

**UNIVERSITY OF SÃO PAULO – USP POLYTECHNIC SCHOOL**  
**PRODUCTION ENGINEERING GRADUATE PROGRAM**  
**PPGEP**

**CALL FOR APPLICATIONS**

The Polytechnic School of the University of São Paulo (EPUSP) calls for applications and establishes selection process rules for admission to the Master's, Doctoral, and Direct Doctoral graduate programs in Production Engineering (PPGEP) in the first four-month period of 2023.

The Production Engineering Graduate Program (PPGEP) of the Polytechnic School of the University of São Paulo (EPUSP) offers both Master's and Doctoral programs in the following research fields:

- 1) Production Economics and Financial Engineering (EPEF) – “Economics and Modeling in Energy, Sustainability, and Innovation” research group;
- 2) Operations and Logistics Management (GOL);
- 3) Technology and Information Management (GTI);
- 4) Product Quality and Engineering (QEP); and
- 5) Labor, Technology, and Organization (TTO).

Additional information on research programs, ongoing research projects, advisors, available subjects, regulations, calendars, benefits, and structure for students are available at <https://ppgep.poli.usp.br>.

This call of notice will reach a terminus on the publication of selection process results.

**1. GENERAL PROVISIONS**

1.1. Applicants to the selection process must have undergraduate degree, master's degree, or finish the undergraduate program by 10 February 2023. Applications with short cycle and associate degree certificates will not be accepted. Certificates must be registered or certified with a grant date from an officially recognized full undergraduate degree.

- 1.2. The selection process will comprise two knockout phases (see items 2 and 3 of this announcement).
- 1.2.1. Applicants will be ranked according to overall scores in the first phase. PPGEP-USP will invite applicants with the best overall scores to take part in the second phase.
- 1.2.2. Applicants invited to the second phase must undertake examinations specific to the research programs they are applying to.
- 1.2.3. Upon registration, applicants to the Doctoral program must produce evidence of an article published in the last five years, according to section 2.1.2.2.
- 1.3. The PPGEP-EPUSP selection process application fee is BRL 150,00 (one hundred and fifty Brazilian Reais) and must be paid before 2 December 2022, using a banking billet which will be sent by email from the PPGEP Secretariat. The fee will not be reimbursed under any circumstances, except if the selective process of this call of notice is cancelled. Applicants who have not paid the fee until the deadline in this notice will not have applications accepted and hence will not be able to take the examinations.
- 1.4. The Program Coordination Committee will analyze application fee waiver requests from applicants under vulnerable socioeconomic conditions. Waiver requests dated and signed by applicants must be handed to the PPGEP Secretariat. The fee waiver request period is from 16 to 18 November 2022. The request document must be written and signed by the applicant (s) explaining the reasoning of the waiver request and be sent to the [ppgep@usp.br](mailto:ppgep@usp.br) address. Additionally, applicants may attach proof documents if deemed appropriate. The list of applicants exempted from fee payment will be published in the Program's home page until 25 November 2022.
- 1.5. Applicants approved in the selection process will be invited to enroll as special students in the first four-month period of 2023. Passing from special student to regular student status is subject to fulfilling the Individual Academic Plan, to be filled and signed by the student, together with their advisor, upon enrollment, according to section 5.
- 1.6. During the selection process, announcements and results will be released exclusively on the PPGEP-EPUSP website (<http://ppgep.poli.usp.br>).
- 1.7. The number of admission vacancies is set by the research programs, according to the availability of advisors, under current rules and regulations.

1.8. There will be no examination reviews, neither of grades nor scores, in any of the selection process phases.

## **2. FIRST PHASE**

### **2.1. Registering for the First Phase**

2.1.1. Registration period: from 20 October to 01 December 2022 (until 11:59 PM). All registrations will be confirmed by email. Please deactivate the SPAM filter for the [ppgep@usp.br](mailto:ppgep@usp.br) email address. The list of approved registrations will be announced until 5 December 2022. PPGEP-EPUSP assumes no responsibility for any errors related to sending and receiving documents.

2.1.2. Candidates must apply at the PPGEP-EPUSP website (<https://ppgep.poli.usp.br>). All required fields must be filled and requested documents must be uploaded. PPGEP-EPUSP takes no responsibility for issues on sending and receiving information and documents. If needed, PPGEP-EPUSP will send an email requesting additional documents, which should be forwarded to the [ppgep@usp](mailto:ppgep@usp) email address.

2.1.2.1. Documents to be sent by Master's program applicants:

- Scanned copy of the undergraduate program transcript. The original document must be shown upon program enrollment.
- Evidence of completion of an undergraduate program recognized by the Brazilian Ministry of Education (MEC). Short cycle and associate degree certificates will not be accepted. For foreign programs that are not participants in dual degree programs with USP, proof of request for undergraduate certificate recognition is needed, in accordance with the prevailing law. The applicant must sign a STATEMENT OF RESPONSIBILITY on the undergraduate degree certificate recognition request. If the undergraduate degree were not further recognized by USP, the applicant approved in the selection process will be immediately disconnected from the PPGEP-EPUSP.
- Scanned copy of updated Lattes curriculum, to be filled directly at the <http://lattes.cnpq.br> website, of the National Council for Scientific and Technological Development (CNPq).

- Scanned copy of a text with academic and professional information, stating the reasoning to develop a Master's level research at PPGEP-EPUSP.
- Whenever applicable, scanned documents with evidence of exemption from first phase examinations, considering peculiarities of Master's program applicants, in accordance with item 2.2. and its sub-items. Attach the certificates of passing examinations and request exemption from first phase examinations. Original documents must be shown upon enrollment.
- Whenever applicable, scanned copy of proficiency in English language, considering peculiarities of applicants to the Master's program, in accordance with item 2.2. and its sub-items. Attach certificate of passing examinations and request exemption from the English proficiency examination. The original document must be shown upon enrollment.

2.1.2.2. Documents to be handed by Doctoral and Direct Doctoral program applicants:

- Undergraduate program academic transcript for Direct Doctoral applicants or Master's program transcript for Doctoral applicants.
- Doctoral program applicants must present a scanned copy of the Master's program certificate (recognized by CAPES – Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – and granted by an institution with score equal to 3 or higher, at the time of the certificate homologation). For foreign programs that are not participants in dual degree programs with USP, evidence of Master's program certificate recognition request is needed, in accordance with the prevailing legislation. The applicant must sign a STATEMENT OF RESPONSIBILITY on the Master's degree recognition request. If an admitted applicant has a Master's program certificate recognition denied by USP, they may be disconnected from PPGEP-EPUSP, after decision from the PPGEP-EPUSP Coordination Committee (CCP).
- Scanned copy of updated Lattes curriculum, to be filled in the <http://lattes.cnpq.br> website, from the National Council of Scientific and Technological Research (CNPq), with special attention to information on publications.
- Doctoral program applicants must hand a digital file with a summary of the Master thesis (up to two pages, typed with single space, *Times New Roman* 12 font, in A4 paper size).
- Doctoral program applicants must produce evidence, in digital form, of existence of an article published/ accepted in the last five years in scientific journals (of either national or

international scope), or scientific congress annals, with editorial committees which adopt blind peer review evaluation, for both journals and events. Those articles must be cited in the respective Lattes curriculum.

- Scanned copy of text with academic and professional information, specifying the reasoning to develop Doctoral or Direct Doctoral level research at PPGEP-EPUSP.
- Whenever applicable, digital copy of documents with evidence of exemption from first phase examinations, taking into consideration the peculiarities of Doctoral and Direct Doctoral applicants, in accordance with item 2.2. and its sub-items. Attach a certificate of passing examinations and request exemption from first phase examinations. The original document must be shown upon program enrollment.
- Whenever applicable, digital copy of certificate of proficiency in English language, in accordance with item 2.2. and its sub-items, taking into consideration peculiarities of Doctoral and Direct Doctoral program applicants. Attach a certificate of passing examinations and request exemption from the English proficiency examination. The original document must be shown upon program enrollment.

## **2.2. First phase examinations**

The first phase examinations, henceforward called “PPGEP-EPUSP examination”, are compulsory and eliminatory for all applicants. The PPGEP-EPUSP exam is made of two parts: (i) examination of knowledge related to production engineering; and (ii) English language proficiency examination.

i. The production engineering knowledge examination will be conducted in online remote format, on 7 December 2022, from 8:00 to 11:00 AM. The examination will last for three hours.

After the publication of the list of applicants admitted to the selection process, applicants will receive an email with both login and password to take the examination. It is the applicant’s sole responsibility to provide a computer fitted with a video camera and sound system (microphone and speakers) and connection to the internet. The examination is composed of thirty-five (35) multiple answer questions, seven (07) related to each research program, in Portuguese or English language. The applicant must choose and answer a maximum of twenty questions. For each additional question answered by the applicant, another correct answer randomly chosen from the twenty will be deducted from the scoring.

Examination scores will be not be disclosed. Applicants will receive a pass or fail grade. A candidate will pass the examination to the Master's program if their scores reach at least 50% of the maximum possible score. For the Doctoral and/or Direct Doctoral programs, an applicant will pass if they obtain at least 60% of the maximum possible score in the examination.

The bibliography for the examination will be available at the program website (<http://ppgep.poli.usp.br>).

ii. The English proficiency examination will be applied by the staff from the Language Center of the College of Philosophy, Letters and Human Sciences (FFLCH) of the University of São Paulo. The call of notice will be published at <https://clinguas.fflch.usp.br/proficiencia-ingles>, in the "Attachments" section.

The examination is specific to the PPGEPEPUSP selection process. Examination scores will not be disclosed. An applicant will receive a pass or fail grade. A Master's program applicant will be considered approved if they reach at least 60% of the maximum possible score. Doctoral and Direct Doctoral applicants will pass if they reach at least 70% of the maximum possible score.

The English examination fee must be paid directly to the FFLCH Language Center. Further information will be posted in the Program's website (<http://ppgep.poli.usp.br>) during the months of November and December 2022.

Single subsection: there will be no examination reviews, neither of first phase scores nor of grades.

## 2.2.1. Full exemption from first phase examinations

2.2.1.1. Applicants may be exempted from first phase examinations by presenting the following international certificates, with minimum acceptance scores:

a) Graduate Management Admission Test (GMAT) – total score of at least 500 points for Master's program applicants and at least 560 points for Doctoral and Direct Doctoral program applicants, obtained from 1 January 2019.

b) Graduate Record Examination (GRE) – for Verbal and Quantitative sections, a minimum score of 150 points is required for Master's program applicants, and at least 154 for Doctoral and Direct Doctoral program applicants. For the Writing section, at least 3.0 is required for Master's program applicants and at least 3.6 for Doctoral and Direct Doctoral program applicants, obtained from 1 January 2019.

## 2.2.2. Exemption from the Production Engineering knowledge examination

2.2.2.1. An applicant may be exempted from the examination if they present a certificate of passing the first phase of the PPGEP-EPUSP selection process, relative to the last preceding edition of the selection process, which happened in July and August 2022. Certificates of passing previous selection processes will not be accepted.

2.2.2.2. A Doctoral applicant who passed the PPGEP-EPUSP Master's thesis defense between July 2020 and the date of publication of this call of notice may be exempted from first phase examinations.

## 2.2.3. Exemption from the English language proficiency examination

2.2.3.1. Applicants with the following certificates may be exempted from the English language proficiency examination:

- i. TOEFL IBT (minimum score 72);
- ii. TOEFL ITP (minimum score 543);
- iii. IELTS (minimum score 5.5);
- iv. First Certificate in English from Cambridge University (minimum score "B");
- v. Certificate of Proficiency in English from Cambridge University;
- vi. Certificate of Competency in English from the University of Michigan (minimum score "P"); and
- vii. Certificate of Proficiency in English from the University of Michigan.

Single subsection: the periods of validity will be those stated in the certificates. If there were no stated period of validity, certificates must have been issued from 1 January 2019.

2.2.3.2. An applicant who presents a certificate of passing a Cultura Inglesa examination from previous PPGEP-EPUSP selection processes, with a maximum validity of one (01) year, from the publication date of this call notice, may be exempted from the English language proficiency exam. An applicant will be considered proficient if they reach at least 60% of the maximum possible score, for the Master's program, and at least 70% of the maximum possible score for Doctoral and Direct Doctoral programs.

2.2.4. To request exemption from any selection process first phase examination, the applicant must send an email with documentary evidence, until 18 November 2022, with the mandatory

title DISPENSA\_FASE01\_Q01\_2023\_FullName, to the [ppgep@usp.br](mailto:ppgep@usp.br) address, considering the requirements of the present call of notice.

Response to first phase examination exemption requests will be communicated to each applicant by the PPGE-EPUSP Secretariat until 28 November 2022 and published at the PPGE-EPUSP webpage.

### **2.3. Further information**

2.3.1. The first phase results will be announced by PPGE-EPUSP, exclusively in the <http://ppgep.poli.usp.br> website, until 30 December 2022. Results will not be communicated by telephone or other means.

2.3.2. Applicants approved in the first phase of the selection process may request the “certificate of passing the first phase of the PPGE-EPUSP selection process”. The deadline for requesting the statement is 10 January 2023. The document is valid for a year, from the date of publishing the results. Further calls of notice are forbidden to accept the certificate.

## **3. SECOND PHASE**

### **3.1. Criteria for inviting applicants to the second phase**

Applicants regularly registered in the selection process and approved in the first phase or exempted from it are eligible to be called to the second phase, in accordance with item 2.2 and its sub-items.

### **3.2. Second phase registration**

Applicants invited to the second phase must manifest their interest to continue in the selection process. For that purpose, they should send an email, with the mandatory title FASE\_2\_Q01\_2023\_INTERESSE\_FullName, to the [ppgep@usp.br](mailto:ppgep@usp.br) address. The message must be sent between 01 and 08 January 2023. Applicants must attach a digital copy of the research project in the message stating their interest, in accordance with item 3.2.1. Messages without attached research projects will be disregarded and will neither be registered nor validated for the second phase.

#### **3.2.1. Research project structure**



To enter Master's, Doctoral, and Direct Doctoral programs, candidates must exhibit skills and interest to develop academic research projects. Moreover, it is necessary the research project topic matches the scope of a PPGEPEPUSP research program. Besides, it is highly desirable the project is aligned to a research project currently under development at PPGEPEPUSP. The project draft must have a maximum of ten (10) pages, single space, Times New Roman 12, in A4 paper size.

It is recommended the paper structure includes the following elements:

- Title
- Definition of the research topic
- Problem statement and its relevance
- Literature review on the topic of study – synthesis and critics
- Conceptual definitions – different meanings of core concepts
- Methodology: research question, general methodology approach, hypotheses and propositions, research sample and universe (if applicable)
- Expected results and, for Doctoral and Direct Doctoral programs, expected original contribution for the advancement of knowledge (how the project may contribute to the advancement of knowledge in the specific field).
- Time schedule of activities
- Bibliographic references used

### **3.3. Second phase**

#### 3.3.1. Steps of the second phase and their deployment

3.3.1.1. The second phase consists of research project evaluation and applicant interviews by the PPGEPEPUSP research group.

a) Applicants invited to the second phase must make oral presentations of their research projects to an examination board appointed by the PPGEPEPUSP Coordination Committee. The board will evaluate research projects, resumes, and other documents submitted to the research programs aspired by applicants.

b) Second phase dates: from 30 January to 03 February 2023. The presentation schedule will be announced by the PPGEPEPUSP Secretariat until 27 January 2023, exclusively on the <http://ppgep.poli.usp.br> website.

c) The presentation will be made in either personal attendance or online remote format. In case of online remote presentations, applicants are responsible for making audio and video connections feasible.

3.3.1.2. Applicants to the Technology and Information Management (GTI) research program will take a written examination on specific knowledge of that research program they are applying to.

- a) The written examination will be in online remote format;
- b) Applicants will receive both login and password by email to take the examination;
- c) Examination date: period between 30 January and 03 February 2023. Exact day and time of examination will be communicated by the PPGEP-EPUSP Secretariat until 27 January 2023, exclusively on the <http://ppgep.poli.usp.br> website. Duration of the exam: 90 minutes

Single subsection: there will be no second phase examination reviews.

3.3.2. Bibliography for the second phase written examination

a) INFORMATION TECHNOLOGY MANAGEMENT / GESTÃO DA TECNOLOGIA DA INFORMAÇÃO (GTI): LAURINDO, F. J. B. *Tecnologia da Informação: Planejamento e Gestão de Estratégias*. 1a ed. São Paulo: Editora Atlas, 2008.

3.3.3. Final results

- a) Each research program examination board will select among applicants based on the overall performance in the second phase of the selection process, taking into consideration:
  - a1) the number of new students PPGEP-EPUSP faculty can take as graduate student advisors in 2023; and
  - a2) the maximum number of advisees allowed, in accordance with the USP Graduate Program Regiment.
- b) First phase examination scores may be used as tiebreakers among applicants with equal standing in the second phase of the selection process.
- c) The list of selected candidates will be announced until 15 February 2023, on the <http://ppgep.poli.usp.br> website.
- d) The final result will not be communicated by telephone or any other means.

#### **4. ADVISOR APPOINTMENT**

4.1 The list of advisors qualified to advise candidates admitted to the PPGEPEPUSP in the first four-month period of 2023 will be defined and announced by the PPGEPEPUSP Coordination Committee until 10 February 2023.

4.2 Advisors to candidates admitted to the PPGEPEPUSP in the first four-month period of 2023 will be appointed until the initial enrollment day by the qualified faculty board, in accordance with item 4.1.

#### **5. ENROLLMENT**

To enroll, admitted candidates must hand copies of the following documents to the PPGEPEPUSP (Departamento de Engenharia de Produção, Escola Politécnica da USP, Cidade Universitária, São Paulo, SP) Secretariat:

- Enrollment form.
- Individual academic plan.
- Voter card (born or naturalized Brazilian citizens only).
- Certificate of marriage or birth.
- Certificate of conscription discharge (born or naturalized male Brazilian citizens only)
- Undergraduate program degree certificate.
- A picture in 3 by 4 cm format, with white background;
- Master's program certificate with proof of program accreditation to CAPES (Coordination for the Improvement of Higher Education Personnel), for Doctoral program candidates.
- Copy of permanent or temporary visa if foreigner.
- For foreigners not living in Brazil: proof of scholarship from the country of origin or letter stating responsibility for own maintenance expenses for the full duration of Master's or Doctorate program.

Enrollment date: see official USP calendar, to be published by PRPG-USP (Pró-Reitoria de Pós-Graduação - Universidade de São Paulo.)

#### **SELECTION PROCESS TIME SCHEDULE**

<b>Step</b>	<b>Time</b>
Application – first phase	20 October to 01 December 2022
List of approved applications	until 5 December 2022
Response to requests for exemption from first phase examinations	until 28 November 2022
First phase examinations	07 December 2022
First phase results	until 30 December 2022
Statement of interest to attend the second phase and research project submission	01 to 08 January 2023
Second phase examinations	30 January to 03 February 2023
List of admitted candidates	until 15 February 2023
Enrollment	according to the official USP calendar

Prof. Dr. Fernando Berssaneti

Chair PPGEP

Approved by the CCP on \_\_\_\_ / \_\_\_\_ / 2023

Approved by the CPG on \_\_\_\_ / \_\_\_\_ / 2023