# Course plan

420-D08-SU
## Web programming
AEC Programming, Networks and Security (LEA.5F)
AEC Programming and Web Technologies (LEA.5G)
AEC Video Game Programming(LEA.CU)

## Competency

017D   Design and develop a hypermedia application within internal and global networks
Courses required to attain this competency: D08, W11

## General objectives

Acquire enough knowledge of the HTML language to enable a good understanding of the construction and management of a website and of its components. A text editor such as Brackets will be the tool used in the creation of HTML pages.

Learn to develop websites that are accessible and that respect the recommendations of W3C.

Learn to separate content (HTML) from presentation (CSS).

The course is structured in a way that aims to develop the autonomy of the student. This autonomy is necessary, for the job market involves an abundance of new web technologies. At the end of the course, the student will be in a position to:
- Create web pages with the help of a text editor
- Analyze and modify HTML code, whether generated or not

## Specific objectives

- Acquire a knowledge of web standards and accessibility
- Become acquainted with the DOM (Document Object Model)
- Learn the syntax of HTML and the concept of semantics
- Understand the structure of a website
- Learn to use CSS to format an HTML document
- Master the different methods of positioning using CSS

## Content outline

### Module 1 –Introduction

- Presentation and history of HTML
- Recommendations of the W3C, accessibility and respecting standards

### Module 2 –The foundations of HTML5

- Presentation
- Structure of the language, syntax
- Common tags, lists, forms, tables
- The new structural/semantic tags
- Validators
- Genealogy of an HTML document
- Syntax, and main differences in comparison with HTML5

### Module 3 – Cascading Style Sheets (CSS)

- Presentation of style sheets, syntax
- Linking style sheets to HTML documents
- CSS3 selectors
- Colors, units, fonts, formatting, and decoration of text
- Box model, layout of elements
- Other important concepts (inheritance, weight, etc.)

### Module 4 – CSS Animations

- Basic animations
- Design and prototype

### Module5–Other considerations regarding websites

- Domain names and the DNS
- FTP
- Working in teams
- Version control systems (optional)
- Statistics (optional)

## Formative evaluation

Practical exercises
Laboratories

## Summative evaluation

| Exercises | 10% |
|---|---|
| Quiz 1 | 15% |
| Quiz 2 | 15% |
| Final exam | 30% |
| Practical project | 30% |

*Material*

- Course notes

### *Reference works*

- CSS avancée - Vers HTML5 et CSS3 (Eyrolles, 2011)
- HTML5 pour les Web Designers (Eyrolles, 2010)
- Maitrise des CSS – 2$^e$édition (Pearson, 2010)
- CSS3 - Pratique du design Web – 3$^e$édition (Eyrolles). https://www.css3-pratique.fr/

*Reference websites*

- *learning.mozilla.org/en-us/activities/make-your-first-webpage/*
- *http://htmldog.com/*
- *https://css-tricks.com/*
- *https://html5demos.com/*
- *https://www.w3.org/*
- *https://www.w3.org/TR/mobile-bp/*
- *https://www.w3schools.com/*
- *https://developers.google.com/web/fundamentals/*
- *https://developer.mozilla.org/en-US/docs/Web/*

# STANDARDS OF L'INSTITUT SUPÉRIEUR D'INFORMATIQUE

With the aim of ensuring a high quality of education and maintaining the smooth operation of our facilities, the following rules are applied:

## ABSENCES AND LATENESS:

If you miss more than 20% of class time for a course, you will expose yourself to a failing grade for the course, without the right to take a supplemental examination.

If you are absent on the day of an examination, you will receive 0% for this examination. Only the directors can authorize you to retake the examination on another day. A doctor's note is not necessarily a sufficient justification. Each case will be assessed on its own merits and a minimum fee of $25 will be applied.

If you are late to class, you may be refused access to the class until the break.

## EXAMINATIONS:

For courses involving practical projects and examinations, you must achieve at least 50% on the examinations in order for the practical projects to be graded.

The corrected examinations will be temporarily handed back to the students for consultation, and subsequentlycollected again by the instructor for archiving.

During examinations:

- It is forbidden to leave the classroom under any circumstances. If a student leaves the classroom, they must hand in their examination to the instructor, who will consider their examination to be finished.

- No documents, bags, or briefcasescan be on the desks. Each student must be sure to clear their desk before the beginning of the examination. The instructor will ensure the application of this standard.

- The use of electronic devices, cell phones, or other devices is forbidden. Any violation of this standard will result in the immediate termination of the examination for the student.

## PRACTICAL PROJECTS:

The practical projects must necessarily be done in teams of 2 or 3 people. A minimum of 5 hours could be added to the course hours for the practical projects; attendance during these periods is mandatory. In order for the final examination grade to be considered, the practical projects must be submitted before the final examination. The practical projects will be presented to the group by the instructor during the period following the examination.

## GRADE REVIEW:

As specified in our PIEA (Politique institutionnelle d'évaluation des apprentissages), approved by the MEES (Ministère de l'Éducation et de l'Enseignement supérieur), if you wish to have a grade reviewed, you must submit a grade review request to the directors within ten (10) working days after the grades are submitted to the students or posted on the school's intranet.

### SUPPLEMENTAL EXAMINATIONS:

You will be entitled to a supplementalexaminationfor a course only if:

   a)   you achieved a grade of at least 45% on all of the evaluations for the course,

   b)   you were absent for less than 20% of the class time for the course,

   c)   you submitted all examinations and practical projects for the course,

   d)   you pay a minimum fee of $25.

If these four conditions are not met, you will need to retake the course.

A supplementalexamination replaces the regular examinations for the course. A grade of at least 50% must be obtained on the supplemental examinationin order for the practical project to be considered.

Following a supplemental examination, the maximum final grade for the course will be 60%.

### PREREQUISITES:

In order to have access to the final projects and internships, you must have successfully completed all of the courses in the program. Tuition fees must be fully paid before the internships.

### WITHDRAWAL:

In order to withdraw from courses, a written withdrawal request must be submitted to the admissions office. The withdrawal will take effect on the date that the request is received. If the request is received within the first ten (10) working days of a semester, the courses for this semester will be cancelled in your transcript (but not the tuition fees); furthermore, you will receive no financial assistance and no failing grades for the semester. However, after this period, you will receive financial assistance for the semester, if applicable, and your transcript will display the grades accumulated up until the date of withdrawal.

### FOOD:

It is strictly forbidden to drink, eat, or smoke outside of areas specifically reserved for these activities.

### CELL PHONES AND LAPTOPS:

It is required to turn off your cell phone when you enter the college. It is forbidden to bring your own personal laptop to the college.