



SGGUGS

**"Zdravko Cvetkovski"**

**Vocational Education**



## **"Integrating E-Learning and Open Educational Resources into Classroom" – iOERc**

Decembar, 2015



# СГГУ на Град Скопје “Здравко Цветковски”

- was established 1944
- first Macedonian-technical secondary school
- 1965 the school moved in a new building
- 10 000m<sup>2</sup> , 45 classrooms and offices, workshops, laboratories, offices, meeting rooms, two gymnasiums, library, reading rooms, equipped with new technical devices
- reorganization and transformation in 2002/03 , additionally high school
- 4th degree: general education, architectural technicians,
- construction technicians and surveying
- technicians, designer of interior architecture
- 3rd degree: Installers for dry construction and builder-facade makers.
- further training and specialization of certain teaching programs in the field of construction and architecture.
- The classes and the instructions are held on Macedonian and Albanian.
- post-secondary, specialized fields and professions:
  - ✓ , carpenter, painter
  - ✓ armature constructor
  - ✓ concrete and asphalt constructor
  - ✓ constructing and ceramics specialist
  - ✓ hydro- isolation and processing organizer
  - ✓ technician for industrial building
  - ✓ constructing calculator
  - ✓ service technician for glass elements and ceilings
- At the moment run projects like:
  - ✓ Knauf Junior Trophy
  - ✓ Twinning project
  - ✓ Education for peace with German NGOs
  - ✓ Project for multietnichal integration in the education with USAID
  - ✓ multycultural workshops, co-operation with parents
  - ✓ Project for integrated education "We are learning together"



# Jasmina Aatanasova Simjanoska

- Expert teacher for architectural technicians and technical interior architecture designers.
- Architect – designer, revisionist, supervisor, energy efficiency controller.
- Creative and innovative person with art and poetry affinities.
- Open minded, curious and ambitious person.
- Architecture International experience.
- Work experience in domestic and international companies.
- Expert teacher of 5 different specific subjects.
- Author of 4 specialized program me subjects for technical designers for interior architecture.
- Author of external test exams for 5 subjects and assessor of external exams for 12 specialized subjects of architectural technicians and technical designers for interior architecture.
- Project participant
- Participation in an inclusive teaching project.
- Participation in the project for introducing energy efficiency into education.
- Participation in a project for using IPA – educational funds.



# Our goals:

- To engage students in production processes related with building
- To train students to be able to work in building companies
- To engage students to work in design studio as a technicians
- To train students who will continue their education on compatible faculty



# How to achieve the goals?

- Training in the use of computer technology for Microsoft Office programs
- Training for the use of programs for computer designing
- Training for skills to search webs related to architecture, civil engineering, interior design and furniture, geodesy, etc.

# Graphic programs for computer designing



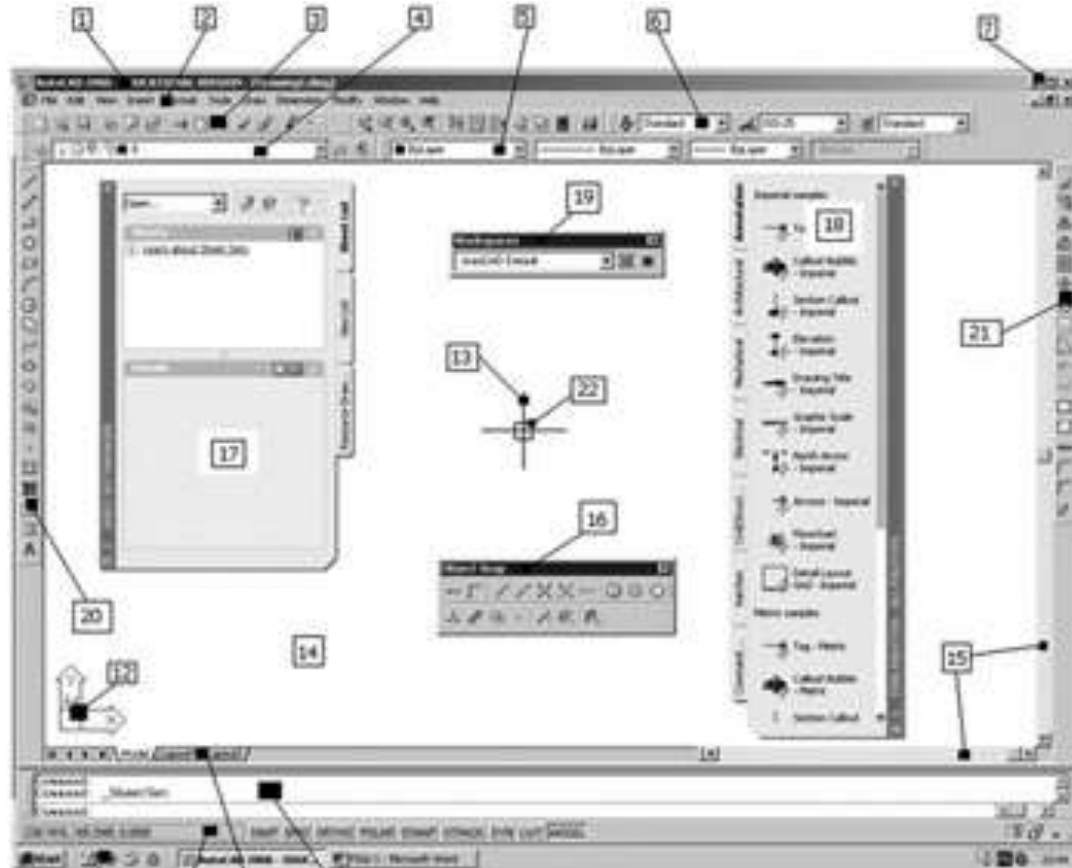
- Those programs are designed for architects, interior designers, construction technicians, geodesy technicians. For each of these vocations program has its own specifications, rarely used the same version



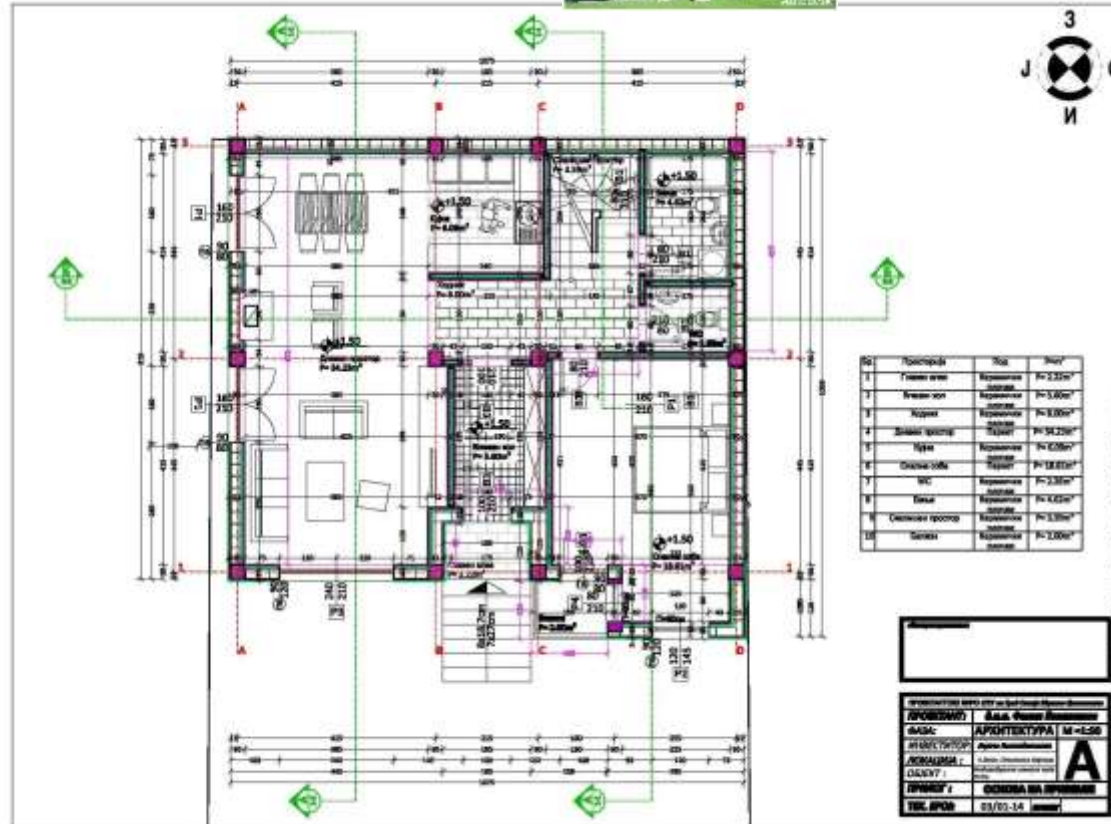
# Start learning

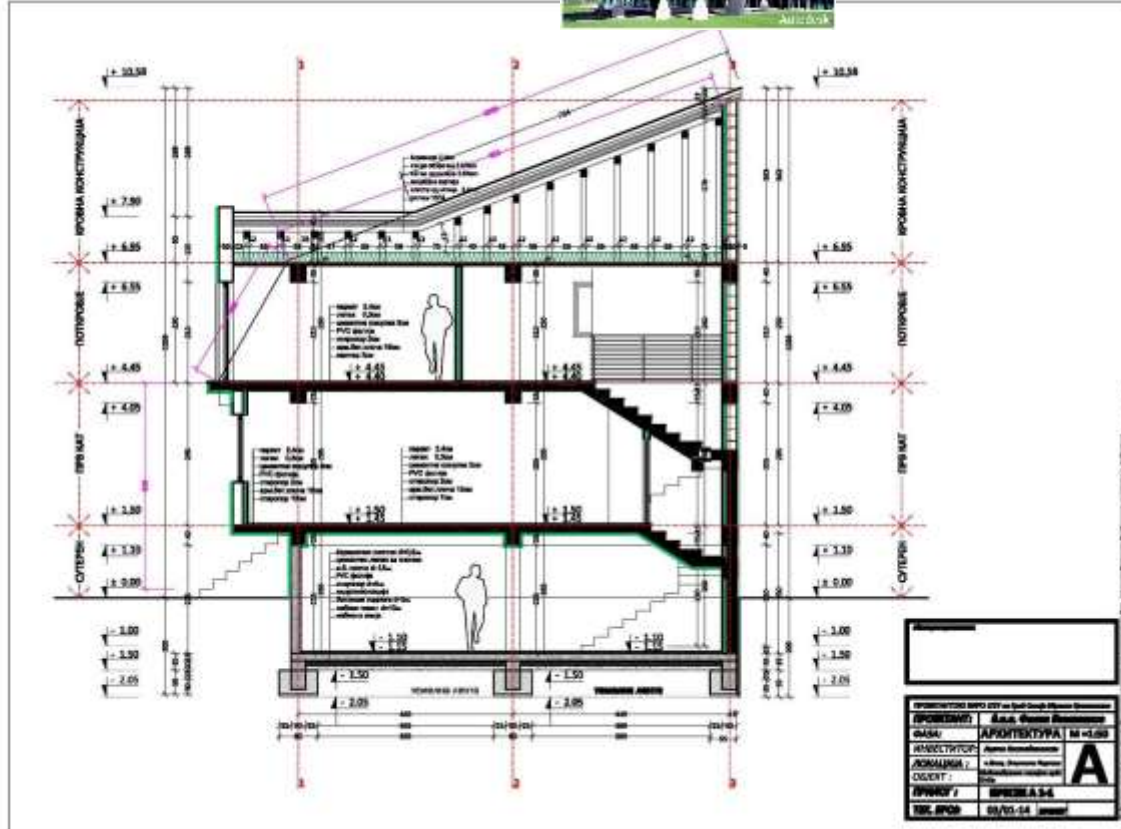
- Start from scratch...
- How to draw a point, line, polyline, circle, rectangle?
- How to combine basic commands to draw a useful drawing?
- How to modify the drawing?
- How to implement a text, dimension lines, picture into drawing?
- How to use templates?

# Drawing and modified tools



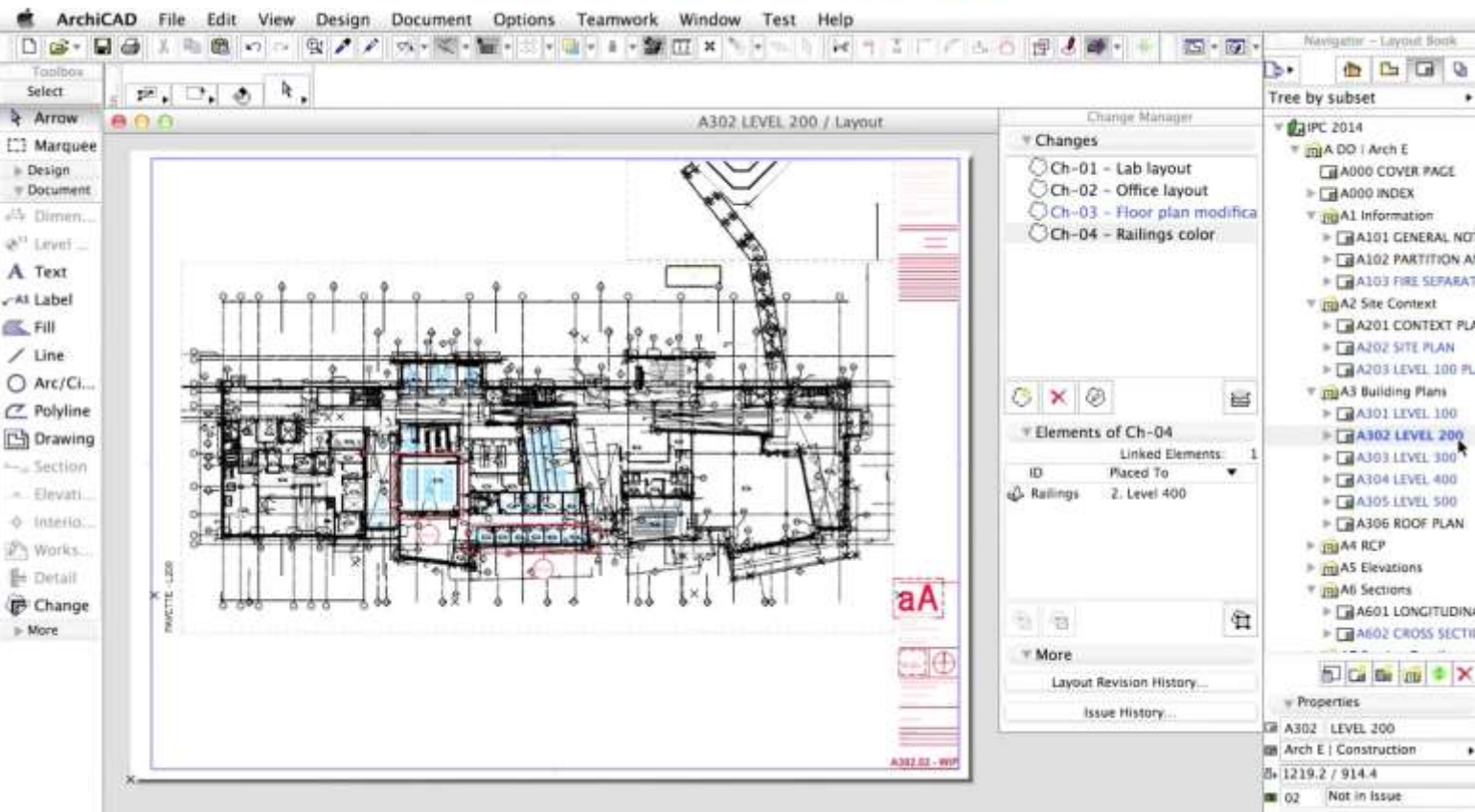
# Ground floor



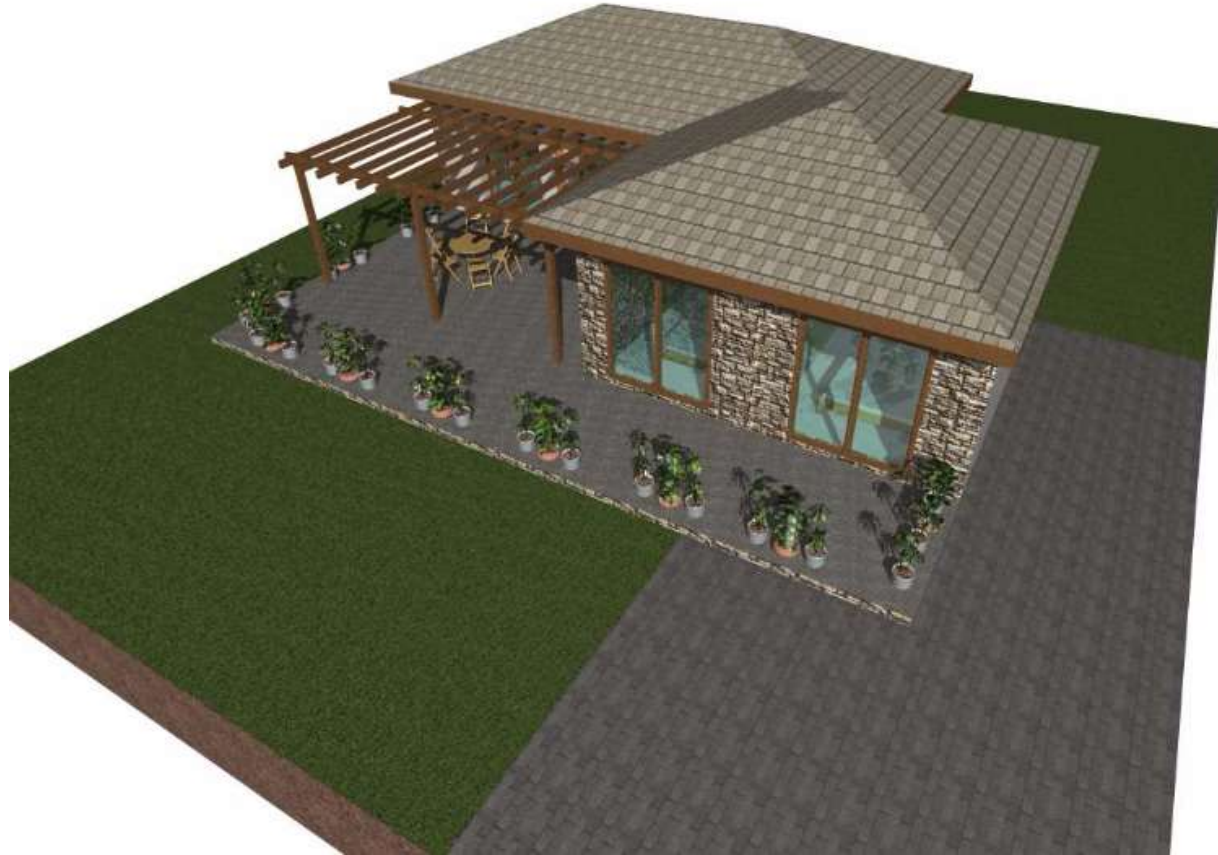




# GRAPHISOFT. ARCHICAD



# 3D designing



# 3D designing



# 3D designing

GRAPHISOFT  
**ARCHICAD**



# Interior design (Archi CAD)





# How to use ICT in teaching?

❖ My subjects are:

- building materials,
- building construction,
- Detail in architecture and interior,
- History of architecture and art to the XX century
- History of architecture and art of the XX and XXI century



# Materials for building

- New daily material innovations possess improved performances. The teachers and students have to follow and use the advantages of those new performances.
- New design construction innovations allow building and constructing diverse forms with almost endless heights.

# Cubic houses Rotterdam Netherlands



# The highest building in the world, Burj Khalifa, Dubai



# The biggest energy sustainable building, World Trade Center, Bahrain



# Researching for interior details:

- floors, ceilings, walls finishes, furniture design,
- attractive interiors revolution structures





History of art and  
architecture.

Is it possible every single  
person to visit all world  
masterpieces?

# Altemira, Spain (cave art)



# Stonehenge, Great Britain



# Kokino, Macedonia



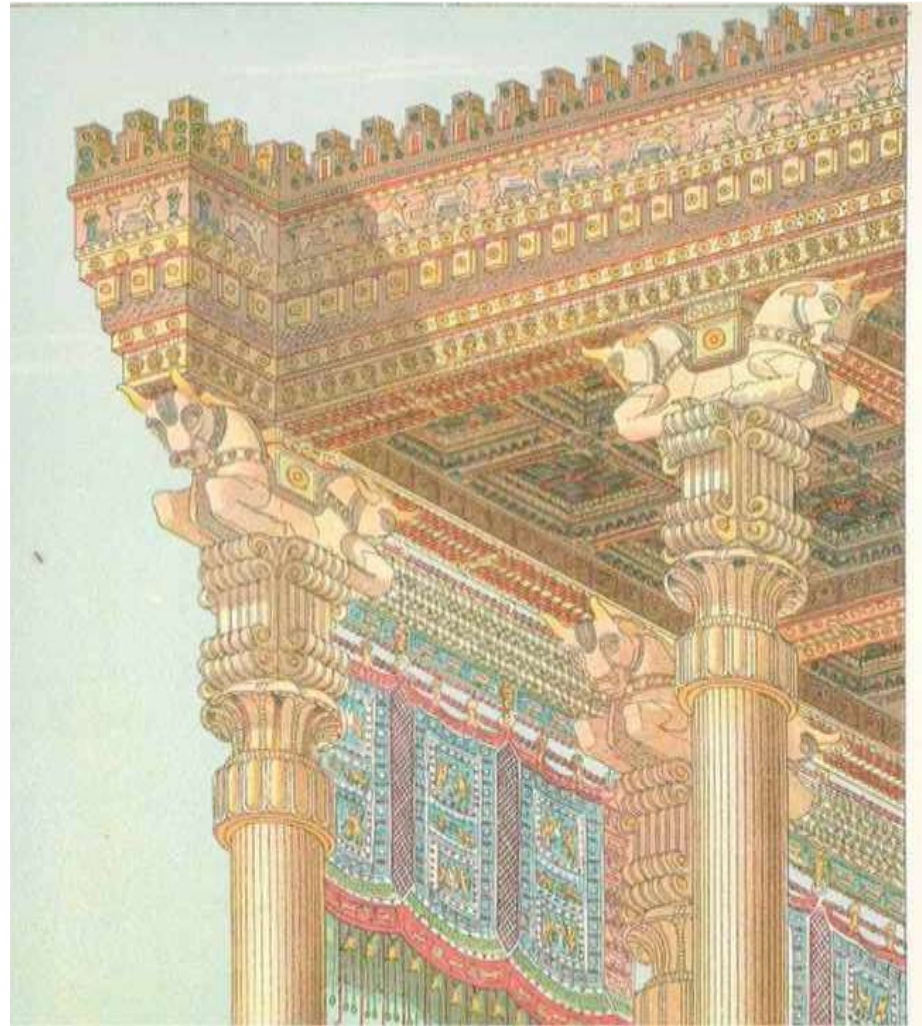
# Giza, Egypt



# Semiramida gardens, Mesopotamia



# Persian apadana



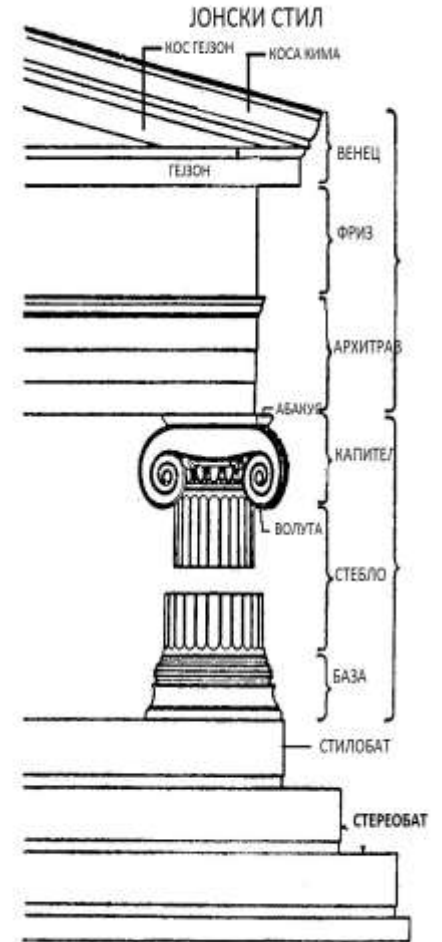
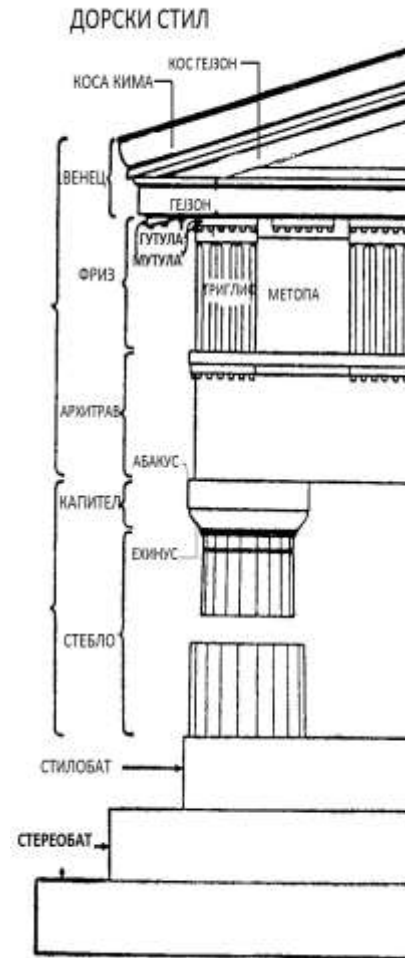
# Crete, king Minos palace in Knossos



# Mikena, Lion gate



# Hellenic column style



# Hellenic art (Disk thrower, Aphrodite from Milos, Apollyon from Belvedere)



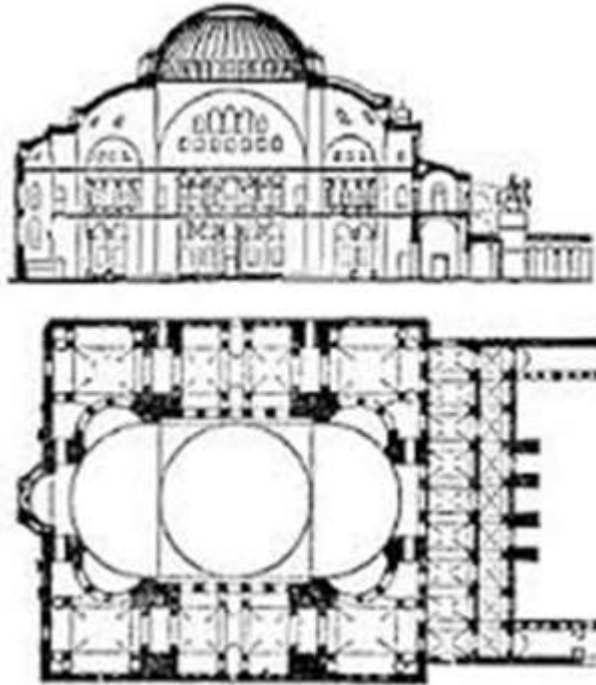
# Roma, Coliseum



# Early Christian period, catacombs



# Byzantium architecture, Aja Sofia



# Romanic architecture, Pisa, Italy



# Gothic interior, Notre Dame, Paris



# Renaissance art, Leonardo da Vinci



# Baroque, Saint Peter, Roma



# Art styles in XX century

- Neoclassicism
- Neoromantism
- Realism
- Impressionism
- Expressionism
- Pointillism
- Cubism
- Pop- art
- Op- art (optical art)
- Naive art



# New styles in architecture, XX & XXI century

- Jugend style
- Secesia
- Bauhaus
- Chicago style arch.
- International style (modern architecture)
- Postmodern style
- Interiors and decoration style
- Organic architecture
- Green architecture





# Conclusion:

The way to accomplish the education goals is ICT!