





# **Topics**

- General Information Romania, Nord-Transylvania, Cluj Napoca
- 2. Technical University of Cluj Napoca (TUC-N)
  - 2.1 Historical Background
  - 2.3 Academic Studies
- Faculties of TUC-N
- 4. Description of the Faculties:
  - 4.1 Faculties of Civil Engineering & Architecture Profile
  - 4.2 Faculties of Electrical Engineering Profile
  - 4.3 Faculties of Mechanical Engineering Profile
- International Relations
- 6. Student's Life



# Romania – Transylvania Nord





#### **Number of counties: 6**

- Cluj
- Bihor
- Salaj
- Bistrita-Nasaud
- Maramures
- Satu-Mare

# Cluj - Napoca - The City



Location: Central Romania (County: Cluj)

Size: 16.2 sq miles (42 sq. kilometers)

Elevation: 1,181 ft. (360 meters)

**Inhabited since**: 200 BC

First documented: 1177 AD (Clus)

# Cluj - Napoca

# Cluj - Napoca – Facts and Figures

Population: 342,122 (estimation 2019)

• **Area**: 179,5 km<sup>2</sup>

Ethnic groups:

Romanian: 79,46%

– Hungarian: 18,86%

Student population: over 100.000

Culture:

- 2 theatres and opera houses
- philharmonic house
- 6 museums, botanical garden



# Cluj - Napoca

# Cluj - Napoca – Facts and Figures

**Airport:** International Airport, 5 miles from downtown Cluj-Napoca

- Domestic flights: daily flights to/from Bucharest and Timişoara;
- International flights: scheduled flights to/ from several cities in:
  - Austria (Vienna)
  - Italy (Ancona, Bergamo, Bologna, Florence, Rome, Milano, Verona)
  - Germany (Düsseldorf, Frankfurt, München, Stuttgart)
  - Hungary (Budapest)
  - France (Paris)
  - Spain (Valencia)

# Cluj Napoca - Views



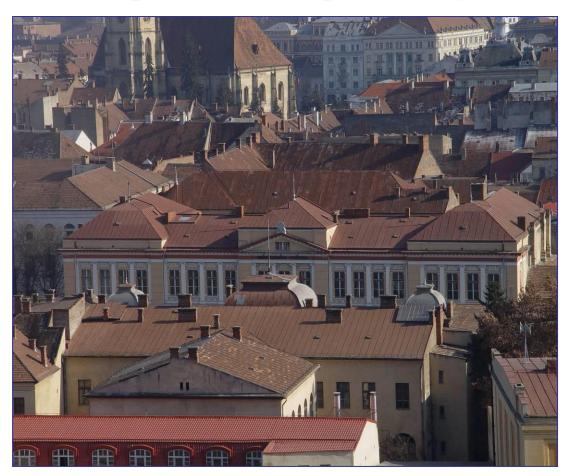
# Cluj - Napoca – Academic City

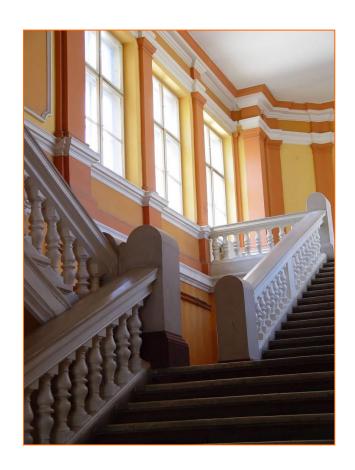
#### State universities

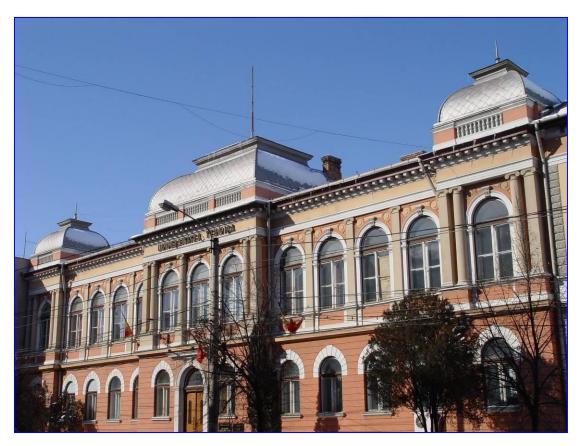
- University "Babes Bolyai" of Cluj- Napoca
- Technical University of Cluj- Napoca (TUC-N)
- "Ion Andreescu" Academy of Visual Arts
- University of Medicine and Pharmacy "Iuliu Haţieganu" of Cluj- Napoca
- University of Agriculture Science and Veterinary Medicine of Cluj- Napoca
- "Gheorghe Dima" Academy of Music Cluj- Napoca











# **Historical Background**

- 1920 The Industrial College was founded in Cluj Napoca.
- 1922 The Industrial College becomes College for Technical Conductors.
- 1937 The College for Technical Conductors becomes the Electromechanical College.
- 1953 Cluj Polytechnic Institute with three faculties.
- 1992 The Polytechnic Institute was renamed to the Technical University of Cluj - Napoca and the three existing faculties at that time were restructured into seven faculties and one college.
- **1998** The structure of the Technical University was completed with the Faculty of Architecture and Urban Planning.
  - Today, **Technical University of Cluj Napoca** is a *leading higher education institute in Transylvania* region in the technical field, and one of the most important in Romania.

# **Academic Studies**

The Technical University of Cluj-Napoca comprises twelve faculties in the two academic centres, Cluj-Napoca and Baia Mare, as well as in locations, such as Alba-Iulia, Bistriţa, Satu Mare and Zalău. The educational offer, aligned to the Bologna system, includes bachelor's, master's and doctoral programs, as well as continuous training programs.

#### Academic year 2004/2005 (faculties)

**Long Term Engineering Diploma - 5 years** 

Advanced Studies Diploma - 1 - 1.5 years

PhD Diploma - 4 years

#### Actual academic structure (2007/2008) – Bologna process

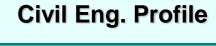
**Bachelor Diploma - 4 years** 

**Master of Science Diploma - 1.5 years** 

PhD Diploma - 4 years



# Faculties in Cluj –Napoca



Architecture & Urban Planning

Civil Engineering

**Bulding Services** 

#### **Electrical Profile**

Automation & Computer Science

**Electronics & Telecommunications** 

**Electrical Engineering** 

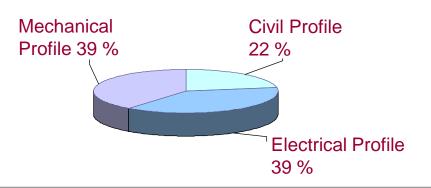
#### **Mechanical Profile**

Machine Building

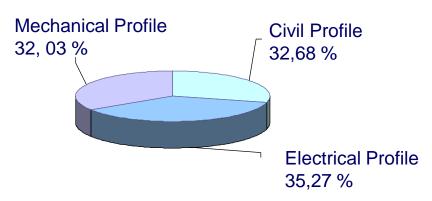
Automotive, Mechatronics and Mechanical Engineering

Materials and Environmental Engineering

#### **Academic Staff**

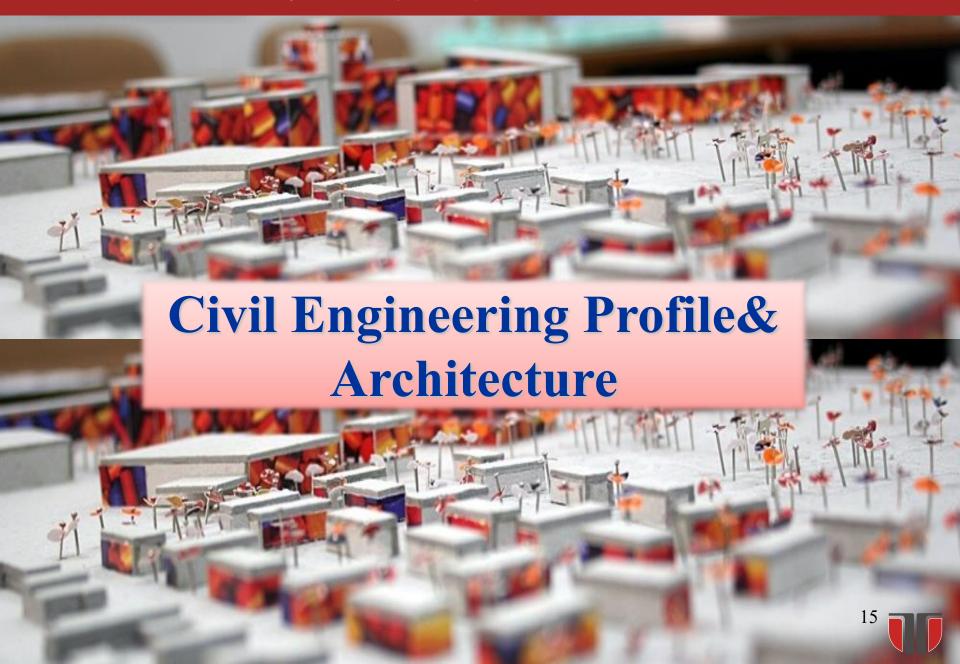


#### **Students**



# Infrastructure

- □ 14 buildings for education with a total area of 60132.66 sq. meters.
  - education spaces (47 course rooms, 73 seminar rooms, 290 laboratories and 8 workshops);
  - auxiliary spaces (106 research laboratories, 260 teaching staff cabinets, 30 library rooms);
- administrative spaces with a total area of 15658.11 sq.m.
- 7 students hostels with 3.900 places, 2 canteens with 900 places, 2 sport bases





## Faculty of Civil Engineering

#### **Education**

## Bachelor (4 years):

- Civil Engineering (specializations):
  - Civil, Industrial and Agricultural Buildings
  - Railway, Roads and Bridges
  - Civil Engineering (in English)
- Engineering and Management (specializations):
  - Economical Engineering in Civil Engineering

# Master (1,5 years):

Civil Engineering



# Faculty of Building Services

### **Departments:**

- Installations Engineering
- Building Services
- Installations & Equipment for Atmosphere Protection

### **Education**

# Bachelor (4 years):

### Specializations:

- Installations
- Building Service Equipment
- Installations & Equipment for Atmosphere Protection

# **Master Studies (1,5 year)**

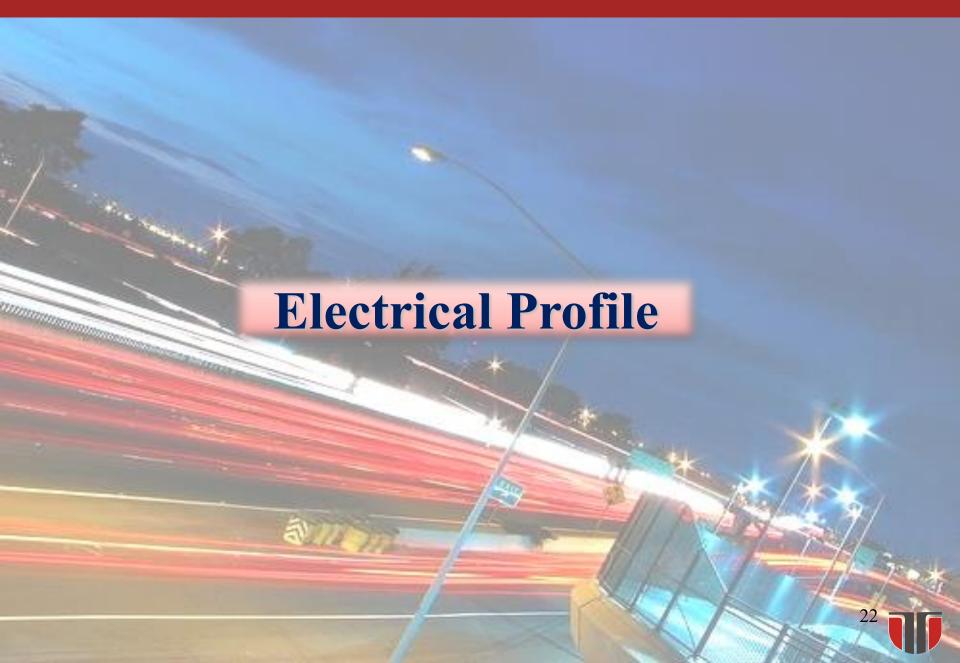
### **PhD Studies**

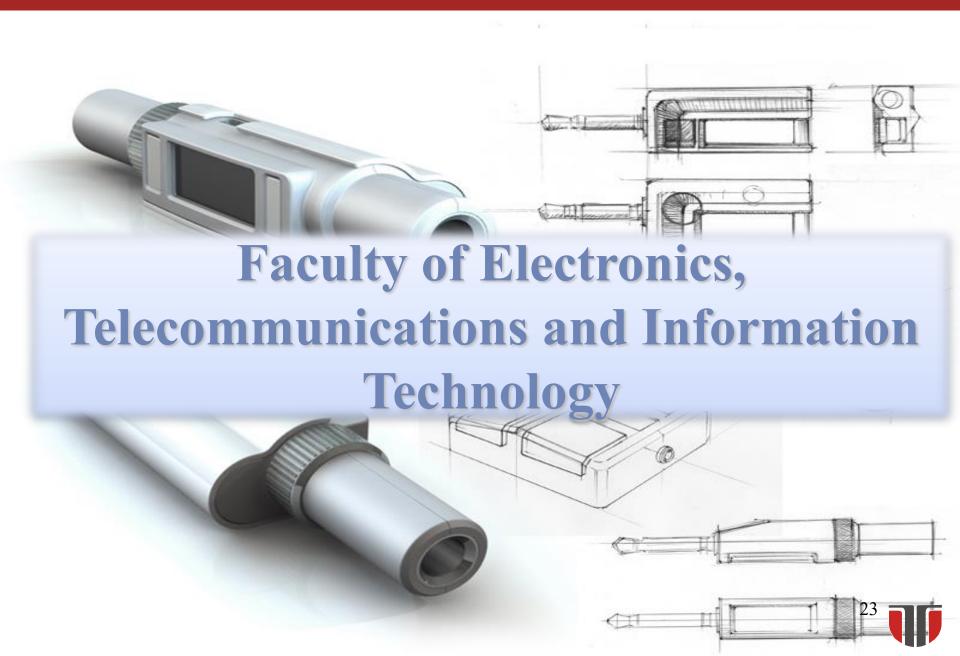


## Faculty of Architecture and Urban Planning

### **Main Research Topics** (selection):

- Restoration
- Study of Historical Sites Revitalization
- Evaluation of Building Strengthening
- Architecture Design
- Resistance Design reinforced concrete, wood, metal etc.





# Faculty of Electronics, Telecommunications and Information Technology

#### **Education**

## Bachelor (4 years):

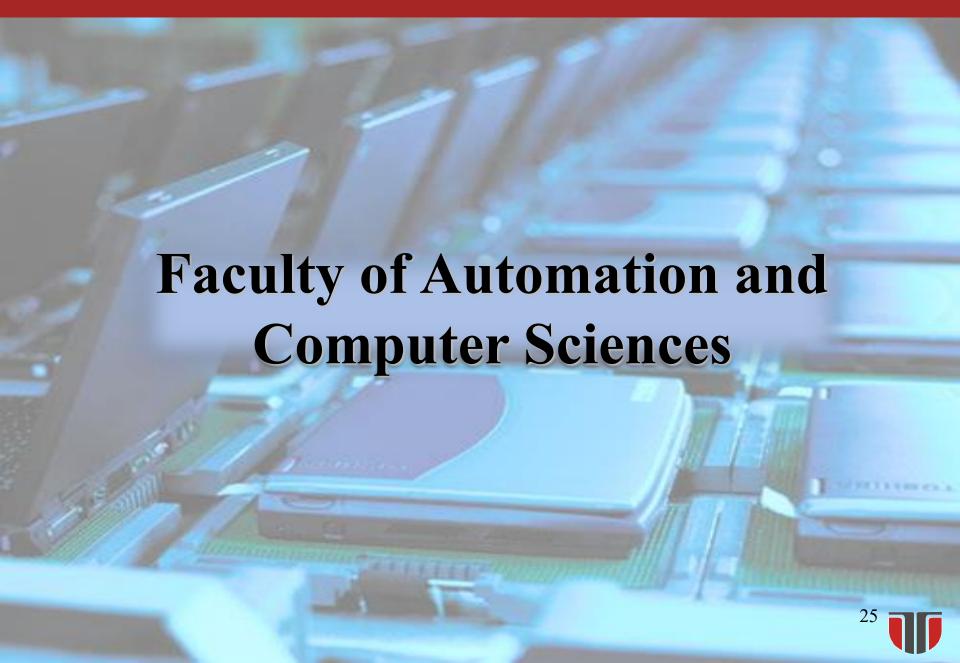
- Applied Electronics (courses taught in Romanian & English)
- Telecommunications (courses taught in Romanian & English)

### Master (1,5 years) with the following specializations:

- Design Techniques of Complex Electronic Circuits
- Electromagnetic Compatibility in Electronic Systems
- Modern Techniques in Telecommunications
- Multimedia Technologies

# PhD program (3 years)

- Electronics
- Telecommunications



## Faculty of Automation and Computer Science

### **Education**

## Bachelor (4 years):

- Computer Science & Information Technology (in Romanian & English)
- Automation (in Romanian & English)

### Master (1,5 years) with the following specializations:

- Modern Techniques in Automated Control
- The New Generation of Computers
- Information Systems
- Automation

## Faculty of Automation and Computer Science

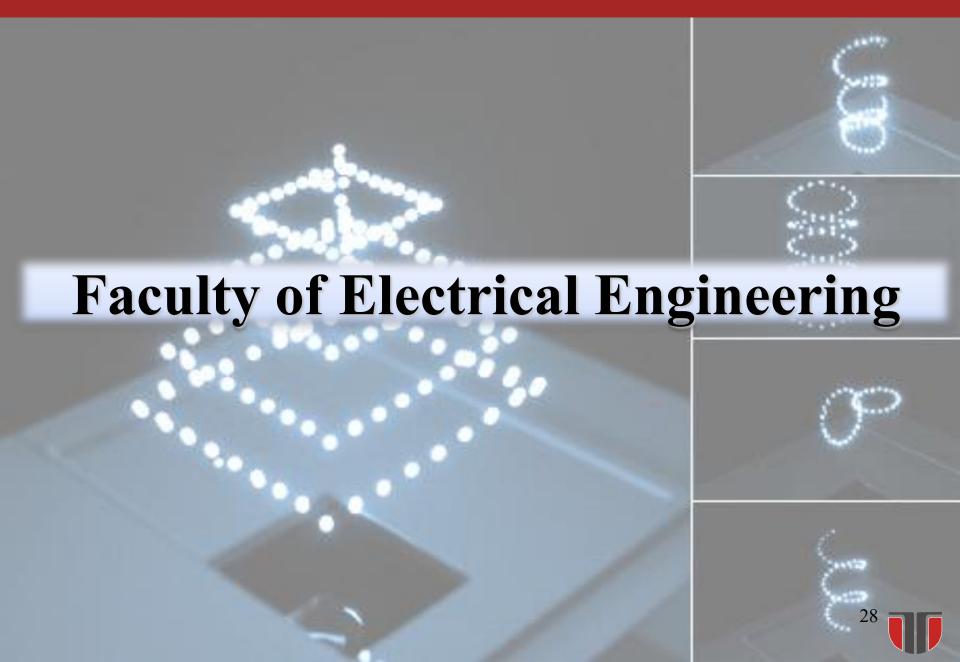
### **Education** (continuation)

# PhD program (3 years)

- Computer Science
- Automation

#### **Post Graduate Courses**

- Basic of Programming
- CISCO Academy
- Microsoft Academy



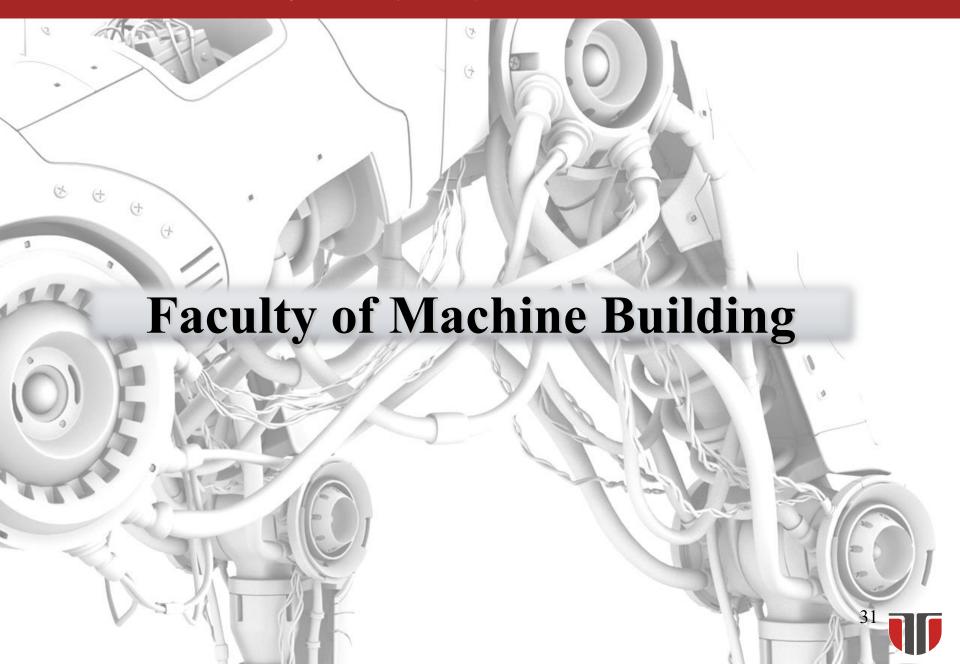
## Faculty of Electrical Engineering

#### **Education**

## Bachelor (4 years):

- Electric Engineering (with the following specializations):
  - Electric Systems
  - Instrumentation and Data Acquisitions
  - Power Electronics and Electric Drives
  - Electro-mechanics
- Energetic Engineering (specialization):
  - Energy Management
- Engineering Applied Sciences (specialization)
  - Medical Engineering





## Faculty of Machine Building

## **Education - Bachelor (4 years):**

- Industrial Engineering (with the following specializations):
  - Manufacturing Technology (in Romanian & German languages)
  - Industrial Design
  - Machine Tools & Manufacture Systems
- Engineering & Management
  - Industrial Economic Engineering (in Romanian & English)
- Mechatronics & Robotics
  - Robotics (in Romanian & English)



# Faculty of Mechanical Engineering

**Education** - Academic year 2009/2010

## **Bachelor (4 years):**

- Mechanical Engineering (with the following specializations):
  - Machines and Equipments for Agriculture and Food Industry
  - Thermal Machines and Equipments
  - Fine Mechanics
- Engineering Transport
  - Automotive
- Mechatronics

Master (1,5 years)

PhD program



## Faculty of Material Science and Engineering

Education - Academic year 2009/2010

## Bachelor (4 years):

- Materials Engineering (with the following specializations):
  - Materials Engineering
  - Material Processing Engineering
- Environmental Engineering (with the following specializations):
  - Industrial Environment Engineering and Protection

Master (1,5 years)

PhD program (3 years)

# Department of Foreign Languages

# **Teaching staff**



❖ 16 full time teaching staff, graduates of the Faculties of Letters and specialised in—country or abroad (Great Britain, France, Germany, Austria or other European countries).

# Main objectives

- > to help students form and consolidate their skills in general and specific purpose languages;
- > to help them master concepts and cognitive and discursive operations typical of the specialised discourse;
- > to widen their cultural horizons and enrich their professional experience.

# The range of courses offered

General English
English for science and technology
Business English

German for science and technology

General Italian

Italian for specific purposes

General French
French for science and technology

General Spanish

General German

General Russian
Russian for science and technology

General Romanian
Romanian for specific purposes



# **Activity of the Department**

- Offering courses of Romanian as a foreign language as a way to improve language skills and to help better understand Romanian culture and civilisation for:
  - English medium sections;
  - German medium sections;
  - · foreign students who enrol in Romanian medium courses.

# **Activity of the Department**

- Teaching a course of Communication Skills for the students in the following fields:
  - product design;
  - business;
  - civil engineering;
  - other departments or specialities.

























# **International Cooperation**





















#### **International Affiliations**



EUROPEAN UNIVERSITY OF TECHNOLOGY



**EUA - European University Association** 



Alliance of Universities for Democracy



Black Sea Universities Network



Agence Universitaire de la Francophonie

#### **International Relations**

http://ori.utcluj.ro

- 75 bilateral agreements with universities of high prestige from:
   Austria, Belgium, Canada, France, Italy, Germany, The Netherlands,
   Singapore, South Korea, Switzerland, USA, etc.
- 113 LLP Erasmus/Socrates agreements with universities from EU:
  - > 447 months of Student Mobility
  - ➤ 141 weeks of Academic Staff Mobility

## International Relations

#### **International Research Projects (selection):**

PK 1 Draimler, Volswagen; Seoho Korea; bilateral project with

University of Brauschweigh; Craft Lothis; Broadwan; VIF; Kugler; Multipr;

Philips; Multipro; Fraunhofer; OP3 MET; Business; Silansys; EGEE-

ICI,PZ Engineering; CONTI; Blatand; 1 bilateral project with University

of Hamk; DIEHL; Fp7 and LDV.

## **International Relations**

#### **International Educational Projects (selection):**

EIE-Surveyor - Reference Point for Electrical and Information Engineering in

Europe;

Bilateral project with University of Ottawa;

FP7- Marie Curie Research Training Network;

University of Trieste;

Overpar Solutions Liechtenstein;

Universite de Technologie de Compiegne;

FASTQUAD cu Universite Pierre-Mendez, Grenoble;

EUCEET III cu Ecole Nationale des Ponts et Chausses;

EU Framework Programme;

Humboldt.

## **Student Life - Education**







## **Student Life - Leisure**













## **Active Student Organizations**



**OSUT** - Organizatia Studentilor din Universitatea Tehnica Cluj - Napoca



**BEST Cluj – Napoca** - Board of European Students of Technology



AEGEE Cluj - Napoca - Association des Etats

Généraux des Etudiants de l'Europe



















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# Thank you for your attention!

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