

PONTIFICAL CATHOLIC UNIVERSITY OF RIO DE JANEIRO



PUC
RIO

PUC



ADMINISTRATIVE STRUCTURE

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

President:
Prof. Fr. Josafá Carlos de Siqueira, S.J.

Vice-President:
Prof. Pe. Álvaro Mendonça Pimentel, S.J.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. Sérgio de Almeida Bruni



PUC-Rio was the first private higher education institution in the country. Created 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 (ECO) a free digital environment of multidisciplinary knowledge

Students

Undergraduate* 11.291

Graduate 2.613

Continuing Education 4.000

Undergraduate Students with Scholarships 6.503

Graduate Students with Scholarships 2.205

Faculty members

Full time 476

Part time 849

With Master degree 373

With PhD degree..... 851

R&D projects staff

Researchers/technicians 642

Other 819

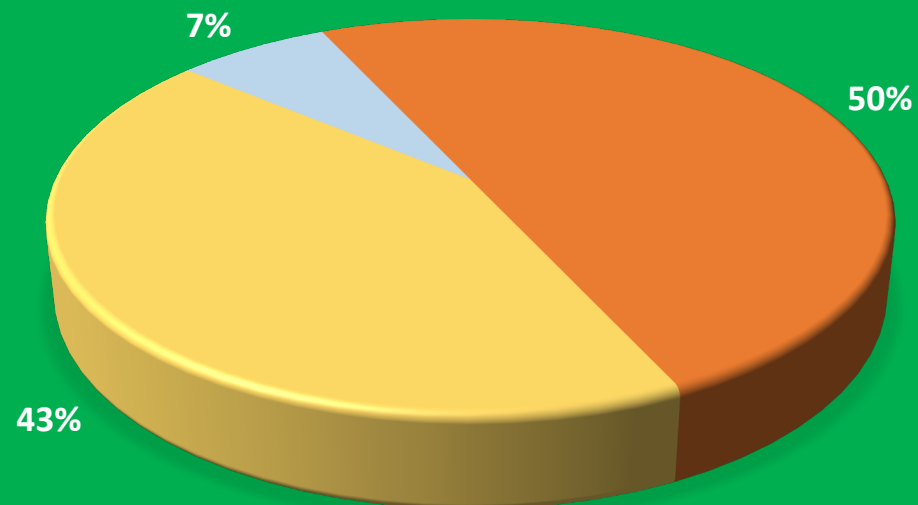
PUC-RIO

IN NUMBERS

PUC-RIO IN NUMBERS

Revenue

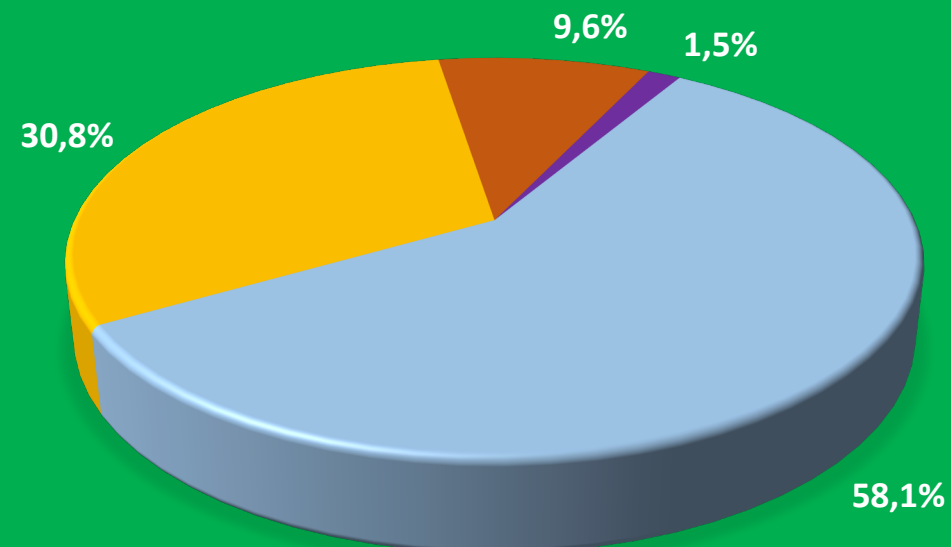
- Undergraduate and Graduate Students Fees
- Continuing Education Students Fees
- Research Projects and Services



Annual budget: US\$ 220,000

Expenses

- Personal
- Maintenance
- Investment
- Other





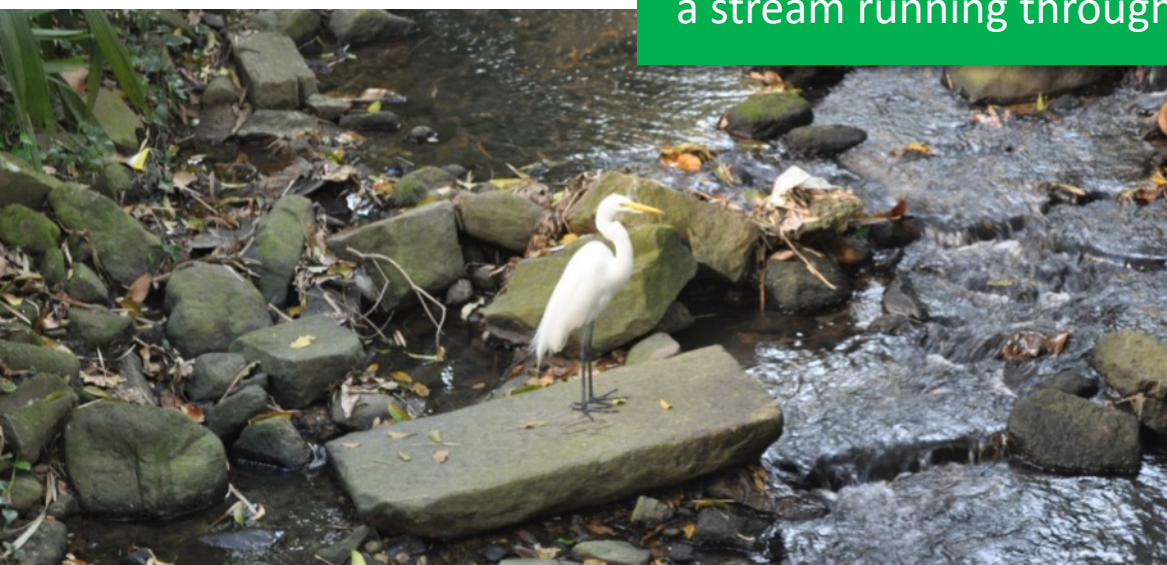
THE CAMPUS



THE GÁVEA CAMPUS



PUC-Rio is located near the forest and the beach. Its campus is a pleasant green area with a stream running through it



THE GÁVEA CAMPUS

6 Main Buildings

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

- ▶ 27 Departments
- ▶ 18 Other Units
- ▶ 1 Central Library
- ▶ 4 Sectorial Libraries
- ▶ Research Laboratories
- ▶ 4 Auditoriums





OTHER UNITS

São Marcelo College
(Gávea)

Continuing Education Center Unit
(Downtown)



ACADEMIC CENTERS AND DEPARTMENTS



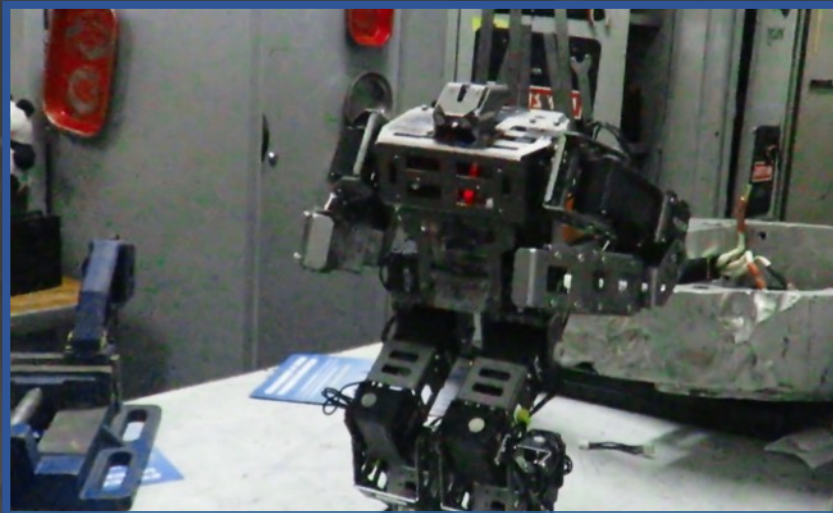
ACADEMIC CENTERS (SCHOOLS) AND DEPARTMENTS

Undergraduate Courses Central Coordination Office

Associate Vice-President for
Academic Affairs
Prof. Daniela Vargas

Graduate Courses Central Coordination Office

Associate Vice-President for
Academic Affairs
Prof. Paulo Cesar Duque Estrada



Center of Science and
Technology (CTC)




Center for Theology and
Human Sciences (CTCH)



Center for Social
Sciences (CCS)



Center for Biological and
Medical Sciences (CCBS)



CENTER FOR THEOLOGY AND HUMAN SCIENCES (CTCH)

Dean

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

Departments

ARCHITECTURE & URBANISM

ARTS & 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
- ❖ Letters:
 - Portuguese and Respective Literature
 - Portuguese and English and Respective Literature
 - Textual Production (Writer Training)
 - Translator - English
- ❖ Performing Arts
- ❖ Philosophy
- ❖ Psychology
- ❖ Theology

**Multidisciplinary course*

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
- ❖ Psychology – M/D
- ❖ Theology – M/D

M: Master – D: Doctorate

CENTER FOR SOCIAL SCIENCES (CCS)

Dean

Prof. Luis Roberto
de Azevedo Cunha
lirac@puc-rio.br

Departments

BUSINESS AND ADMINISTRATION

ECONOMICS

GEOGRAPHY AND ENVIRONMENT

HISTORY

INTERNATIONAL RELATIONS INSTITUTE

LAW

SOCIAL COMMUNICATION

SOCIAL SCIENCES

SOCIAL SERVICES

Undergraduate Courses - Bachelor

- ❖ Business Administration
- ❖ Economic Sciences
- ❖ 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
- ❖ International Relations – M/D
- ❖ Law – M/D
- ❖ Social History of Culture – M/D
- ❖ Social Sciences – M/D
- ❖ Social Services – M/D

M: Master – D: Doctorate

CENTER OF BIOLOGICAL SCIENCES AND HEALTH(CCBS)

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

Departments

BIOLOGY (UNDERGRADUATE LEVEL)
MEDICINE
INSTITUTE OF DENTISTRY

The CCBS offers the Biological Sciences course (undergraduate level) and specialization courses (*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

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

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
- ❖ Production Engineering – M*
- ❖ Urban and Environmental Engineering – M* ** Lato Sensu*

M: Master – D: Doctorate

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sidnei@puc-rio.br

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Main Research Areas and Special Projects

❖ Chemical and Materials Engineering and Environmental Processes

- Chemical Processes and Catalysis
- Green Chemistry
- Industrial Water and Wastewater Treatment
- Microstructural Engineering
- Mining-Metallurgical Processes
- Modelling, Optimization, Control and Automation Processes
- Performance and Integrity of Materials
- Synthesis, Processing and Characterization of Materials
- Waste Treatment

❖ Civil Engineering

- Applications of Optimization Techniques
- Applied Computer Graphics
- Biomechanics
- Boundary Element Methods
- Computational Geomechanics
- Environmental Geotechnics
- Experimental Geotechnics
- Inelastic Structures and Materials
- Instability and Dynamics of Structures
- Metallic Structures
- No-Conventional Materials
- Petroleum Geomechanics
- Reinforced and Prestressed Concrete Structures
- Rock Mechanics and Engineering Geology

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INDUSTRIAL ENGINEERING,
MECHANICAL ENGINEERING

Main Research Areas and Special Projects

❖ Electrical Engineering

- Antennas
- Computational Intelligence
- Digital Transmission System
- Electronic Instrumentation
- Linear and Nonlinear Statistical Models
- Optoelectronics
- Operation y Planning
- Probabilistic Methods Applied to Power Systems
- Quantum Communication
- Radio Propagation
- Robotics
- Satellite Communication Systems
- Signal Processing
- Signal Processing for Communications

❖ Mechanical Engineering

- Dynamic Systems and Control
- Energetic Systems
- Fluids Engineering
- Heat and Mass Transfer
- Petroleum Engineering
- Pipeline Engineering
- Solid Mechanics
- Thermal Machines

❖ Production Engineering

- Capital Markets
- Corporative Finance
- Logistic Transport System Control and Programming
- Production System Planning and Operations
- Programming and Control of Production Systems and Operations
- Transport and Logistic System Planning

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ELECTRICAL ENGINEERING
INDUSTRIAL ENGINEERING,
MECHANICAL ENGINEERING

Main Research Areas and Special Projects

❖ Computer Science

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

❖ Mathematics

- Analysis and Differential Equations
- Combinatorics
- Computer Graphics
- Differential Geometry
- Dynamical Systems
- Mathematical Physics
- Probability and Stochastic Processes
- Topology

❖ Chemistry

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

❖ Metrology for Quality and Innovation

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

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CHEMICAL AND MATERIALS ENGINEERING
ELECTRICAL ENGINEERING
INDUSTRIAL ENGINEERING,
MECHANICAL ENGINEERING

Main Research Areas and Special Projects

❖ Physics

- Astroparticle Physics and Neutrino Phenomenology
- 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 Biophysics
- 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

❖ 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 2020 by subject: physical sciences

4th position in Latin America,
3rd position in Brazil
1st position in Rio de Janeiro



Leader in Industry Income and International Outcome in the country

World University Rankings 2020 by subject: physical sciences

Leader Physics, Mathematics and Chemistry

World University Rankings 2020 by subject: computer science

1st position in Rio de Janeiro and 4th in Brazil



QS Latin American University Rankings 2020

15th position in the overall ranking

5th position in Brazil

2nd position in the State of Rio de Janeiro

1st private University in Brazil



Annual Evaluation | 2020

Undergraduate courses
Grades vary from 1 to 5 stars



Electrical Engineering

Production Engineering



- Chemical Engineering
- Chemistry
- Civil Engineering
- Computer Engineering
- Computer Science
- Environmental Engineering

- Mathematics
- Mechanical Engineering
- Materials and Nanotechnology Engineering
- Petroleum Engineering
- Physics



CAPES RANKING



Graduate Programs Evaluation 2013-2016

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 integrate the Graduate National System.

Graduate programs (2013-2016 evaluation)

▪ Computer Science (M/D)	7
▪ Electrical Engineering (M/D)	7
▪ Mathematics (M/D)	7
▪ Mechanical Engineering (M/D)	7
▪ Civil Engineering (M/D)	6
▪ Physics (M/D)	6
▪ Chemistry (M/D)	5
▪ Materials Engineering (M/D)	5
▪ Production Engineering (M/D)	5
▪ Metrology (M)	5

Note: Highest score (M/D) = 7
Highest score (M) = 5



PARTNERSHIPS

The large number of partnerships and agreements in which PUC-Rio participates evinces 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.



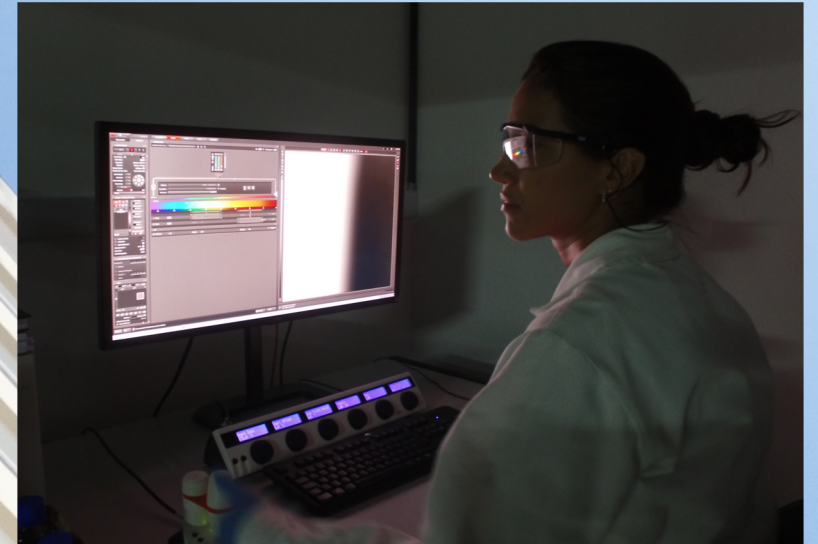
Some of PUC-Rio's main partnerships:

- **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.
- **Eletrobras**
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.**

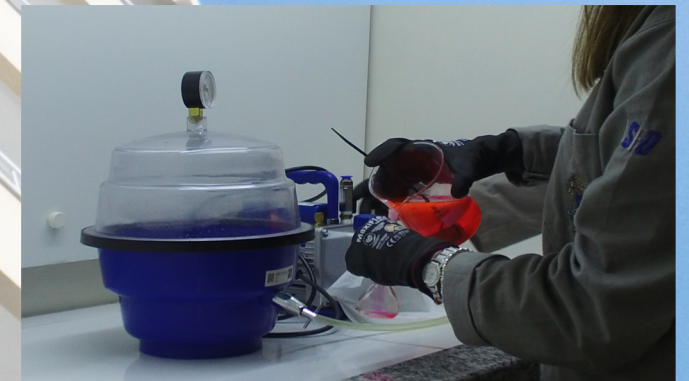
... over 300 current R&D contracts.



REGIONAL OIL & GAS R&D CENTER



Research and innovation laboratories





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UNIVERSIDADE
CATÓLICA
DO RIO DE JANEIRO

www.puc-rio.br

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