CCN – What for?
Want to understand, analyze and improve your communication network system? Want to develop and define software on top of next-generation networks? Many people who want to study the techniques and tools analyzing complex networks choose CCN.

This program proposes graduate students to be initiated to research and to acquire strong practical and theoretical knowledge in the network and computer science area. The broad range of proposed modules gives students the opportunity to deepen their technical knowledge through computer science methodologies applied to communication networks as well as to discover new emerging research topics.
**PEDAGOGICAL OBJECTIVES**

Two main objectives can be tackled when following this program. First, to master formal techniques for network analysis, the students will study novel techniques and tools to model and analyze complex future networks. Secondly, the students could also be interested by all the software engineering techniques (e.g. software defined networks) to compute, improve and master the keys of the development of distributed networks.

A number of labs and projects are scheduled for students to practice and assimilate concepts more easily. High quality lectures and project supervision are provided by expert professors coming from two major engineering schools from the Université Paris-Saclay, Telecom SudParis and Centrale-Supelec.

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**PERSPECTIVES**

The Master CCN leads to research and engineering positions in the fields of modeling and analysis of complex networks, distributed computing for new-generation communicating systems, their qualitative and quantitative studies.

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**RESEARCH**

More than 20 research units and laboratories are associated to the Master 'Computer Science' of the University Paris-Saclay offering then a real opportunity for preparing a PhD thesis. Most of the professors involved in CCN are scientifically recognized in their research community and members of CNRS labs. Furthermore, some of the courses and labs will be provided by industrial R&D units, illustrating the relationships between the taught research methods and their applications to the industry. Apart from the acquired technical background, the objective of the Master CCN is to give a first research experience so students are next able to apply to PhD position, or research engineers in academic or industrial organizations.

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**SOCIOECONOMIC PARTNERSHIP**

The Master CCN, proposed by two major engineering schools of the University Paris-Saclay, enjoys an exceptional location in an ecosystem bringing together a large number of ICT economic actors, the competitiveness clusters Systematic and Cap Digital, and innovation structures (IRT SystemX, Incuballiance).

In addition, for several years, CCN has developed close relationships with several socio-economic partners whom the students will benefit.