

## Applied Physics Department Specializing in Instrumentation or Physicochemical controls and Materials

An intensive 2 -year course leading to a National University Institute of Technology Diploma  
DUT : Diplôme Universitaire de Technologie : 120 ECTS credits

### **OVERALL PRESENTATION OF THE COURSE:**

Multidisciplinary course that gives you the opportunity to become a polyvalent technician specializing in:

- Instrumentation
- Measurement and control in physics, chemistry and materials.

### **CAREER PROSPECTS AND RELATED FIELDS:**

- Engineering assistant in labs (medical and biomedical industries, hospitals etc.)
- Research and Development (environment, phone industry etc.)
- Analyses (measurements and tests, control, instrumentation, metrology etc.)
- Research departments (car industry, aeronautics, chemistry etc.)

### **A GENERAL AND PROFESSIONAL COURSE BASED ON EXPERIMENTAL PRACTICE:**

- Wide range of technical and scientific fields: physics, chemistry, materials, practical applications, mathematics, industrial computing, metrology etc.
- Communication skills: French and English courses, management and internal and external business relationship management.
- Professional project
- Tutored project

#### **EXAMPLES OF TUTORED PROJECTS:**

- ✓ Noise level assessment on a wind farm
  - ✓ Digital photography
  - ✓ Automation of thermal measurements for industrial computing workshop
  - ✓ Identification of paint components
- Minimum 10-week internship in a company and research project

#### **EXAMPLES OF INTERNSHIPS:**

- ✓ Measurements of environmental noise for emergency vehicles
- ✓ Development and verification of the safety standards of a blast heater ( CALOR)
- ✓ Seal testing of the cryogenic line powering the particle accelerator in the CERN (AIR LIQUIDE)
- ✓ Development of a method to measure the level of cyanide in blood ( Police Forensic Laboratory in Lyon)
- ✓ Measuring the electric conductivity of cross-linking charged adhesives.
- ✓ Setting up a technical process of reception and verification of sensors after restoration, maintenance or calibration

### **AFTER YOUR DIPLOMA:**

- 40% join engineering schools, or apply to university (vocational or non vocational degree) as well as business schools etc.
- 35 % do a sandwich course degree in the Applied Physics department,  
2 possibilities are offered to you: "acoustics and vibration" or "vacuum processes & materials engineering"

## **HOW TO CONTACT US**

**MPH** ☎ : 33 (0)4 77 46 34 42      ✉ : [iutmph@univ-st-etienne.fr](mailto:iutmph@univ-st-etienne.fr)  
Web site: <http://www.iut.univ-st-etienne.fr>

## **REGISTRATION PROCEDURE**

*Deadlines for submitting applications for ERASMUS students:*

**1<sup>st</sup> semester and full year: May 20th**  
**2<sup>nd</sup> semester: October 20th**

## **ADMISSION REQUIREMENTS**

Assessment of academic results over the previous two years taken into account, for people who have the following diploma:

- French baccalauréat equivalent
  - ✓ Scientific Baccalauréat
  - ✓ Technological Baccalauréat in science and engineering (electrical and electronic engineering, mechanics)
  - ✓ Baccalauréat in science and lab techniques (physics and chemistry)
- Interview with Head of Department may be required

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