ADVANCED COMPUTER BUSINESS APPLICATION

Code du cours Course Code BAC.EAINA.ISCSE.2301			**Titre du cours Course title ADVANCED COMPUTER BUSINESS APPLICATION**					
Crédits Credits 6		**Période d'enseignement Teaching period** fall, spring					**Année Académique Academic Year** 2022/2023	
Charge de travail Student workload	**Synchrone / Synchronous** 39	**Asynchrone / Asynchronous** 0	**Travail en équipe Team work** 0	**Activités pédagogiques / Pedagogical activities** 0	**Travail personnel Personal work** 0	**Coaching** 0	**Evaluation** 6	**Charge totale de travail Total workload** 45
Programme Program			Global BBA					
Discipline Discipline								
Module			-					
Type de cours Course type			core					
Campus			Barcelone, Lille, Nanjing, Raleigh, Sophia					
Campus partenaire								
Course open to students in exchange								
Langue d'enseignement Teaching language		Anglais / English						
Responsable du cours Course leader			MILLELIRI André					
Pré-Requis Prerequisite			Consumer Computer Applications					
Nom des intervenants par campus Instructor(s) names by campus	Belo Horizonte							
	Lille							
	Paris							
	Raleigh							
	Sophia							
	Stellenbosch-Le Cap							
	Suzhou							
	Nanjing							

	Barcelone			
	Other			

Descriptif du cours / Course description	This course introduce the basis of VBA programming of macros applied in Excel as well as general algorithms used in programming. Students will learn the general objects used in Excel programming as well as the basic keywords. Applications will be reviewed along labs and the final project.
Thémes / Topics	
Résultats d'apprentissage / Intended Learning Outcomes and Skills	**A l'issue de la formation, vous serez capable de / As a result of this module, you will be able to:** **Connaissances / Knowledge and Understanding (subject specific)** understand the basis of VBA programming and algothithm structures. **Aptitudes cognitives / Cognitive skills** be able to write a specific processing algorithm based on the target to reach and how to find resources on internet **Attitudes / Key transferable skills** be able to analyse a practical situation and propose an automatic treatment of data **Ethical and social understanding** be able to write an Excel macro dedicated to a specific situations
Contribution aux objectifs pédagogiques du programme / Contribution to learning objectives	Indiquer les learning objectives auxquels contribue le cours (en se basant sur le curriculum mapping du programme) / Indicate which learning objectives the course contributes to (based on the program curriculum mapping)
	LO3.2 : To produce clear, well organized written communication : LG3 : Graduate should be able to communicate in an international environment
	Cours soumis à évaluation dans le cadre de l'Assurance of Learning pour l'année en cours ? Non / No
Evaluation des étudiants **Student Assessment**	**Evaluation finale (DS)** **Final examination** 40%
	(Précisez la nature pour l'évaluation finale / Explain type for final examination)
	Cliquez ici pour entrer du texte. QCM - Quiz: Epreuve sur table - Supervised exam: Présentation orale - Presentation: Rapport écrit/Dissertation - Report / Dissertation: Participation - Class participation:

<table>
<tr><td rowspan="5"></td><td colspan="2">Autre, précisez / Other, precise:</td></tr>
<tr><td>Contrôle continu
Continuous Assessment</td><td>60%</td></tr>
<tr><td colspan="2">préciser nature / Explain type</td></tr>
<tr><td>Cliquez ici pour entrer du texte.
QCM - Quiz:
Epreuve sur table - Supervised exam:
Présentation orale - Presentation:
Rapport écrit/Dissertation - Report / Dissertation:
Participation - Class participation:

Autre, précisez / Other, precise:</td><td>Nb midterms : 2</td></tr>
<tr><td colspan="2"></td></tr>
<tr><td rowspan="4">Méthodes d’enseignement
Teaching Methods</td><td colspan="2">Format de cours / Course format</td></tr>
<tr><td colspan="2">Cours magistral / Lecture - TD / Tutorials
Autre, précisez / Other, precise:</td></tr>
<tr><td colspan="2">Activités d’apprentissage / Learning activities</td></tr>
<tr><td colspan="2">Personal guided study</td></tr>
<tr><td>Plan de cours
Course Plan</td><td colspan="2">Introduction. Reviews on Excel advanced formulas.
Lab #1: Excel formulas.

Introduction to VBA macro
Recording macro and understanding the code generated. Introduction to VBA editor
Lab #2: samples recorded macro

VBA syntax. Sample and common VBA objects
Lab #3: sample data processing

Variable type and declaration. User interaction.
Lab #4: setting a programming environment

Decisions making and operators
Lab #5: application of conditionnal programming

Data processing: loops
Lab #6: applications of automatic processing

Midterm test 1

Data processing: loops
Lab #7: applications

Lab #8: Applicatinos of VBA tools and concepts

Functions: Excel type and user-defined
Lab #9: applications of VBA functions

Procedures and Events</td></tr>
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	Lab #10: user-defined procedures. Applications on data sorting Midterm test 2 VBA forms Lab #11: creating an Excel form VBA forms Lab #12: Creating an Excel form and programming the interaction with an Excel sheet Lab #13: Data Mining and data processing Submission of final projects Final Exam
Référence Académique / Academic reference	
Site(s) web / Web site(s)	
Licence(s) informatique(s)/ Computer licenses	

	Modalités de délivrance du cours (par campus si différent) **Course delivery modes (per campus if different)**					
Nombre CM Amphi / Number of Lectures	**Durée CM Amphi (en heures) / Lecture duration (in hours)**	**Nombre TD / Number of Tutorial classes**	**Durée TD (en heures) / Tutorial class duration (in hours)**	**Asynchrone / Asynchronous**	**Autres (Distance learning, etc…) (en heures) / Other (in hours)**	**Préciser les spécificités de programmation (TD journée, cadencement spécifique des séances) / Specify if full-day tutorial class, different schedules**
	Campus Sophia					
0	0	13	3	0	0	