, Italy, Singapore and Tunisia;
- 2 come from Argentina, Azerbaijan, Bangladesh, Canada, Nigeria, Serbia, UK, Venezuela;
- 1 come from Algeria, Angola, Austria, Cameroon, Costa Rica, Cyprus, El Salvador, Greece, Hungary, Kazakhstan, Morocco, Netherlands, Palestine, Panama, Portugal, Russia, Slovenia, South Africa, Sri Lanka, Turkmenistan, Uruguay, Uzbekistan and Yemen.

Fourth statistics: Employability of MESC/MESC+ students in the year following their graduation

76% pursued in PhD after their graduation.

22% found a position in a company after their graduation.

2% have not answered.

Fifth statistics: Current situation of MESC/MESC+ graduates: where do they work?

56% of the graduates work now in a company.

29% of them work in academia (university).

15% of them Work in a research centre.

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