



**DOCTORAL PROGRAMME
IN
ELECTRICAL AND COMPUTER
ENGINEERING**

2008-2009

**Annual Annex to the Document
Programme Guidelines**

Scientific Committee

Programme Director

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1 INTRODUCTION

This document is the 2008-2009 annex to the general document "PROGRAMME GUIDELINES". This annex presents relevant and specific information regarding the academic year 2008-2009, including:

- Important dates, fees and other information
- Calendar
- Streams and courses offered in 2008-2009

1.1 Important Dates

For 2008-2009, the important dates are listed below:

	Fall Semester	Spring Semester
Application periods	26/05/2008 to 18/07/2008	03/11/2008 to 09/01/2009
Candidate selection	24/07/2008 to 31/07/2008	19/01/2009 to 23/01/2009
Registration	08/09/2008 to 11/09/2008	02/02/2009 to 05/02/2009
Starting dates	15/09/2008 to 19/09/2008	25/02/2009 to 27/02/2009

1.2 Fees

The annual fee is 3.000,00 Euros.

1.3 How to apply

For application the candidates should submit to the address below the application form and enclosing the following documents:

- Education certificates
- Curriculum Vitae
- Copy of the passport or other identity document
- 2 letters of recommendation
- Photograph

Address for application:

Faculdade de Engenharia da Universidade do Porto
Serviços Académicos – Divisão de Pós-graduação e Educação Contínua
Rua Dr. Roberto Frias, 4200-465 Porto, Portugal
Tel.: +351225082130 | 225081406, Fax: +351225081409, Email: sposgrad@fe.up.pt

The selection criterion is based on the CV of the candidate and on the overall marks in the undergraduate courses. A minimum of 16 out of 20 is required. All other cases will be evaluated by the PDEEC Scientific Committee in a case by case analysis. An overall mark in the range 14/20 to 16/20 will require a strong recommendation letter. The other cases can be exceptionally considered if strongly recommended by a Professor of the DEEC-FEUP.

For any additional information you may contact the PDEEC Secretariat.

PDEEC Secretariat:

Carla Lopes
Email: cflopes@fe.up.pt; Tel.: +351.225083205

2 Streams and Courses offered in 2008-2009

PDEEC courses are organized in two semesters. First year students typically select two main streams plus two electives. Each main stream is composed of two courses (one course per semester). The electives are chosen within PDEEC or other doctoral programmes at FEUP. Individual Topics 1 and 2 are additional courses intended to help the student start the research work, and to prepare the thesis research plan under the supervision of a professor. Students must find a thesis supervisor during the first semester. The research plan needs to be discussed and approved by the Supervisory Committee at the end of the first year.

The general organisation of the programme is as follows:

1 st Semester	2 nd Semester
Individual Topics 1	Individual Topics 2
Main Stream 1 (two courses)	
Main Stream 2 (two courses)	
Elective 1	Elective 2

The PDEEC courses offered for 2008-2009 are shown in the following table. The student's course plan needs to be approved by the PDEEC Scientific Committee.

The streams opened in 2008-2009 are the following:

- Energy Markets (**ENMAR**)
- Power System Dynamics and Control (**PSDCO**)
- Systems and control (**SYCON**)
- Discrete Event and Hybrid Systems (**DEHSY**)
- Image Recognition and Machine Learning (**IMRML**)
- Microelectronics and Microsystems (**MICRO**)
- Test Technology and Design for Testability (**TTDTE**)
- Operations Research (**OPRES**)

The students can select as Electives the courses in the other streams or from other Doctoral Programmes at FEUP with similar number of ECTS, namely:

1. Doctoral Programme on Sustainable Energy Systems (PDSSE)
<http://paginas.fe.up.pt/~pdsse/>
2. Doctoral Programme in Informatics Engineering
<http://paginas.fe.up.pt/~prodei/site/presentation.php>

This selection needs approval from the PDEEC Scientific Committee and requires acceptance from the PhD Programme from which the student has selected the elective(s).

The courses offered in 2008-2009 are listed in the following table.

STREAM	COURSES	
	1 st Semester	2 nd Semester
Energy Markets (ENMAR)	Markets and Regulation J. Tomé Saraiva F. Siciliani de Oliveira	Market Simulation Gerald Scheblé
Power System Dynamics and Control (PSDCO)	Signals, Dynamics and Control Helena Vasconcelos Vladimiro Miranda F. Maciel Barbosa	Systems with Renewables (Lecturers to be defined)
Systems and Control (SYCON)	Vector Space Methods Margarida Ferreira	Measure Theory and Stochastic Processes Maria do Rosário Pinho Aníbal Matos
Discrete Event and Hybrid Systems (DEHSY)	Discrete Event Systems Fernando Lobo Pereira	Hybrid Systems Fernando Lobo Pereira João Sousa
Image Recognition and Machine Learning (IMRML)	Machine Learning Jaime Cardoso Aurélio Campilho	Image Analysis and Recognition Aurélio Campilho Ana Maria Mendonça
Microelectronics and Microsystems (MICRO)	Microelectronic and Microelectromechanical Technologies Vítor Grade Tavares José Machado Silva Luís Rocha	Advanced Microelectronic Systems Design José Carlos Alves J. Silva Matos
Test Technology and Design for Testability (TTDTE)	Test and Design for Testability José Martins Ferreira José Machado Silva Hélio Mendonça	Instrumentation and Systems Testing José Machado Silva José Martins Ferreira Hélio Mendonça
Operations Research (OPRES)	Decision Support Maria Antónia Carravilla José Fernando Oliveira	Optimization Techniques José Fernando Oliveira Maria Antónia Carravilla
ELECTIVES		
	Computational Intelligence and Power Systems Vladimiro Miranda	Grid Computing Jorge Barbosa
	Signal Analysis, Classification and Processing José Carlos Príncipe Aníbal Ferreira	
	Non-linear Control Fernando Lobo Pereira	
INDIVIDUAL TOPICS		
	Individual Topics 1 João José Ferreira	Individual Topics 2 Vítor GradeTavares

3 Lecturers in 2008-2009

PROFESSORS	
Ana Maria Mendonça – amendon@fe.up.pt	João José Ferreira – jjpf@fe.up.pt
Aníbal Ferreira – ajf@fe.up.pt	Jorge Barbosa – jbarbosa@fe.up.pt
Aníbal Matos – anibal@fe.up.pt	José Carlos Alves – jca@fe.up.pt
Aurélio Campilho – campilho@fe.up.pt	José Carlos Príncipe – principe@fe.up.pt
F. Maciel Barbosa – fmb@fe.up.pt	José Fernando Oliveira – jfo@fe.up.pt
F. Siciliani de Oliveira – Fernando.Oliveira@wbs.ac.uk	José Machado Silva – jms@fe.up.pt
Fernando Lobo Pereira – flp@fe.up.pt	Luís Rocha – lrocha@dei.uminho.pt
Gerald Sheblé – gbs@fe.up.pt	Margarida Ferreira – mmf@fe.up.pt
Helena Vasconcelos – mhv@fe.up.pt	Maria Antónia Carravilla – mac@fe.up.pt
Hélio Mendonça – hsm@fe.up.pt	Maria do Rosário Pinho – mrpinho@fe.up.pt
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J. Tomé Saraiva – jsaraiva@fe.up.pt	Vladimiro Miranda – vmiranda@fe.up.pt
Jaime Cardoso – jsc@fe.up.pt	