Concepts common to both specialties:
➢ **SISR** (Infrastructure Solutions, Systems and Networks)
➢ **SLAM** (Software Solutions and Business Applications)

- Systems and Networks :
  - Workstation configuration and connection to an existing network
  - Operating system installation, configuration and administration
  - Basic configuration of network interconnection elements (TCP/IP model)
  - Basic server administration
  - Backup management, restoration of user and server environments
- DBMS :
  - Use of an existing database (relational model - SQL language)
- Development :
  - Procedural development
  - Human-machine interface development in Windows and web environments Project management :
    - Working in project mode
    - Estimating and controlling project costs

➢ **SISR Specialty**	➢ **SLAM Specialty**
- Server virtualization - User access maintenance - Setting network interconnection elements (static routing, VLANs) **Design, configuration, administration, supervision, security and optimization of infrastructures, systems and services networks**	- Operating and modifying a database **Object-based programming** **Studying and using a framework** **Integration of a new service within existing software** **Database design, adaptation and implementation in implementation with the tools from associated programming**

Some examples of activities that may be entrusted to the trainee	
➢ **SISR Specialty**	• **SLAM Specialty**
- User support - Incident management using specialized software - Remote control of a workstation or server - Mock-up of a technical solution - Workstation deployment **Projects of development and optimization of an infrastructure** **User and server administration** **Supervision of network services and infrastructures** **Securing and optimizing a network service**	- Creating or updating dynamic websites - DB design, modification and operation using various DBMS and design tools (WIN Design) - User interface development **Adding functionalities to existing software** **Smartphone / tablet development** **Development of business applications around a framework** **Setting up a test procedure and carrying out tests**

- Documentation :
    - Writing technical documentation for other IT specialists
    - Writing user documentation, training
- **Training :**
    - **Draw up a training plan for users of a new service**

Development

Object development language (C#). Visual Studio 2019. .NET technologies

- Component use and development

Web development technologies and tools (PHP, HTML, CSS, Javascript)

- Management applications based on shared databases.

DBMS technologies (ACCESS, SQL Server, MySQL)

- Representation models (UML)
- Definition and manipulation language (SQL)

System and network

System and network support for user access

- Install, configure, parameterize and secure single-user and server systems
  - ✓ Linux (Ubuntu DeskTop, Debian 9)
  - ✓ Windows 10

IPV4 addressing

Service and server support (Windows, Linux environments)

- Maintenance and incident resolution
- Design and adaptation of network infrastructure (switch and router)

Cyber security

- Identify and list personal data
- Raising user awareness of data protection