

# BSC DEGREE APPRENTICESHIP SCIENCE, TECHNOLOGY AND HEALTH, ELECTRICITY AND ENERGY CAREERS MAJOR, RAILWAY ELECTRIFICATION SPECIALISATION

## IDENTITY CARD

> Domain : Sciences, Technologies and Health  
 > Degree apprenticeships  
 > [Accessible to people with disabilities](#)

> [60 ECTS credits](#)  
 > 1 year  
 📍 La Rochelle

## REGISTRATION

## CONTACT

## OBJECTIVES

## PROGRAMME

● Mandatory ■ Course option

### > Analysis, Diagnosis and Maintenance ●

#### ● CMMS - Review Previous Steps

Language used for teaching  
 French

Teaching time  
 10h (10h tutorials)

1 ECTS credit

Course code  
 559-0-72

#### ● Ethernet Diagnostics and Troubleshooting

Language used for teaching  
 French

Teaching time  
 18h (2h lectures - 16h practical work)

2 ECTS credits

Course code  
 559-0-71

#### ● Studies / Research / Diagnostics

Language used for teaching  
 French

Teaching time  
 16h (2h lectures - 2h tutorials - 6h practical work - 6h work in accompaniment)

1 ECTS credit

Course code  
 559-0-73

### > General Training ●

- **Communication: Reporting, Managing - Company Organisation / Employment Contract**

Language used for teaching
French
Teaching time
34h (24h lectures - 10h work in accompaniment)
3 ECTS credits
Course code
559-0-22

- **LV1 Anglais**

Language used for teaching
French
Teaching time
30h (30h tutorials)
3 ECTS credits
Course code
559-0-21

> **IT Skills** •

- **Basic Computer Skills (Google Workspace) / Networks (IP address)**

Language used for teaching
French
Teaching time
12h (8h practical work - 4h work in accompaniment)
1 ECTS credit
Course code
559-0-12

- **General Physics: Basics of Electricity + Tools**

Language used for teaching
French
Teaching time
30h (12h lectures - 4h tutorials - 14h work in accompaniment)
3 ECTS credits
Course code
559-0-11

- **Word Processor / Editing a Spreadsheet / Editing a Text**

Language used for teaching
French
Teaching time
16h (12h practical work - 4h work in accompaniment)
1 ECTS credit
Course code
559-0-13

> **Methods - Instruction Sheets for CAPE** •

- **CAPE Route Sheet (SAP: Parts Flow) / Hardware Integration / CATIA**

Language used for teaching
French
Teaching time
32h (2h lectures - 4h tutorials - 16h practical work - 10h work in accompaniment)
3 ECTS credits
Course code
559-0-52

## • Drafting of Assembly Instructions / CATIA

Language used for teaching	French
Teaching time	25h (3h lectures - 12h practical work - 10h work in accompaniment)
2 ECTS credits	
Course code	559-0-51

## > Modelling and Design •

### • Editing Diagrams and Classification

Language used for teaching	French
Teaching time	50h (30h tutorials - 20h work in accompaniment)
4 ECTS credits	
Course code	559-0-43

### • Reading Block Diagrams - Principle - Drawing Up an Electrical Diagram

Language used for teaching	French
Teaching time	22h (12h tutorials - 10h work in accompaniment)
2 ECTS credits	
Course code	559-0-42

### • Risk Integration in Design / V-Model Study

Language used for teaching	French
Teaching time	18h (8h lectures - 10h work in accompaniment)
1 ECTS credit	
Course code	559-0-41

### • Sizing, Choosing Cables and Equipement (Design)

Language used for teaching	French
Teaching time	24h (4h lectures - 10h tutorials - 10h work in accompaniment)
2 ECTS credits	
Course code	559-0-44

## > Railway Electrification •

### • Energy Quality - Type of Current and Usage - Types of Electrical Distribution

Language used for teaching	French
Teaching time	24h (4h lectures - 4h tutorials - 12h practical work - 4h work in accompaniment)
2 ECTS credits	
Course code	559-0-32

## • Identifying and Choosing the Components (Elements and Wiring) of an Electrical Installation or Equipment

Language used for teaching
French
Teaching time
12h (2h lectures - 2h tutorials - 8h work in accompaniment)
1 ECTS credit
Course code
559-0-35

## • Railway Culture - Regulation and Compliance of Electrical Installations - Railway Safety and Autorisation

Language used for teaching
French
Teaching time
22h (12h lectures - 10h work in accompaniment)
2 ECTS credits
Course code
559-0-31

## • Railway Systems and Electromagnetic Compatibility - EMC

Language used for teaching
French
Teaching time
24h (8h lectures - 12h practical work - 4h work in accompaniment)
2 ECTS credits
Course code
559-0-34

## • Transport Networks, Railway Electricity Distribution and Network Architecture

Language used for teaching
French
Teaching time
14h (4h lectures - 4h tutorials - 6h practical work)
1 ECTS credit
Course code
559-0-33

## > Testing, Commissioning and Validation •

### • Construction / Assembly and Commissioning

Language used for teaching
French
Teaching time
16h (16h practical work)
1 ECTS credit
Course code
559-0-63

### • Electrical Measurements

Language used for teaching
French
Teaching time
20h (2h tutorials - 12h practical work - 6h work in accompaniment)
2 ECTS credits
Course code
559-0-62

- **Wiring according to Instruction Sheets**

Language used for teaching	French
Teaching time	24h (24h practical work)
2 ECTS credits	
Course code	559-0-61

> **Work Placement** •

- **Work Placement (Sandwich Course)**

Language used for teaching	French
18 ECTS credits	
Course code	559-0-81

## AFTERWARDS

Information subject to change

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