

**TITU MAIORESCU UNIVERSITY OF BUCHAREST
FACULTY OF INFORMATICS**



RESEARCH STRATEGY

**OF THE FACULTY OF INFORMATICS
FOR THE PERIOD 2012-2016**



BUCHAREST, 2012

1. STRATEGIC OBJECTIVES AND DIRECTIONS

Strategic objective 1: Increasing the impact of the research activities on teaching activities, increasing inter-, multi- and trans-disciplinary character of research, through collaboration with other faculties and research institutes on informatics.

Description: Aims to strengthen and stimulate inter-, multi- and trans-disciplinary research teams conducted with faculties and research institutes from TMU, from Romania and EU, in order to achieve international research grants with European funding.

Estimated time for completion: October 2012, with continuing enforcement.

Coordination: Dean, Faculty Council, Department of Informatics.

Strategic objective 2: Increasing the capacity for innovation and technological development in the field of applied informatics.

Description: Faculty of Informatics will strive to achieve and participate in accessing FP7 grants and projects in the field of innovation and also at partnership type projects in UEFISCDI.

Estimated time for completion: October 2012, with continuing enforcement.

Coordination: Dean, Faculty Council, Department of Informatics.

2. OPERATIONAL OBJECTIVES

- Improve the efficiency of scientific research activities through targeting the specific activities on priority issues, respectively on the criteria for quality indicators of the scientific research activities at the national level;
- Increasing the national and international visibility of the Faculty of Informatics, and the capacity for innovation and technological development by developing strategic partnerships with socio-economic environment in Romania and renowned companies (Siemens, Microsoft, HP, Xerox, etc.).
- Increasing the participation in national and international grants and research contracts.
- Attracting young researcher.
- Further development of the material base for education and research.

3. CAPITALIZATION OF SCIENTIFIC RESEARCH RESULTS

Capitalization of scientific research results in the Faculty of Informatics is carried out through the following forms:

- Participation in the prestigious scientific events in Romania and abroad;
- Publication of scientific papers in ISI indexed scientific journals;
- Registration and patenting the outcomes of the scientific research activities;
- Organization of scientific events: scientific seminars, training sessions, conferences, roundtables, at the national and international levels;
- Developing academic books, handbooks and textbooks.

**SCIENTIFIC RESEARCH ACTIVITIES
FOR THE PERIOD 2012-2016**

A. Scientific research grants

No.	Title of the research topic	Financing	Time for completion
1	Center for Information, Advice and Mentoring to Promote Entrepreneurial Culture	SOPHRD ¹ Project ID 57836	2010-2012
2	Modern Education and Quality for the Future	SOPHRD Project ID 61434	2010-2013
3	Internships in Bucharest - Ilfov Region	SOPHRD Project ID 81566	2011-2013
4	Research on the Development of Portable Embedded Systems for Measuring Small Forces, with Industrial and Medical Applications	Partnerships 2011 Programme – proposed for funding	2011-2014
5	Developing an Analysis Laboratory Concerning Safety of Wireless and WIMAX Networks with Applications in Education	Proposed for funding in a SOPHRD Project	2011-2014
6	System For Management Energy Efficiency - Electric And Hydrogen By Renewable Energy (E.M. Hybrid Vehicle 4X4 Electric and Hydrogen)	Partnerships PNII Programme	2013-2016

B. Scientific research issues in the internal scientific research plan of the Faculty of Informatics

No.	Title of the research topic	Financing	Time for completion
1	Data Mining Applications in Medicine	Internal	2012-2014
2	Numerical algorithms and optimization techniques	Internal	2012-2016
3	Methods and Algorithms in System Theory	Internal	2012-2016
4	Java Technologies	Internal	2012-2015
5	Web Technologies	Internal	2012-2015
6	Security of Web Applications	Internal	2012-2016

¹ SOPHRD: Sectorial Operational Programme *Human Resources Development*.

B. Scientific research issues in the internal scientific research plan of the Faculty of Informatics (sequel)

No.	Title of the research topic	Financing	Time for completion
7	Linux application. Development of Teaching Materials	Internal	2012-2014
8	Calculation Systems Architecture. Development of Teaching Materials	Internal	2012-2013
9	Nonlinear Time Series Analysis of the Measurement of Biological Processes Using Recurrence Quantification Analysis	Internal	2013-2016
10	Automatic Transmission System of Technical Parameters on Traffic Accidents	Internal	2013-2016
11	Developing an Application for Testing Stationary and Periodicity of a Discrete Dynamical System	Internal	2013-2015
12	Automatic Dosing System for Ophthalmic Liquids	Internal	2013-2016
13	Optimizing and improving student-teacher communication E-learning platform AEL	Internal	2013-2014