

Elective R 5.4: Digital Economy					
Module Code	Workload	Credits	Semester	Frequency	Duration
R 5.4	150 h	5 ECTS	5. Sem.	Every semester starting: WS 21/22	1 Semester
1	Courses R543 Digital Economy (German until WiSe 21/22, English start in SoSe 2022) vhb-Course: Hospitality Revenue Management, incl. Airlines/Tour Operators (English from WiSe 21/22)	Contact Time 2 SWS / 22,5 h Distance Learning eForum/Chat	Autonomous learning time 127,5 h	Planned group size 15-35 Students	
2	Learning outcomes / competences <ul style="list-style-type: none"> • Ability to analyze and evaluate digital transformation processes from an economic perspective • Ability to analyze and evaluate electronic markets, business models & value chains based on microeconomic business and market models, network effects and growth models. • Knowledge of the most important revenue management & pricing methods of the hospitality industry, of airlines and tour operators. • Ability to evaluate the impacts of digital transformation and revenue management critically. 				
3	Content <ol style="list-style-type: none"> Digital economy, digital markets & digital transformation (in German until WiSe2021/22) <ol style="list-style-type: none"> Cost structures, and fixed cost economies of internet services, pricing and revenue stream management, classic market models, equilibrium analysis, pareto-optima; demand models, logit/probit-demand and conjoint-analysis. Effects of digitalization on different market models: Chamberlin's monopolistic competition & chain/group building, Hotelling competition and Nash equilibria for mobile 4G/5G coverage, Cournot oligopoly vs. Bertrand's oligopoly (internet pricing competition), heterogeneous oligopolies and digital product differentiation, network economy, two-sided markets, platform-economy, direct & indirect network effects, English vs. Vickrey auctions: Analysis of Google Ad Words bid pricing by Varian as positioning auction, reverse pricing:models, Economics of 3D-printing, AI, Bitcoin,... Digital transformation of the tourism-value-chain: new intermediaries, dis-/re-intermediation, innovation- and substitution, transaction cost economics – industrial economics perspective; new business models & critical success factors of digital tourism, digital goods as hybrids of information goods, system goods, network goods, media, services, club goods, etc. Hospitality Revenue Management & Introduction to Airline & Tour Operator RM <ol style="list-style-type: none"> Revenue management as applied micro-economics and regional market analysis Basic processes, methods & systems of hospitality & hotel revenue management: forecasting with demand calendars, booking pace, seasonal pricing, group/banquet pricing, multi-channel revenue management, RM key performance indicators, etc. 				

Course Descriptions Semester 5 TOURISMUS MANAGEMENT 3.0

	<p>2.2 Revenue management methodology: competitive benchmarking & pricing, optimization, forecasting, reports, RevSim/STR Hotel Revenue Management Business Simulation Game.</p> <p>2.3 Introduction into specific revenue management systems of airlines (network carriers vs. low-cost carriers) & tour operators and in the healthcare sector.</p> <p>2.4 Paths to a more sustainable Revenue Management</p>
4	<p>Teaching Methods</p> <p><i>eLearning Course vhb-Virtual University of Bavaria (www.vhb.org), seminar lecture with cases</i></p>
5	<p>Participation Prerequisites</p> <p>formal: Access to a PC/Laptop with Internet & MS-Office</p> <p>substantial prerequisites: <i>Introduction to Tourism, Introduction IT in Tourism, Business Mathematics & Statistics, Introduction to Microeconomics, Marketing Basics.</i></p>
6	<p>Examination</p> <p>Written examination 90 min</p>
7	<p>Prerequisites for the Allocation of Credit Points successful examination</p>
8	<p>Use of the Module (in other study programs): none</p>
9	<p>Factor for calculation of the degree grade: weighting with factor 1</p>
10	<p>Module Supervisor and Full-Time Teachers</p> <p>Prof. Dr. Goecke, Prof. Dr. Munz, N.N. (new Tourism Economics professorship)</p>
11	<p>Other information:</p> <p>Literature/References:</p> <p>Benckendorff, P.J., Xiang, Z., Sheldon, P., (2019) Tourism Information Technology, 3rd Edition, Cabi Wallingford & Boston</p> <p>Clement, R., Schreiber, D. (2019). Internet-Ökonomie. Grundlagen und Fallbeispiele der vernetzten Wirtschaft, Berlin Heidelberg</p> <p>Goecke, R. (2021) Revenue-Management-Systeme; in: Weithöner, U., Goecke, R., Kurz, R., Schulz, A., Digitaler Tourismus – Informationsmanagement im Tourismus, 3. Aufl. De Gruyter, München und Berlin (in Druck)</p> <p>Goecke, R. (2015): Revenue-Management-Systeme; in: Schulz, A.; Weithöner, U.; Egger, R.; Goecke, R. (Hrsg.); eTourismus: Prozesse und Systeme, De Gruyter, München, S. 475-499.</p> <p>Gallego, G., Topaloglu, H. (2019): Revenue Management and Pricing Analytics (International Series in Operations Research & Management Science, Band 279), Springer Berlin.</p> <p>Goerlich, B.; Spalteholz, B. (2020): Total Revenue Management im Hotel; DEHOGA Berlin</p> <p>Gönsch, J.; Klein, R.; Steinhardt, Cl. (2016); o.J.: Dynamic Pricing – State of the Art; http://ssrn.com/abstract=2179225 (Zugriff April 2021)</p> <p>Harmon, M. (2012): Step-By-Step Optimization with Excel Solver; http://www.ExcelMasterSeries.com (Zugriff 12.9.2020)</p>

<p>Johnson, N., Markey-Towler, B. (2020); Economics of the Fourth Industrial Revolution: Internet, Artificial Intelligence and Blockchain (Innovation and Technology Horizons), Routledge London New York</p> <p>Klein, R.; Steinhardt, Kl. (2008): Revenue Management – Grundlagen und mathematische Methoden; Springer Verlag Berlin</p> <p>Kortmann, W. (2006): Mikroökonomik – Anwendungsbezogene Grundlagen, 4. Aufl. Physica Verlag Heidelberg</p> <p>Mauri, A.G. (2012): Hotel Revenue Management; Pearson Italia; Milano</p> <p>Mochón/Sáez (2015): Understanding Auctions - Chapter Online Auctions Springer Verlag 2015</p> <p>Peters, R. (2010). Internet-Ökonomie, Springer Verlag Berlin.</p> <p>Phillips, R. (2005): Pricing and Revenue Optimization; Stanford Business Books; Stanford.</p> <p>Simon, H.; Fassnacht, M. (2016): Preismanagement; Springer-Gabler Verlag, Wiesbaden</p> <p>Talluri, K.; Van Ryzin, G. (2004); Revenue Management – The Theory and Practice of Revenue Management; Springer Verlag; Berlin</p> <p>Tremblay, V.J.; Tremblay, C. H. (2012): New Perspectives on Industrial Organization With Contributions from Behavioral Economics and Game Theory; Springer-Verlag Berlin</p> <p>Varian, H. R. (2004): The Economics of Information Technology: An Introduction (Raffaele Mattioli Lectures); Cambridge University Press, Cambridge</p> <p>Varian, H. R. (2019): Intermediate Microeconomics: A Modern Approach; Media Update, Norton New York</p> <p>Wied-Nebbeling, D.; Schott, H. (2005); Grundlagen der Mikroökonomik; Springer Berlin</p> <p>Williams, H.P. (2013): Model Building in Mathematical Programming; 5th Edition, Wiley Chichester</p>
