Digital Learning Hub_

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CODING

AUTOMATION OF REPETITIVE TASKS WITH CLASSICAL AND VISUAL PROGRAMMING (RPA) TECHNIQUES

Numerous companies experience a prevalence of repetitive tasks. Processing data in Excel, obtaining and transferring documents via Outlook, repetitive manipulations of internal ERP systems are just a few examples.

This course is aimed at analysts seeking to automate and professionalise their tasks, as well as managers, wishing to learn about the possibilities offered by the combination of "classic" programming tools and Robotic Process Automation (RPA). During the course, we will present a general definition, key differences, as well as concrete examples of how they have been implemented in business.
Open the doors to programmatic automation, and your vision of work in business will never be the same again.

View online
Price: 32,00 €
Start date: 22.10.2024
Instructor(s): Maurizio Napoli, Gauthier Pierard
Language: English
Difficulty: Intermediate

BACK-END DEVELOPMENT WITH PYTHON AND FLASK

Embark on a journey into the world of back-end development with our 'Back-End Development with Python and Flask' course. This course is designed for individuals who want to dive into the exciting realm of web development, particularly focusing on the back-end. It's perfect for beginners who have a basic understanding of Python and want to harness its power to build dynamic web applications.

In this interactive program, we use a deductive reasoning approach, where we start by exploring real-world problems and then work together to craft practical solutions. You'll delve into essential topics such as integrating Python with MySQL for efficient data management, creating robust APIs, mastering HTTP request handling, and implementing secure session management for user logins and protected pages. Additionally, you'll develop the art of building

a templating system to create visually appealing and dynamic web pages.

The goal is to provide you with a solid foundation in back-end development, equipping you with the skills needed to create data-driven, secure, and user-friendly web applications.

View online
Price: 64,00 €
Start date: 05.10.2024
Instructor(s): Vanessa Al Daham
Language: English
Difficulty: Beginner

CONTENEURISATION AVEC DOCKER

La conteneurisation est l'une des clé fondatrice de l'informatique moderne et est souvent considérée comme la porte d'entrée vers le Cloud. A la fin de ce module, vous serez capable de conteneuriser et d'exécuter vos application sur Docker.

View online
Price: 56,00 €
Start date: 12.09.2024
Instructor(s): Jérémy Albrecht
Language: French
Difficulty: Beginner

DÉCOUVERTE DU DEVOPS

Initiation au métier du DevOps. Ce module vous permettra d'appréhender les enjeux de DevOps. L'un des objectifs ici et de démystifier un domaine technique plutôt large.
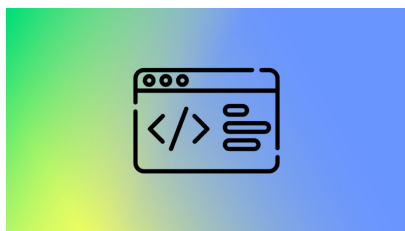
View online
Price: 28,00 €
Start date: 09.09.2024
Instructor(s): Jérémy Albrecht
Language: French
Difficulty: Beginner

DÉVELOPPEUR WEB

Apparu avec Internet, le développement web fait référence au processus d'écriture d'un site ou d'une page web dans un langage technique. Il s'agit d'une étape incontournable pour qu'un contenu soit mis en ligne et atteigne ses lecteurs. Le développeur web s'occupe de la réalisation de l'ensemble des fonctionnalités techniques d'un site Internet ou d'une application web. En fonction des exigences présentées dans un cahier des charges précis, ce spécialiste analyse les besoins et définit la solution technique adaptée. Il développe ensuite les fonctionnalités du site ou de l'application web en rédigeant des lignes de code. Ses missions incluent également le diagnostic et la résolution de problèmes détectés sur un site déjà en ligne. La polyvalence, l'autonomie, la capacité d'adaptation ainsi que le respect des délais figurent parmi les qualités de ce professionnel.

Les sujets abordés lors des cours :

- Les fondamentaux – comment fonctionne un navigateur web ?
- JavaScript – le moteur des applications Web
- TypeScript – le Super Set de JavaScript
- Apprenez le framework web de Google le plus utilisée au Luxembourg
- Apprenez la librairie Front end de Facebook, la plus utilisée au Luxembourg
- Comprendre le futur du Browser (navigateur web)
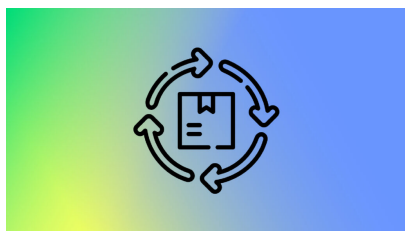
[View online](#)
Price: 252,00 €
Start date: 07.06.2024
Instructor(s): Nicolas Frizzarin / Enes Koc
Language: French
Difficulty: Intermediate

DEVOPS - GESTIONNAIRE DES MODIFICATIONS ET DE LA CONFIGURATION DES TIC

En favorisant la communication et la collaboration entre les équipes chargées du développement et des opérations IT, le DevOps vise à optimiser la satisfaction client et à proposer des solutions à valeur ajoutée plus rapidement. Le DevOps est aussi conçu pour stimuler l'innovation dans une optique d'amélioration continue des processus.

Les sujets abordés lors des cours :

- Initiation au métier du DevOps
- La porte vers le Cloud
- Apprenez comment configurer un pipeline en utilisant GitOps
- Dernière étape d'une chaine DevOps : L'orchestration de conteneur en utilisant Kubernetes

[View online](#)
Price: 168,00 €
Start date: 09.09.2024
Instructor(s): Guillaume Homberg / Jéremy Albrecht
Language: French
Difficulty: Beginner

FOUNDATIONS OF DJANGO WEB DEVELOPMENT

The "Foundations of Django Web Development" is a 21-hour course aimed at teaching Django's fundamentals, tailored by industry experts for aspiring web developers.

In the dynamic and fast-paced world of web development, Django, a high-level Python web framework, has become a cornerstone technology, powering a wide array of modern web applications and platforms. This meticulously designed 21-hour course is tailored for those who aspire to excel in the field of web development using Django. It offers a comprehensive learning experience, honed by industry experts, to meet the growing demand for skilled Django developers.
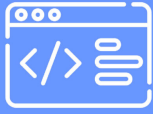
[View online](#)
Price: 84,00 €
Start date: 24.06.2024
Instructor(s): FERNS David
Language: English
Difficulty: Intermediate

FROM CODE TO MOTION: COMBINING ROBOTICS AND CODING FOR INDUSTRIAL AUTOMATION

Discover the fascinating world of industrial robotics with comprehensive training program. Designed for beginners, this training will provide you with a solid introduction to robotics and equip you with essential skills to thrive in this field.

Throughout the course, you will delve into key elements of robotics, starting with an in-depth exploration of the fundamental principles that underpin this cutting-edge technology. From there, you will progress to robotics programming, where you will learn to program robots using a variety of languages, including Teach & Play, Blocky, and introductory Python.

The course goes beyond theory by emphasizing practical applications of robotics. You will gain insights into real-world scenarios where robots are utilized across different industries and sectors. Additionally, you will have hands-on experience working with dobot robots, enabling you to develop and program robots to perform specific tasks in both manual and autonomous modes.

Collaboration is a vital aspect of our workshop, as you will engage with fellow participants to complete a final project that showcases your understanding of robotics and programming concepts. By the end of the course, you will have acquired a solid foundation in robotics, mastered programming techniques, and developed critical thinking skills applicable to real-life situations.

Don't miss this opportunity to unlock your potential in the exciting field of industrial robotics. Enroll today and embark on a transformative learning journey that will broaden your horizons and open doors to endless possibilities.

[View online](#)
Price: 160,00 €
Start date: 17.06.2024
Instructor(s): Abdoellah Adam
Language: English
Difficulty: Beginner

HOW TO USE WEB SERVICES WITH JAVASCRIPT

Imagine you would like to get information about a country and use these data on your website. How would you do that?
Where would you get the data from? The solution is easy!
Nowadays, you address an open online database via a web service to retrieve the information that is publicly available.

This course provides you with an overview of a "service-oriented architecture". After a brief introduction to Javascript, you learn how to send requests to a web service, how to retrieve information and how to display them in a browser. Learners will gain hands-on experience in utilizing JavaScript to interact with web services.

Although this course is not a typical Javascript class, it summarizes basic structures and instructions and introduces you to the basic concepts of reading JSON files. Therefore, programming knowledge is not a prerequisite as such.

View online
Price: 64,00 €
Start date: 02.11.2024
Instructor(s): Vanessa Al Daham
Language: English
Difficulty: Intermediate

HOW TO USE WEB SERVICES WITH JAVASCRIPT

Imagine you would like to get information about a country and use these data on your website. How would you do that? Where would you get the data from? The solution is easy! Nowadays, you address an open online database via a web service to retrieve the information that is publicly available. This course provides you with an overview of a "service-oriented architecture". After a brief introduction to Javascript, you learn how to send requests to a web service, how to retrieve information and how to display them in a browser. Learners will gain hands-on experience in utilizing JavaScript to interact with web services. Although this course is not a typical Javascript class, it summarizes basic structures and instructions and introduces you to the basic concepts of reading JSON files. Therefore, programming knowledge is not a prerequisite as such.

View online
Price: 64,00 €
Start date: 06.07.2024
Instructor(s): Vanessa Al Daham
Language: English
Difficulty: Intermediate

HUMAN AND PLANET CENTRED DESIGN IN PROGRAMMING WITH PYTHON

Learn to develop software applications and projects that contribute to society while valuing our planet's assets.

As an approach to green computing, sustainable coding practices and energy efficient programming, this course will introduce human-centred and planet-centred design principles and demonstrate the importance of incorporating both human and planetary considerations in programming projects. Participants will embark on a transformative journey to create Python projects while learning and applying a new mindset for programming.

During four sessions of five hours each, we will learn about real world examples of successful human-centred and planet-centred design projects and explore the principles, methodologies, and practical applications of integrating such concepts into Python projects, all while gaining a deeper understanding of sustainability and its relevance in programming.

Session 1: Introduction to Human and Planet-centred Design
Session 2: Design Thinking for Python Projects
Session 3: Sustainable Development with Python
Session 4: Integration and Project Showcase

[View online](#)
Price: 80,00 €
Start date: 18.06.2024
Instructor(s): Mancellari Enea
Language: English
Difficulty: Intermediate

Digital Learning Hub_

INTRODUCTION TO COBOL PROGRAMMING

Dive into COBOL! Embark on a COBOL programming adventure! Learn the essentials of this key business language in our "Introduction to COBOL Programming" course.

Our dynamic 3-day course will turn you into a COBOL pro, ready for the finance and government sectors. Master programming fundamentals, debug like a pro, and bridge COBOL with modern tech. Join us for an immersive experience that combines theory with real-world practice. Unlock your potential in an in-demand niche and elevate your career. Start your COBOL journey today!

View online
Price: 84,00 €
Start date: 08.07.2024
Instructor(s): FERNS David
Language: English
Difficulty: Advanced

INTRODUCTION TO FLASK WEB DEVELOPMENT WITH PYTHON

Unlock the Power of Web Development with Flask: A Comprehensive Training Program

Embark on a transformative journey into the world of web development with our Flask Web Development with Python course. This course is meticulously designed to cater to the evolving needs of the modern web development landscape. Whether you're an aspiring developer, part of an IT team, an entrepreneur, or a professional seeking to diversify your skills, this course is tailored for you.

Dive into Flask Web Development with our course! Master Python and Flask basics to build dynamic websites and applications efficiently.

View online
Price: 84,00 €
Start date: 02.07.2024
Instructor(s): FERNS David
Language: English
Difficulty: Beginner

INTRODUCTION TO JAVASCRIPT – THE LANGUAGE OF THE BROWSER!

JavaScript is the language of the browser! And not only that: JavaScript also remains the most popular programming language for the tenth time in a row and is used by almost 17.5 million developers worldwide (Source: State of the Developer Nation 2022). Not only do new developers see JavaScript as an attractive entry-level language, but existing developers are also using it to expand their skills. As a result, JavaScript is now used by more than half of the developers working on web applications. So this is a course you don't want to miss!

We will learn how to create dynamic web pages with JavaScript. The training sessions are very hands-on oriented in dedicated computer rooms. Participants can also bring their own laptop.
Through an active engagement, we will have a look at versatile use-cases of JavaScript and especially use it for validation purposes.

View online
Price: 64,00 €
Start date: 05.10.2024
Instructor(s): Vanessa Al Daham
Language: English
Difficulty: Intermediate

INTRODUCTION TO SQL, THE QUERY LANGUAGE FOR RELATIONAL DATABASES

SQL is the most popular query language par excellence and is used by many world-famous companies such as Facebook, Microsoft, Adobe and others. It is hard to imagine working with relational databases without SQL. In this very practical course we will not only learn about the language, but also perform various data queries on a MySQL server.
The training sessions are very hands-on oriented in dedicated computer rooms.
Through an active engagement, we will tackle various problem sets and discuss the different approaches.

View online
Price: 64,00 €
Start date: 23.11.2024
Instructor(s): Vanessa Al Daham
Language: English
Difficulty: Beginner

INTRODUCTION TO SQL, THE QUERY LANGUAGE FOR RELATIONAL DATABASES

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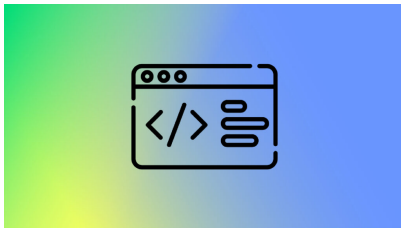
[View online](#)
Price: 64,00 €
Start date: 07.09.2024
Instructor(s): Vanessa Al Daham
Language: English
Difficulty: Beginner

JAVA - JUNIOR DEVELOPER

The aim of this Learning Track is to provide full knowledge in coding with Java so that participants, who have no prior knowledge in Java programming, can take on a position as Java Jr Developer upon completion of the course.
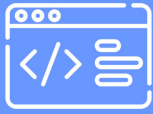
[View online](#)
Price: 320,00 €
Start date: 09.09.2024
Instructor(s): Lisa Hennecart
Language: English
Difficulty: Beginner

JAVASCRIPT

Le moteur des applications web. Une étape obligatoire pour tout développeur web. Vous apprendrez tout ce qui est nécessaire pour le développement JavaScript ainsi que les bons cas d'usage.

[View online](#)
Price: 56,00 €
Start date: 13.06.2024
Instructor(s): Nicolas Frizzarin
Language: French
Difficulty: Beginner

LE FUTUR DU WEB

Nous sommes actuellement dans un virage technologique fort pour le développement front-end. Ce cours vous permettra de mieux appréhender les changements à venir pour répondre aux problèmes de demain.
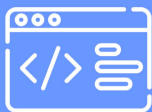
[View online](#)
Price: 28,00 €
Start date: 17.09.2024
Instructor(s): Enes Koc
Language: French
Difficulty: Beginner

MODÈLISATION D'UNE BASE DE DONNÉES

SGBD
Préparer les données
Redondances de données
Trancher les données à l'aide de la matrice des dépendances
Définir clé primaire et clé étrangère
Etablir un modèle conceptuel de données
Les relations
Les cardinalités
Modèle logique des données
Représentation virtuelle des données
Modèle physique des données
Formes normales
Contrainte d'intégrité fonctionnelle

Ce cours permet aux participants de trancher parmi les données pour construire un modèle physique de données qui sert de plan pour construire une base de données. Le but principal est d'éviter des redondances et de détecter des contraintes d'intégrité fonctionnelle afin d'éviter des problèmes de gestion des données.

Des exercices pratiques mènent les participants à bien assimiler les tranches de théorie de la matière traitée.

View online
Price: 36,00 €
Start date: 10.10.2024
Instructor(s): GNAD Christiane
Language: French
Difficulty: Beginner

ORCHESTRER VOS APPLICATIONS AVEC KUBERNETES

Dernière étape d'une chaîne DevOps: être capable d'orchestrer ses ressources en vue d'optimiser ses déploiements. Dans ce module, nous aborderons les notions de cluster, d'unité de déploiement et de réplication. Pour ce faire, nous utiliserons Kubernetes, technologie opensource leader du marché.

View online
Price: 56,00 €
Start date: 23.09.2024
Instructor(s): Guillaume Homberg
Language: French
Difficulty: Beginner

PIPELINE DE DEPLOIEMENT AVEC GITOPS

Une fois vos application conteneurisées, il sera temps de construire une chaîne de build et de déploiement qui vous permettra d'industrialiser vos processus. Vous apprendrez ici les bases des pipelines en utilisant l'imprementation de GitHub. L'objectif est d'automatiser vos tests unitaires, votre build et enfin votre déploiement

View online
Price: 28,00 €
Start date: 16.09.2024
Instructor(s): Jérémy Albrecht
Language: French
Difficulty: Beginner

PYTHON - OBJECT ORIENTED PROGRAMMING AND DESKTOP APPLICATION CREATION

This course is ideal for anyone who already has a basic knowledge in Python coding and wants to learn how to develop high-level softwares using the world's most widely used programming language. The course will provide a comprehensive understanding of advanced tools and code structures in Python, reviewing functions, classes, databases and user interfaces. The aim of the course is to provide students with a better knowledge of coding with the Python language so that they are able to create professional software. The lesson will take place in an interactive and practical format, alternating between theory and exercises, where the students can apply their knowledge into practice. To maintain attention and a collaborative environment, there will be a final group project that will integrate everything that has been learned during the course.
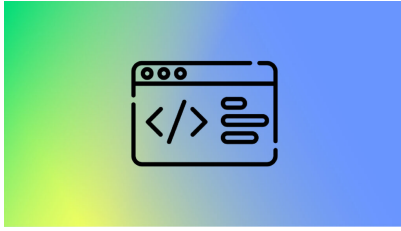
View online
Price: 80,00 €
Start date: 25.11.2024
Instructor(s): Lisa Hennecart
Language: English
Difficulty: Intermediate

PYTHON BASICS

Apprendre à programmer en language Python.

Ce Learning Track (parcours d'apprentissage) est composé des quatre modules suivants :

[View online](#)
Price: 192,00 €
Start date: 03.09.2024
Instructor(s): GNAD Christiane
Language: French
Difficulty: Beginner

REACTJS

React est une librairie très utilisée concurrente à Angular. Le point fort de React est sa légèreté. Développée par les équipes de Facebook, cette librairie est incontournable dans l'écosystème actuel.

[View online](#)
Price: 56,00 €
Start date: 12.09.2024
Instructor(s): Enes Koc
Language: French
Difficulty: Beginner

SEO FOR WEB DEVELOPERS & FRONT-END DEVELOPERS

This training covers the essentials of SEO for web development practitioners and is aimed at raising awareness among developers about how they can better support content editors, web marketers (and all the job positions involved in the SEO process) by integrating the tools best suited to their tasks, including AI, which is playing a major role in SEO today.

[View online](#)
Price: 48,00 €
Start date: 05.12.2024
Instructor(s): Ludovic GIAMBIASI
Language: English
Difficulty: Beginner

TYPESCRIPT

Typescript - Le Super Set de JavaScript. Aujourd'hui, TypeScript fait partie intégrante du développement front-end. Il apporte de grandes améliorations à JavaScript comme le typage fort. Maintenu par Microsoft, il est le langage de base de pléthore de framework web comme Angular.

[View online](#)
Price: 28,00 €
Start date: 20.06.2024
Instructor(s): Nicolas Frizzarin
Language: French
Difficulty: Beginner

VISION SYSTEMS FOR INDUSTRIAL ROBOTS

In the industrial world, the synergy between vision systems and robots has become increasingly prevalent and indispensable. Vision systems are essential tools used for quality inspection, coordinate determination, and various other tasks in industrial settings. This course, "Vision Systems for Industrial Robots," is designed to provide beginners with a comprehensive introduction to using vision applications in conjunction with industrial robots.

[View online](#)
Price: 64,00 €
Start date: 10.07.2024
Instructor(s): Adam Abdoellah
Language: English
Difficulty: Beginner