



FACULDADE DE ENGENHARIA MECÂNICA  
PROGRAMA DE PÓS-GRADUAÇÃO EM  
CIÊNCIAS E ENGENHARIA DE PETRÓLEO  
Rua Mendeleiyev, 200 – Cidade Universitária  
CEP: 13083-860 – Campinas-SP

<https://www.fem.unicamp.br/index.php/pt-br/cpg-cep>  
(19) 35213245 – 35213407 – 35213217 – [cpg@fem.unicamp.br](mailto:cpg@fem.unicamp.br)



---

## REGULAR STUDENT SELECTION FOR GRADUATE PROGRAM IN PETROLEUM SCIENCES AND ENGINEERING - MASTER AND DOCTORATE COURSES

2<sup>nd</sup> SEMESTER OF 2024

### PREREQUISITES

Candidates who have graduated from one of the following courses are eligible as regular students in graduate courses in Petroleum Science and Engineering: Petroleum, Mechanical, Electrical, Control and Automation, Chemistry, Civil, Naval, and Oceanic and Mining Engineering, Geology, Geophysics, Physics or Mathematics.

Other courses will be analyzed by the Program Commission. The candidate must contact at least one professor of the research line of interest and have his acceptance to complete the application.

### APPLICATION PROCEDURES

The candidate must carefully read all the information in this notice, as incorrect procedures make the application unfeasible.

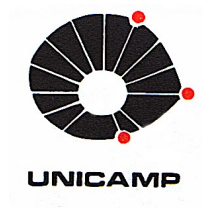
Enrollment is online through the FEM's System.

In addition to the required documentation, the candidate must complete the "objective" field, making clear the reasons for his interest in the Graduate Studies in Petroleum Science and Engineering.

### REGISTRATION DOCUMENTS

The documents must be attached in PDF format in the FEM's System, absolutely within the registration period. Applicants who are not attached to Documents within the application period will have their application automatically rejected. The mandatory documents are:

- Registration Form from Academic Management System - [SIGA/DAC](#) (for all candidates);
- Undergraduate Diploma / Certificate of Completion / Statement of Possible Undergraduation (for all candidates);
- Master's Degree / Statement with Expected Date for Master's Defense (only for doctoral candidates);
- Full Academic Transcript of Undergraduation (for all candidates);
- Full Academic Transcript of Graduation (only for doctorate candidates);



- Curriculum (preferably [Lattes](#));
- Letter(s) of recommendation (specific template available in the application form);
- A work Plan, which should be developed in agreement with the supervisor. The work plan summary must have a maximum of five pages, with obligatorily the objective and schedule; **NOTE:** The plan can be written in English;
- GRE - Graduate Registration Examination (mandatory for those requesting scholarships and cannot take the entrance exam at UNICAMP) - valid for five years.

**Note.** Master's applicants without undergraduate diploma must attach, during the enrollment period, the Certificate of Completion or a Declaration of Possible Completion within a period of up to 6 months, issued by the Faculty with the date of probable completion.

Doctoral applicant without a Master's degree must attach, during the registration period, the Declaration with the Expected Date for Master's Defense within a period of up to 6 months, issued by the Graduate Program in which he is studying.

#### **REGISTRATION CALENDAR FOR THE 2<sup>nd</sup> SEMESTER OF 2024**

Candidate Registration <b>DAC/SIGA System and FEM System</b>	<b>April 15<sup>th</sup> to May 13<sup>th</sup>, 2024</b>
Supervisor Pre-Selection	<b>May 20<sup>th</sup> to June 03<sup>th</sup>, 2024</b>
E-mail for the Entrance Exam	<b>June 5<sup>th</sup>, 2024 from 02:00 pm</b>
Entrance Exam (remote)	<b>June 14<sup>th</sup>, 2024</b>
Result Announcement E-mail	<b>July 1<sup>st</sup>, 2024 from 02:00 pm</b>
Deadline for Appealing the Result of the Selection Process	<b>From the announcement of the result until 5:30 pm on July 3<sup>rd</sup>, 2024</b>



FACULDADE DE ENGENHARIA MECÂNICA  
PROGRAMA DE PÓS-GRADUAÇÃO EM  
CIÊNCIAS E ENGENHARIA DE PETRÓLEO  
Rua Mendeleiyev, 200 – Cidade Universitária  
CEP: 13083-860 – Campinas-SP

<https://www.fem.unicamp.br/index.php/pt-br/cpg-cep>  
(19) 35213245 – 35213407 – 35213217 – [cpg@fem.unicamp.br](mailto:cpg@fem.unicamp.br)



Judgment of Appeals and Disclosure of Results	<b>July 4<sup>th</sup>, 2024</b>
Disclosure of Final Classification	<b>July 5<sup>th</sup>, 2024</b>
Confirmation of Orientation by Candidate	<b>July 5<sup>th</sup> to 8<sup>th</sup>, 2024</b>
Enrollment (carried out by secretary)	<b>July 15<sup>th</sup>, 2024</b>
Enrollment in subjects (Enrollment instructions will be sent by e-mail)	<b>July 15<sup>th</sup> to 17<sup>th</sup>, 2024</b>
Supplementary enrollment	<b>August 1<sup>st</sup>, 2024</b>
Enrollment in subjects for students entering supplementary	<b>August 4<sup>th</sup> to 7<sup>th</sup>, 2024</b>
Start of Classes	<b>August 1<sup>st</sup>, 2024</b>

**Note.** The candidate who does not take any of the phases will be disqualified from the selection process.

### **SELECTION AND CLASSIFICATION**

The process consists of analyzing the curriculum, academic record, work plan and performance in the entrance exam applied to Unicamp or GRE (in the case of a candidate who will apply for a scholarship from the Program). According to the registration calendar, the candidate's final classification will be published on the Program's website. The candidate's approval does not guarantee the right to enter the Program with a scholarship.



FACULDADE DE ENGENHARIA MECÂNICA  
PROGRAMA DE PÓS-GRADUAÇÃO EM  
CIÊNCIAS E ENGENHARIA DE PETRÓLEO  
Rua Mendeleiyev, 200 – Cidade Universitária  
CEP: 13083-860 – Campinas-SP

<https://www.fem.unicamp.br/index.php/pt-br/cpg-cep>  
(19) 35213245 – 35213407 – 35213217 – [cpg@fem.unicamp.br](mailto:cpg@fem.unicamp.br)



## VACANCIES

The Graduate Program in Petroleum Science and Engineering offers approximately 15 vacancies, which may be smaller or larger, depending on the availability of professors in the period. Once the selection process is finished, there will not be a period for a new selection or call of candidates.

## SCHOLARSHIP

The candidate must express interest in the Program's scholarship when filling out the application. In this case, the candidate must take the entrance exam or present the GRE (Graduate Record Examination) within the registration period. The candidate must have a minimum pass of 40% of the Entrance Exam or GRE to compete for the Program scholarship. Applicant approval does not guarantee a scholarship to the Program. Scholarship availability will be confirmed after the start of classes. Candidates who have not been awarded a scholarship for admission to the course will be able to participate in the selection exam in the following semester and apply again for a scholarship from the Program. Candidates with an employment relationship cannot apply for the scholarship.

## ENTRANCE EXAM

The entrance exam is mandatory for those who wish to apply for a scholarship in the Program, even if they are already enrolled. The entrance exam will be carried out remotely. Candidates will receive instructions by email. The entrance exam can be replaced by the GRE (Graduate Record Examination), as long as it is attached when filling out the application. The minimum and maximum values obtained in the respective exams will be used to normalize the grades and determine the correspondence between them. The candidate who takes the entrance exam or presents the GRE (Graduate Record Examination) will have priority to the scholarship of the Program. The entrance exam will consist of a test with questions covering basic knowledge in Physics, Mathematics, and Geology. The topics of each area and the bibliography are listed below:

### Physics

- Units and Dimensions Systems;
- Newton's Laws;
- Statics and Dynamics;



FACULDADE DE ENGENHARIA MECÂNICA  
PROGRAMA DE PÓS-GRADUAÇÃO EM  
CIÊNCIAS E ENGENHARIA DE PETRÓLEO  
Rua Mendeleiyev, 200 – Cidade Universitária  
CEP: 13083-860 – Campinas-SP

<https://www.fem.unicamp.br/index.php/pt-br/cpg-cep>  
(19) 35213245 – 35213407 – 35213217 – [cpg@fem.unicamp.br](mailto:cpg@fem.unicamp.br)



- Work and Energy;
- Energy Conservation;
- Fluid Mechanics;
- Temperature and Heat;
- Laws of thermodynamics.
- Linear Moment and Conservation;
- Angular Moment and Conservation;
- Rotation of Rigid Bodies;
- Linear Oscillations;
- Waves in Elastic Media;

#### **Mathematics**

- Differential and Integral Calculus;
- Ordinary Differential Equations;
- Laplace transform;
- Fourier series;
- Partial Differential Equations.

#### **Geology**

- Introduction to Geology: Minerals and Rocks;
- Earth Structure and Main Geological Phenomena acting on the Earth's Crust;
- Origin, Properties and Classification of Rocks;
- Igneous, Sedimentary and Metamorphic Rocks;
- Global tectonics;
- Origin and Evolution of Sedimentary Basins;
- Sedimentary Facies Concept;
- Depositional Environments and Systems;
- Brazilian Sedimentary Basins.



FACULDADE DE ENGENHARIA MECÂNICA  
PROGRAMA DE PÓS-GRADUAÇÃO EM  
CIÊNCIAS E ENGENHARIA DE PETRÓLEO  
Rua Mendeleiyev, 200 – Cidade Universitária  
CEP: 13083-860 – Campinas-SP

<https://www.fem.unicamp.br/index.php/pt-br/cpg-cep>  
(19) 35213245 – 35213407 – 35213217 – [cpg@fem.unicamp.br](mailto:cpg@fem.unicamp.br)



## Bibliography

- Sears, Zemansky; Física, Vols. 1 e 2, 12a Edição, Pearson, 2008.
- Halliday, Resnick, Walker; Fundamentos da Física, Vols. 1 e 2, 8a Edição, LTC, 2009.
- Alonso, Finn, Física Um Curso Universitário, Vols. 1, Edgard Blucher, 1972.
- Leithold, L.; O Cálculo com Geometria Analítica, Vols. I e II, Harbra, 3a Edição, 1994.
- Kaplan, W.; Cálculo Avançado, Vol. I, Edgard Blucher, 1972.
- Guidorizzi, H.L.; Um Curso de Cálculo, Vols, III, LTC, 5a Edição, 2002.
- Boyce, W.E; di Prima, R.C.; Equações Diferenciais Elementares e Problemas de Valores de Contorno, LTC, 8ª edição, 2006.
- Allen, P. A. & Allen, J. R. Basin Analysis – Principles and Applications. Blackwell Science Ltd., 451p. 1990.
- TEIXEIRA, W., TOLEDO, M.C.M., FAIRCHILD, T., TAIOLI, F. – Decifrando a Terra. Organizadores: Wilson Teixeira...[et al]. – São Paulo, Oficina de Textos, 568 p., 2000.
- Suguio, K. Geologia Sedimentar. Ed. Edgar Blucher, 460p. 2003.
- Moran, Shapiro, Munson and Dewitt, "Introdução à Engenharia de Sistemas Térmicos", LTC, 2005
- Fox and McDonald, "Introdução à Mecânica dos Fluidos", 5ed, LTC Editora, 1998.
- Incropera and DeWitt, "Fundamentals of Heat and Mass Transfer, 4th ed, John Wiley, 1996.
- BIZZI, L. A. SCHOBENHAUS, C., VIDOTTI, R. M. & GONÇALVES, J. H. (Editores.) Geologia, Tectônica e Recursos Minerais do Brasil. CPRM-SGB - Brasília, 2003, 674p.

## DISCLOSURE OF RESULTS

The selection process result will be disclosed to the candidate by email, according to the calendar.

## REGISTRATION

After being approved in the selection process, candidates will receive instructions for completing the Enrollment according to the date established in this notice.

## FOREIGN STUDENTS

Foreign students' applicants must provide the documents below for the Enrollment:



FACULDADE DE ENGENHARIA MECÂNICA  
PROGRAMA DE PÓS-GRADUAÇÃO EM  
CIÊNCIAS E ENGENHARIA DE PETRÓLEO  
Rua Mendeleiyev, 200 – Cidade Universitária  
CEP: 13083-860 – Campinas-SP

<https://www.fem.unicamp.br/index.php/pt-br/cpg-cep>  
(19) 35213245 – 35213407 – 35213217 – [cpg@fem.unicamp.br](mailto:cpg@fem.unicamp.br)



- Passport: identification page and visa stamp for entry into Brazil;
- Undergraduation Diploma (for Master's students) and Graduation and Master's (for Doctoral students) consularized (authenticated by the Brazilian embassy);
- Translation into Portuguese of the Diplomas, by a Sworn Translator;
- CRNM (National Migration Registry Card): usually obtained after the student has entered Brazil. The scheduling protocol at the Federal Police will be accepted;
- CPF (Individual Registration): obtained when the student enters Brazil.

This selection process Notice is valid only for admission in the 2<sup>nd</sup> semester of 2024.

FEM, April 12<sup>th</sup>, 2024

#### **CONTACT**

University of Campinas - UNICAMP  
School of Mechanical Engineering - FEM  
Graduate Committee  
Phones: +55-19- 3521-3245 / 3521-3244 / 3521-3407  
Email: [cpg@fem.unicamp.br](mailto:cpg@fem.unicamp.br)