

## Fiche partenaire – Étudiants sortants (outgoing)

<b>THE VIVES UNIVERSITY COLLEGE - 6 campus (13 000 étudiants)</b>	
<b>Villes</b>	KORTRIJK/BRUGGE/OOSTENDE
<b>Pays</b>	<b>BELGIQUE</b>
<b>Continent</b>	Europe
<b>Type de mobilité</b>	Erasmus+
<b>Cycle concerné</b>	Bachelor informatique – ICT (Campus KORTRIJK) Bachelor Biotechnology (Campus de Roselare à ROULERS)
<b>Places disponibles</b>	Courtrai ICT: 8 places pour 1 semestre Roulers Biological and related science : 8 places pour 1 semestre
<b>Langues d'enseignement</b>	Anglais
<b>Exigence linguistique</b>	B1
<b>Autres exigences</b>	dossier scolaire – niveau de langue dans le cadre ERASMUS.
<b>Pourquoi cette université ?</b>	Cursus en anglais. Proximité Le Français est compris/parlé par tous.
<b>Programme</b>	<a href="https://www.vives.be/international/programmes">https://www.vives.be/international/programmes</a>  <a href="#">Bachelor biotechnologie   VIVES Université des sciences appliquées</a>
<b>Calendrier scolaire</b>	<b>Automne</b> Semaine d'orientation : fin août début septembre Cours : mi-septembre au fin décembre Examens et remises de projet : janvier <b>Hiver</b> Arrivée : fin janvier Orientation : fin janvier Cours du début février à début juin Examens et remise des projets du juin
<b>Accueil</b>	Semaine d'orientation obligatoire Welcome in Flanders - A cultural introduction programme @ VIVES
<b>Logement</b>	Sur marché privé environ 400 €/mois Hébergement géré par l'Université (Kortij) : <a href="mailto:Housing.officer@vives.be">Housing.officer@vives.be</a> <a href="mailto:Incoming.exchanges@vives.be">Incoming.exchanges@vives.be</a>
<b>Cours de langue</b>	Anglais ou Néerlandais
<b>Site internet</b>	<a href="https://www.vives.be/">https://www.vives.be/</a>
<b>Section échange</b>	<a href="https://www.vives.be/international/incoming-students">https://www.vives.be/international/incoming-students</a>
<b>Guide pratique</b>	<a href="http://www.vives.be/international">www.vives.be/international</a>
<b>Assurances</b>	Carte vitale européenne Une copie d'une assurance Responsabilité Civile valable est obligatoire
<b>Immigration</b>	CI en cours de validité
<b>Coût de la vie à prévoir</b>	Coût de la vie similaire à celui de Toulon
<b>Frais de scolarité</b>	<b>Aucun</b> (Erasmus)
<b>Démarche d'inscription</b>	Nomination par l'ISEN
<b>Date limite</b>	<b>Automne</b>

	<p>Nomination par l'ISEN : Fin mars  Dossier complet envoyé au partenaire : 31 mai</p> <p><b>Hiver</b>  Nomination par l'ISEN : 31 octobre  Dossier complet envoyé au partenaire : 15 novembre</p>
<b>Contact @école partenaire</b>	<p>Evert COTTYN</p> <p><a href="mailto:evert.cottyn@vives.be">evert.cottyn@vives.be</a></p> <p>International Coordinator - Applied Engineering &amp; Technology</p> <p>Melanie CARBONELLE</p> <p><a href="mailto:melanie.carbonelle@vives.be">melanie.carbonelle@vives.be</a></p> <p><a href="http://www.vives.be/international">www.vives.be/international</a></p>
<b>Contact ISEN</b>	International-mediterranee@yncrea.fr

# IT Courses for incoming Erasmus students, academic year 2021-2022

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## Introduction

The courses in Applied Computer Science belong to the Department of Commercial Sciences, Business Management & Informatics.

The courses will be in English. Courses are usually a mix of classroom teaching, classroom practicing and individual work.

Student should bring their personal laptop computer.

## Overview

Course name	ECTS credits	Autumn semester	Spring semester
Web Design	6	x	x
Databases and SQL	6	x	x
Introduction to Linux	4	x	x
Web Development in .NET	6	x	x
Android App Development	6	x	x
Mobile App Development - iOS	6	x	x
Introduction to Artificial Intelligence	6	x	x
IT-security	6	x	x
Small IT Project	8	x	x
Final project	20	x	x

## Course details

<b>Course Title</b>	<b>Web Design</b>
<b>Semester</b>	Autumn - Spring
<b>ECTS credits</b>	6
<b>Lecturer</b>	Bavo Ketels (bavo.ketels@vives.be)
<b>Type of course unit</b>	Optional
<b>Course contents</b>	<ul style="list-style-type: none"> <li>Structuring the content of a website by means of html5.</li> <li>The use of css3 to give a website a certain design.</li> <li>Developing a website using a modern development environment.</li> <li>Applying techniques to properly display a website on a mobile device.</li> </ul>



	<ul style="list-style-type: none"> <li>Analyze the requirements, design a good information structure and create an attractive design.</li> <li>Deploying a website on a shared hosting platform.</li> <li>Introduction to web builders.</li> </ul> <p>The student must be able to build a beautifully designed website with html and css.</p>
<b>Course objectives</b>	The student must be able to build a beautifully designed website with html and css.
<b>Entry requirements</b>	None.
<b>Teaching method</b>	Classroom work (2 hours a week), plus self-study and individual exercises.
<b>Assessment</b>	Evaluation of the exercises. Building a final website.
<b>Course material</b>	Online material.
<b>Remarks</b>	Student do exercises on their own laptop.

<b>Course Title</b>	<b>Databases and SQL</b>
<b>Semester</b>	Autumn - Spring
<b>ECTS credits</b>	6
<b>Lecturer</b>	Arne Vandenbussche (arne.vandenbussche@vives.be)
<b>Type of course unit</b>	Optional
<b>Course contents</b>	<ul style="list-style-type: none"> <li>Basic concepts of a relational database.</li> <li>Design a simple relational database.</li> <li>Retrieve data from a SQL database.</li> <li>Single row functions in SQL</li> <li>Group functions</li> <li>Subqueries.</li> <li>Data Definition Language</li> <li>Data Manipulation Language.</li> <li>Views</li> </ul>
<b>Course objectives</b>	The student will prove that he can design and use a relational database.
<b>Entry requirements</b>	None.
<b>Teaching method</b>	Classroom work (2 hours a week), plus self-study and individual exercises.
<b>Assessment</b>	Written exam. Individual assignments.
<b>Course material</b>	Own course material.
<b>Remarks</b>	Student do exercises on their own laptop.

<b>Course Title</b>	<b>Introduction to linux</b>
<b>Semester</b>	Autumn - Spring
<b>ECTS credits</b>	4
<b>Lecturer</b>	Geert Dekeyser (geert.dekeyser@vives.be)
<b>Type of course unit</b>	Optional
<b>Course contents</b>	<ul style="list-style-type: none"> <li>Basics of the linux operating system.</li> <li>What is an operating system?</li> </ul>

	<ul style="list-style-type: none"> <li>• Short history of the linux operating system.</li> <li>• The basic commands.</li> <li>• The nano text editor.</li> <li>• Managing files and directories.</li> <li>• File permissions.</li> <li>• Processing text files.</li> <li>• Advanced file mangement.</li> <li>• File sharing.</li> <li>• Redirection and piping</li> </ul>
<b>Course objectives</b>	The students learn to master the most important linux command and they learn the basics of linux bash scripting.
<b>Entry requirements</b>	Basic programming skills required.
<b>Teaching method</b>	2 hours/week classroom work plus self-study and assignments.
<b>Assessment</b>	Written exam. Individual assignments.
<b>Course material</b>	Linux, The Textbook. Syad Mansoor Sarwar, Robert Koretsky. Taylor & Francis Ltd. Second New Edition. September 2018. 658 blz. ISBN: 9781138710085
<b>Remarks</b>	Student do exercises on their own laptop.

<b>Course Title</b>	<b>Web Development in .NET</b>
<b>Semester</b>	Autumn - Spring
<b>ECTS credits</b>	6
<b>Lecturer</b>	Bavo Ketels (bavo.ketels@vives.be)
<b>Type of course unit</b>	Optional
<b>Course contents</b>	<ul style="list-style-type: none"> <li>• Introducing ASP.NET Core</li> <li>• Visual Studio online and GIT</li> <li>• Templates, routing and Async</li> <li>• Classes, Interfaces and Dependency Injection</li> <li>• HTML and Razor Forms</li> <li>• Forms Validation</li> <li>• Project structure, SOLID Principles and layer model</li> <li>• CRUD with Entity Framework</li> </ul>
<b>Course objectives</b>	To be able to build an e-commerce site using ASP.NET MVC
<b>Entry requirements</b>	Knowledge of object oriented programing, of html and CSS, of Javascript and of relational databases and SQL.
<b>Teaching method</b>	2h/week classroom work plus self-study and an project.
<b>Assessment</b>	Practical Exam.
<b>Course material</b>	
<b>Remarks</b>	Student should bring their own laptop with the Windows operating system.

<b>Course Title</b>	<b>Introduction to Artificial Intelligence</b>
<b>Semester</b>	Autumn - Spring
<b>ECTS credits</b>	6



<b>Lecturer</b>	Pieter Ideler (pieter.ideler@vives.be)
<b>Type of course unit</b>	Optional
<b>Course contents</b>	Introduction to Artificial Intelligence: <ul style="list-style-type: none"> <li>• Definition of A.I.?</li> <li>• History of A.I.?</li> <li>• What is Machine Learning and Deep Learning?</li> <li>• Modelling of A.I. problems</li> <li>• Basic algorithms: search, heuristics, ...</li> <li>• Introduction to automated reasoning</li> </ul>
<b>Course objectives</b>	The student gains insight in modelling (real-world) problems and in basic A.I.-algorithms to tackle te problems
<b>Entry requirements</b>	Programming skills required.
<b>Teaching method</b>	A mix of classes (2h/week), individual assignments and self study.
<b>Assessment</b>	Oral examination with written preparation
<b>Course material</b>	<ul style="list-style-type: none"> <li>• Ebook available in library: Introduction to Artificial Intelligence, Wolfgang Ertel</li> <li>• Powerpoint slides</li> </ul>

<b>Course Title</b>	<b>Android App Development</b>
<b>Semester</b>	Autumn - Spring
<b>ECTS credit</b>	6
<b>Lecturer</b>	Dirk Hostens (dirk.hostens@vives.be)
<b>Type of course unit</b>	Optional
<b>Course contents</b>	The students learn to develop an Android app using Kotlin: activities, fragments, graphical user interface, using local data, using remote data, navigation.
<b>Course objectives</b>	Be able to develop an native Android App.
<b>Entry requirements</b>	Concepts of object oriented programming. SQL.
<b>Teaching method</b>	Classroom work (2 hours/week) plus self-study and individual exercises.
<b>Assessment</b>	Project work.
<b>Course material</b>	Developer website <a href="http://developer.android.com">http://developer.android.com</a> & lynda.com
<b>Remarks</b>	Student need their own laptop to do the exercises.

<b>Course Title</b>	<b>Mobile App Development - iOS</b>
<b>Semester</b>	Autumn - Spring
<b>ECTS credit</b>	6
<b>Lecturer</b>	Dirk Hostens (dirk.hostens@vives.be)
<b>Type of course unit</b>	Optional
<b>Course contents</b>	Developing apps for iOS, using the Swift programming language and the XCode IDE. UI development using UIText, UILabel, UIImageView, UISlider, UIStepper, ....
<b>Course objectives</b>	To be able to develop an app for iPhone or iPad.

<b>Entry requirements</b>	Concepts of object oriented programming. SQL.
<b>Teaching method</b>	Classroom work (2 hours/week) plus self-study and individual exercises.
<b>Assessment</b>	Exam
<b>Course material</b>	Developer website: <a href="http://developer.apple.com">http://developer.apple.com</a> & lynda.com
<b>Remarks</b>	A Mac laptop is preferable, but not necessary. If a student does not have a Mac, he can use the computers of VIVES at specific times.

<b>Course Title</b>	<b>IT Security</b>
<b>Semester</b>	Autumn - Spring
<b>ECTS credit</b>	6
<b>Lecturer</b>	Peter Debeuckelaere (peter.debeuckelaere@vives.be)
<b>Type of course unit</b>	Optional
<b>Course contents</b>	Concepts of Cybersecurity.
<b>Course objectives</b>	To have insight in recent technologies for IT Security.
<b>Entry requirements</b>	Basic knowledge of operating systems and computer networking.
<b>Teaching method</b>	Individual assignments with regular feedback sessions.
<b>Assessment</b>	Paper.
<b>Course material</b>	
<b>Remarks</b>	

<b>Course Title</b>	<b>Small IT Project</b>
<b>Semester</b>	Autumn - Spring
<b>ECTS credit</b>	8
<b>Lecturer</b>	Dirk Hostens (dirk.hostens@vives.be)
<b>Type of course unit</b>	Optional
<b>Course contents</b>	<p>The students will do a small IT project in a small team in the context of the VIVES learning company. They will plan their work, communicate with the client, analyse the problem, develop a solution and test this thoroughly. The workload is about one and a half days a week.</p> <p>The project can be in the domain of software development, business IT solutions, IT Infrastructure, ... depending on the field of interest of the student and the available projects. It is possible that student have to learn new technologies to do their project.</p>
<b>Course objectives</b>	Be able to realize an IT Solution for a real client. Manage projects in a agile and professional way.
<b>Entry requirements</b>	Project will be adapted to the student's skills.
<b>Teaching method</b>	Project work.
<b>Assessment</b>	Project work
<b>Course material</b>	
<b>Remarks</b>	Own laptop required.



<b>Course Title</b>	<b>Final Project</b>
<b>Semester</b>	Autumn - Spring
<b>ECTS credit</b>	20
<b>Lecturer</b>	Responsible lecturer: Dirk Hostens (dirk.hostens@vives.be) Coaching lecturer will depend on the project.
<b>Type of course unit</b>	Optional
<b>Course contents</b>	The students will do a project, alone or in a small team, for a real client. They will plan their project, communicate with their client, analyze the problem, develop a solution and implement the solution. They will document their project in detail writing a paper about the project and its results. The project can be in the domain of software development (web development, desktop development, mobile app development) , business IT solutions (Sharepoint, Business Intelligence, ...), IT Infrastructure (Security, Server Management, Virtualisation, Cloud Computing), ... depending on the field of interest of the student and the available projects. It is possible that student have to learn new technologies to finish their project successfully.
<b>Course objectives</b>	Be able to work out an IT Solution for a real client. Manage projects in a sound way. Report in English.
<b>Entry requirements</b>	Good knowledge of software development or IT Infrastructure. Project will be adapted to the student's skills.
<b>Teaching method</b>	Project work. Individual coaching.
<b>Assessment</b>	Project management, project results and reporting will be assessed.
<b>Course material</b>	
<b>Remarks</b>	Own laptop required.