



Elective Subjects/ Semester 2,3 or 4:

Title of the course	Development of ICT and Media Services
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Coordinator of the course:	Per LYNNGAARD
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Objectives	<p><u>Students who complete the module:</u></p> <p>Knowledge</p> <ul style="list-style-type: none"> - Must be able to understand architectural issues such as the division of functions between terminal, server and networks. - Must have knowledge about low-level service enablers in relation to Internet of Things, sensors, and smart actuators - Must have knowledge about development platforms and environments, such as Software Development Kits (SDK), simulators, emulators, and Integrated Development Environment (IDE). - Must have knowledge of web development tools, e.g. MEAN (MongoDB, Express.js, Angular.js and Node.js), RESTful programming models and JSP (Java Server Pages)/servlets - Must have knowledge about basic artificial intelligence and pattern recognition algorithms and principles. - Must have knowledge about platform programming and scripting, e.g. tablets, Raspberry Pi, Arduino, or Smart TV - Must understand interface and communication concepts in relation to external servers, databases, and cloud-based services. <p>Skills</p> <ul style="list-style-type: none"> - Must be able to design and implement platform services/applications using high-level programming languages and development platforms. - Must be able to perform platform programming and scripting (Raspberry Pi, Arduino, IoT, Smart TV, etc.). - Must be able to use sensors and actuators to implement Internet of Things-related systems and devices. - Must be able to use simple artificial intelligence algorithms in platform services and applications. - Must be able to apply programming interfaces to communicate with and use external servers, databases, and cloud-based services. - Must be able to design, develop and evaluate platform software components. - Must be able to produce technical documentation. <p>Competencies</p> <ul style="list-style-type: none"> - Must have the competency to design and develop viable ICT and media services that can address a wide range of user needs and provide a good user experience - Must have the competency to compose more advanced service functionality using state-of-the-art software tools, Internet of Things, cloud architectures, sensors and simple artificial intelligence algorithms.
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DCLead



Master in Digital
Communication
Leadership

Workload: ECTS	5 ECTS Credits
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Important note

This syllabus describes the course as it was delivered in **Summer Semester 2016**. Readers should note that courses of the DCLead programme are changed and adapted every year, also taking into consideration the feedback of the participants. This syllabus is for informational purposes only. The administration of the DCLead programme does not guarantee that the entirety of the information contained in this document clearly applies to any course that is delivered during another semester, also with the same title.