

MS Degree Computer Science and Networking

# Routing Architectures and Protocols Lab (LPA)

Davide Adami





## About LPA

- Teacher name: Davide Adami
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- Semester: First
- Exam mode: Oral
- Pre-requisites:
  - Networking fundamental
  - Understanding of destination-based, hop-by-hop IP routing in a Classless Inter-Domain Routing (CIDR) environment
- Area: Networking





## Course Overview

- The course provides the basic knowledge and the key concepts to understand the functional components required to design and implement intra and inter-domain routing
- Main theoretical and practical topics:
  - design and deployment of networks with IGP (RIP/OSPF) and EGP (BGP) routing protocols, Routing Policy, Firewall Filters, Class-of-Services, IPv6
- Traditional lectures are coupled with hands-on lectures which provides students with the possibility to work with Juniper Networks routers.
- Basic concepts concerning the configuration, management and monitoring of Juniper Networks routers are recalled
- At the end of the course, students may obtain Juniper Certification (JNCIA-Junos exam).

#### • Required Skills

- Networking fundamental
- Understanding of destination-based, hop-by-hop IP routing in a Classless Inter-Domain Routing (CIDR) environment





### Lab equipment at UNIPI



#### 9 J4350 Router with Gigabit Ethernet Interfaces



9 SRX-240 Router with Gigabit Ethernet and Serial Interfaces



Layer 2 switches with 24 10/100/1000 Ethernet Interfaces 4 Fiber Optic Gigabit Ethernet Interfaces



