

#### Course Aims

- To gain in-depth introduction to a wide range of topics in the field of computer networks, including the Internet
- To obtain hands-on understanding of networking protocols
- To gain skills in network programming, designing and implementing network protocols, evaluating network performance and problem solving
- To build necessary foundational knowledge required

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# Labs

- 2 hour lab sesionstarting Week 2
- Hands

## Assessment

• Hands-

## Assessment

**NOTE:** 

#### Accounts for accessing lab machines

## Be original!!

- Collaboration
  - You may discuss approaches, not solutions
  - You must submit your own work
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- Introductory (first course) course in computer network
  - Learn

#### What is this c,urse ab,ut?

- 1. To learn how the Internet works
  - Internet is a complex global infrastructure
  - What are the organising principles behind the Internet?
  - What really happens when you "browse the Web"?

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#### What isuthisucour about?

- 1. To learn how the Internet works
  - Internet is a complex global infrastructure
  - What are the organising principles behind the Internet?
  - What really happens when you "browse the Web"?
  - What are TCP/IP, DNS, HTTP, NAT, VPNs, 802.11,.... anyway?
- 2. To learn the fundamentals of computer networks
  - What issue you need to take into consideration to make a computer network work well?
  - What design strategies have proven valuable?
  - How do we evaluate network performance?



## Nano-scale computer networks?

#### Pre-requisites

- Good understanding of algorithms, data structures and basic probability
- Proficient in programming: C, Java or Python