

# History of Polytechnic University of Tirana (PUT)



PUT was founded under the name of Polytechnic Institute



State University of Tirana was founded and Polytechnic Institute was introduced as its instance



PUT was separated from State University of Tirana PUT obtained the independent status



Faculty of Electrical Engineering instance of PUT, was divided into two new faculties:

Faculty of Electrical Engineering FEE Faculty of Information Technology FIT

### **PUT Structure**



Polytechnic University of Tirana (PUT)

Mechan<mark>ical</mark> Engineering (FME)

Geology & Mining (FGM)

Civil Engineering (FCE) Applied Sciences (FAS)

Electrical Engineering (FEE)

Information Technology (FIT)

## **FIT Structure**



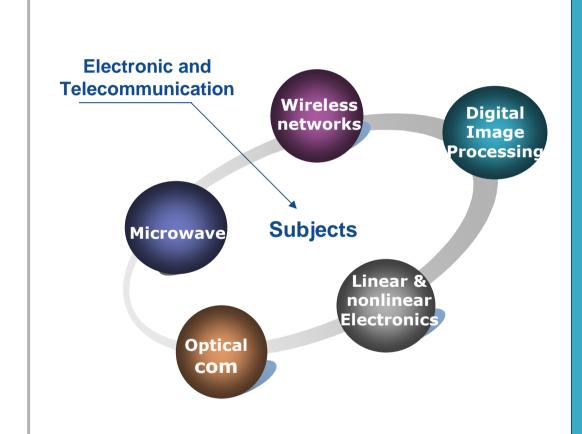
FIT

Research Center in Information Technology

Electronic and Telecommunication Department

Department of Informatics Engineering

## Subjects and research on and Telecommunication



## The research work is focused on several areas:

- ☐ Wave propagation and Field Radiation (Vodafone sites test)
- Optical Communication
- ☐ Software design for digital image processing
- ☐ Analyze and Design of Network Architecture GSM,

**UMTS** 

- □ Network simulation with NS2
- ☐ Programmable Electronic Systems

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# Research Detailed Information To Electronic and Telecommunication

#### Bexhet Kamo (researcher)

Realization of the power system for ground-air communication centre of ANTA.

Combination of central server with real time monitoring-reason for high security functioning.

#### □ Olimpion Shurdi (researcher)

Multimedia Communication in next generation network.

Optimization methods in Wireless Technology.

#### ■ Vladimir Kolici (researcher)

Network Protocols. Pear to pear communication

# Research Detailed Information To Electronic and Telecommunication

#### ■ Indrit Enesi (researcher)

Fast Stereo Matching Using Rectification and Correlation Techniques

#### Ezmerina Kotobelli (researcher)

The electromagnetic propagation of the antennas for Wi-Fi systems implementation and Access Point Wi-Fi/ UMTS.

#### □ Renalda Kushe (researcher)

Localization and Mapping for Mobile Robot navigation. Extended Kalman Filter. Particle Filtering approach. Monte Carlo Localization.

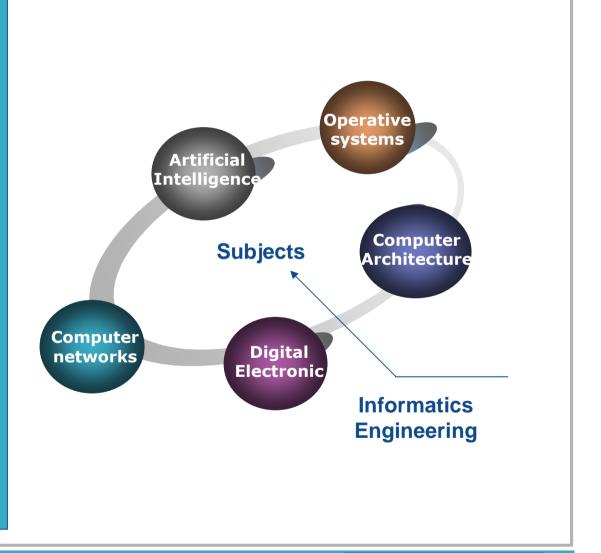
## Subjects and research on Informatics Engineering



### The research work is focused on several areas:

- Numeric System Design such as Microprocessor, using FPGA and XILINX Architecture Integrated WEB Applications in heterogenic Hardware and Software Platforms Design
- ☐ Computer Networks LAN,
- WAN, MAN, Wireless and QoS
- Object Oriented
- Programming Languages, Java
- ☐ Computer Architecture,
- especially GRID Architecture
- ☐ Operative Systems UNIX,
- LINUX
- ☐ Data Bases SQL, ORACLE
- ☐ Artificial Intelligence, Neural

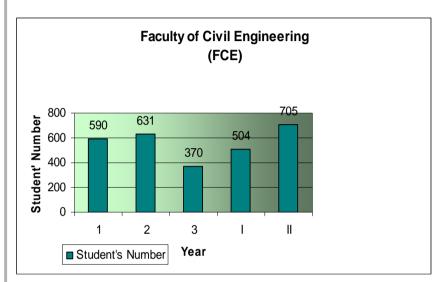
**Networks** 

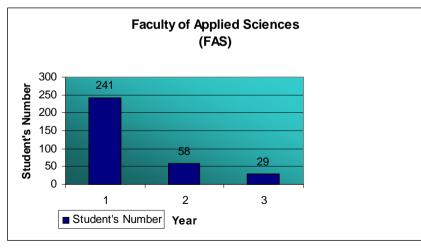


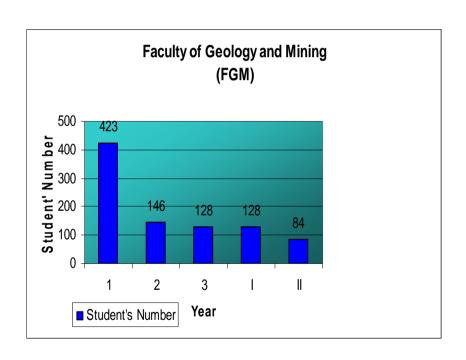
## Research Detailed Informations Informatics Engineering

- Igli Tafaj (researcher)
  - QOS Routing. Algorithmic approach
- Dorian Minarolli (researcher)
  - Calculation of Partial Fluxes of Power with Combined Graph's Methods on Grid Computing Platform.
- Fisnik Kraja (researcher)
  - Implementation of Cryptographic algorithms on reconfigurable FPGA systems. Case study: 3DES Algorithm.
- Mihal Brumbulli (researcher)
  - SimJ: A Simple Programming Language built on the Polyglot Framework

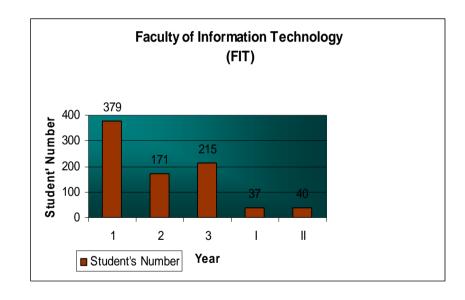
### Student's Number in PUT

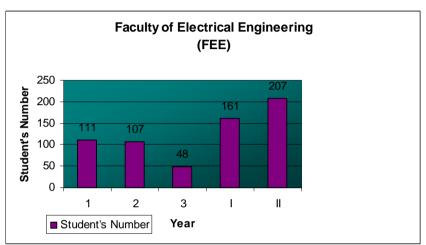


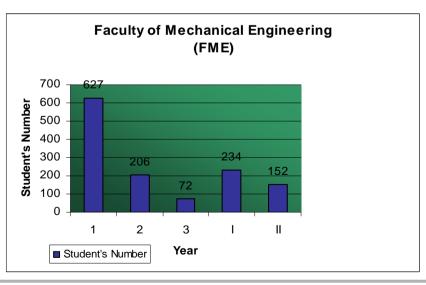




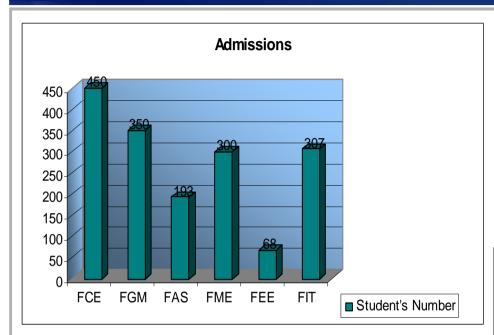
### Student's Number in Pl

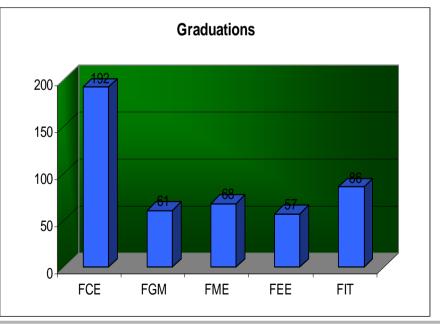






## Admissions and Graduations





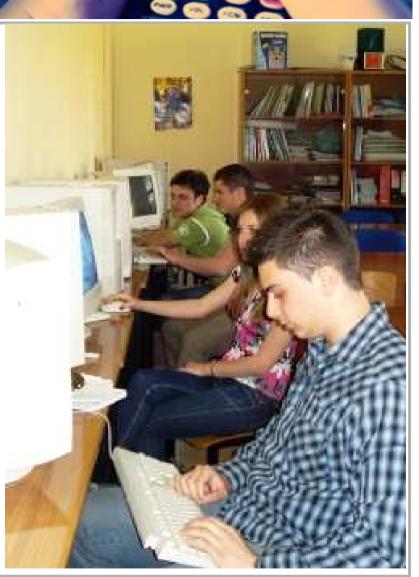
## Studies Structure accordin Bologna Process



## **Engineering Degrees ar Evaluation type**

- ☐ First level degree in Electronics, Telecommunication or Informatics Engineering (Bachelor)
- ☐ Second Level Degree in Electronics, Telecommunication or Informatics Engineering (Master)
- Doctorate

- ☐ The mark is the evaluation type for the quality of studies in a specific subject.
- ☐ The credit (ECTS-European Credit Transfer System) evaluates the quantity of studies for a student



## Laboratories for student (Not Research)



- ☐ Low and High Frequency Filters. PSPICE Simulations
- ☐ Digital Image Processing with MatLab
- ☐ Numerical
  Electronic simulation
  (logic ports circuits)
- ☐ Network Simulation with NS2

### Students orientation to job

- ☐ Many of the students elaborate their Final Project in the companies
- ☐ Many of these companies end up as steady jobs for students
- ☐ Several companies come the last year of studies to recruit students in all our engineering degrees.
- ☐ We must mention the mobile companies such as Vodafone, AMC and currently the third operator Eagle Mobile



### The Necessity for a Data Base



- A Manner for Student's Data Management
  - It facilitates the Faculty Secretariat work
  - It minimizes human faults
  - The student can access personal data utilizing a password (the student can access only <u>not editable</u> <u>data</u>)
  - Gain in time; finding the appropriate information
- A Manner for Student's Data Management
  - Abroad Companies can easily get general information about its future employee

## The discussions about the Database

- □ Several meetings were organized with the Council of departments, practically heads of departments. Principally, they agreed for the need to promote the mobility of new experts in Information Engineering
- ☐ The meetings with the head of Didactic Directorate, in the Polytechnic University, for promoting the website for the database
- □ Important contacts were with expert engineers of the electronic field, dealing with the needs for new experts in information technology in Albania. They were also invited during the meetings in the faculty. It is agreed that they may provide practical assistance in the new curricula, up to 10 ECTS
- □ Additional meeting with the representatives of Valona University

## Data Base Structure Analyze

- Students who started the studies on the academic year 2002-2003; until 2006-2007.
  - Information about the position in the companies
  - Results during the studies, the diploma thesis and the vote of the diploma
  - Personal information such as telephone number, address etc.
  - The qualification
- Students who started the studies on the academic year 2007-2008.
  - Information about the high school, the votes of the state exams
  - Personal information such as telephone number, address etc.

## Project progress during January-April 2008



### **☐** January 2008

The data collection related to old system of 5-year curricula, i.e. for the graduated persons that have started the studies in the academic years: 1999-2000, 2000-01 and 2001-2002 (the latest courses of the old system).

#### The records contains:

- 1. Information about the middle school: the name of the school, the district, etc.
- 2. Results during the studies in the university: the mean votes, in each academic year and the graduation vote for the whole study, title of Diploma Theses.
- 3. Personal information: such as telephone number, address, photo, etc.
- 4. Actual job position.

## Project progress during January-April 2008



#### ☐ February 2008

Extension of the database with additional information, such as Title of the Diploma thesis, the vote of the diploma thesis, etc. This information will be done for all the students, in the new curricula and for the students in the old system.

#### **☐** March 2008

A special form with the required questions will be delivered to all graduated engineers, who have started to work at the IT sector in Albania, from the year 2004. Getting of contacts with the graduated engineers in the sector of IT, to complete the data base with the information about the actual position, the qualification that they have done in their companies, etc.

Extension of the database with additional information, such as the personal photos for the recorders; the photos will be collected and scanned.

## Project progress during January-April 2008



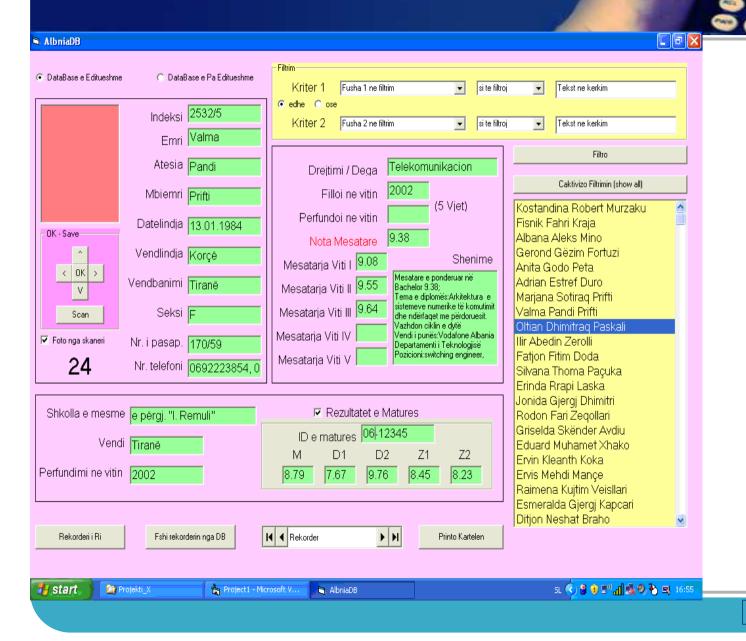
#### **□** April 2008

The set up of a Guide how to use the database; the program of the database will offer a quick searching, regarding different criteria.

The implementation of the Database in Electronic Engineering and Information Engineering; establish a Center beside the PUT, to promote the professional of the emigrants, to promote the mobility and the insertion in the working places of the young experts in Information Technology in the Adriatic Area.

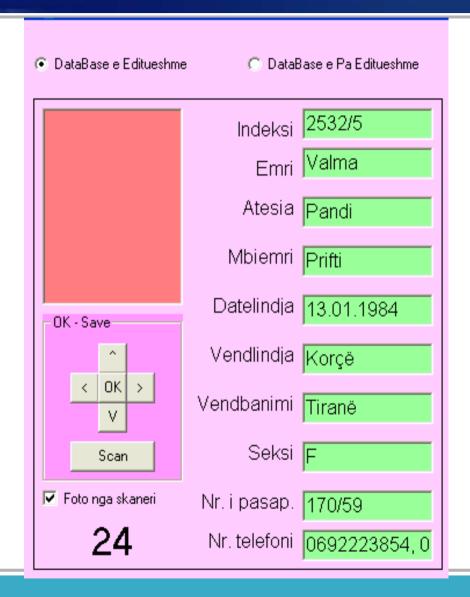
Organize a workshop aiming to inform the interested persons and institutions in Albania about the Database in Electronic Engineering and Information Engineering, and about the respective Center beside Polytechnic University of Tirana.

### AlbaniaDB.mdb Presentation



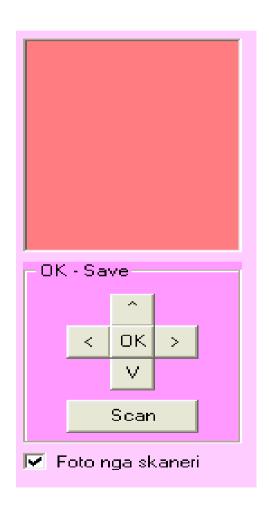
This program operates on AlbanaDB.mdb Data Base, designed with Microsoft Access 2003





- In this section, we can insert personal data, including the student's photo (optional).
- The number in the left bottom, indicate the ID of respective recorder. (in this case the ID is "24")
- If we want the data to be not editable, we must activate the option "DataBase e Pa Editueshme"





- The "Scan" button, shows into the red window, the student's photo, which must have been preliminarily positioned in the scanner.
- The buttons around the "OK" button, allow the user to position the face, in the center of the figure.
- The "OK" button, insert the photo in the Data Base.





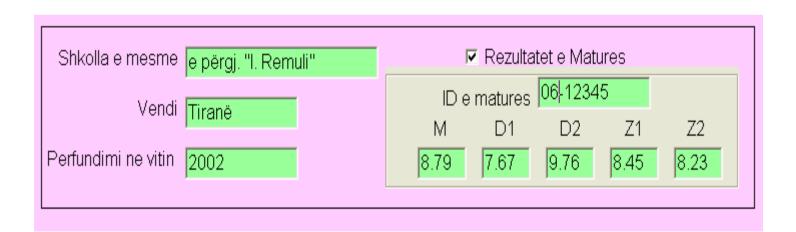
In this section, are introduced the Faculty data.

- the department (Telekomunikacion)
- the started year (2002)
- the average vote (9.38)
- the average votes for the first three years
- Notes



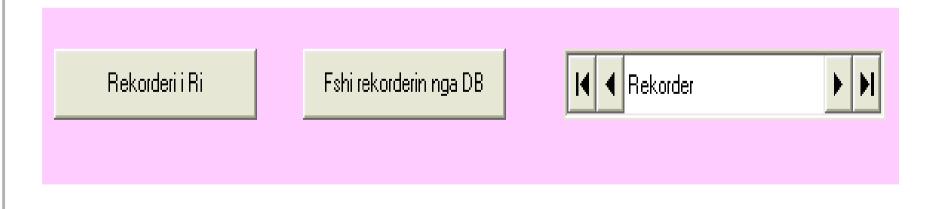
## In this section are introduced the data for the high school

- the high school ID
- the votes of the state exams
- the high school name

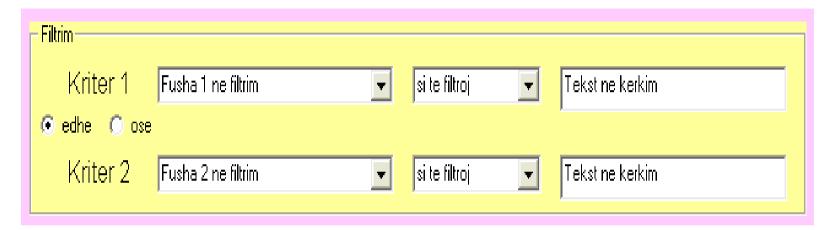




- "Rekorder i Ri" button, is used to create a new recorder in the Data Base.
- "Fshi rekorderin nga DB" button is used to delete the selected recorder.
- The buttons of this section, allow the user to cross from one recorder to another.







In this section, we can make different queries, combining up to two criteria, using AND and OR logic. (designed for future use)





- "Filtro" button displays in the yellow window, only the names, which fulfil the filtration criteria
- "Caktivizo Filtrimin" button displays in the yellow window, all the names in the Data Base
- AlbaniaDB Data Base, is converted in the Excel format (AlbaniaDB.XLS). Excel users can utilize the Data Base information without accessing the above program.





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