National Technical University «Kharkov Polytechnic Institute»

Faculty Computer Information Technologies
Department of Computer Science and Programming

Department was founded on September 1, in 1961.

The organizer and the first head of the department was Vasiliev Viktor (1961-1974 gg.).

Since September 2014 the department is headed by Doctor of Technical Sciences, Senior Researcher Semenov Serhii.

TEACHERS of DEPARTMENT

Our Department is:

1. More than 40 highly qualified teachers with extensive work experience;
2. Using of new and modern teaching methods;
3. Good provided with modern computer technology.

The Department provides training in the specialty **"Computer engineering"** at all levels of higher education:

✓ Bachelor
✓ Master

The main consumers and employers of graduates of the Department "CSP" are **firms that develop hardware and software**, including:

"EPAM systems",
"NIX Solutions Ltd",
"INSART", etc.

Specialization Of Department :

- Computer systems and networks;
- System programming;
- Specialized computer systems.
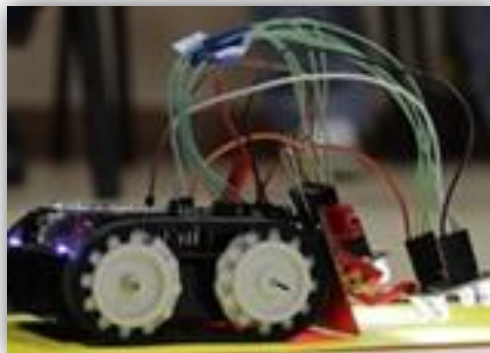

In the teaching process, the student learns :

✓ **Operating systems :** *Windows, Unix, Linux;*

✓ **Languages and programming environments :** *C#, C++, Visual C++, Microsoft Visual Studio, Builder, Delphi, PHP, Java, HTML, WPF, JavaScript, Python, Assembly;*

✓ **DBMS:** *Oracle, MS SQL, MySQL, Access*;

✓ **CAD :** *OrCad, AutoCAD, Компас, PCAD, SolidWorks;*

✓ **Graphics packages :** *Photoshop, CorelDraw, Inkscape, 3D Studio MAX, Morph, GIF Animator;*

✓ **Mathematical packa**ges **:** *MatLAB, Statgraphics, Statistica, Mathematica, SPSS, Derive*

EMPLOYMENT:

- information processing centers;
- state, cooperative and small enterprises,
- banking institutions,
- companies and firms that use computer technology, modern information technology and means of communication;
- enterprises in the electronics and electrical industries, scientific research organizations;
- system programmers,
- leading programmers,
- 1C-programmer
- system analyst,
- system and network administrator
- web application developer
- Web designer,
- database administrator,
- developer of complex electronic devices as well as devices based on
- microcontrollers
- developer of information systems
- tester,
- specialist communication
- head of It departments and divisions of computer security ect.

The Department " Computer Science and Programming " developed many interesting projects:

1. *Mobile application development based on UNITY3D*
2. *The development of a stabilization system for compact cameras*
3. *Training simulator of UAV*
4. *The implementation of an open authorization Protocol OAuth 2.0.*
5. *A simulation model of the router*
6. *Development of a system of pattern recognition based on neural networ*
7. *Software development for checking students ' works*
8. *The online knowledge test*
9. *Website development for the company AlterSchool*
10. *Development of a mobile system "the Family Doctor"*
11. *Multifunctional system based on industrial computer "Raspberry Pi"*
12. *Mobile application "Schedule of classes"*
13. *Load testing web servers*

✔ In 2016, the Department of "CSP" founded the first international scientific-practical conference on cyber security.

✔ Our students are participants and winners of Olympiads:

1. All-Ukrainian Olympiad on discipline "Systems of artificial intelligence";
2. Ukrainian student Olympiad on System programming.
3. Ukrainian Olympiad "Programming mobile robots".

✔ In 19 may of 2016 the students of our faculty organized an unusual flash mob.

✔ Any students activity strongly supported of our Department.
Participation in the marathon from MTS.