

University Bachelor of Technology (B.U.T.)

Networks & Telecommunications (R&T)

Computer networks are at the heart of our social and professional lives with the rise of teleworking, mobile communications, transportation, high-speed networks and access to information. These evolving technologies involve deploying infrastructures, configuring computer networks, virtualizing services, managing data flows and dealing with new cybersecurity issues.

The **Bachelor of Technology (B.U.T.) in Networks & Telecommunications (R&T)** is designed to meet the growing demand for skills in the sectors of information and communication technologies.

The B.U.T. in R&T provides solutions to these challenges by offering a three-year degree program which trains senior technicians to implement, configure and maintain equipment and information systems, while ensuring their physical safety and software security. The course revolves around Networks and Telecommunications, as well as IT skills and five specialized study tracks.

Professional opportunities for graduates include: network administrator, systems administrator, IT asset manager, senior operations and maintenance technician, cloud and data storage architect, DevOps, senior cybersecurity technician, IT business manager.

Study tracks

- The **Cybersecurity study track** trains qualified technicians to develop the required skills for all jobs related to the security of information systems, from the installation of security equipment (firewalls, network probes) to their monitoring. Graduates will be able to define a company's cybersecurity policy and set the framework for the use of digital resources. They can also operate secure information systems compliant with current regulations such as the GRDP law and governmental recommendations (ANSSI), imposed by the current context.

- The **Systems & Cloud Development study track** trains qualified technicians to two complementary professional situations: understanding, deploying, and testing a computer infrastructure or application in collaboration with network architects, administrators or application developers, as well as maintaining a cloud environment suitable for business needs and automating its production.

- The **Network Operators and Multimedia study track** trains students to become fixed telecommunications networks operators who provide network access for companies or individuals (optical fibres, ADSL, core networks), or integrative communication solutions for companies (IP telephony, videoconferencing, video-protection). Graduates can configure companies' networks as well as secure and supervise all voice and data services.

- The **Mobile Networks and Internet of Things study track** trains students to acquire expert knowledge in communication technologies between mobile objects: telephones, vehicles, and sensors of all kinds. The Internet of Things sector is growing rapidly, with many emerging professions in precision farming, Industry 4.0, intelligent transportation

systems, and e-health. New technologies and standards have been designed in this field (LoRa, Sigfox, NB-IoT, IEE 802.15.4, etc.). The existing generations of mobile networks (3G, 4G, 5G) and wireless communications systems (Wifi, Bluetooth) are used for the Internet of Things and continue to generate job opportunities for senior technicians.

- The **Network Project Management study track** trains students to acquire the skills in computer and telecommunication network technologies which allow them to coordinate with different actors within a project. Graduates can analyse and manage the internal and external demands of organizations as well as the components of contracts in compliance with the technical and regulatory standards of their sector.

Entry requirements

Enrolment in the R&T B.U.T. degree is open to secondary school graduates from **general or technology backgrounds (STI2D)**, or **students with a secondary school vocational diploma**.

Apprenticeship

In addition to the full-time course, it is possible to enrol in the B.U.T. within the framework of Lifelong learning or as an apprenticeship.

This degree can also be acquired through Accreditation of Prior Experiential Learning (APEL).

