

Computer Network-2

Dr. Truong Dinh Huy

My Self

- Dr. Truong Dinh Huy
- Office: **Room 389**, Admin Building
- My e-mail: huy.td@vgu.edu.vn
- Major: IoT, Deep Learning for IoT, Reinforcement Learning
- Office Hours: If you have any questions, just come my office at 2pm-4pm every Tuesday.

Course Workload

Student workload

Credits	5	ECTS
Contact hours (Lecture)	30	AHs
Contact hours (Lab)	30	AHs
Assignments and independent learning	90	AHs
Total Working hours	150	AHs

Frequency The module is offered each academic year

Prerequisites

None

Course Content

Lecture Contents	Lab Contents
1. Socket Programming Multi-Thread Programming	1. Network data transmission using Socket Programming
2. <ul style="list-style-type: none">- IP Cellular telephone mobile network- Network management- Network of Internet of Things	2. Configuration and setup network devices: Computer, Switch, Router,... 3. Application of network management

Assessment

1. 3 on-line Individual assignments: 20%
2. Project: 40%
3. Final Exam: 40%

Notes:

1. **Prerequisites:** Students are allowed to take part in the module examination if the student attended at least 75% of total number of lectures.
2. **For students who do not follow this rule like 2020-student or 2019-student:** To be allowed to take part in the final Exam, you must do all homework and submit them to specific folder

3 On-line Assignments (20%)

3 on-line individual assignments will be done at lecture hall and online. You will use your laptop to do your assignments and submit them in our Moodle website (moodle.vgu.edu.vn) in a limited time.

- First assignment is about socket programming, multi-thread programming.
- Second assignment is about configuration and setup network devices.
- Third assignment is about Wi-Fi, 4G/5G (chapter 7 of textbook 2).

Projects (40%)

You are required to build a network GUI application by using Java language

The list of projects is posted in Moodle website.

You build your team and pick up one of them.

We will use the last day of the course as presentation day and you need to submit your projects before the last day

Final Exam (40%)

This is open-book written exam and no electric devices.

Duration: 90 minutes

Contents of final exam cover all parts: network programming, configuration LAN, and theory.

There are two parts in final exam: Multiple-choice part and written part

Course materials

Recommended Textbook:

1. Elliotte Rusty Harold, Java Network Programming , 4th edition, 2014.
2. James F. Kurose and Keith W. Ross, Computer Networking: A top-down approach, 8th edition, 2020.
3. B.A. Forouzan, TCP/IP Protocol Suite, 4th Edition, 2010.

Recommended Materials for Configuration LAN

1. [Free CCNA v1.1 200-301 | Complete Course 2025 – YouTube:](https://www.youtube.com/playlist?list=PLxbwE86jKRgMpuZuLBivzIM8s2Dk5IXBQ)
<https://www.youtube.com/playlist?list=PLxbwE86jKRgMpuZuLBivzIM8s2Dk5IXBQ>

E-learning platform: <https://moodle.vgu.edu.vn/>

1. Slides
2. HomeWorks.
3. Assignments.
4. Projects