



Contact

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The Federal University of Paraíba has more than 38.000 students in under graduate and graduate courses, in almost all fields of knowledge.



The main campus is in the city of João Pessoa, one of the oldest cities in Brazil. with beautiful and quiet beaches!



The Program

The **Graduate Program in Materials Science and Engineering** of Federal University of Paraíba, Brazil, Master and Doctorate levels, was created, in 2011. It aims to prepare specialists with strong technical skills for the processes innovation and applications of new materials, to train qualified human resources for industrial sector and Researches and Development Institutions. Students are also involved in the search for new products, understanding the fundamental aspects related to the processing, microstructure and properties of the materials.

The fields of research are:

- I. Clays: Processing and Applications.
- II. Characterization and Properties of Materials.
- III. Catalysts Environmental Applications.
- IV. Fuel Cells.



- V. Advanced Ceramics. VI. Development of Polymeric Materials and their Composites. VII. Durability and Recycling of Materials and Waste. VIII. Alloys with Shape Memory Effect. IX. High Entropy Alloys. X. High Strength Aluminum Alloys. XI. Nanostructured, Quasicrystalline and Amorphous alloys. XII. Cement and Geopolymeric Materials. XIII. Non-Conventional Materials in Engineering. XIV. Materials for Energy Conversion. XV. Semiconductor and Magnetic Materials. XVI. Cellulose Nanowhiskers and their use in Nanocomposites. XVII. Polymers Derived from Glycerol from Biodiesel. XVIII. Production of Polymer Micro and Nanofibers. XIX. Rheology and Processing of Polymeric Materials. XX. Conductive Polymer Sensors. XXI. Numerical Simulation in Materials Engineering.
- XXII. Solidification

The Master level program takes two years and the Doctorate degree, between three to four years.

The student must fulfill a certain number of credits and present a master's or doctoral thesis.

Normally the period of the courses is divided in two semesters, from March to July and August to December. Concentrated courses can be also offered.

To obtain the master's degree, the student must complete 22 credits and present a MSc thesis.

To obtain the doctorate's degree, the student must complete 35 credits and present a PhD thesis

Each credit corresponds to 15 class hours.

A limited number of scholarships are available each semester.

Courses

To get the credits, the student must to finish at least two compulsory courses between the following:

Course	Total	Credit
	hours	
Characterization of materials	45	3
Material Science and Engineering	45	3
Structure and properties of ceramics	45	3
Structure and properties of polymers	45	3
Structure and properties of metals	45	3
Physics of materials	45	3





The other credits can be obtained attending the courses named in the following table.

Even credits from other pos graduate program can be validated, since limited to 11 credits in the MSc and 17 credits in the doctorate degree.

These other programs are Civil and Environmental Engineering, Mechanical Engineering, Chemistry, Electrical Engineering and so on.

Table of courses offered by the Program

Course	Total	Credit
Mathematical methods for materials engineering	10015	3
Advanced chemistry for materials engineering	45	3
Solid state physics	45	3
Machanical behavior and failure of matale	45	3
	45	3
Mechanical behavior and durability of polymers	45	3
Corrosion engineering of metals and ceramics	45	3
Composite materials for structural applications	45	3
Surface engineering and technology	45	3
Advanced materials	45	3
Nanomaterials for energy conversion	45	3
Plasmas for surface micro and nanostructuring	45	3
Surface treatments for mechanical applications	45	3
Micromechanics	45	3
Physics of nanostructures	45	3
Cementitious materials	45	3
Special Topics	variable	variable

To make inscription

Please contact Prof. Ricardo Dutra ppcem@ct.ufpb.br telling of your interest and more information will sent to you.

Research team

Name	Title	University where	Field of investigation	e. mail	CV
		doctorate was			
		obtained			
Amélia Severino	Materials	Federal University	Development and		http://lattes.cnpg.br/5119417295487126
Ferreira e Santos	Engineer	of de São Carlos	properties of Materials	<u>ameliastsantos@ya</u>	
	-	(2004)		hoo.com.br	
Andressa de	Civil Engineer	Federal University	Cementitious materials,	andressa.pv@hotm	http://lattes.cnpg.br/5279240919437112
Araujo Porto	-	of Paraiba (2010)	Construction waste	ail.com	
Antonio Farias	Civil Engineer	Federal University	Cementitious materials		http://lattes.copg.br/1714604461090292
Leal	, in the second s	of Campina	Construction waste	antoniofleal@gmail.	<u>mtp://attes.enpq.br/1/1/00/101050252</u>
		Grande (2004)		<u>com</u>	





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	Daniel Araujo de	Dr. Materials	Federal University	Materials for Energy	damaced@gmail.co	http://lattes.cnpq.br/1027496814443777
		Science and Eng.	of Rio Grande do Norte (2013)	Storage	<u>m</u>	
	Danielle Guedes de Lima Cavalcante	Materials Engineer	Federal University of Paraiba (2011)	Shape memory alloys	danielleguedes02@ gmail.com	http://lattes.cnpq.br/2575577028682912
	Danniel Ferreira De Oliveira	Mechanical Engineer	Federal University of Paraiba (2013)	Thermomechanical properties, Shape recovery, Shape memory materials, Superelasticity	<u>dannieldeoliveira@g</u> <u>mail.com</u>	http://lattes.cnpq.br/3903255880120747
	Eliton Souto De Medeiros	Materials Engineer	Federal University of São Carlos (2006)	Polymers and nanotechnology.	eliton@ct.ufpb.br	http://buscatextual.cnpq.br/buscatextual/visualizacv.do?ic
	Fabiana De Carvalho	Materials Engineer	Federal University of Rio Grande do Sul (2012)	Graphene and polymers	<u>fabianafim@ct.ufpb.</u> <u>br</u>	http://lattes.cnpg.br/6720107710917686
	Heber Sivini Ferreira	Materials Engineer	Federal University of Campina Grande (2009)	Clays, Ceramic materials Drilling fluids Materials characterization	hebersivini@gmail.c om	http://lattes.cnpq.br/4481989037518681
	leda Maria Garcia Dos Santos	Materials Engineer	University Federal of São Carlos (2000)	Biodiesel Amorphous materials with photoluminescent properties Environmental catalysts	<u>ieda.garcia@pq.cnp</u> g.br	
	leverton Caindre Brito	Mechanical Engineer	Federal University of Paraiba (2015)	Processing and characterization of shape memory alloys	<u>caiandre.lsr.ct@hot</u> <u>mail.com</u>	http://lattes.cnpq.br/6671762467892737
	Itamara Farias Leite	Materials Engineer	Federal University of Perrnambuco (2010)	Biodegradable polymers Nanocomposites	<u>itamaraf@gmail.co</u> <u>m</u>	http://lattes.cnpq.br/3355222757051946
	Liszandra Fernanda Araujo Campos	Materials Engineer	Federal University of Campina Grande (2007)	Ceramic materials Betonite clays, Reology	liszandra@hotmail.c om	http://buscatextual.cnpg.br/buscatextual/visualizacv.do?ic
	Lucineide Balbino Da Silva	Doctor in Science and Material Engineering	Federal University of São Carlos (2003)	Processing and Rheology of Polymer, blends and composites	<u>lucineide@ct.ufpb.b</u> <u>r</u>	http://lattes.cnpq.br/2926581493300295
	Marçal Rosas Lima Filho	Civil Engineer	Federal Univesity of Paraíba	Cementitious materials	<u>marcal_civil@yahoo</u> .com.br	
	Maria Roseane de Pontes Fernandes	Materials Engineer	Federal University of Rio Grande do Norte, (2014)	Metalic composite materials	<u>roseanef@gmail.co</u> <u>m</u>	http://lattes.cnpq.br/6135213219185858
	Normando Perazzo Barbosa	Civil Engineer	Pierre et Marie Curie University, Paris 6 (1983)	Cementitious materials, Non Conventional Construction Materials	nperazzob@yahoo.c om.br	http://buscatextual.cnpq.br/buscatextual/visualizacv.do?ic
	Ramon Alves Torquato	Materials Engineer	Federal University of Campina Grande (2011)	Magnetic properties in metal alloys Diluted magnetic semiconductors	ramont4@yahoo.co m.br	http://lattes.cnpq.br/7115589079155137
	Renate Maria Ramos Wellen	Materials Engineer	Federal University of Campina Grande (2007)	Thermoplastics and Thermosettings: Chemical Modification, Properties, Crystallization and Cure Kinetics	wellen.renate@gma il.com	http://lattes.cnpq.br/5406259642631461
	Ricardo Peixoto Suassuna Dutra	Industrial Chemistry	Federal University of Rio Grande do Norte, (2007)	Ceramic materials	ricardopsd@gmail.c om	http://buscatextual.cnpg.br/buscatextual/visualizacv.do?ic
	Rodinei Medeiros Gomes	Mechanical Engineer	Tokyo Institute of Tecnology (1987)	Alloys with shape memory, amorphous alloys, quasicrystal and titanium alloys for biomedical purposes	<u>rodineix@gmail.co</u> <u>m</u>	
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Thiago Araujo Simoes	Mechanical Engineer	University of Leeds(2015)	Biomaterials, biomechanics, corrosion, tribocorrosion, electrochemistry	<u>thiagoasimoes@gm</u> ail.com	http://buscatextual.cnpg.br/buscatextual/visualizacv.do?id
Tiberio Andrade Dos Passos	Mechanical Engineer	Federal University of Paraiba	Solidificação rápida, quasicristal, ligas de alumínio	professor.tiberio@g mail.com	http://lattes.cnpq.br/4927690916035249

You are welcome to the Graduate Program on Science and Materials Engineering!





University Hospital

Technological Center