

# INFORMATICS

Practical activities such as: *Computer programming and programming languages, Applied Informatics, Technical Drawing and Infographics* are carried out in this laboratory.



## The general objective

Developing skills for programming and use of PCs (knowledge, capabilities, and high competence) so as to have a correct interpretation of concepts and processes in the Engineering Sciences.

## Specific objectives

Students will be able to:

- ✓ operate with algorithms and algorithmic languages and programming, after getting the theoretical knowledge in programming
- ✓ analyze and tackle engineering issues, as a result of their training in getting an algorithmic thinking
- ✓ process the information by using different methods
- ✓ make the difference between types of programming languages and software application, and to see their advantages and disadvantages
- ✓ get the right view of the syntax and semantics of the medium and high-level programming languages
- ✓ solve low and medium –complexity problems using the calculation technique ( selecting the adequate instruments for work)



## Material basis

- ❖ 20 individual working posts, having the latest generation computers (Intel Dual Core 3,1GHz, 2GB RAM processor , 500GB Hard Disk
- ❖ Licensed software (Windows 7 Ultimate, Microsoft Office 2007, Matlab 7, Rap tor, Dev-C++)
- ❖ Mobile video projector and display
- ❖ Internet connection



### **List of laboratory works carried out in this laboratory**

- ❖ Analysis of engineering issues and development of algorithms for getting an automatic solution to them
- ❖ Developing standard algorithms in diverse programming languages
- ❖ 2D and 3D projection and modeling
- ❖ Simulation of processes in different domains

