## **Course Catalogue Engineering and ICT**

**EXCHANGE PROGRAMME** 

Mobile Solutions 2023-2024



Course summary				
VOE Code: ICT.KS.MS.V20 ECTS credits: 24 Level: Bachelor's degree (full-time)				
Course Title	Mobile Solutions Compulsory			
Type	Compulsory			
Learning competences	If you want to work with others on developing a ready-to-use native or hybrid iOS			
Learning outcomes	and/or Android app for actual clients. If you want to collaborate with students from different disciplines and with a variety of expertise. If you are willing to tackle problems that require a multidisciplinary solution. If you want to find and implement a solution for a real-life business assignment. Then the semester Mobile Solutions fits you perfect!  The success of as app depends on a good architecture and technical development. It also involves carefully considered features, a good infrastructure, as well as that the application is designed in such a way that users have an optimal user experience.  Together with the product owner and your team you specify the requirements. Once you have built a new feature, you will measure whether the intended goals have been met or not and tweak if necessary the application. You strive to realize an app that is in production by the client's company after the semester is accomplished: in Apple's app store and/or Google Play or in a private app store.  Open to all HBO students  Mobile Solutions is one of the elective broadening semesters of HBO-ICT. You learn to participate in a project in a professional and agile working environment. This is done in a multidisciplinary team with a real client. This semester is open for all HBO students who are interested in learning how-to develop an app. And that is more than only the technical part, amongst others topics like user-experience, commercial and legal aspects and privacy are at stake. In this way you will learn about the professional environment as well as from other disciplines in your project. The feedback, evaluation and supervision focuses on preparing you as much as possible for the final graduation phase of their study program.			
Course content	The projects in Mobile Solutions range from building a minimum viable product (MVI from scratch to optimizing and expand an existing app.			
	You choose your project, team and technology stack The assignments may vary in nature. You choose at the kick-off in which team, client and technology stack you will pursue your assignment. The technology stack can comprise native app development or hybrid using frameworks like Ionic or Xamarin. There are only two main requirements: it must be a mobile app and yield a working (prototype) product. Topics like requirements engineering, user experience research, legal aspects, security issues, marketing, data science, iterative and incremental development, testing, use of sensors are addressed during the assignment. As every project is different the learning opportunities can vary as well. It is up to you, supported by your Windesheim coach, how you choose to shape your semester. The assignment is mainly conducted at the client's premises and partly at the ICT Community at Windesheim.			
	Learning opportunities  To help you with your project a number of workshops are available. Some are obligatory (e,g. project management, consulting skills), others are elective (SCRUM, growth hacking, interview techniques, game design). The workshops are not graded individually, but are aimed to contribute to the success of the concerning project. During the semester you will participate in knowledge-sharing sessions. Thus to ensure that knowledge of innovative techniques is passed on to the other teams. Company visits and guest lectures might also be a part of this elective semester program. At the end of the semester you present your app at the Winnovation Expo.			

Planned learning	Large project			
activities and teaching	for actual client or in real-life setting			
methods	• 32-hours per week			
	three to five students per team			
	Weekly coaching			
	Workshops and masterclasses contributing to your projects			
	Regular presentations in which students share their obtained knowledge			
Recommended or	Only freely-accessible learning materials are being used, see ELO (Electronic Learning			
required reading and	Environment).			
other learning				
resources / tools				
Prerequisites and co-				
requisites				
Level	Bachelor			
Grading scale	Portfolio assessment = 1 up to 10, 1 dec., Professional Attitude = Not			
	Achieved/Achieved			
Assessment methods and criteria	Type of assessment	Grade weighting	Criteria	
	Portfolio assessment	1	Higher or equal to 5.5	
	Professional Attitude	0	Higher or equal to 5.5	
Language of	English			
Instruction				
Name of lecturer	For information about the lecturers you can contact Rob van de Star			
Mode of delivery	Students are coached in their project teams on a weekly basis.			