

<b>Modulbezeichnung (eng.)</b>	<b>IoT Data Processing</b> (IoT Data Processing)	
<b>Semester</b>	WPM	
<b>ECTS-Punkte (Dauer)</b>	5 (1 Semester)	
<b>Art</b>	Wahlpflichtmodul	
<b>Sprache(n)</b>	Englisch	
<b>Studentische Arbeitsbelastung</b>	60 h Kontaktzeit + 90 h Selbststudium	
<b>Voraussetzungen (laut MPO)</b>		
<b>Empf. Voraussetzungen</b>	Programmieren auf Bachelor-Niveau (z.B. in C++, Java, Python)	
<b>Verwendbarkeit</b>	Mall	
<b>Prüfungsform und -dauer</b>	Studienarbeit	
<b>Lehr- und Lernmethoden</b>	Seminar, Praktikum	
<b>Modulverantwortlicher</b>	D. Kutscher	
<b>Qualifikationsziele</b>	<p>The students gain detailed knowledge about current architectures, methods, and technologies for the processing of large data sets as well as essential concepts of the Internet of Things. They are able to apply this knowledge in the context of concrete projects. They are capable of evaluating the practicality of current frameworks to real life problems and to assess future developments in this rapidly developing field.</p>	
<b>Lehrinhalte</b>	<p>The module is designed to impart an overview of current data processing architectures (e.g. Lambda, Kappa, Dataflow) and frameworks, such as Storm, Spark, Beam and Flink. Furthermore it covers important application areas of IoT technologies. During the semester students will bring together the knowledge in these topics by applying data processing technology to concrete IoT projects.</p>	
<b>Literatur</b>		
<b>Lehrveranstaltungen</b>		
<b>Dozent</b>	<b>Titel der Lehrveranstaltung</b>	<b>SWS</b>
D. Kutscher, N. Streekmann	IoT Data Processing	4