

Faculty of Electrical Engineering and Computer Science

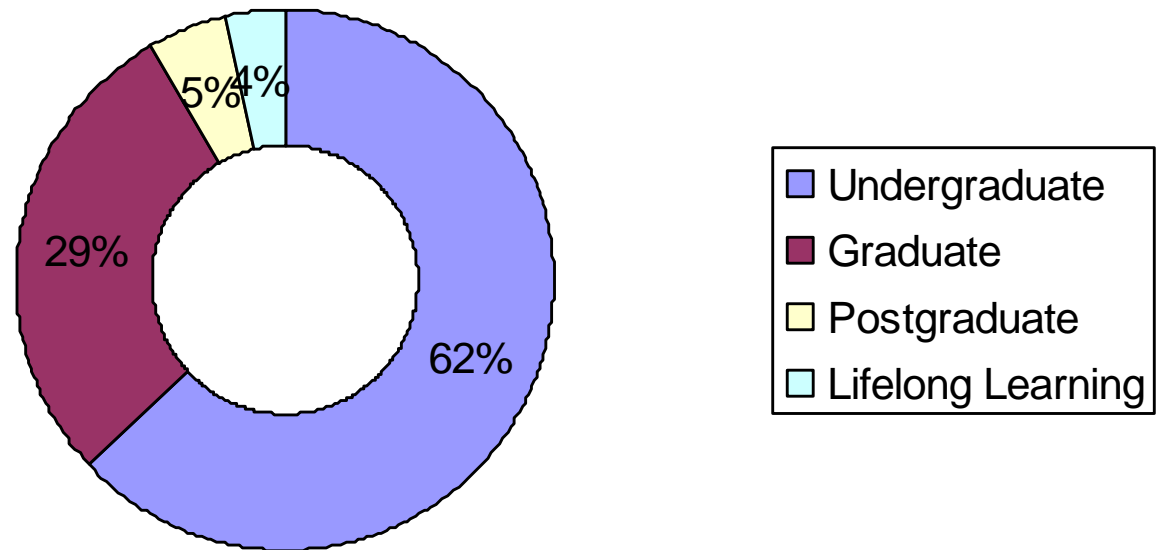
25 years of Higher Education in Electrical Engineering (1985-2010) in Suceava

Facultatea de Inginerie Electrică și Știința Calculatoarelor



25 de ani de învățămînt universitar sucevean în inginerie electrică

1215 Students Enrolled in Higher Education Programmes



Higher Education Programmes

The study programmes are established according to the requirements of

- labour market
- quality assurance standards set by ARACIS
- available resources

Higher Education Programmes

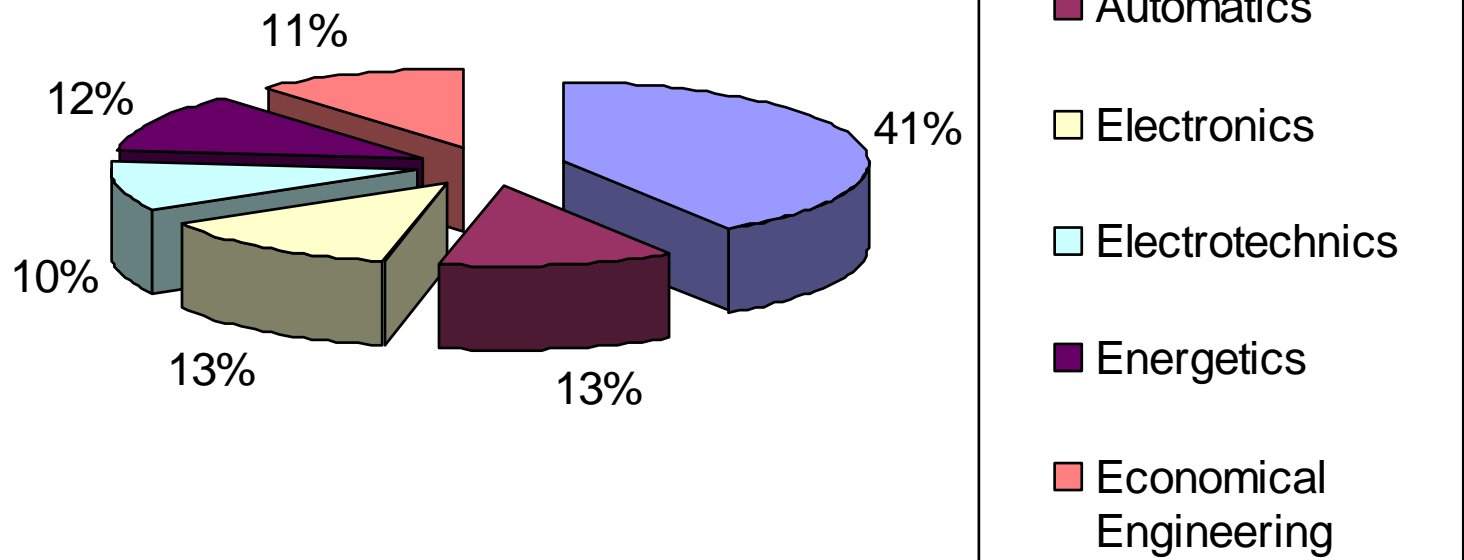
Degree Programmes

- Undergraduate studies - *Bachelor of Science* (4 years)
- Graduate studies - *Master of Engineering* (2 years)
- Postgraduate studies - *Ph.D.* (3 years)

Lifelong Learning Programmes

- Training Courses – 1 week, 3 months, 2 years
- Post-doctoral Programmes (research)

Degree Programmes – Bachelor of Science



Economical Engineering Programme is organized in co-operation with FESPA.

Degree Programmes - Master of Engineering

(field - specialization)

- Computers and IT – Computer Science and Engineering
- Automatics – Computer Engineering and Process Control
- Electrotechnics
 - Advanced Techniques in Electrical Machines and Drives
- Energetics
 - Modern Systems for Energetic Process Control
- Electronics - Communications and Computer Networks

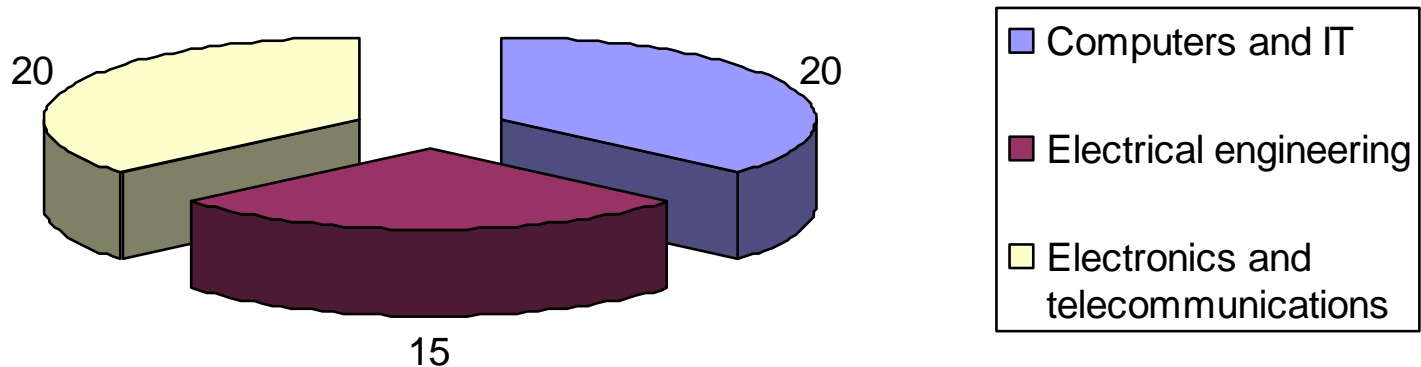
Degree Programmes - Master of Engineering

Interdisciplinary Programmes

- **Digital Arts** - Computer Aided Visual Arts, Design and Advertising Image
(with FLSC and University of Arts)
- **Engineering and Management**
 - Computer Aided Management in Industry and Administration
(with FSEAP)

Degree Programmes – Ph.D.

Enrolled Ph.D. Students



Lifelong Programmes

Training Courses

- *IT Courses - WEB Design, Internet Applications Programming, PC Use ...*
- *Electroenergetic Balance Sheets*
- *Energy Management*
- *CAD Applications Development in Electric and Energetic Fields*
- *Informatics*

FEECS vs. USV

Study Programme	Number of Programmes in USV	No. of Progr. in FEECS	in FEECS [%]
Bachelor of Science	38	6	16
Master of Engineering	50	5	10
Ph.D.	11	3	27
Longlife Learning	7	5	71

Compatibility of Academic Regulations with Similar Faculties in EU

- In 1993-1998, FEECS was the coordinator of 2 Tempus Programmes that allowed us to organize the educational process similar to the partner institutions
- Since 1996, FEECS adopted the European Credit Transfer Systems
- FEECS concluded a *Double Diploma Agreement* with Ecole d'Ingenieurs de Lille, based on ECTS, in 2000
- Ph.D. Co-tutelle with USTLille(F) and KaHO Gent (B)

FEECS STRUCTURE

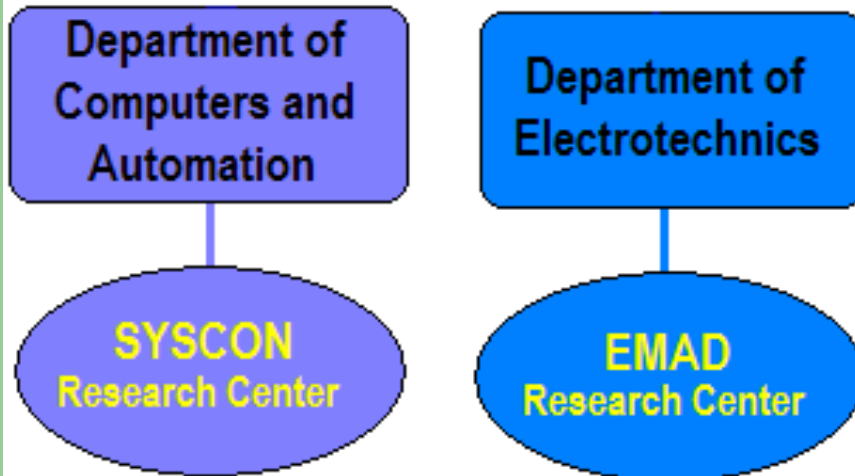
**Department of
Computers and
Automation**

FEECS STRUCTURE

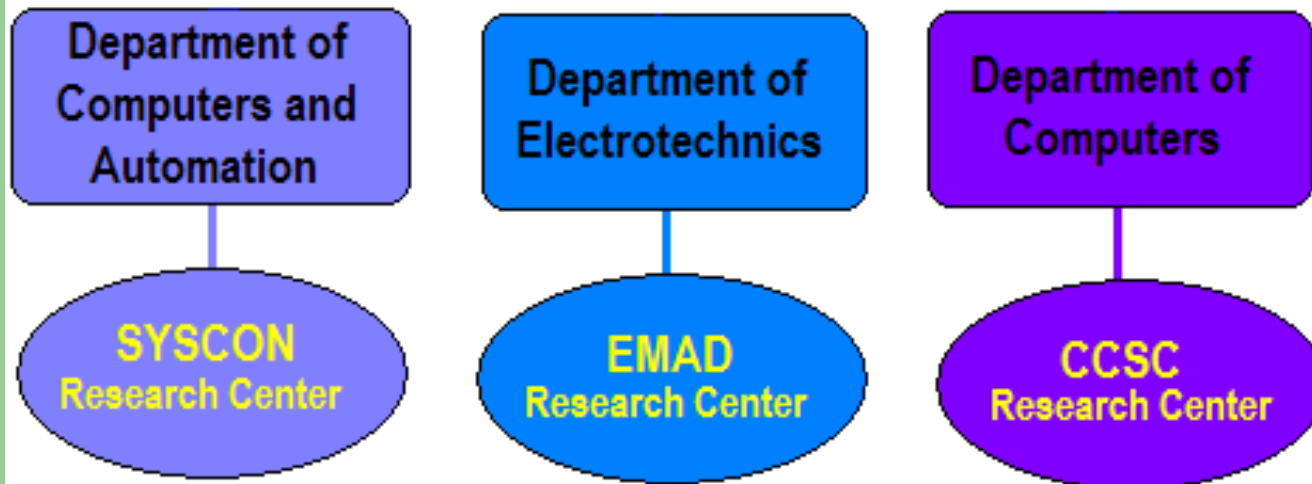
**Department of
Computers and
Automation**

**SYSCON
Research Center**

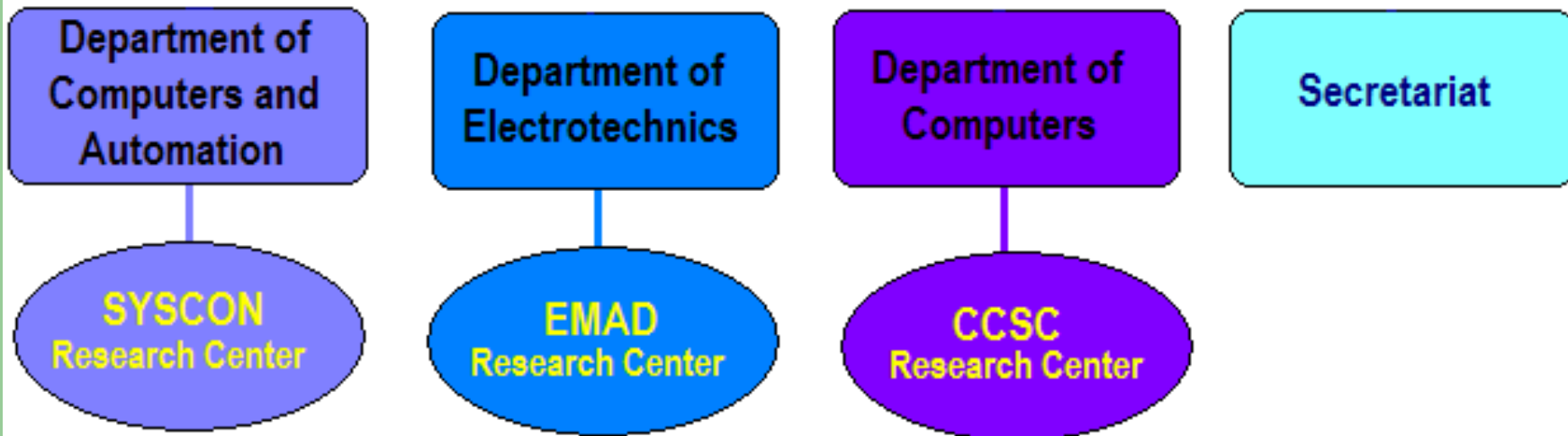
FEECS STRUCTURE



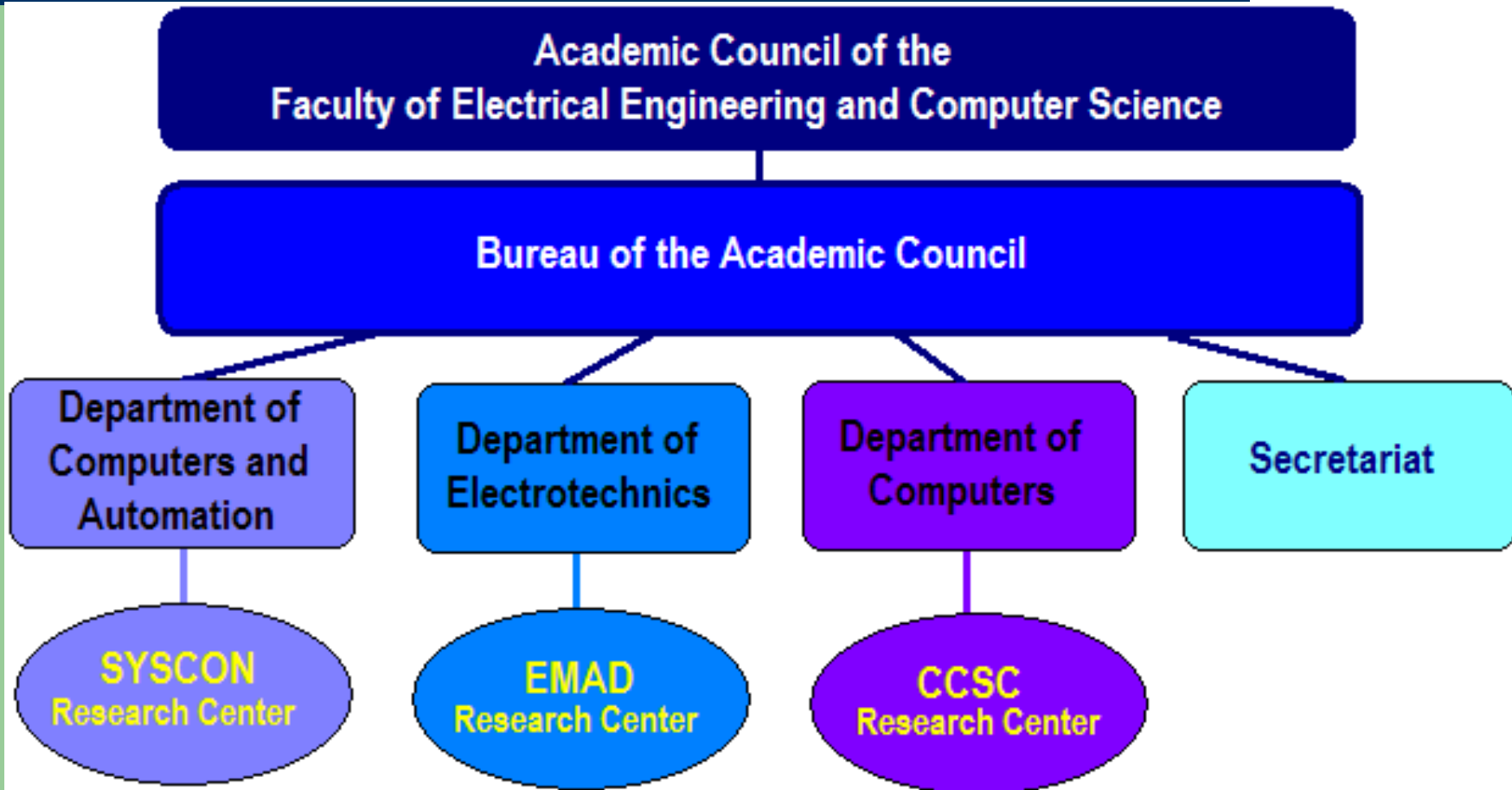
FEECS STRUCTURE



FEECS STRUCTURE



FEECS STRUCTURE



FEECS Infrastructure



C building (3.500 square meters) houses
26 laboratories



D building:

- ❖ 4 amphitheatres
- ❖ 6 laboratories
- ❖ 2 seminar rooms
- ❖ conference hall
- ❖ High Performance Computing Laboratory
- ❖ IT Center



G building houses the Electromagnetic
Compatibility Laboratory

ACCREDITED RESEARCH CENTERS

EMAD - Research Center in
Electrical Machines,
Apparatus and Drives

CCSC - Research Center in
Computer Science

SISCON - Systems and
Process Control Research
Center



Research Center in Electrical Machines, Apparatus and Drives - EMAD

- Piezoelectric motors
- Special electromechanical energy converters
- Vibromotors
- Microelectromechanical systems (MEMS)
- Robots and actuators
- Electric drives and automations
- Electric and hybrid vehicles

Research Center in Computer Science

CCSC

- **Artificial Intelligence**
- **Pattern Recognition**
- **Distributed Systems**
- **Embedded Systems**
- **Information Technologies**
- **Process Control**

CCSC – High Performance Computing Laboratory

Ziarul care ști de vorbă cu oamenii

DE SUCEAVA

Monitorul

Universitatea Suceava deține cel mai performant calculator din mediul academic românesc

Local - Oana ALPHONSO

(citește alte articole de același autor »)

Universitatea „Ștefan cel Mare” din Suceava deține cel mai performant calculator din întregul sistem academic din România, un „supercalculator”, așa cum

Computing power in double precision - 6.45 Tflops

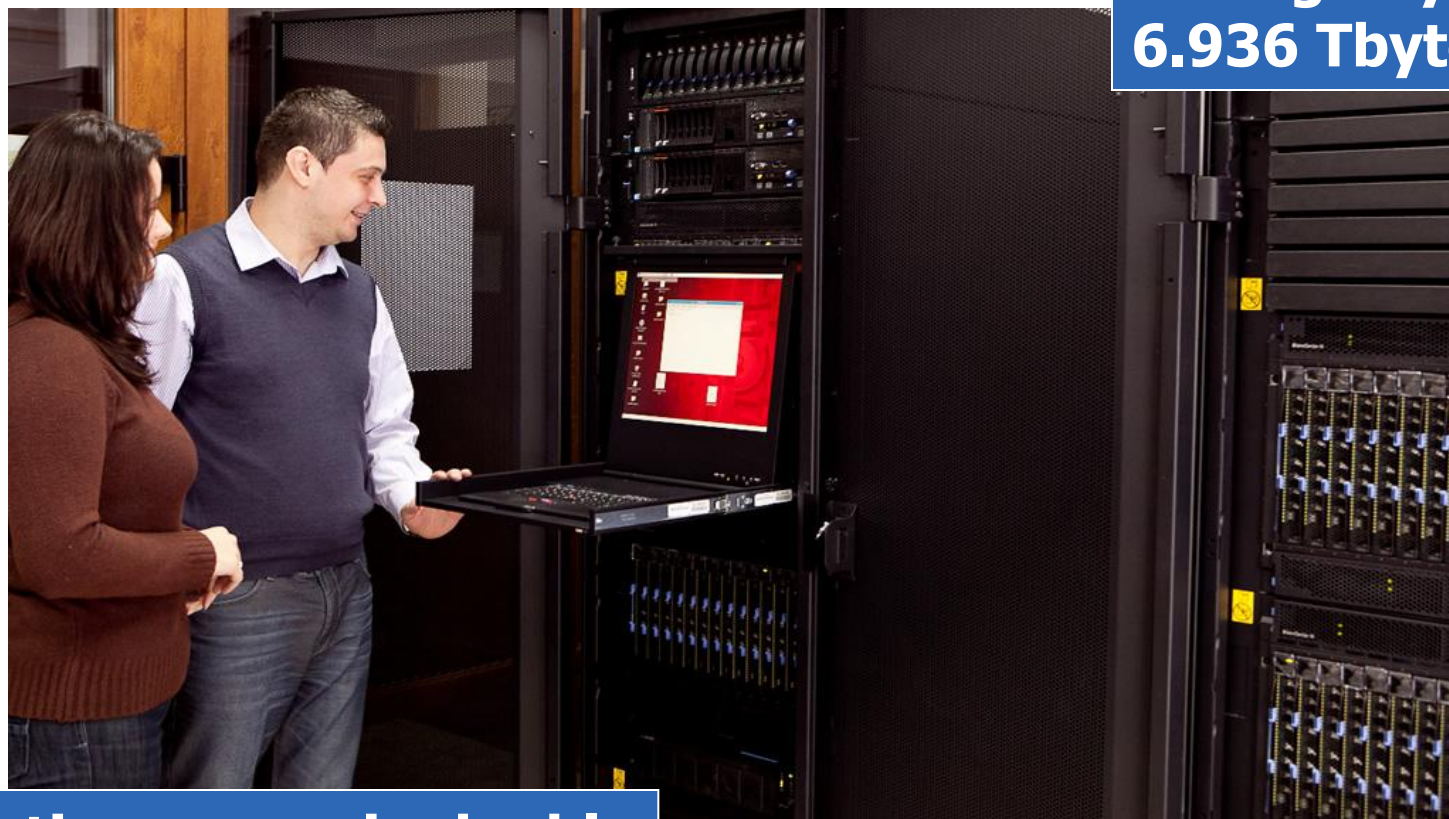


“University of Suceava has the most performant super-computer from the Romanian academic environment” (translation of newspaper title).

High Performance Computing Laboratory

www.eed.usv.ro/gridnord

Storage System –
6.936 Tbytes



Computing power in double
precision - 6.45 Tflops

SISCON - Systems and Process Control Research Center

- remote location and identification (RFID);**
- electromagnetic compatibility (EMC);**
- process control and automations;**
- wired and wireless data transmissions;**
- digital signals processing;**
- power line carrier communications;**
- embedded processing systems;**
- network time synchronization and applications**

SISCON – Electromagnetic Compatibility Laboratory



Accredited by RENAR Bucharest

Electromagnetic Compatibility Laboratory

accredited by RENAR Bucharest



<http://www.emclab.ro>

Research Results

FEECS contribution to the scientific production of the University (in 2009)

Explanations	USV	FEECS	%
Papers published in ISI Journals	63	25	39.7
Papers published in Proceedings of the ISI indexed Conferences or International Conferences	176	32	18.2
Papers published in IDB indexed Journals others than ISI	48	17	35.4
Prizes and Diplomas for Research awarded by international bodies	21	18	85.7
Prizes and Diplomas for Research awarded by National Bodies	19	4	21.4
Inventions Patents	32	21	65.6

Outstanding Contributions to Romanian Research, Development and Innovation

Prof.univ.dr.ing. Dorel CERNOMAZU
(153 inventions)



Medals obtained at Inventics Exhibitions in Brussels, Geneve, ...



**Gold Medals – Bruxelles –
EUREKA 2005, INVENTICA
1994, 2002, International
Exhibition ECOINVENT 2003,
PROINVENT, 2006, 2007, 2008)**



**Silver Medals obtained at Inventics
International Exhibition Bruxelles –
EUREKA 2002, 2004, 2007
GENEVA – 2005, 2008,
ECOINVENT 2003)**



**Bronze Medals
INVENTICA 1992,
ECOINVENT
2003, GENEVA –
2008**

International Eureka Contest Bruxelles - 2010



An invention having as authors members of FEECS (Nicolae SOREA, Dorel CERNOMAZU, Leon MANDICI) was awarded with:

- Silver Medal from **Brussels Innova**
- *Prof. Ignacy Mościcki Medal* from Zalozyciel Institute (ASSOCIATION OF POLISH INVENTORS AND RATIONALIZERS), Poland.

International Recognition

- Prizes and medals at international level
- Keynote speakers, PC members, ...
- Title of Doctor Honoris Causa of Cernăuți University, Ukraine, awarded to prof. eng. Adrian Graur, PhD

Faculty of Electrical Engineering and Computer Science

Accredited by

European Federation of National Engineering Associations
(FEANI)



the voice of Europe's engineers

FEANI 

Romania/RO - User

www.feani.org

[Browse](#)

[Return to view menu](#)

FEANI - Schools search result

Suceava

[Universitatea "Stefan cel Mare" din Suceava - Facultatea de Inginerie Elctrica](#)

Compatibility and Co-operation



- ❖ **European Credit Transfer System (ECTS)**
- ❖ **ERASMUS and Leonardo da Vinci**
- ❖ **Co-operation with 28 universities from 19 European countries**

Compatibility and Co-operation



- ❖ **Universite des Sciences et Technologies - Polytech'Lille, FRANÇA**
- ❖ **Universita degli Studi di Catania, ITALIA**
- ❖ **Katholieke Hogenschool Sint Lieven Gent, BELGIA**
- ❖ **Instituto Politecnico de Porto, PORTUGALIA**
- ❖ **University of Limerick, IRLANDA**
- ❖ **Fachhochschule Oldenburg / Ostfriesland, GERMANIA**
- ❖ **University of Southern Danmark, DANEMARCA**
- ❖ ...



International Computer Contest for Students

❖ Teams from Beijing, București, Cernăuți, Chișinău, Iași, Lille, Limoges, Moscova, Novi Sad, Porto, ...

❖ **Hard & Soft**

❖ **Microsoft Imagine Cup**

❖ **ACM Programming Contest**

❖ **Tehnici de interconectare în electronică**

❖ **CSIDC**

❖ **Siemens-VDO**



International Computer Contest for Students

Presidents of the Jury

- John Milner – City University of London
- Timothy Hall – University of Limerick



Scientific Journal indexed by ISI Thomson Reuters



Advances in Electrical and Computer Engineering

- ISSN: 1582-7445
e-ISSN: 1844-7600
doi: 10.4316/aece
www.aece.ro
www.aece.eu

Impact Factor: 0.509

- Advances in Electrical and Computer Engineering is a peer-reviewed journal published by Stefan cel Mare University of Suceava and the Romanian Academy of Technical Sciences, Romania.
- The journal is rated as Class A publication by the Romanian Council for Research in Higher Education (CNCSIS) and it is indexed and abstracted in Science Citation Index Expanded by ISI Thomson Reuters.

Conferences and Symposiums

- **DAS 2010 - 10-th International Conference on Development and Application Systems, May 27-29, 2010 - Suceava, Romania**
- **ELS 2011 - 4th International Symposium on Electrical Engineering and Energy Converters, September 22 - 23, 2011, Suceava, Romania**

Faculty Management

- FEECS follows its Strategic Plan (2008/2013)
 - Objectives derived from University Strategic Plan
- Each year the Academic Council establishes an Operational Plan
 - Objectives from Faculty Strategic Plan
 - Actions
 - Results Analysis at the end of each year

Faculty Management

- Active Participation of Teachers and Students in
 - decision making process
 - task definition
- Task Control
 - Task responsible
 - Head of the Department
 - Research officer, Vice-dean, Dean
 - General director, Rector

Conclusions

- BSc, ME, PhD and Longlife Learning programmes with a dynamic evolution
- education programmes designed after dialogues with companies and analysis of labour market
- interdisciplinary programmes
- quality promotion in all the educational and research activities
- co-operation in education and research with other faculties in USV, Romania and Europe
- outstanding contributions in Inventics
- European vocation