

1. Hardware requirements

- **Ethernet adapter**
 - Connector: RJ-45 (twisted pair)
 - Bitrate: 10/100/1000 MBit
- **Network cable** (patch cable)
 - Minimum CAT5 RJ-45 (for 100 MBit)
 - Don't use ISDN cables (RJ-11)!

2. Getting the MAC address

The MAC address is the hardware address of a network adapter. It is necessary for the unique identification of the adapter in the network. It looks like: 00:11:EE:2C:BD:B6 or 00-11-EE-2C-BD-B6.

Only registered MAC addresses (computers) have access to the FeM-Net. If you connect a non-registered computer, the access to the FeM-Net is blocked for the complete network outlet. This means that you only have access to a small range of pages (e.g. TU Ilmenau, FeM Website).

- **Windows XP/Vista/7**
 - Click Start (and Run in XP), then type "cmd" and hit [Enter], then type "getmac /v" in the command prompt and hit [Enter]
 - Search for "Ethernet adapter" or "Local Area Connection" (not "Wireless LAN adapter"!)
 - Read the MAC address labeled "Physical Address"
- **Mac OS X**
 - Apple (top left) -> System Preferences -> Network -> Show: Built-in Ethernet -> "Ethernet" tab
 - Read the MAC address labeled "Ethernet ID"
 - Configure: Automatically
- **Linux**
 - Open up a console and type "/sbin/ifconfig"
 - Read the MAC address labeled "hardware address" or "HWaddr"

3. Setting up your operating system

- **Windows XP/Vista/7**
 - Windows XP: click Start -> Control Panel -> Network Connections
 - Windows Vista/7: click Start -> Control Panel -> Network and Internet -> Network and Sharing Center -> Change adapter settings (Vista: manage network connections)
 - Right-click on "Local Area Connection" -> Properties
 - Windows Vista/7: uncheck "Link-Layer Topology Discovery Mapper I/O Driver" and "Link-Layer Topology Discovery Responder"!
 - Select "Internet Protocol Version 4 (TCP/IPv4)" and click Properties
 - Check "Obtain an IP address automatically" and "Obtain DNS server address automatically"
 - Click Advanced..., choose "DNS" tab and uncheck "Register this connection's addresses in DNS"
- **Mac OS X**
 - Apple (top left) -> System Preferences -> Network -> Location: Automatically; Show: Built-in Ethernet
 - In tab "TCP/IP" set "Configure IPv4:" to "Using DHCP" and finish with "Apply Now"

4. Proxy server and firewall

In some cases, the proxy server is necessary to reach websites that are usually blocked by the FeM Firewall, especially using active FTP.

- The firewall blocks: UDP connections (incoming/outgoing) and TCP connections (all ports incoming, ports 135, 137-139, 445 outgoing), more information in the FeM-Net-FAQ.
- Using automatic proxy scripts in the web browser:
 - Use proxy server only if necessary: <http://proxy.fem.tu-ilmenau.de/noproxy.pac>
 - Always use proxy server (except FeM-Net): <http://proxy.fem.tu-ilmenau.de/proxy.pac>

5. Services of FeM e.V.

- Internal (only inside the FeM-Net)
 - **FAQ** (Frequently Asked Questions, instructions and hints) <http://faq>
 - **FeM News** (discussion platform for members) <http://news>
 - **MyInfo** (membership information) <http://myinfo>
 - **CName** (change your computer name in the network) <http://cname>
 - **Proxy server** <http://proxy>
 - **TFSNA** (internal search engine) <http://tfsna>
 - **Mailgate** (contact other members) <http://mailgate>
 - **Wiki** (information about FeM) <http://wiki>
- External (reachable worldwide)
 - **sPi** (students community portal) <http://spi.fem.tu-ilmenau.de>
 - **Jabber/XMPP** (alternative instant messaging service) <http://jabber.fem-net.de>
 - **IRC** (Internet Relay Chat, reachable in the IRCNet) irc.fem.tu-ilmenau.de (Port 6667)
 - **Streaming** (lectures on demand etc.) <http://streaming.fem.tu-ilmenau.de>
 - **iSTUFF** (student television) <http://iSTUFF.de>
 - **Pergon, SMRealms** (online games) <http://welt-pergon.de>, <http://smrealms.de>

6. Terms of service

- If you've got any questions, please read the **FeM-Net-FAQ** on <http://faq.fem.tu-ilmenau.de> first.
- In case your question still isn't answered, feel free to post your question in the **FeM News** on fem.net.help or ask your **admin**.
- We strongly recommend you having **antivirus software** installed. More information can be found in the FeM-Net-FAQ.
- Virus infected computers are isolated from the others for security reasons. The access to the FeM-Net will be restricted to a few websites and services like the FeM-Website and virus scanner websites. If your computer is in this **quarantine network**, please follow the instructions in your browser or contact virus@fem.tu-ilmenau.de.
- Please notice that the FeM-Net uses the Internet uplink of the university, so **avoid high network loads** (e.g. long video and audio streams) from the Internet. There are no such limitations inside the FeM-Net or the internal network of the university.

<http://faq.fem.tu-ilmenau.de>