

SCHOOL OF ENGINEERING OF LORENA – EEL/USP
GRADUATE PROGRAM IN MATERIALS ENGINEERING – PPGEM
Call for Applications – 1st Semester/2026
CALL FOR APPLICATIONS FOR MASTER’S AND DIRECT DOCTORATE
SELECTION

Applications are open at EEL-USP for the Graduate Program in Materials Engineering (PPGEM), in the Master’s and Direct Doctorate modalities, the latter aimed at candidates who do not hold a master’s degree.

Applications will be carried out exclusively by submitting the application form and supporting documents, through the application link, with the submission of numbered and named files as per item 3 of this call. Only documents in searchable PDF format (PDF/A ISO 19005) and with good resolution quality will be accepted; image files in jpeg, png, gif, tif, etc., formats will not be accepted, except for item 3.1.1 of this call. In this sense, all documents containing the interested party’s signature must be electronically signed (Gov.br electronic signature, DocuSign or equivalent).

1. NUMBER OF POSITIONS FOR 2025:

- Master’s: 15 (fifteen)
- Direct Doctorate: 5 (five)
- Reserved Positions for Master’s: 01
- Reserved Positions for Direct Doctorate: 01

2. Regarding the Reservation of Positions in the Selection Process

In compliance with CoIP Resolution No. 8,835, of August 7, 2025, the reservation of 01 (one) position for the master’s program and 01 (one) position for the direct doctorate program from the total available positions in this selection process will be ensured for self-declared black (black or brown) candidates, provided they express this option at the time of application.

The fulfillment of this provision will observe the following conditions:

- i. The confirmation of the racial self-declaration will occur through a hetero-identification procedure, conducted at a specific and previously scheduled

time, upon formal summons. This procedure will consist of the exclusive analysis of the candidate's phenotypic characteristics and will be carried out by a committee appointed by the Inclusion and Belonging Commission (CoIP), in conjunction with the Program Coordinating Committee (CCP), and must precede the ratification of the final result.

- ii. Candidates registered under the affirmative action modality will also be subject to full compliance with the stages established in the selection process, as provided in items 4, 5, and 6 of the call for applications, with the obtained score constituting a classification criterion for those whose self-declaration is validated.
- iii. The non-confirmation of the self-declaration by the hetero-identification procedure will result in the candidate being redirected to the general competition positions, without prejudice to the score obtained in the examination.
- iv. Any unfilled positions in the reserve intended for affirmative action will be automatically redistributed to the general competition.

3. IMPORTANT DATES

For candidates, Brazilian or Portuguese-speaking foreigners, residing in Brazil:

- Applications: 10/10 to 20/11/2025
- Written Exam: 02/12/2025
 - Location: Department of Materials Engineering – Area II, EEL/USP
 - Time: 08:30 AM
- Direct Doctorate Project Defense: 10/12/2025
- Results: 17/12/2025
- Enrollment: 23 to 26/02/2026.

For foreign candidates residing outside the country:

- Applications: 10/10 to 20/11/2025
 - Project Defense (Master's and Direct Doctorate): date of the summons to be announced later
 - Results: until 20/02/2026
 - Enrollment: 02 to 04/03/2026
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4. DOCUMENTS REQUIRED FOR APPLICATION

4.1. Master's and Direct Doctorate

- 4.1.1. A recent 3x4 photo in an image file: jpeg, png, gif, tif, etc;
- 4.1.2. Application Form. Available at the link www.inscricao.eel.usp.br, to be filled out and signed electronically (Gov.br electronic signature, DocuSign or equivalent);
- 4.1.3. Copy of the CPF – not required if it is on the RG;
 - 4.1.3.1. For foreign candidates residing in Brazil:
 - - a) Individual Taxpayer Registry (CPF),
 - - b) National Migration Registry (RNM) or
 - - c) Passport (pages with identification/photo, passport number, and validity).
- 4.1.4. Digital copy of the General Registry (RG). Attention: the CNH will not be accepted;
- 4.1.5. Digital copy (front/back) of the Diploma or Declaration of Completion of the undergraduate course, containing the date of graduation. Candidates in their last semester of undergraduate studies are exempt from presenting the Diploma or Declaration of Completion of the course containing the graduation date at the time of application, but these will be essential for enrollment if the candidate is approved. However, they must present a certificate of enrollment for the current year/semester;
- 4.1.6. Digital copy of the Undergraduate Academic Transcript (referring to the diploma presented in item 4.1.5, or the ongoing course, as well as course transfers, if any);
- 4.1.7. Detailed and documented digital academic curriculum. Preferably the Lattes Curriculum;
- 4.1.8. If your project includes a co-supervisor, it is mandatory to present the following documents separately: a) a letter from the supervisor with a detailed justification proposing the ad-hoc accreditation of the co-supervisor; b) a letter of acceptance of co-supervision digitally signed by the future co-

supervisor, containing justifications based on merit and the co-supervisor's expertise on the project's theme; c) Lattes curriculum of the last 5 (five) years; d) co-supervisor accreditation form, available at the CPG link: <https://cpg.eel.usp.br/aluno/formularios/credenciamento-recredenciamento-de-orientadores>;

4.2. Complementary documents only for Brazilian candidates for the direct doctorate and foreign candidates residing abroad

- 4.2.1. Research Project in digital format in searchable PDF (PDF/A ISO 19005), with a maximum of 20 pages (double spaced and Arial size 12 font). The file must be uploaded (attached) on the application page;
- 4.2.2. The text of the thesis project must contain: title, objective, justification, relevant literature review, experimental procedure, necessary resources, funding agency, schedule of activities, and references. The study plan to be attached to the thesis project is available at the link: [http://cpg.eel.usp.br/formulario-cpg/ Form 7](http://cpg.eel.usp.br/formulario-cpg/Form%207);
- 4.2.3. A letter of recommendation digitally signed by the future supervisor, who must be regularly accredited in the PPGEM. The letter must contain justifications for the request, based on merit, the supervisor's expertise on the topic, the originality of the research work proposal, the candidate's academic performance, and scientific maturity for direct doctorate;
- 4.2.4. Digital Supervision Commitment Term. Duly filled out and signed, available at the link: http://cpg.eel.usp.br/sites/files/cpg/arquivos/formularios/12_Termo_Compromisso_de_Orientacao.pdf
- 4.2.5. If your project includes a co-supervisor, it is mandatory to present the documents from item 4.1.8 of this call for applications;

5. SELECTION CRITERIA

The selection process for the Master's and Direct Doctorate will consist of the analysis of the candidate's documented Curriculum Vitae and a written exam (for Brazilian candidates or foreigners residing in Brazil). For the Direct Doctorate, an oral presentation of the research project referred to in item 4.2.1 is also part of the

selection process. The oral presentation of the project is also required for foreign candidates residing abroad for both the master's and direct doctorate programs.

- 5.1. In the Curriculum analysis, undocumented information will not be computed for the composition of the score for this item;
- 5.2. The Written Exam will be eliminatory:
 - 5.2.1. For the Master's: minimum grade of 3.0 (three);
 - 5.2.2. For the Direct Doctorate: minimum grade of 5.0 (five).
 - The written exam is part of the evaluation only for Brazilian and foreign candidates residing in the country.
- 5.3. The Direct Doctorate candidate will be considered able to present their research project to an Examining Committee only if they obtain a grade equal to or greater than 5.0 (five) on the written exam. The candidate may have a maximum of one failure in their undergraduate studies and must have at least 1 (one) publication in an indexed journal with a JCR equal to or greater than 1.0.
 - 5.3.1. The presentation of the research project will have a maximum duration of 30 minutes.
 - 5.3.2. The Examining Committee will consist of two members chosen by the CCP, using the criteria established in Annex A for the evaluation of the project/candidate;
 - 5.3.3. The evaluation of the project/candidate by the committee is not public, therefore, the presence of third parties is forbidden. Each member of the Examining Committee will assign a grade for the project presentation.
- 5.4. For Master's candidates, the final grade (NF) will be calculated by combining the Written Exam grade (NPE) with the Curriculum analysis grade (NC), with a weight of 60% for the written exam grade (NPE) and 40% for the Curriculum analysis grade (NC), according to the equation: $NF = (NPE \times 0.60) + (NC \times 0.40)$.
- 5.5. For Direct Doctorate candidates, the final grade will be obtained by the arithmetic mean of the grades given by the two members of the examining committee.

- 5.6. A candidate for the Master's or Direct Doctorate will be considered approved in the selection process if they obtain a final grade (NF) equal to or greater than 5.0 (five).
- 5.7. For foreign candidates who will compete in their country for PEC-PG scholarships granted by the Brazilian government, or for scholarships granted by other international bodies, the selection process will consist of the analysis of the candidate's Curriculum and research project by an examining committee defined by the CCP.

6. EVALUATION CRITERIA OF THE DIRECT DOCTORATE EXAMINING COMMITTEE

The evaluation by the members of the Examining Committee will be done according to the following items:

- 6.1. Content (35% of the final grade): (a) Clarity of objectives; (b) Methodology and problem approach; (c) Planning of the infrastructure for the project's execution; (d) Economic viability of the project; (e) Adequacy and timeliness of the bibliography; (f) Supervisor's expertise on the project's theme, proven by supervisions and scientific articles; (g) Scientific originality of the proposal;
 - 6.2. Project Presentation (10% of the final grade): (a) Formatting; (b) Quality of the elaboration and clarity of figures and tables and (c) Writing;
 - 6.3. Oral Presentation (35% of the final grade): (a) Logical sequence of the exposition; (b) Confidence and command of the subject; (c) Quality of the answers given;
 - 6.4. Quantitative Evaluation of the Curriculum Vitae + Academic Transcript (20% of the final grade).
 - 5.4.1. The PPGEM Secretariat will provide the evaluators with the consolidated spreadsheet of the points computed in item 4 for verification, according to the documentation submitted by the candidate regarding item item 4.1.6 e 4.1.7.
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7. QUANTITATIVE EVALUATION OF THE CURRICULUM VITAE + ACADEMIC HISTORY

7.1. Curriculum Vitae:

- 7.1.1. Scientific Initiation (IC): Only IC with a duration equal to or greater than 6 months will be considered; being 0.6 points for the first semester and 0.1 per additional month. Limited to 2.4 points. The accepted proofs of IC are only declarations from the supervisor or a competent body, containing the start and end dates, and Commitment/Adhesion Terms will not be accepted;
- 7.1.2. Tutoring can only be considered if carried out for at least 6 months during the undergraduate period, with 0.9 points for each semester of tutoring. Limited to 1.8 points;
- 7.1.3. Undergraduate teaching: 0.5 points per semester. Limited to 2.0 points;
- 7.1.4. The following scores will be considered for publications from the last 05 (five) years and with a theme belonging to Engineering and Exact Sciences. Only publications with ISSN/ISBN will be accepted, where applicable; Published or in-press articles.
 - (a) Full article in an international journal with a selective editorial policy: 2.00 points;
 - (b) Filed patent: 1.50 points;
 - (c) Full article in a national journal: 0.75 points;
 - (d) Full paper in international conference proceedings: 0.75 points; limited to 3 points;
 - (e) Full paper in national conference proceedings: 0.50 points; limited to 2 points;
 - (f) Abstract in international conferences: 0.25 points; limited to 1.0 point;
 - (g) Abstract in national conferences: 0.10 points; limited to 1.0 point;
 - (h) Book chapter: 1.5 points; limited to 3.0 points.
- 7.1.5. The following scores will be considered for awards obtained in the last 05 (five) years and with a theme belonging to Engineering and Exact Sciences, with national being 0.50 points and international 1.00 point.

- 7.1.6. Papers in scientific conferences can only be counted if they have already been presented. Scientific articles will only be considered if they prove, at least, final acceptance by the editor.

7.2. Academic Transcript

- 7.2.1. In cases of course transfers during undergraduate studies, the candidate must present the digital academic transcript of both courses to prove the use of disciplines/credits;
 - 7.2.2. Sum of the scores related to the Time to Graduate and Grade Point Average (CR). The Ideal Time to Graduate will be considered as: 5 years for Engineering courses with 10 semesters, 6 years for evening Engineering courses with 12 semesters, and 4 years for Bachelor's degrees with 8 semesters.
 - 7.2.3. The score for Total Time to Graduate (disregarding the time of enrollment suspension, when applicable) will be assigned as:
 - (a) Ideal – 1.50 points
 - (b) Completed with 1 (one) extra semester – 1.25 points;
 - (c) Completed with 2 (two) extra semesters – 1.00 points;
 - (d) Completed with 3 (three) extra semesters – 0.75 points;
 - (e) Completed with 4 (four) extra semesters – 0.50 points;
 - (f) Completed with 5 (five) extra semesters – 0.25 points;
 - (g) Completed with more than 5 (five) extra semesters – 0.00 points.
 - 7.2.4. The score for the Undergraduate Grade Point Average (CR), taking into account failures, if any, will be assigned as:
 - (a) CR equal to or greater than 7.0 - 1.5 points;
 - (b) CR between 6.0 and 6.9 – 1.0 points;
 - (c) CR between 5.0 and 5.9 – 0.5 points;
 - (d) CR less than 4.9 – 0.0 points;
 - 7.2.5. The maximum score for the sum of the Curriculum Vitae and Academic Transcript scores must be 10 (ten).
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8. EXAM

- 8.1. The Exam will cover questions on the following fundamental topics of Materials Science and Engineering: Interatomic Bonds, Structures and Defects, Mechanical Properties, and Phase Diagrams;
 - 8.2. The suggested bibliography includes the following textbooks:
 - 8.2.1. CALLISTER Jr., WILLIAM D. Materials Science and Engineering: An Introduction. 7th ed. Rio de Janeiro: Livros Técnicos e Científicos Editora S.A., 2008;
 - 8.2.2. ASKELAND, DONALD R. and PHULÉ, PRADEEP P. The Science and Engineering of Materials, São Paulo - Cengage Learning – 2008;
 - 8.2.3. SHACKELFORD, JAMES F. Introduction to Materials Science for Engineers, 6th ed. Pearson – São Paulo, 2008.
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9. CANDIDATE CLASSIFICATION

- 8.1. Candidates will be classified in descending order of the final grades (NF) obtained and will be approved within the limit of the number of vacancies declared in this Call for Applications.
 - 8.2. In case of a tie, the tiebreaker criterion will be the highest grade obtained in the written exam for the Master's and Direct Doctorate. If the tie persists, the candidate with the highest scientific productivity in the last 3 years will be ranked higher, using the criteria from item 7.1.4.
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10. DOCUMENTS REQUIRED FOR ENROLLMENT

- 10.1. First Regular Enrollment Application, duly filled out and signed, sent to the approved candidate's e-mail by the PPGEM.
 - 10.1.1. For Master's students, it must be signed by the PPGEM coordinator, as in the first 90 days after enrollment the student will be under academic supervision, and by the end of this period, they must submit the dissertation Study Plan and the supervision acceptance form to the Program Coordinating Committee secretariat;
 - 10.1.2. For Direct Doctorate students, it must be signed with the Supervisor's agreement;

- 10.2. Copy of the CPF – presentation is waived if it is on the RG (mandatory for Foreigners);
- 10.3. Copy of the RG (CNH, Class Registry, Military Registry, or others will not be accepted);
- 10.4. For foreign candidates: a) Copy of the RNE or Protocol (containing the type of Visa: Temporary IV or Mercosur or Permanent) with number and validity, for foreign candidates; b) Copy of the Passport (pages containing identification, passport number, and validity), for foreign candidates;
- 10.5. Copy of the Birth and/or Marriage Certificate;
- 10.6. Copy of the Diploma or Declaration of Completion of the Undergraduate course, containing the date on which the Graduation Ceremony was held;
- 10.7. Copy of the Undergraduate Completion Academic Transcript;
- 10.8. 01 (one) recent 3x4 photo.

11. FINAL CONSIDERATIONS

- 11.1. Applications must be made exclusively through the electronic form, where all documents must be attached in the specific fields, in PDF format, until 11:59 pm on 06/20/2025;
- 11.2. Written Exam: Start: 08:30 am (10 min. tolerance) - End: 11:30 am;
- 11.3. Enrollment will be carried out at the Graduate Studies Commission Secretariat – CPG, by the approved candidate, with the documents required in item 10 of this call for applications, and enrollments by proxy or third parties will not be accepted;
- 11.4. The summons for the Defense of the Research Project of the candidates classified for the Direct Doctorate (and, also in the case of the Master's for foreigners not residing in the country) will be communicated by email to the candidate(s) who obtain the minimum required grade as per item 5.2 of this call for applications;
- 11.5. A classified candidate who does not complete the stages and enrollment on the dates established in this call for applications will be considered to have withdrawn from the position;

- 11.6. The PPGECCP will be responsible for applying the criteria described in this call for applications, with the exception of the requirements for the first regular enrollment;
- 11.7. The CPG will be responsible for the approval of the results;
- 11.8. This selection process will only be valid for the enrollment periods stipulated in this Call for Applications;
- 11.9. Omitted cases will be resolved by the CPG, and in the case of a request for review of exams, the PPGECCP will attend to the requests and communicate to the CPG;
- 11.10. The candidate's application implies acceptance of the rules and instructions for the selection process contained in this Call for Applications and in the communications already issued or that may be made public;

12. ADDITIONAL INFORMATION:

- 12.1. Written Exam Location: EEL/USP, Area II
 - School of Engineering of Lorena – EEL/USP
 - Secretariat of the Graduate Program in Materials Engineering
 - Phone: (12) 3159-9904; E-mail: ppgem-eel@usp.br.
 - Address: Estrada Chiquito de Aquino km 02+200 m, Bairro de Santa Lucrecia, CEP: 12612-550 Lorena/SP.
 - 12.2. Enrollment Location: EEL/USP, Area I
 - School of Engineering of Lorena – EEL/USP
 - Secretariat of the Graduate Studies Commission - CPG:
 - Phones: (12) 3159-5051 or 3159-5015; E-mail: cpg@eel.usp.br
 - Address: Estrada Municipal do Campinho, s./n.º, CEP: 12.602-810 - Lorena/SP
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ANNEX A
Direct Doctorate Candidate Evaluation Form
Graduate Program in Materials Engineering School of Engineering of Lorena -
USP

Candidate's Name: Project Title: Date of Presentation:

1) Content	Grade
(a) Clarity of objectives;	(0 -10)
(b) Methodology and problem approach;	(0 -10)
(c) Planning of the infrastructure for the project's realization;	(0 -10)
(d) Economic viability of the project and supervisor's expertise on the project's subject;	(0 -10)
(e) Adequacy of the bibliography;	(0 -10)
(f) Originality of the proposal;	(0 -10)
Grade for item 1: (a+b+c+d+e+f)/6	(Maximum of 10 points)
2) Written presentation	
(a) Formatting;	(0 - 10)
(b) Elaboration of figures and tables;	(0 - 10)
(c) Writing;	(0 - 10)
Grade for item 2 = (a+b+c)/3	(Maximum of 10 points)
3) Oral presentation	
(a) Logical sequence of the exposition;	(0 - 10)
(b) Confidence and command of the subject;	(0 - 10)
(c) Quality of the answers given;	(0 - 10)
Grade for item 3 = (a+b+c)/3	(Maximum of 10 points)
4) Curriculum Vitae and Academic Transcript	
(a) Sum of the Curriculum Vitae grades	(maximum of 10)
(b) Sum of the Academic Transcript grades	(maximum of 3)
Grade for item 4 = (a+b)	(Maximum of 10 points)