

# Networking and TCP/IP Basics and preparation for Network+

Course code: GOC2

The very basic, five-days course which provides students with all the necessary knowledge to understand, deploy, operate and troubleshoot basic networking technologies based on IPv4 and TCP/UDP protocol suites. The course discusses also topics such as DNS, DHCP or IP routing and NAT.

Affiliate	Duration	Course price	ITB
Praha	5	29 000 Kč	50
Brno	5	29 000 Kč	50
Bratislava	5	1 160 €	50

The prices are without VAT.

## Course terms

Date	Duration	Course price	Type	Course language	Location
 08.06.2026	5	29 000 Kč	Presence	CZ/SK	GOPAS Praha
 22.06.2026	5	29 000 Kč	Presence	CZ/SK	GOPAS Brno
 29.06.2026	5	1 160 €	Online	CZ/SK	Online
 29.06.2026	5	29 000 Kč	Online	CZ/SK	Online
 29.06.2026	5	29 000 Kč	Presence	CZ/SK	GOPAS Praha
 20.07.2026	5	29 000 Kč	Presence	CZ/SK	GOPAS Praha
 03.08.2026	5	1 160 €	Presence	CZ/SK	GOPAS Bratislava
17.08.2026	5	29 000 Kč	Presence	CZ/SK	GOPAS Praha
24.08.2026	5	29 000 Kč	Presence	CZ/SK	GOPAS Brno
21.09.2026	5	29 000 Kč	Presence	CZ/SK	GOPAS Praha
12.10.2026	5	1 160 €	Presence	CZ/SK	GOPAS Bratislava
19.10.2026	5	29 000 Kč	Presence	CZ/SK	GOPAS Praha
02.11.2026	5	29 000 Kč	Presence	CZ/SK	GOPAS Brno
23.11.2026	5	29 000 Kč	Presence	CZ/SK	GOPAS Praha
07.12.2026	5	1 160 €	Online	CZ/SK	Online
14.12.2026	5	29 000 Kč	Presence	CZ/SK	GOPAS Praha

The prices are without VAT.

## Who is the course for

This course is intended for workers responsible for service and net administration in a company.

## What we teach you

In this course students learn about nets (mainly about TCP/IP), which are necessary for every administrator.

## Required skills

OS - Windows Server

## Course Outline

Introduction, net examples, network environment formation

**GOPAS Praha**  
Na Strži 2097/63  
140 00 Praha 4 - Krč  
Tel.: +420 226 201 390  
[info@gopas.cz](mailto:info@gopas.cz)

**GOPAS Brno**  
Nové sady 996/25  
602 00 Brno  
Tel.: +420 530 513 590  
[info@gopas.cz](mailto:info@gopas.cz)

**GOPAS Bratislava**  
Dr. Vladimíra Clementisa 10  
Bratislava, 821 02  
Tel.: +421 902 903 132  
[info@gopas.sk](mailto:info@gopas.sk)



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# Networking and TCP/IP Basics and preparation for Network+

Net range.

Components which partake in network environment formation.

Network topology.

Network technology.

RM ISO/OSI model

Origin of ISO/OSI model

Seven layers of the model

Data transport

Kinds of service

Network protocol

Protocols and data transport.

Common protocols used in network environment.

Other communication protocols.

Protocols used in RAS connection.

Protocol TCP/IP

Set of protocol TCP/IP.

Translation of the names on TCP/IP nets.

Description of data transfer process.

Data heading accross nets.

Addressing using protocol IP

IP address classes.

Subnetting.

Planning of the address area.

Configuration of the protocol TCP/IP.

Hostsearching optimalization in nets using IP address

Binary IP address entry.

Binary „subnet mask“ entry.

Hostsearching process in the net and data transfer.

Possibilities of net monitoring

Network monitor

Networking analysis

Solving of network problems

Automatic allocation of Protocol (IP) addresses

DHCP summary

Installation of DHCP service

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Authorization of DHCP service  
DHCP "Scope" creation and configuration  
DHCP functions adaptation  
DHCP configuration in direction IP environment  
DHCP support  
Implementation of name differentiation using DNS  
Question process DNS summary  
DNS service installation  
Configuration of the name differentiation on clients  
Zone creation and configuration  
Configuration of DNS for internal use  
DNS and DHCP integration  
Support and solving of problems on DNS servers  
Configuration Windows server as a router  
Routers and routing tables summary  
Network connection configuration  
Routing and Remote Access services  
Configuration of static ways  
Configuration of Routing Information Protocol  
Access to Internet configuration  
Possibilities of network connection to Internet  
Access to Internet using Router  
Access to Internet using address translation (NAT)

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