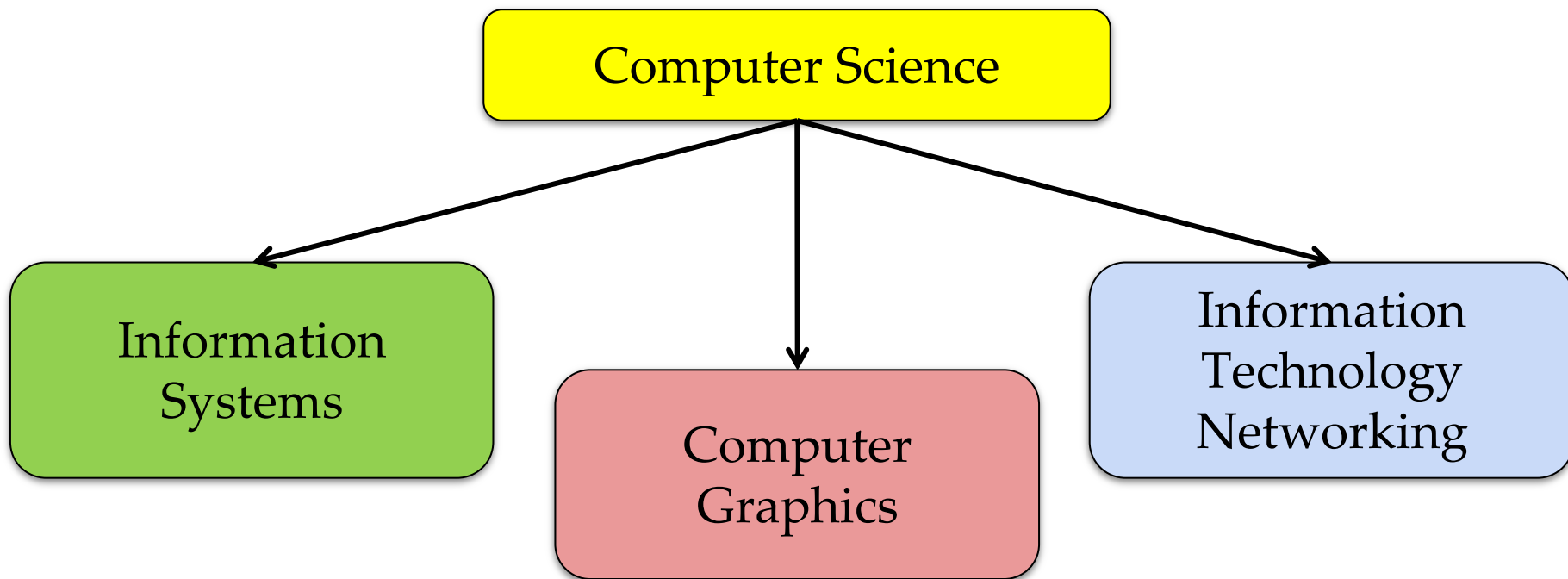




## Computer Science – 1<sup>st</sup> degree specializations



2<sup>nd</sup> degree??

# Information Systems

Designed for students interested in developing information systems, internet applications, databases.

Students acquire skills concerning development, implementation and testing various types of internet, mobile and desktop applications. Graduates are fully trained for effective work in IT-related jobs.

# Information Systems – courses

## Programming:

- Web Application Development
- Concurrent Programming
- Mobile applications
- Computer graphics
- Team project

## General topics:

- Methods of computation
- Intelligent systems
- Introduction to Software Engineering
- Information systems engineering
- Management Information Systems
- Modeling and analysis of business processes

# Information Systems – courses

Selectable specialist courses, among others:

- User interface design
- Computer Networks Administration
- Introduction to human-computer interaction
- Modeling and visualization of physical processes
- Computer systems security
- Introduction to geoinformatics systems
- Application of artificial neural networks in computer science

# Information Systems – laboratories



# Computer Graphics



Designed for students interested in programming of computer graphics, creating computer games and visualizations, processing data with GPU and related topics.

In addition to courses strictly related to the specialization, includes general IT-related courses.

# Computer Graphics – courses

## Programming:

- Basics of the computer graphics
- Algorithms for computer graphics
- Computer graphics programming
- Web Application Development
- Concurrent Programming
- Mobile applications
- Team project

## General topics:

- Software Engineering
- Methods of computation
- Intelligent systems
- Digital signal processing
- Architecture of graphics processor units
- Speech and Image Recognition Systems

# Computer Graphics – courses

Selectable specialist courses, among others:

- A Basis of Composition
- Multimedia Systems
- User interface design
- Computer Networks Administration
- Introduction to human-computer interaction
- Physics in animation and computer graphics
- Introduction to geoinformatics systems
- Application of artificial neural networks in computer science



# CENWIS

## Virtual Reality Laboratory



Laboratory equipped with state-of-the-art hardware, such as:

- Multi-directional treadmills
- VR goggles: *HTC VIVE PRO, Oculus Quest 2*
- AR glasses: *Microsoft HoloLens2, Epson Moverio BT-300*

May be used for diploma theses, team projects, etc.