Intitulé du cours	Advanced Web Development		
Durée du cours	30 h	Crédits ECTS	3
Objectifs du cours (Compétences visées)	In this course, students will manipulate javascript in combination with HTML and CSS to produce the beginnings of a full-stack application. Programming and javascript program structure become central.		

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Contenu détaillé du cours et méthodes et/ou moyens pédagogiques (Grands chapitres)	- Session 1 : - Introduction To The Browser (Anatomy, Dom) - Introduction To Html, Css (Online Resource To Help Understand Flexbox) - Tictactoe Game Skeleton (Introduction To Grids) - Session 2 : - Making The Tictactoe Game Functional - Introduction To Reactjs, Hooks, Rendering Cycle, Props - Session 3 : - Setting Up The Development Environment - Importance Of Ui Design In Frontend Development - Introduction To Design Principles - Session 4 : - Introduction To Usestate And Useeffect Hooks - Working With Side Effects And Async Operations - Designing Relevant App Page With Ui-Building Tool With Goal Of Translating The Design Concepts Into React Components - Session 5 : - Introduction To Redux For Centralized State Management - Connecting React Components To Redux - Implementing React Context For Managing Authentication - Session 6 : - Understanding The Role Of Apis In Frontend Development - Introduction To Axios For Making Requests - Handling Api Responses And Errors - Integrating Api Calls Into The Web Application - Session 7 : - Introduction To React Router Dom For Client-Side Routing - Setting Up Routes And Navigation - Managing Route Parameters And Query Strings - Enhancing The Web Application With Navigation Capabilities - Session 8 : - Introduction To Localstorage, Cookies, And Sessions - Storing And Retrieving Data Using Localstorage - Managing Client-Side Sessions With Cookies - Integrating Data Storage Solutions Into The Web Application - Session 9 : - Deep Dive In The Node Event Loop, Blocking And Non-Blocking Operations - Understanding Node'S Asynchronous Behavior - Learning About The Different Frameworks And At What Scale Should They Be Used - Session 10 : - Setting Up Node Server - Understating The Usage Of A Middleware, Cors & Body Parsers - Creating Crud Operations For A Todo App - Session 11 : - Setting Up A Connection To Mongodb - Handling Sessions Upon Authentication + Password Encryption - Querying With Mongoose - Session 12 : - Setting Up Tests In The Project - Setting Up Environment Variables To Hide Sensitive Data - Session 13 : - Setting Up A Connection To A Postgresql Database - Setting Up Authentication With Jwts - Creation Of A Custom Logger And Streaming Different Log Levels To Files And The Console

Modalités d'évaluation	Grades are not added for the course
Nom de l'enseignant	Martin.Pedraza