PONTIFICAL CATHOLIC UNIVERSITY OF RIO DE JANEIRO

PUC



ADMINISTRATIVE

STRUCTURE

Chancellor: Archbishop of Rio de Janeiro Dom Orani João Tempesta, O. Cist.

President: Prof. Fr. Anderson Antonio Pedroso, S.J.

Vice-President : Prof. Fr. André Luís, S.J

Provost: Prof. José Ricardo Bergmann

Vice-President for Administrative Affairs: Prof. Ricardo Tanscheit

Vice-President for Community Affairs: Prof. Augusto Luiz Duarte Lopes Sampaio

Vice-President for Development Affairs: Prof. Marcelo Gattass

Vice-President for University Extension: Prof. Jackeline Farbiaz

Vice-President for Infrastructure: Prof. Luiz Fernando Martha



PUC-Rio was the first private Higher Education Institution in the country. An initiative by the Catholic Church, it was founded in 1940 by Cardinal D. Sebastião Leme and Father Leonel Franca S.J.



- 1946 PUC-Rio acquires the status of University.
- 1955 PUC-Rio moves to the present Campus.
- 1960 First main frame computer for academic purposes installed in a Brazilian university.
- 1963 Implementation of the first Graduate courses.
- 1972 Inauguration of the Rio Data Centro (RDC), the first Computer Science Center in a Brazilian university.
- 1997 Inauguration of the Genesis Institute (Business Incubator Center).
- 2009 Inauguration of the Digital Medias Institute.
- 2012– Inauguration of the Oil & Gas Engineering Laboratories.
- 2015– Implementation of BEPiD (Brazilian Education Program for iOS Development).
- 2020 Launching of the Educational Platform (ECOA) a free digital ecosystem for promoting innovation and knowledge.



GÁVEA CAMPUS

PUC-Rio is located in Gávea, a charming neighborhood of Rio de Janeiro, embedded between the forest and the beach. Its Campus is crossed by a stream, surrounded by trees and pleasant gardens, populated by a variety of plants and animals





Main Buildings

- Cardeal Leme
- Frings
- Kennedy
- Pe. Laércio Moura
- Pe. Leonel Franca
- Rio DataCentro (RDC)

- ► 27 Departments
- 18 Additional Units
- ► 1 Central Library
- ► 4 Sectorial Libraries
- Research Laboratories
- ► 4 Auditoriums





ACADEMIC CENTERS AND DEPARTMENTS

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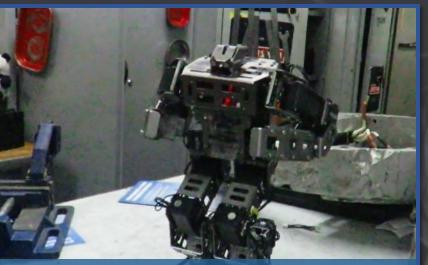
ACADEMIC CENTERS (SCHOOLS) AND DEPARTMENTS

Undergraduate Courses Central Coordination Office

Associate Vice-President for Academic Affairs Prof. Erica dos Santos Rodrigues

Graduate Courses Central Coordination Office

Associate Vice-President for Academic Affairs Prof. Luiz Felipe Roris Rodriguez Scavarda do Carmo



Center of Science and Technology (CTC)





Center for Theology and Human Sciences (CTCH)



Center for Biological Sciences and Health (CCBS)

CENTER FOR THEOLOGY AND HUMAN SCIENCES (CTCH)

Dean

Prof. Prof. Júlio Cesar Valladão Diniz jdiniz@puc-rio.br

Departments

ARCHITECTURE & URBANISM ART & DESIGN EDUCATION LETTERS PHILOSOPHY PSYCHOLOGY THEOLOGY

Undergraduate Courses – Bachelor

- Architecture and Urbanism
- Design:
 - Digital Media
 - Fashion
 - Product Design
 - Visual Communication
- Education Media Production and Management
- Neurosciences*
- Pedagogy

*Multidisciplinary course

- ✤ Letters:
 - Portuguese and Respective Literature
 - Portuguese and English and Respective Literature
 - Textual Production (Writer Training)
 - Translation English
- Performing Arts
- Philosophy
- Psychology
- ✤ Theology

Graduate Programs

- Clinical Psychology M/D
- Design M/D
- ✤ Language Studies M/D
- Education M/D

- Literature, Culture and
 - Contemporaneity M/D
- Philosophy M/D
- Theology M/D

M: Master D: Doctorate CENTER FOR SOCIAL SCIENCES

CCS)

Dean

Prof. Francisco de Guimaraens chicodeguima@puc-rio.br

Departments

BUSINESS AND ADMINISTRATION ECONOMICS GEOGRAPHY AND ENVIRONMENT HISTORY INTERNATIONAL RELATIONS INSTITUTE LAW SOCIAL COMMUNICATION SOCIAL SCIENCES SOCIAL WORK

Undergraduate Courses - Bachelor

- Business Administration
- Economics
- Geography
- ✤ History
- Media Studies
 - Advertising and Corporate Communication
 - Cinema and Audio-visual
 - Communication and Technology

- International Relations
- Law
- Social Sciences
- Social Service
- Technological in Financial Management
 Social Communication
 - Advertising and Marketing
 - Cinema
 - Journalism

Graduate Programs

- Business Administration M/D
- ✤ Architecture M
- Communication M
- Economics M/D
- Geography M/D

- International Relations M/D
- ✤ Law M/D
- Social History of Culture M/D
- Social Sciences M/D
- Social Work M/D

M: Master D: Doctorate

CENTER FOR BIOLOGICAL SCIENCES AND HEATH (CCBS)

Dean Dr. Hilton Augusto Koch hakoch@uol.com.br

Departments

BIOLOGY MEDICINE INSTITUTE OF DENTISTRY

The CCBS offers:

- undergraduate level courses
 - Biological Sciences
 - Nutrition
- latu sensu graduate level programs held at specialized off-campus clinics



Center of Science and Technology (CTC)

Dean Prof. Sidnei Paciornik sidnei@puc-rio.br

Departments

CHEMICAL AND MATERIALS ENGINEERING CHEMISTRY CIVIL AND ENVIRONMENTAL ENGINEERING ELECTRICAL ENGINEERING INDUSTRIAL ENGINEERING INFORMATICS MATHEMATICS MECHANICAL ENGINEERING PHYSICS

Undergraduate Courses - Bachelor

- Chemical Engineering
- Chemistry
- Civil Engineering
- Computer Science
- Computer Engineering
- Control & Automation Engineering
- ✤ Electrical Engineering
- Environmental Engineering

- ✤ Information Systems
- Materials and Nanotechnology Engineering
- Mathematics
- ✤ Mechanical Engineering
- Petrol Engineering
- Physics
- Production Engineering

Graduate Programs

- Chemical and Materials Engineering and Environmental Processes – M/D
- Chemistry M/D
- Civil Engineering M/D
- Computer Science M/D
- Electrical Engineering M/D
- ✤ Mathematics M/D

- Mechanical Engineering M/D
- ✤ Metrology M
- Physics M/D
- Production Engineering M/D
- ✤ Urban and Environment Engineering M*
- ✤ Logistic M*

M: Master D: Doctorate

* Lato Sensu

Dean Prof. Sidnei Paciornik sidnei@puc-rio.br

Departments

Chemical and Materials Engineering Chemistry Civil and Environmental Engineering Electrical Engineering Industrial Engineering Informatics Mathematics Mechanical Engineering Physics

Concentration Areas & Lines of Research of the Academic Graduate Programs



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Departments

CHEMICAL AND MATERIALS ENGINEERING CHEMISTRY CIVIL AND ENVIRONMENTAL ENGINEERING ELECTRICAL ENGINEERING INDUSTRIAL ENGINEERING INFORMATICS MATHEMATICS MECHANICAL ENGINEERING PHYSICS

Chemical Engineering, Materials and Environmental Processes

Chemical Engineering (AEQ)

- Processes Modelling, Optimization, Control and Automation
- Chemical Processes and Catalysis
- Mining-Metallurgical Processes

Materials and Nanotechnology (AMN)

- Synthesis, Processing and Characterization of Materials
- Performance and Integrity of Materials
- Microstructural Engineering

Environmental Processes (PAM)

- Green Chemistry
- Industrial Water and Wastewater Treatment
- Waste Treatment





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Chemistry

- Analytical Methods and Metrological Quality
- Drugs and Chemical-Biological Interactions
- Energy, Environment and Sea Science
- Nanosciences, Interfaces and Colloids



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Departments

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Civil Engineering

Structures and Materials

- Applied Computer Graphics
- Damage and Fracture of Materials
- Steel and Mixed Structures
- Concrete Structures
- Instability and Dynamics of Structures
- Advanced Cementitious Materials
- Non-conventional Materials and Sustainability
- Engineering Project Methodologies
- Variational and Computational Methods

Geotechnics and Environment

- Computational Geomechanics
- Petroleum Geomechanics
- Environmental Geotechnics
- Experimental Geotechnics
- Rock Mechanics and Engineering Geology





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Departments

CHEMICAL AND MATERIALS ENGINEERING
CHEMISTRY
CIVIL AND ENVIRONMENTAL ENGINEERING
ELECTRICAL ENGINEERING
INDUSTRIAL ENGINEERING
INFORMATICS
MATHEMATICS
MECHANICAL ENGINEERING
PHYSICS

Electrical Engineering/Center for Telecommunication

Applied Electromagnetics

- Antennas
- Optoelectronics
- Optoelectronics and Instrumentation
- Quantum Communication
- Radio Propagation

Communication Systems

- Signal Processing for Communications
- Digital Transmission System

Decision Support Methods

- Computational Intelligence
- Linear and Nonlinear Statistical Models

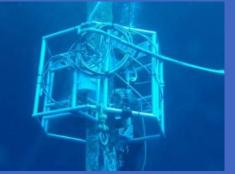
Power Systems

- Probabilistic Methods Applied to Power Systems
- Planning and Operation

Signal Processing, Automation And Robotics

- Electronic Instrumentation
- Signal Processing
- Robotics





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Departments

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Industrial Engineering

Operations and Business Engineering

- Business Management
- Operations Management

Operations Research

- Algorithms and Optimization
- Statistical Methods and Analytics



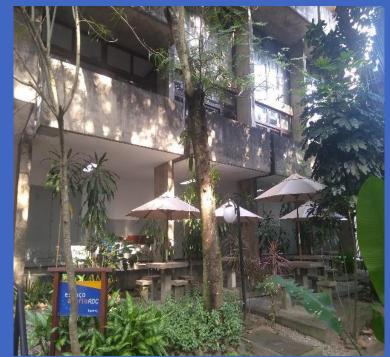
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Departments

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Informatics

- Database
- Computer Graphics
- Computer Networks and Distributed Systems
- Human-Computer Interaction
- Hypertext and Multimedia
- Optimization and Automatic Reasoning
- Programming Languages
- Software Engineering
- Computation Theory
- Data Science





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Departments

Chemical and Materials Engineering Chemistry Civil and Environmental Engineering Electrical Engineering Industrial Engineering Informatics Mathematics Mechanical Engineering Physics

Mathematics

- Analysis and Differential Equations
- Combinatorics
- Differential Geometry
- Dynamical Systems
- Mathematical Physics
- Numerical Analysis and Computational Modeling
- Probability and Stochastic Processes
- Topology



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Departments

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Mechanical Engineering

Applied Mechanics

- Solid Mechanics
- Dynamic Systems and Control

Petroleum and Energy

- Pipeline Engineering
- Petroleum Engineering
- Energetic Systems

Thermal Science

- Fluids Engineering
- Thermal Machines
- Heat and Mass Transfer







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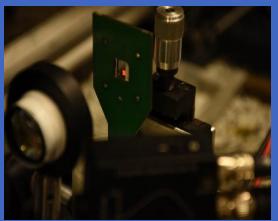
Departments

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Physics

- Astroparticle Physics and Neutrino Phenomenology
- Molecular Biophysics
- Biophysics of Nanoparticles
- Complex Systems
- Condensed Matter Theory
- Experimental Heavy Quark Physics
- Experimental Physics Applied to Astrophysics and Planetary Sciences
- Fabrication and Optical Characterization of Nanomaterials and Plasmonic Devices
- Magnetism Applied to Art
- Molecular Optoelectronics
- Nanotribological and Mechanical Characterization of Materials
- Non-Equilibrium Statistical Physics and Granular Systems
- Nondesctructive Magnetic Characterization of Materials
- Optical Spectroscopy of Bidimensional Materials
- Particle Physics Phonomenology
- Photonic Devices in Optical Fibers and Glass Systems
- Protective Coatings and Nanostructured Materials
- Quantum Optics
- Transport And Electronic Properties of Nanoscopic Systems
- Topological Order and Spintronics





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Departments

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Metrology for Quality and Innovation*

- Instrumentation and Measurement
- Intelligent Networks (smart Grid)
- Innovation of Strategic Management and Sustainability









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Departments

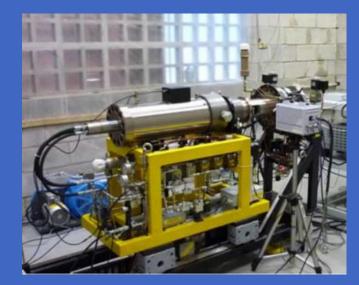
CHEMICAL AND MATERIALS ENGINEERING CHEMISTRY CIVIL AND ENVIRONMENTAL ENGINEERING ELECTRICAL ENGINEERING INDUSTRIAL ENGINEERING INFORMATICS MATHEMATICS MECHANICAL ENGINEERING PHYSICS

Institute of Technology of PUC-Rio (ITUC)

- Calibration Services
- Materials Engineering and Product Analysis
- Mechanical Properties and Behavior of Materials
- Solar energy
- Vehicular Engineering









RANKINGS

World University Rankings 2023

JNIVERSITY

RANKINGS

8th position in Brazil 1st position in Rio de Janeiro Leader in Industry Income in the country

Latin America University Rankings 2022

10th position in Latin America 1st position in the State of Rio de Janeiro Leader in Industry Income Leader in International Outcome in the country WORLD UNIVERSITY RANKINGS

7th position in Brazil 2nd position in the State of Rio de Janeiro 1st among the private Universities in Brazil

Annual Evaluation | 2022 Undergraduate courses Grades vary from 1 to 5 stars

\star \star \star \star

Chemistry

- **Civil Engineering**
- Mathematics

- Chemical Engineering
- Computer Engineering
- Computer Science
- Control and Automation Engineering
- Electrical Engineering

- Environmental Engineering
- Mechanical Engineering
- Materials and Nanotechnology Engineering
- Production Engineering
- Physics

CTC courses only





Graduate Programs Evaluation 2017-2020

CAPES is the Government Agency responsible for the accreditation and regulation of all master and doctoral programs in the country.

Among other activities, it carries out the annual follow-up and quadrennial evaluation of all graduate programs and courses that are part of the Graduate National System. Evaluation of the Academic Graduate Programs Center of Science and Technology

l	Computer Science (M/D) Mathematics (M/D) Mechanical Engineering (M/D) Production Engineering (M/D) Physics (M/D)		
ł	Civil Engineering (M/D) Electrical Engineering (M/D)		6
į	Chemistry (M/D) Materials Engineering (M/D)		
ł	Metrology (M)		
	Note: Highest score (M/D) = 7	Highest score (M) = 5	



The large number of partnerships and agreements in which PUC-Rio participates highlights not only the extent of the university integration into the Brazilian society but also the degree of trust that it shares with other institutions as a serious model of education and research.

These partnerships create countless advantages for students and faculty.



Some of PUC-Rio's main partnerships:

Oil & Gas companies

Research and work comprising the whole production chain of gas and petroleum, presenting students with the most modern innovations in these fields.

Eletrobrás

Carries on analyses related to the consumption of electrical power in Brazil.

 ICT companies, Globo Network, Vale do Rio Doce, Thyssenkrupp, Gerdau Group, Peugeot-Citroen do Brasil, among many others.
 ... over 300 current R&D contracts.



PONTIFÍCIA UNIVERSIDADE CATÓLICA DO RIO DE JANEIRO

www.puc-rio.br

www.ctc.puc-rio.br