

Course Title	Interaction Design							
Course Code	EBC4226							
ECTS Credits	5,0							
Assessment	Whole/Half Grades							
Period	Period	Start	End	Mon	Tue	Wed	Thu	Fri
	4	5-2-2018	6-4-2018		X			X
Level	Advanced							
Coordinator	Dominik Mahr For more information:d.mahr@maastrichtuniversity.nl							
Language of instruction	English							
Goals	<p>When you have successfully finished this course, you will:</p> <ol style="list-style-type: none"> <li>1) Be able to apply multi-disciplinary reasoning in approaching smart service design including human-computer interaction perspectives.</li> <li>2) Be able to discuss the diverse spectrum of software and hardware platforms available for smart service development.</li> <li>3) Gain a better understanding of the broad range of legal and ethical issues surrounding smart services.</li> </ol>							
Description	<p>Broadly speaking, the study of service interaction involves unique challenges, such as:</p> <ol style="list-style-type: none"> <li>1) An increasingly multi-disciplinary design environment spanning domains such as interaction design, UEX, human-computer interaction, affective computing, behavioral science and psychology, services, and computer science and engineering domains including data mining, machine learning, sensor fusion and robotics.</li> <li>2) New and rapidly evolving software and hardware landscapes, giving rise to constantly evolving platforms upon which to develop smarter services, as well as parallel rapid evolution in new analytical techniques, ranging from sophisticated multivariate A/B testing to social media analytics, to sensor fusion in wearable computing and smart cities. This requires a reimagining of the many ways in which customers can interact with services.</li> <li>3) A rapidly developing ethical and legal landscape with unique considerations around privacy trade-offs, data collection and keeping customers informed.</li> </ol> <p>This course will introduce students to the primary theoretical aspects of each of these challenges and equip them with the tools to begin to create and manage smarter services. Students will learn about scientific developments at the intersection of different disciplines giving rise to the services of the future, and will experience a wide-ranging introduction to multiple options to develop such services.</p> <p>Divided into nine distinct topics, this course begins with a multi-disciplinary introduction to the creation of smarter services, guiding students through a variety of relevant domains where smarter services are currently evolving, before finally concluding with critical ethical considerations, shaping the way smart services are created and ensuring customer uptake and continued usage.</p>							
Literature	<p>Battistella, C., Battistella, C., De Toni, A. F., De Toni, A. F., Pessot, E., &amp; Pessot, E. (2017). Open accelerators for start-ups success: a case study. <i>European Journal of Innovation Management</i>, 20(1), 80-111.</p> <p>Dale, R. (2016). The return of the chatbots. <i>Natural Language Engineering</i>, 22(5), 811-817.</p> <p>Dennis, L., Fisher, M., Slavkovik, M., &amp; Webster, M. (2016). Formal verification of ethical choices in autonomous systems. <i>Robotics and Autonomous Systems</i>, 77, 1-14.</p> <p>Eyssel, F. (2017). An experimental psychological perspective on social robotics. <i>Robotics and Autonomous Systems</i>, 87, 363-371.</p> <p>Gravina, R., Alinia, P., Ghasemzadeh, H., &amp; Fortino, G. (2017). Multi-sensor fusion in body sensor networks: State-of-the-art and research challenges. <i>Information Fusion</i>, 35, 68-80.</p> <p>Rafaeli, A., Altman, D., Gremler, D. D., Huang, M. H., Grewal, D., Iyer, B., ... &amp; de Ruyter, K. (2016). The Future of Frontline Research: Invited Commentaries. <i>Journal of Service Research</i>, 1094670516679275.</p>							
Prerequisites	A rudimentary understanding of service design and smart services.							
Keywords								
Teaching methods	PBL / Presentation							
Assessment methods	Participation							
Evaluation in previous academic year	For the complete evaluation of this course please click <a href="http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM">http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM</a>							
This course belongs to the following programme / specialisation	MSc Business Intelligence and Smart Services				No specialisation			
	MSc Business Intelligence and Smart Services				Specialisation courses Service Design			
	SBE Non Degree Courses				No specialisation			