

## Scholarships and Internships for Students

- 📖 Katholieke Universiteit Leuven, Belgium
- 📖 Carlton University of Ottawa, Canada
- 📖 University of Ottawa, Canada
- 📖 York University Toronto, Canada
- 📖 University of Exeter, England
- 📖 L'Institut Polytechnique du Grenoble, France
- 📖 Université D'Aix Marseille, France
- 📖 Université de Paris, France
- 📖 Ecole Nationale Supérieure des  
Telecommunications de Bretagne, France
- 📖 Université de Nice "Sophia Antipolis", France
- 📖 Fachhochschule Rosenheim Germany
- 📖 Vrije Universiteit Amsterdam, Holland
- 📖 Dublin City University, Ireland
- 📖 ETH Zurich, Switzerland
- 📖 EPF Lausanne, Switzerland
- 📖 Universitatea Tehnică Budapesta, Ungaria

## Partnerships with High Profile Companies

**NOKIA**



Elektrobit



A CANON COMPANY



### Address

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Politehnica University of Timisoara  
Faculty of Automation and Computing



## Study Program

# Computers

### Graduation Domain

Computer and Information Technology

### Specialization Area

Computer engineering and software engineering

### Language

Romanian and English



Programming your future, since 1966.

## Tradition in a Nutshell

- 1963 First course in Digital Computers and Programming
- 1964 First group of students in "Electronic Computers"
- 1964 Creation of the "Digital Computers" Team
- 1965 Establishment of the "Electronics and Computers" Department
- 1966 Creation of the first study program "Electronic Computers" in Romania within the Faculty of Electrical Engineering, The Polytechnic Institute of Timisoara
- 1966 First engineer graduates in "Electronic Computers"
- 1990 Establishment of the Faculty of Automation and Computers
- 1996 "Digital Computers" team becomes the "Computers Department"
- 2008 Three Master programs in English language
- 2012 "Computers" bachelor program in English language

## Opportunities

- ⇒ Highly qualified academic staff
- ⇒ Modern study environment
- ⇒ Last generation infrastructure
- ⇒ 25 laboratories, over 750 computer systems and specialized equipment
- ⇒ Accommodation facilities for students in Campus
- ⇒ Scholarships
- ⇒ Ever increasing demand of jobs in Computers and Information Technology

## Knowledge, Skills and Abilities

1. Understanding of basic knowledge in science and engineering and its application in computers and information technology
2. Wide range knowledge in computers and information technology, know-how of various application fields, and furthering of at least one specialization
3. Identification, formulation and problem-solving in various engineering domains by means of specific methods and strategies
4. Usage, configuration and management of computer systems and application programs
5. Design, implementation and testing of equipment, computer systems and software, in a systematic manner with appropriate development tools
6. Experimenting and evaluation of adequate solutions function of various performance and economic requirements
7. Knowledge of the economic, ethical, legal and social professional environment
8. Work style combining individual and team abilities, proper communication skills, interdisciplinary co-operation and lifelong professional development

## Curriculum Area

- ☞ Computer Programming
- ☞ Logics and Discrete Structures
- ☞ Computer Architecture
- ☞ Data Structures and Algorithms
- ☞ Circuits and Digital Signals
- ☞ Algorithm Design and Analysis
- ☞ Fundamentals of Software Engineering
- ☞ Embedded Systems
- ☞ Computer Networks
- ☞ Organization of Computer Systems
- ☞ Operating Systems
- ☞ Digital Microsystem Design
- ☞ Digital Signal Processing
- ☞ Web Programming
- ☞ Fundamentals Artificial Intelligence
- ☞ Databases
- ☞ Microprocessor-Based Systems
- ☞ Software Project Management
- ☞ Computer Engineering
- ☞ Digital Telecommunications
- ☞ Formal Languages and Compilation Techniques
- ☞ Software System Design and Architecture
- ☞ Multimedia Systems

## Possibilities for Further Studies in Computing

### 📖 Master Programs (2 years)

- 🔗 Master of Computer Engineering (MCE)
- 🔗 Master of Software Engineering (MSE)
- 🔗 Master of Information Technology (MIT)

### 📖 Doctoral Programs

- 🔗 PhD supervisors:
  - ☞ Prof. em. dr. ing. Vladimir CREȚU
  - ☞ Prof. em. dr. ing. Mircea VLĂDUȚIU
  - ☞ Prof. dr. ing. Horia CIOCĂRLIE
  - ☞ Prof. dr. ing. Ștefan HOLBAN
  - ☞ Prof. dr. ing. Ionel JIAN
  - ☞ Prof. dr. habil. ing. Marius MARCU
  - ☞ Prof. dr. habil. ing. Radu MARINESCU
  - ☞ Prof. dr. habil. ing. Mihai V. MICEA
  - ☞ Prof. dr. ing. Mircea POPA
  - ☞ Prof. dr. ing. Mircea STRATULAT

## Research in cutting-edge domains

- 📖 **Advanced Architectures and Computer Systems**  
Testing and reliability of computer systems, flaw tolerant structures, nonconventional and bioinspired architectures, reconfigurable applications and platforms.
- 📖 **Software Engineering**  
Evolutive, integrated development environments for software systems analysis.
- 📖 **Real-Time Systems, Robotics and Digital Signal Processing**  
Real-time and embedded systems, robotic systems, applications for digital processing of signals and images, and multimedia systems.
- 📖 **Databases and Artificial Intelligence**  
Distributed databases, artificial intelligence, neural networks and fuzzy systems, cognitive systems.
- 📖 **Mobile Computing, Sensor Networks and Embedded Systems**  
Mobile systems and applications, intelligent sensor networks and embedded control systems.



## Strengths

- ☑ **Our graduates**, highly qualified professionals in **computer and software engineering**, with thorough knowledge in **hardware**, as well as in **software**.
- ☑ **Graduates of the "Computers" program** have **knowledge, skills and abilities** to design, develop, implement and maintain computer systems and equipment, specialized equipment based on microprocessors and microcontrollers, basic software and applications in various fields.
- ☑ **Our graduates** are **on high demand on the computing and IT market**, both in România and in most developed industrial countries in the world.