



## COURSE OUTLINE

**Course Code:** CSE 464

**Course Title:** Computational Geometry Sessional

**Level/Term:** 4/II

**Section:** A/B

**Academic Session:** 2016-17

**Course Teacher:**

Name:	Office/Room:	E-mail and Telephone:
Md. Ishaq-E-Rabban (IER)	CSE – 216	<a href="mailto:ieranikg@gmail.com">ieranikg@gmail.com</a>
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### Course Outline:

Laboratory works based on CSE 463.

### Learning Outcomes/Objectives:

After undergoing this course, students should be able to:

- Implement the algorithms in the course
- Verify the correctness and theoretical complexity of the algorithms in the course through empirical analysis
- Increase their coding skill for implementing sophisticated algorithms
- Develop their own algorithms for solving computational geometric problems
- Apply the problem solving and coding skill acquired in the course to solve real-world problems

### Assessment

Lab Evaluation (Online):	20%-30%
Home Assignment (Offline):	35%-50%
Attendance:	0-5%
Lab Quiz:	20%-30%

### Learning Resources:

- Computational Geometry in C, 2<sup>nd</sup> Edition, Joseph O'Rourke
- Computational Geometry: Algorithms and Applications, 3<sup>rd</sup> Edition, Mark de Berg, Otfried Cheong, Marc van Kreveld, Mark Overmars
- Planar Graph Drawing, Takao Nishizeki, Md. Saidur Rahman



d. Computational Geometry Lecture Notes, David M. Mount

e. Data Science Tutorials, <https://www.topcoder.com/community/data-science/data-science-tutorials/>

**Weekly schedule:**

Week	Topics	Teacher's Initial
Week 1,2,3	Introduction	IER, SAT
Week 4,5	Evaluation of Assignment-1	IER, SAT
Week 6,7	Evaluation on Assignment-2	IER, SAT
Week 8	No Class	None
Week 9,10	Evaluation of Assignment-3	IER, SAT
Week 11,12	Evaluation of Assignment-4	IER, SAT
Week 13	Quiz	IER, SAT

Prepared by:	
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Signature:	