

**COURSE TITLE:****ENGINEERING GRAPHICS**

Institute / Division;

Institute of Applied Computer Science

Number of course hours:

45

Course duration:

2 semesters

ECTS credits

3

Course description:

Theoretical base of parametric curves and surfaces notation. Curves in CAD systems. Parametric polynomial curves. Segment of Hermit and Bezier curve. Uniform and non-uniform non-rational B-splines. Properties of base functions in B-splines. Notation of non-uniform rational B-splines: NURBS. The Coons surface. Parametric bi-cubic surfaces. Classes of continuity. Computer programs for creating vector 2D graphics: Autocad, Intercad, DWGEditor. Creating of document templates, basic commands, configuration. Essentials and methodology of creating 2D engineering drawings. First angle projection, views and intersections. Simplified drawings of screw joints, welds etc. Placing designations of tolerances and fittings. Creating of diagrams, schemes and charts.

Literature:

F. E. Giesecke and others, Technical Drawing, Pretience Hall, New York 2006

Course type:

lectures + projects

Assessment method:

Attendance, passing projects and test

Primary target group:

2<sup>nd</sup> year students of computer science

Lecturer:

Wojciech Czyżycki, PhD

Contact person:

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Deadline for application:

May 31