

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. Josafá Carlos de Siqueira, S.J.

Vice-President:

Prof. Pe. Anderson Antonio Pedroso, 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. 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 (ECO) a free digital ecosystem for promoting innovation and knowledge.



CAMPUS



GÁVEA CAMPUS



PUC-Rio PUC-Rio is located in Gávea, a charming and green neighborhood of Rio de Janeiro, near the forest and the beach. Its Campus is crossed by a stream, surrounded by trees and pleasant gardens.

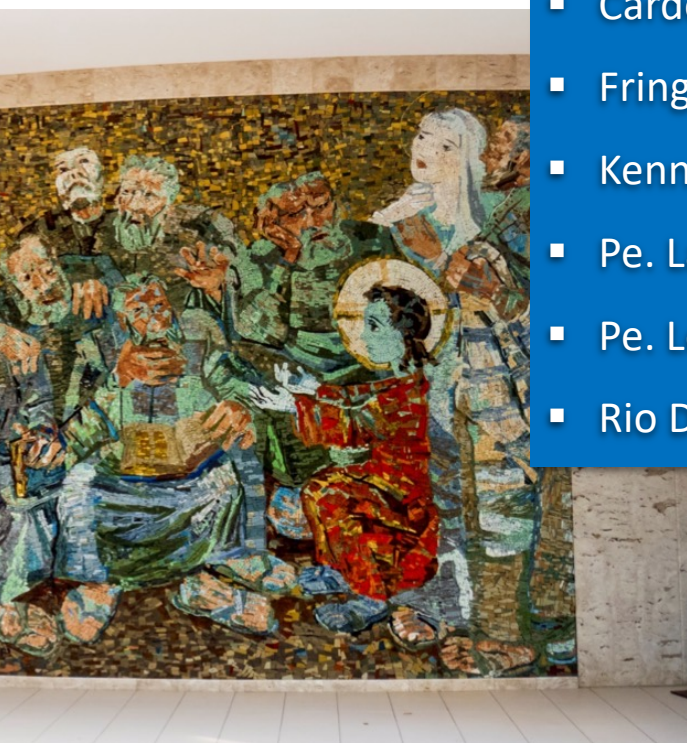


GÁVEA CAMPUS

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



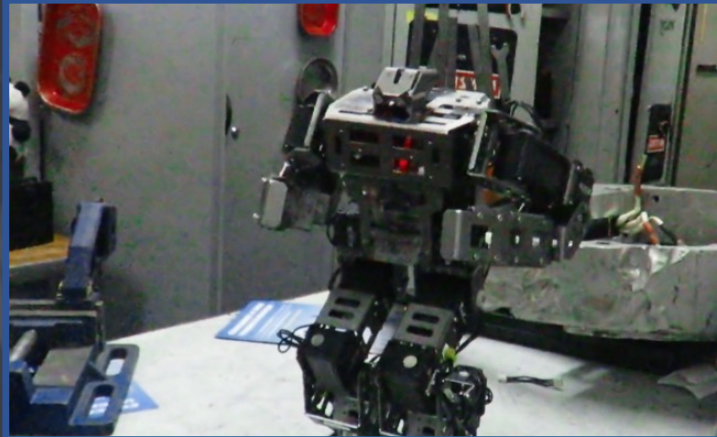
ACADEMIC CENTERS (SCHOOLS) AND DEPARTMENTS

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 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

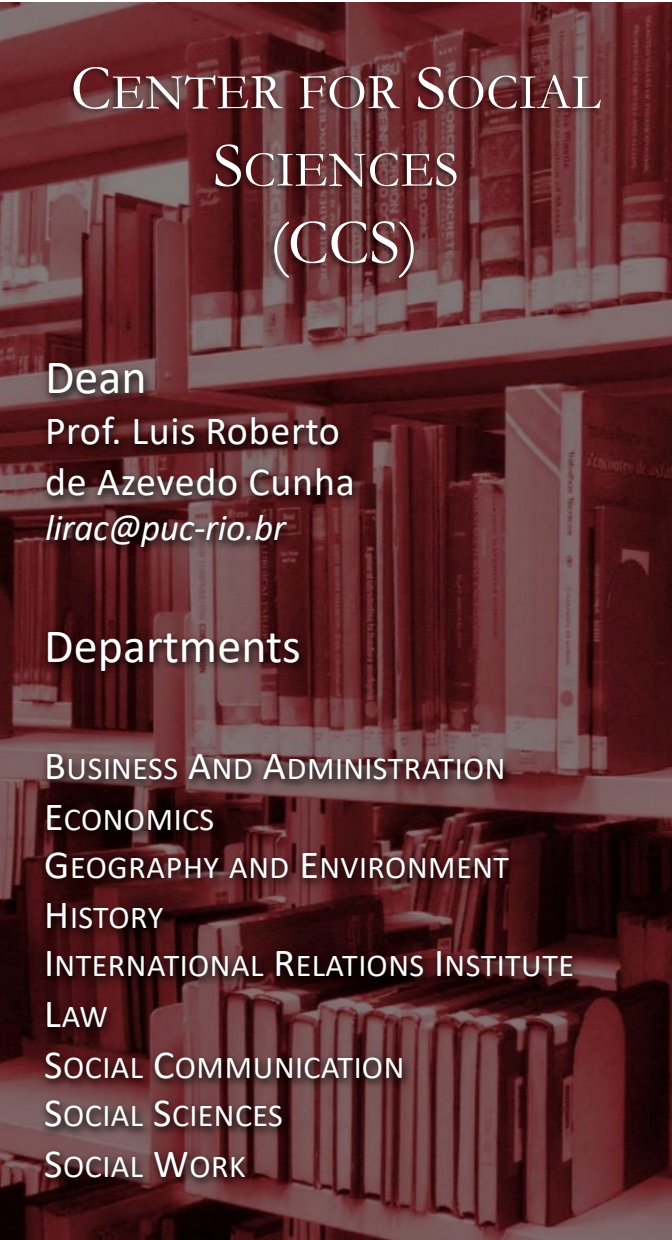
- ❖ Architecture and Urbanism
- ❖ Design:
 - Digital Media
 - Fashion
 - Product Design
 - Visual Communication
- ❖ Education Media Production and Management
- ❖ Neurosciences*
- ❖ Pedagogy
- ❖ Letters:
 - Portuguese and Respective Literature
 - Portuguese and English and Respective Literature
 - Textual 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
- ❖ 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 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
- ❖ 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 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

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 Engineering
- ❖ Computer Science
- ❖ 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*

* *Lato Sensu*

*M: Master
D: Doctorate*



RANKINGS



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



3rd position in Brazil
1st position
in Rio de Janeiro



Leader on the 9th UN'
Sustainable Development
Goal (SDG) – industry,
innovation and
infrastructure in
Latin America



Annual Evaluation | 2020

Undergraduate courses

Grades vary from 1 to 5 stars



▪ Mathematics



- Chemical Engineering
- Chemistry
- Civil Engineering
- Computer Engineering
- Control and Automation Engineering
- Computer Science
- Electrical Engineering
- Environmental Engineering
- Mechanical Engineering
- Materials and Nanotechnology Engineering
- Mechanical Engineering
- Production Engineering
- Physics



6th position in Brazil
2nd position in the State of Rio de Janeiro
1st private University in Brazil



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.

The results for the 2016-2020 are expected to be released in December 2021

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

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ELECTRICAL ENGINEERING/CETUC
INDUSTRIAL ENGINEERING
MATHEMATICS
MECHANICAL ENGINEERING
PHYSICS

❖ Chemical and Materials Engineering 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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MECHANICAL ENGINEERING

PHYSICS

❖ Civil and Environmental Engineering

Structures and Materials

- Applications of Optimization Techniques
- Biomechanics
- Applied Computer Graphics
- Reinforced and Prestressed Concrete Structures
- Inelastic Structures and Materials
- Metallic Structures
- Instability and Dynamics of Structures
- Non-Conventional Materials
- Boundary Element Methods

Geotechnics and Environment

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



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PHYSICS

❖ 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



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❖ Electrical Engineering/Center for Telecommunication

Applied Electromagnetics

- Antennas
- Quantum Communication
- Optoelectronics
- Operation y Planning
- Radio Propagation

Signal Processing, Automation And Robotics

- Electronic Instrumentation
- Signal Processing
- Robotics

Communication Systems

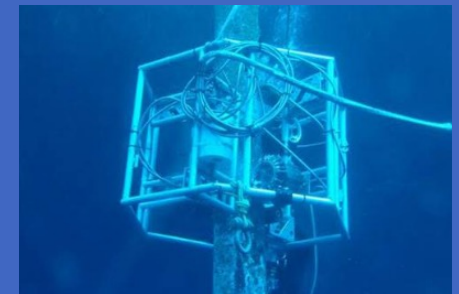
- Signal Processing for Communications
- Satellite Communication Systems
- Digital Transmission System

Decision Support Methods

- Computational Intelligence
- Linear and Nonlinear Statistical Models

Power Systems

- Probabilistic Methods Applied to Power Systems
- Planning and Operation



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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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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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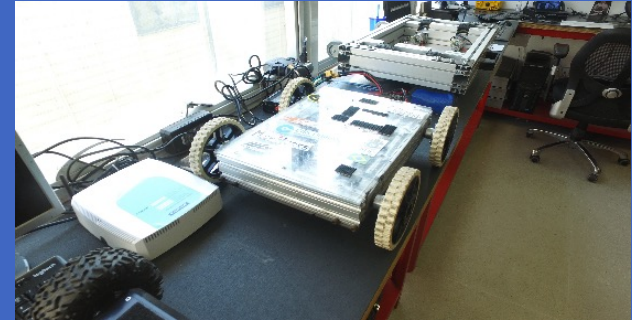
MECHANICAL ENGINEERING

PHYSICS

❖ 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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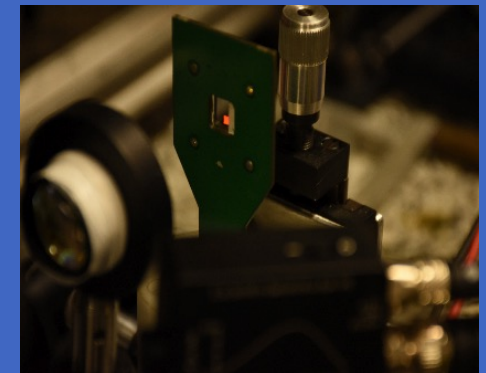
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PHYSICS

❖ 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
- Nondestructive Magnetic Characterization of Materials
- Optical Spectroscopy of Bidimensional Materials
- Particle Physics Phenomenology
- Photonic Devices in Optical Fibers and Glass Systems
- Protective Coatings and Nanostructured Materials
- Quantum Optics
- Transport And Electronic Properties of Nanoscopic Systems



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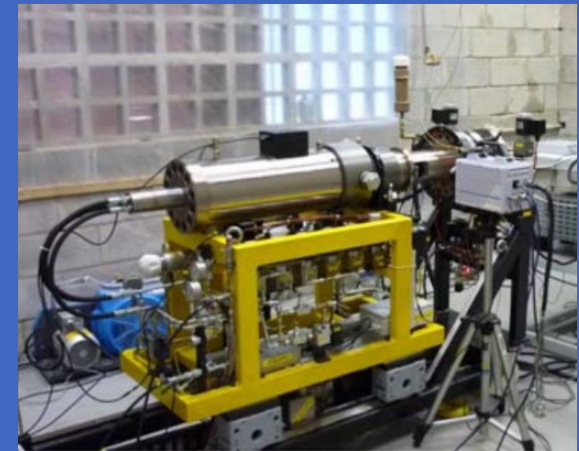
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PHYSICS

❖ Institute of Technology of PUC-Rio (ITUC)

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



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MECHANICAL ENGINEERING
PHYSICS

❖ Metrology for Quality and Innovation

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





PARTNERSHIPS

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:

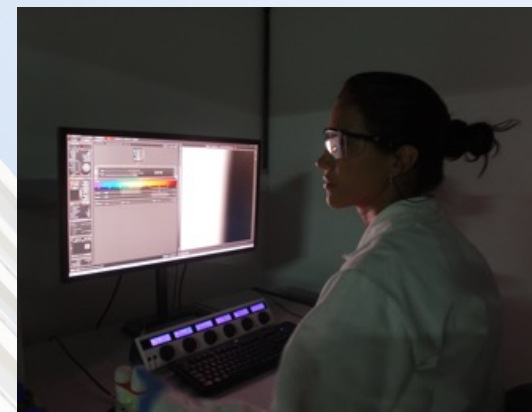
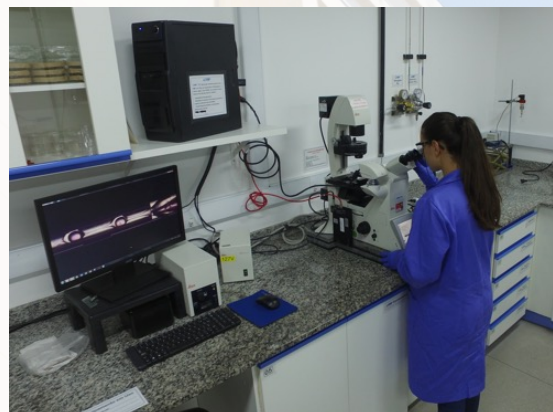
- **Oil & Gas companies**
Research and work comprising the whole production chain of gas and petroleum, presenting students with the most modern innovations in these fields.
- **Eletrobras**
Carries on analyses related to the consumption of electrical power in Brazil.
- **ICT companies, Globo Network, 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

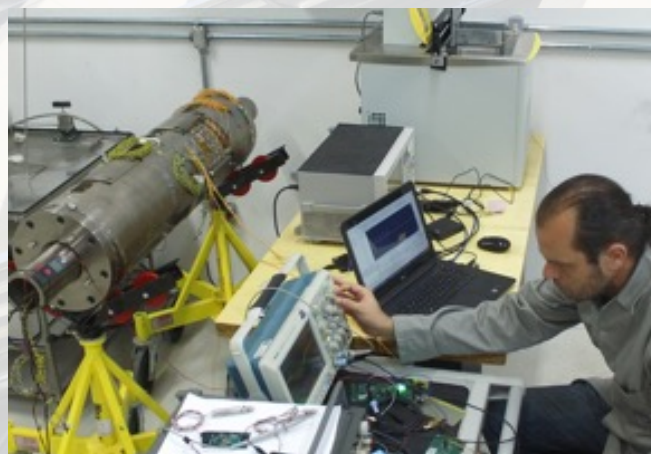
LMMP





REGIONAL OIL & GAS R&D CENTER

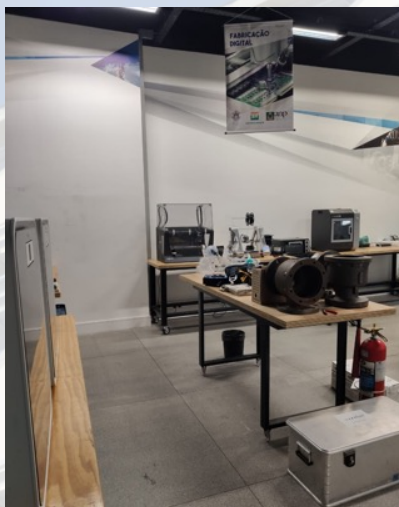
Research and innovation laboratories





REGIONAL OIL & GAS R&D CENTER

Research and innovation laboratories





PONTIFÍCIA
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CATÓLICA
DO RIO DE JANEIRO

www.puc-rio.br

www.ctc.puc-rio.br