

## Electronic and Electrical Engineering

**Introduction to Internet Protocol Networks (ELEC0099)****Description**

This Module provides an Introduction to IP networks and Data networks in general.

It follows a bottom up approach, starting in layer 2 with coverage of Ethernet and IEEE 802.11.

It then covers the essentials of IP protocols (IPv4 and IPv6) with a big emphasis on network routing, both intra and inter domain.

Congestion and flow control is taught by detailing the TCP protocol and a smaller emphasis in UDP and newer congestion control protocols like RTCP and DCCP.

Quality-of-service is examined in detail by looking at the fundamentals of queuing theory and the Integrated and Differentiated services architecture.

The course finishes with analysis of upper layer functionality, namely session and application layer protocols and security.

The course contains a lab session where the theoretical concepts are illustrated with small exercises.

**Key information**

<b>Year</b>	2018/19
<b>Credit value</b>	15 (150 study hours)
<b>Delivery</b>	PGT L7, Campus-based
<b>Reading List</b>	<a href="#">View on UCL website</a>
<b>Tutor</b>	<a href="#">Prof Miguel Rio</a>
<b>Term</b>	Term 1
<b>Timetable</b>	<a href="#">View on UCL website</a>

**Assessment**

■ Written examination (departmentally managed): 100%

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