

Module: OPM 682 Revenue Management

Contents:

In today's e-business environment, there is an increasing number of unlocked opportunities to increase profits through Revenue Management (RM). RM is a short-term planning instrument in order to effectively match supply and demand and thereby maximize profitability – by selling the right product to the right customer at the right time through the right channel for the right price. RM takes into account that on the supply side, resources to produce these products are usually constrained and often perishable, and therefore, the effectiveness of the abovementioned market-related decisions is highly interrelated with resource allocation decisions.

Today, RM is a large revenue generator for several major industries relying on sophisticated RM systems; Robert Crandall, former Chairman and CEO of American Airlines, has called RM "the single most important technical development in transportation management since we entered deregulation." While airlines have the longest history of development in RM, applications have rapidly diffused beyond airlines to industries such as retailing, hospitality, railways, car rental, telecommunications and financial services, internet service provision, electric utilities, broadcasting and even manufacturing.

For outside observers, RM may seem often like an art. But finally, the most important pillar of RM is analytics – including systematic data analysis, forecasting, and powerful optimization that allows taking all market- and supply-related profit drivers simultaneously into account. This course provides the key ideas, the underlying basic models and state-of-the-art methods of RM.

Learning outcomes:

Students will gain insights into practical applications of Revenue Management. The students get familiar with the underlying models and methods. The students furthermore enhance their analytical skills.

Prerequisites:

Formal: At least one of the modules OPM 501, 502, 561, 581, 582 or 591 (parallel attendance possible); further modules may be accepted by Professor upon request.

Recommended: Participants should be familiar with the fundamentals of Operations Management and Service Operations Management. Furthermore, students need a basic knowledge in mathematics (including linear programming) and in statistics (probability distributions).

Obligatory registration: no	Further Information on the registration: -	
Courses	Hours per week	Self-study
Lecture & Exercise class	2	6
Exercise class	2	2
ECTS in total	6	
Form of assessment	Written exam, optional bonus assignment	
Preliminary course work	-	
Lecturer/Person in charge	Prof. Dr. Cornelia Schön	
Duration of module	1 semester	

Offering	Spring semester
Language	English
Program-specific educational goals	CG 1, CG 3, CG 5
Grade	graded
Range of application	M.Sc. MMM, M.Sc. MMBR, M.Sc. Bus. Edu., M.Sc. Bus. Inf., M.Sc. Bus. Math., M.Sc. Econ.