

## GRADUATE CERTIFICATE IN TELECOMMUNICATION NETWORK MANAGEMENT

The explosive growth of data networks has brought with it the need for effective network management. The widespread deployment of standards-based solutions (e.g., SNMP) is but a first step in dealing with the complexity of network management. A thorough knowledge of network protocols and network management standards is necessary for any practitioner in this area. The program consists of four required courses. A GPA of 3.0 or higher is required in the four courses to receive the certificate. [This Certificate can be finished completely online.](#)

| Course No. | Course Title                         | Credits |
|------------|--------------------------------------|---------|
| EL 5363    | Principles of Communication Networks | 3       |
| {EL 5373   | Internet Architecture and Protocols  | 3       |
| or         |                                      |         |
| CS 6843    | Network Protocols I }                |         |
| EL 6373    | Local and Metropolitan Area Networks | 3       |
| {CS 6813   | Information, Privacy and Security    | 3       |
| or         |                                      |         |
| CS 6823    | Network Management and Security}     |         |

### Certificate Coordinator:

For further information regarding the Telecommunication Network Management Certificate, contact Professor Yong Liu at 718-260-3959 or [yongliu@poly.edu](mailto:yongliu@poly.edu).