

**🡪MukeTech**

As with many other computer-related jobs, several courses are possible to become a back-end programmer. Integrating a university, a computer school or an engineering school is essential to learn how to handle programming languages as well as databases. Thus ***MukeApps*** offers you the opportunity to learn the job of developer through a detailed, advanced and enriched training to make you the desired developer in any company.

[**1000 Computer Science**](https://catalog.gsu.edu/undergraduate20132014/computer-science/)

**Programs Offered:**

* **Bachelor of Science in Computer Science in Software Engineering**
  + **Concentration in Web Development (1100)**
* [CSC 1101](javascript:void(0)) Introduction to Web Programming
* [CSC 1102](javascript:void(0)) Web Programming
* CSC 1103 Advanced web programming
* CSC 1104 Hands-on Responsive Web Design
* CSC 1105 Introduction to Full Stack Software Engineer
  + **Concentration in Computer Software Systems (1200)**
* [CSC 1201](javascript:void(0)) Introduction to Object Oriented Programming (OOP)
* [CSC 120](javascript:void(0))3 Web Services
  + **Concentration in Databases and Knowledge-based Systems (1300)**
* [CSC 1301](javascript:void(0)) Introduction to Database Systems
* CSC 1302 Databases systems
  + **Concentration in Software Architecture (1400)**
* [CSC 1401](javascript:void(0)) Introduction to Software Design Pattern - SOLID
* CSC 1402 Introduction to Software Architecture – Micro Service
  + **Concentration in Devops (1500)**
* [CSC 1501](javascript:void(0)) Introduction to version control

**Titles Offered:**

* **Software Engineer Titles**
  + **Entry Level Software Engineer** 
    1. **CSC 1101 :** Introduction to web programming
    2. **CSC 1301 :** Introduction Databases systems
    3. **CSC 1102 :** Web programming
  + **Mid-Level Full Stack Software Engineer** 
    1. **CSC 1201 :** Introduction to Oriented Object Programming
    2. **CSC 1103 :** Advanced Web programming.
    3. **CSC 1105 :** Introduction to Full Stack Software Engineer.
    4. **CSC 1302 :** Databases systems
  + **Senior Full Stack Software Engineer**
    1. **CSC 1104 :** Hands-on Responsive Web Design
    2. [**CSC 1105**](javascript:void(0)) : Introduction to Full Stack Software Engineer
    3. [**CSC 1203**](javascript:void(0)) : Web Services
  + **Senior Full Stack Software Engineer and Architect**
  + **Senior Full Stack Software Engineer, Architect and Devops**
* **Business / Finance Titles:** 
  + **Entry Level Finance / Business Analyst**
  + **Mid-Level Finance/ Business Analyst**
  + **Senior Finance/ Business Analyst**

**A. Entry Level Software Engineer**

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| **CSC 1501** | **Introduction to version control** |
| **Credit Hours** | 4.0 |
| **Prerequisites** | **None** |
| **Description** | Version control is central to any file-based project. Whether you're a software developer, project manager, student, or someone else working on file-based projects, it's essential to follow the changes you've made to create a quality product. In this course, you will learn the popular Git version control system and why it plays an important role in creating projects by learning the basics of understanding Git. Then, you'll explore how Git elevates a project into a fun and easy experience. Finally, you will discover the current and extensive orders used daily in Git. Once you have completed this course, you will have a good command of Git as a version control system for your project.  Programming Concepts: Linux Bash |

<https://app.pluralsight.com/library/courses/git-getting-started/table-of-contents>

* [CSC 1101](javascript:void(0)) Introduction to Web Programming (4)

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| **CSC 1101** | **Introduction Web Programming** |
| **Credit Hours** | 4.0 |
| **Prerequisites** | **CSC 1501** |
| **Description** | The course introduces the student to programming techniques required to develop Web applications with HTML, CSS and Javascript    In-depth knowledge of HTML is at the heart of Web development, and an introduction to CSS will give you all the knowledge you need to start working with Cascading Style Sheets (CSS) and Web Design. First of all you will approach the HTML language which is the squellette of a web page then we discover the CSS language that will allow us to stylize our web pages and to have our HTML elements. And finally you will learn programming with JavaScript. First, you will discover the types of applications that can be built with JavaScript and the platforms on which they will be run. Once this course is complete, you will have the skills and knowledge in JavaScript to create simple programs and web applications.  Topics include: Git.  Programming Concepts: Linux Bash  Software include: Visual Studio Code (live server), Git Bash , GitHubDesktop, GitKraken |

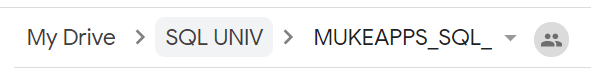
<https://app.pluralsight.com/library/courses/html-fundamentals/table-of-contents>

<https://app.pluralsight.com/library/courses/css-intro/table-of-contents>

<https://app.pluralsight.com/library/courses/javascript-getting-started/table-of-contents>

* [CSC 1301](javascript:void(0)) Database Systems (4)

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| **CSC 1301** | **Introduction Database Systems** |
| **Credit Hours** | 4.0 |
| **Prerequisites** | **CSC 1501** |
| **Description** | An introduction to the fundamental concepts and principles that underlie the relational model of data.  Topics include formal query languages; T-SQL; query optimization; relational database design theory; physical database design, integrity, security, and concurrency control.  Programming Concepts: T-SQL, Linux Bash  Software include: Microsoft Visual Studio, SQL Server Management Studio, Git Bash.  Website include: GitHub.com |



FROM LESSON 1 TO LESSON 4

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| **CSC 1102** | **Web Programming** |
| **Credit Hours** | 4.0 |
| **Prerequisites** | **CSC 1501, CSC 1101** |
| **Description** | The course gives more tool to students that are necessary for Web Development.  Topics include: HTML, CSS, JavaScript and Git.  In-depth knowledge you will deepen web development by creating attractive and responsive forms with Bootstrap 3. Get the most out of your forms by using form selectors, events and jQuery methods. This course covers the Bootstrap form style, jQuery validation, data binding to forms, third-party form controls, autocomplete, and server-side form processing.  Programming Concepts: HTML, CSS, JavaScript, JQuery, Bootstrap, Linux Bash  Software include: Visual Studio Code (live server), Git Bash  Website include: GitHub.com |

<https://app.pluralsight.com/library/courses/front-end-web-app-html5-javascript-css/table-of-contents>

<https://app.pluralsight.com/library/courses/jquery-forms-bootstrap3/table-of-contents>

**A2. Mid-Level Software Engineer**

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| **CSC 1201** | [CSC 1201](javascript:void(0)) Introduction to Object Oriented Programming (OOP) |
| **Credit Hours** | 4.0 |
| **Prerequisites** | **CSC 1501, CSC 1101, CSC 1102** |
| **Description** | The course gives an introduction to the fundamental of OOP with C#  Topics include: C# and Git.  C# has consistently been one of the top three programming languages to learn as it's used widely throughout the industry. This course, C# Fundamentals, will help you be comfortable with fundamental programming concepts on any platform. First, you will learn about the syntax of the C# language. Next, you will discover the built-in features of .NET. Finally, you will explore how to solve problems using object-oriented programming techniques. When you are finished with this course, you will have the skills and knowledge you need for real-world solutions.  Programming Concepts: C#  Software include: Visual Studio Code (live server), Git Bash  Website include: GitHub.com |

<https://app.pluralsight.com/library/courses/csharp-fundamentals-dev/table-of-contents>

* [CSC 1103](javascript:void(0)) **Advanced Web Programming** (4)

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| **CSC 1103** | **Advanced Web Programming** |
| **Credit Hours** | 4.0 |
| **Prerequisites** | **CSC 1501, CSC 1101, CSC 1102, CSC 1201** |
| **Description** | The course introduces the student to programming techniques required to develop Web applications.  This course takes you step by step through the process of building line of business Web applications using Angular. It covers layout and routing, accessing data, building and validating forms, defining business logic, and data visualization.  Topics include: HTML, CSS, JavaScript and Git.  Programming Concepts: HTML, CSS, JavaScript, JQuery, Bootstrap, Angular-JS, Flex Linux Bash  Software include: Visual Studio Code (live server), Git Bash  Website include: GitHub.com |

<https://app.pluralsight.com/library/courses/angularjs-line-of-business-applications/table-of-contents>

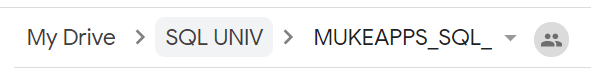
* [CSC 1105](javascript:void(0)) **Introduction to Full Stack Software Engineer** (4)

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| **CSC 1105** | **Introduction to Full Stack Software Engineer** |
| **Credit Hours** | 4.0 |
| **Prerequisites** | **CSC 1501, CSC 1101, CSC 1102, CSC 1201, CSC 1103** |
| **Description** | The course introduces the student to programming techniques required to develop Web applications.  You will create a Web application with ASP.NET Core, MVC, Entity Core Framework, Bootstrap and Angular. You will also explore technologies within ASP.NET Core such as Entity Framework Core, using ASP.NET Identity, building APIs with ASP.NET MVC and deploying your application on the server or cloud. In addition, you will create an angular application to show you how to associate server-side and client-side development in ASP.NET Core. At the end of this course, you will be able to create websites and APIs using ASP.NET Core.  Topics include: HTML, CSS, JavaScript and Git.  Programming Concepts: HTML, CSS, JavaScript, JQuery, Bootstrap, Angular-JS, Flex Linux Bash  Software include: Visual Studio Code (live server), Git Bash  Website include : GitHub.com |

<https://app.pluralsight.com/library/courses/aspnetcore-mvc-efcore-bootstrap-angular-web/table-of-contents>

* [CSC 1302](javascript:void(0)) Database Systems (4)

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| **CSC 1302** | **Database Systems** |
| **Credit Hours** | 4.0 |
| **Prerequisites** | None |
| **Description** | An introduction to the fundamental concepts and principles that underlie the relational model of data.  Topics include formal query languages; T-SQL; query optimization; relational database design theory; physical database design, integrity, security, and concurrency control.  Programming Concepts: T-SQL, Linux Bash  Software include: Microsoft Visual Studio, SQL Server Management Studio, Git Bash.  Website include: GitHub.com |



FROM LESSON 5 TO LESSON 9 (No SSIS….)

**A3. Senior Software Engineer**

* [CSC 1104](javascript:void(0)) **Hands-on Responsive Web Design** (4)

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| **CSC 1104** | **Hands-on Responsive Web Design** |
| **Credit Hours** | 4.0 |
| **Prerequisites** | **CSC 1501, CSC 1101, CSC 1102, CSC 1201, CSC 1103** |
| **Description** | Hands-on Responsive Web Design 3: Columns, Flexbox, and Grids.  Topics include: HTML, CSS, JavaScript and Git.  The development of any responsive website relies on in-depth knowledge of the use of HTML5, CSS3 and SASS. In this course, you will learn the skills needed to layout a page using standard divisions and CSS, as well as new technologies such as Flexbox and CSS Grids. First, you will discover how to automate this process by harnessing the power of SASS operators. Finally, you will explore the use of CSS grids for the overall layout.  Programming Concepts: HTML, CSS, JavaScript, JQuery, Bootstrap, Angular-JS, Flex Linux Bash  Software include: Visual Studio Code (live server), Git Bash  Website include: GitHub.com |

<https://app.pluralsight.com/library/courses/responsive-web-design-columns-flexbox-grids/table-of-contents>

* [CSC 1105](javascript:void(0)) **Full Stack Web Design** (4)

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| **CSC 1105** | **Full Stack Web Design** |
| **Credit Hours** | 4.0 |
| **Prerequisites** | **CSC 1501, CSC 1101, CSC 1102, CSC 1201, CSC 1103, CSC 1104** |
| **Description** | Angular is one of the most popular frameworks for building client apps with HTML, CSS and TypeScript. If you want to establish yourself as a front-end or a full-stack developer, you need to learn Angular.  By the end of watching this course, you'll be able to:   * Build real client apps with Angular on your own * Troubleshoot common compile-time and run-time errors * Write clean and maintainable code like a professional * Apply best practices when building Angular apps   Software include: Visual Studio Code (live server), Git Bash  Website include: GitHub.com |

<https://www.udemy.com/the-complete-angular-master-class/>

* [CSC 1203](javascript:void(0)) **Web Services** (4)

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| **CSC 1203** | **Web Services** |
| **Credit Hours** | 4.0 |
| **Prerequisites** | **CSC 1501, CSC 1101, CSC 1102, CSC 1201, CSC 1103, CSC 1104, CSC 1301, CSC 1302** |
| **Description** | In this course we will start before learning the Java language by mastering before starting the heart of the same of what the web service and its implementation.  Architectures are moving towards microservices. RESTful web services are the first step to developing great microservices. Spring Boot, in combination with Spring Web MVC (also called Spring REST) makes it easy to develop RESTful web services.  Software include: Visual Studio Code (live server), Git Bash, Maven and Tomcat  Website include: GitHub.com |
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<https://www.udemy.com/spring-web-services-tutorial/>

**Note : Pour le cours** [**CSC 1105**](javascript:void(0)) **Full Stack Web Design, il faudra aussi TypeScript comme prérequis & Pour le cours Web Services CSC 1203, il faudra aussi dispenser Java qui est un prérequis (ou on introduira simplement les bases du langage pour développer avec Spring Boot) d’où je n’ai pu vraiment établir une description correct. Un éclaircissement m’aidera bien.**

**Aussi je n’ai pas tenu compte des Credit Hours, Programming Concepts, Software include et Website include, ça sera plus facile de le remplir lorsque nous aurons fini avec nos leçon.**

**Concernant le cours sur la partie sql, je crois que j’ai dû supprimer le mail par mégarde.**