**Department:** Mathematics and Computer Sciences

**Division:** Computer Sciences **Level and Major:** Graduate

**Course Title:** Special Topics (Computational Geometry 2)

**Number of Credits:** 3

**Prerequisite:** Permission Group

**Lecturer:** 

## **Course Description:**

# **Course Goals and Objectives:**

# **Course Topics:**

- Incremental algorithms Insert: Insert ordering, find convex procedure (incremental procedure),
- Monotone polygons, find polygon star shapes,
- Visibility,
- Art gallery,
- Position of a point: Add-on method of insertion by beam sending, cutting Line: Insert incremental method, polygon cutting
- Vornoi Diagram
- Robotic basics

## **Reading Resources:**

#### **Evaluation:**