Course Catalogue Engineering and ICT

EXCHANGE PROGRAMME

Mobile Solutions 2024-2025

University of
Applied Sciences
Windesheim

Course summary

Course Title	International Course
Type	Optional
Learning competences	
Learning outcomes	The student can give a presentation of 30 minutes for a mixed audience about the differences in (inter)cultural aspects between The Netherlands and their home country.
Course content	Content of the presentation shows aspects that vary from food and habits to teaching and/or working in a company. Some theoretical aspects need to be included, like the dimensions of Hofstede (country comparison) or the ones from Hall. It can start with a general introduction of the country itself. The 30 minutes consist of 20 minutes presentation and 10 minutes Q and A with the audience.
Planned learning activities and teaching methods	Presentation for audience
Recommended or required reading and other learning resources / tools	- Student's laptop. - Big monitor/screen in the room.
Prerequisites and co-requisites	You are required to have two years of Bachelor's study experience and English-language skills at B2 level.
Level	Advanced
Grading scale	1 up to 10, 1 dec.
Assessment methods and criteria	Pass or fail
Language of Instruction	English
Name of lecturer	For information about the lecturers you can contact Rob van de Star
Mode of delivery	Face to face

Course summary

Course Title	Project Mobile Solutions
Type	Compulsory
Learning competences	
Learning outcomes	If you want to work with others on developing a ready-to-use native or hybrid iOS 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 (MVP) 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 avaialble. 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 activities and teaching methods	• Large project
	   o for actual client or in real-life setting
	   o 32-hours per week
	   o 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 required reading and other learning resources / tools	Only freely-accessible learning materials are being used, see ELO (Electronic Learning Environment).
Prerequisites and co-requisites	You must be a third- or fourth-year student in a relevant field of study with at least 90 ECTS credits. A motivation and/or application letter and grade list will determine your admission to this exchange programme. Besides this, you need to have English-language skills at B2 level.
Level	Advanced

Grading scale	1 up to 10, 1 dec.		
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 Instruction	English		
Name of lecturer	For information about the lecturers you can contact Rob van de Star		
Mode of delivery	Face to face		