

## Course Descriptions None 2019-2020

Course Title Network Economics  
 Course Code EBC2109  
 ECTS Credits 6,5  
 Assessment None

Period	Start	End	Mon	Tue	Wed	Thu	Fri
5	14-4-2020	5-6-2020	X			X	

Level Advanced  
 Coordinator Robin Cowan For more information:r.cowan@maastrichtuniversity.nl

Language of instruction

Goals  
 Learn and understand the basic economics of network technologies  
 Understand formation and evolution of networks  
 Learn difference between different network structures  
 Learn about pricing and economics of network goods  
 Understand issues relating network technologies and business strategies  
 Understand effects of network technologies on competition and competition policy

Description  
 The new economy is driven by dramatic changes in information and communication technologies — the computer, telecommunication technologies, the internet. These technologies, which are being integrated into every facet of the economy and society, are inherently network technologies. This course studies the micro-economics of networks, and the effects on the economy of the widespread diffusion of network technologies. Specific topics include the nature and scope of network externalities; the need for standards (both technical and cultural) and the nature of the standardisation process; path dependence; technological lock-in and escaping from lock-in; potential regret; issues in pricing the use of network technologies; the effects of different network architectures such as small worlds on economic performance. Various policy issues will also be addressed. The new information technologies have made it possible for agents in the economy to have different types of interactions with each other. For example, businesses can buy and sell using electronic trading technologies at the extreme, or simply using the internet to extend their reach to customers in ways that were previously impossible. All of this activity, though, draws on networks. There is the obvious one, namely that the internet (and the Web) is itself a network: the internet a physical network, the Web a network of linked information. Additionally, though, because of changes in the way information flows today, we have to think of agents more generally interacting over a more abstract kind of network of connections of various different kinds, as they operate in the economy. Virtual networks, or social networks form a more important aspect of economic life: firms have networks of suppliers with which they have long-lasting non-market relationships. Firms also have networks of other (non-supplier) firms for the same of gathering or creating information or knowledge about future technologies. The new economy depends on networks in many different ways, and this course aims to understand both networks per se, and networks as supporting different types of economic activity.

Literature No pre-assigned literature. We make use of recent journal articles.

Prerequisites An intermediate level of economics is recommended. Exchange students should have a basic knowledge of microeconomics  
 an advanced level of English

Teaching methods PBL / Lecture / Assignment / Groupwork

Assessment methods Final Paper / Attendance / Participation / Written Exam

Evaluation in previous academic year For the complete evaluation of this course please click <http://iwio-sbe.maastrichtuniversity.nl/rapporten.asp?referrer=codeUM>

This course belongs to the following programme / specialisation

Bachelor Economics and Business Economics - Economics and Management of Information	Year 2 Compulsory Course(s)
SBE Exchange Bachelor	Bachelor Exchange Courses
SBE Exchange Master	Bachelor Exchange Courses
SBE Non Degree Courses	Bachelor Courses