

COMPTIA RFID+ CERTIFICATION COURSE



The **DFID+ (Radio Frequency Identification) Certification Course** prepares students for the current CompTIA RFID+ RF0-001 examination.

Students will learn how to set up and manage RFID systems to track inventory, goods, vehicles, and even people. They will also learn about the physics and radio principles that enable RFID solutions.

Course Objectives:

After completing this course, you will know how to:

- Explain the uses and benefits of RFID, and identify the components of an RFID system.
- Compare radio frequency with wavelength, discuss the factors affecting RF signals, and also discuss the communication methods; discuss antenna characteristics and identify reflective and absorptive materials; calculate ERP.
- Identify the types and functionalities of interrogators, and explain interrogator communication; discuss issues related to dense environment and anti-collision protocols; configure interrogation zones and interrogation commands, and optimize interrogation zones.
- Discuss power, frequency, and safety regulations and their impact on RFID systems; discuss air interface protocols and the impact of standards on business and IT infrastructure.
- Classify tags; discuss the types of antennas and their configuration, integrated circuit, and substrate configuration; discuss labels, inserts, and packing items.
- Explain the interaction between tags and interrogators; discuss the factors affecting tag performance and the effects of packaging materials on a tag; explain tag orientation and placement, the movement of tags, and the issues caused by tag stacking.
- Discuss the effects of signal interference on the RFID system; explain site obstructions that affect RFID system performance; discuss radiation patterns; Review the RF network architecture, site structures, and mechanical equipment.
- Determine the relation between virtual components and hardware components of RFID systems; discuss the hardware components of an RFID system and protection.
- Explain hardware installation and safety considerations in the RFID system; explain the installation of an RFID system in various enterprise applications.
- Explain monitoring and troubleshooting an RFID system by analyzing read rates, tuning and repositioning the antennas, and diagnosing failed reads and system hardware failure; identify symptoms for tag failure, explain tag management techniques, and identify the causes of IC failure; describe middleware and network connectivity requirements.
- Discuss RFID printers, printer properties, and ancillary devices; discuss real time location system and warehouse management system.

Price:
£200.00

Instalment Options:
You can spread the payments for this course over 4 monthly payments. 1 initial payment of £80.00, followed by 3 monthly payments of £40.00.

Course Format:
Course Book & Online Practice Exams

Assessment:
CompTIA RFID+ Examination

Approximate Study Time:
100 Hours of Self Study

The RHID+ Certification course consists of the following items:

➤ **RHID+ Certification, 2009 Objectives Course Book**

This course book is designed to provide network technicians and support staff with the foundation-level skills they need to install, operate, manage, maintain, and troubleshoot a corporate network. The manual is designed for quick and easy scanning and filled with exercises that help ensure success.

The course book covers the following Units:

- **Unit 1 – Introduction to RHID**

The following topics are covered in this Unit: RFID basics.

- **Unit 2 – RF Physics**

The following topics are covered in this Unit: RF propagation; Antenna field performance; and Radiated power output.

- **Unit 3 – Interrogation Zone Basics**

The following topics are covered in this Unit: Interrogators; Dense environments; and Configuring interrogation zones.

- **Unit 4 – Regulations & Standards**

The following topics are covered in this Unit: Regulations; and RFID standards.

- **Unit 5 – Characteristics of Tags**

The following topics are covered in this Unit: Basics of tags; Components of tags; and Packaging.

- **Unit 6 – Tag Implantation**

The following topics are covered in this Unit: Interaction between tags and interrogators; Factors affecting tag performance; and Selection and placement of tags.

- **Unit 7 – Site Analysis**

The following topics are covered in this Unit: Electrical environmental conditions; Physical environmental conditions; Coverage area; and Site blueprints.

- **Unit 8 – Design Selection**

The following topics are covered in this Unit: Virtual components of RFID systems; and Hardware components of RFID.

- **Unit 9 – Installation**

The following topics are covered in this Unit: Hardware installation; and Installing RFID systems.

- **Unit 10 – Monitoring & Troubleshooting**

The following topics are covered in this Unit: Analyzing read rates; Troubleshooting tag failure; and Troubleshooting software.

- **Unit 11 – RFIF Peripherals**

The following topics are covered in this Unit: RFID printers; and RFID enterprise systems.

- **Appendix A: Certification exam objectives map**

The following topics are covered in this Unit: Comprehensive exam objectives

PLEASE NOTE: The DHTI+ Certification Course is designed as a theory-based course but does contain all relevant information on how to complete practical exercises. The course books that we use are Official CompTIA Press Course materials.



➤ CertBlaster Online Exam Preparation Software

The course comes with DTI Publishing's Online CertBlaster exam preparation software absolutely free.

CertBlaster® is a powerful certification preparation tool that simulates the conditions of the exams students prepare for. **CertBlaster®** offers four practice modes and all the different question types required to simulate all the exams.

CertBlaster covers mock examination questions in multiple choice or multiple answer formats. This software is the perfect addition to help prepare for your exam.

Pre-Requirements:

Before taking this course, you should be familiar with personal computers and the use of a keyboard and a mouse. It is also recommended that students have RFID technical experience and completed the A+ Certification Course but this is not a requirement.

To complete the practical elements of this course you would require a PC with a minimum of Windows XP Professional or a more recent operating system.

You would also require the following items: An Alien ALR9780 Developer's Kit with circular polarized antenna and tags, or similar RFID reader, tag, and software kit; An Alien linear polarized antenna; A canned food with a high water content (soda, juice, fruit, or vegetables); A bottle of soda pop; A container of antiperspirant; A pack of chewing gum (preferably with foil-wrapped sticks of gum); A ream of paper; Boxes of dry food; Books; Articles of clothing; A lightweight durable object such as a box of pencils; 8' length of string; A plastic ruler or similar object; and Tape.

Course Duration & Support:

Students may register at any time. The courses are designed as self-study courses but if you have any problems you can email our email support. As the course is self study you can complete in as little or as long a time as you prefer, and we do not impose a cut-off date for study.

Assessment:

Assessment is from the CompTIA RHID+ RFO-001 Certification and Examination. The Examination has 81 questions in a multiple choice/multiple answer format spread over 90 minutes. The Exam is graded on a scale of 100 - 900 with a minimum passing score of 630.

Qualification:

On completion of the RFID+ course, you can apply for the Internationally Recognised **CompTIA RFID+ RFO-001 Examination**.

Examinations must be sat at a registered Prometric or Pearson VUE testing centre and are currently £191.00 + VAT each.

You can locate testing centres and schedule appointments on their Websites:

Prometric website – <http://www.prometric.com/>

Pearson VUE - <http://pearsonvue.com/>

