Georg-August-Universität Göttingen **Module B.Inf.1204: Telematics / Computer Networks**	5 C 3 WLH

Learning outcome, core skills: The students • know the core principles and concepts of computer networks. • know the principle of layering and the coherences and differences between the layers of the internet protocol stack. • know the properties of protocols that are used for data forwarding in wired and wireless networks. They are able to analyse and compare these protocols. • know details of the internet protocol. • know the different kinds of routing protocols, both in the intra-domain and inter-domain level. They are able to apply, analyse and compare these protocols. • know the differences between transport layer protocols as well as their commonalities. They are able to use the correct protocol based on the demands of an application. • know the principles of Quality-of-Service infrastructures and networked multimedia • know the basics of both symmetric and asymmetric encryption with regards to network security. They know the various advantages and disadvantages of each kind of encryption when compared to each other and can apply the correct encryption method based on application demands.	**Workload:** Attendance time: 42 h Self-study time: 108 h

Course: Computernetworks (Lecture, Exercise)	3 WLH
Examination: Written examination (90 minutes) **Examination requirements:** Layering; ethernet; forwarding in wired and wireless networks; IPv4 and IPv6; inter-domain and intra-domain routing protocols; transport layer protocols; congestion control; flow control; Quality-of-Service infrastructures; asymmetric and symmetric cryptography	5 C

Admission requirements: none	**Recommended previous knowledge:** B.Inf.1101, B.Inf.1801
Language: English	**Person responsible for module:** Prof. Dr. Xiaoming Fu
Course frequency: once a year	**Duration:** 1 semester[s]
Number of repeat examinations permitted: twice	**Recommended semester:**
Maximum number of students: 100	