

# Higher Layer Telecommunication Protocols – Elec 6861

## Fall 2018

### Standard project: Distance-Learning Application

#### 1. Introduction

The project consists of designing and implementing a distance learning application which offers its services to teachers and students. The design goals are described below, followed by the requirements on the project teams, and the teaching assistant contact.

#### 2. Design goals

##### 2.1. *Pre-distance learning session*

The proposed system should allow:

- a. The publication of the available courses along with the teachers who are teaching them, and the allocated time slots.
- b. The enrolment of the students for the courses they wish to take

##### 2.2. *Distance learning session*

The proposed system should allow:

- a. Notifications to teachers and students when classes start
- b. Chat room between the teacher and the students
- c. Audio conference between the teacher and the students
- d. Unidirectional video streaming between the teacher and the students
- e. Provision for students with special needs (e.g. students who do not understand the language in which the course is taught, students who understand only sign language)

#### 3. Requirements on the project teams

- Projects should be done in teams of 3 to 4 students.
- Each team should select and motivate the technologies used in the project.
- The expected output consists of:
  - A technical report (max: 10 pages).
  - A powerpoint presentation (5 minutes) to introduce the demo
  - A live demo

#### 4. Teaching assistant contact

Name: Abbas Soltanian

Email: [Abbas.Soltanian@gmail.com](mailto:Abbas.Soltanian@gmail.com)

Availability: by appointment (Time slots: Thursdays 15h00 – 17h00)