



# **IT Support Technician**

# **Technical Handbook**

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# **ITST Sponsors**

We would like to thank all our industry leading sponsors that are passionate about finding the top talented apprentices and make this competition possible



This WorldSkills UK competition is managed by WorldSkills UK (WSUK)



#### **Overview:**

This competition focuses on all the essential requirements for a successful career as an IT Support Technician within any industry.

This competition tests your ability to configure IT hardware and software to meet customer requirements. This will involve setting up a Client / Server network with a domain controller.

This WorldSkills UK competition is managed by WSUK. This competition consists of:

- an entry stage, a virtual task to indicate to yourself and WorldSkills you have the competences to proceed
- a national qualifier, which will be either virtually led or a face to face competition
- the WorldSkills UK national final, taking place at a venue in the UK.

Competitors will undertake a series of practical tasks which will demonstrate their abilities and skills in PC technology and networking.

The practical tasks will be carried out using virtual machines hosted on a Windows 10 base PC All competition machines will be hosted in a virtual environment using Oracle Virtual Box or Microsoft Hyper-V.

The full competition brief will be provided to each competitor on the morning of the national qualifiers.

#### Career Pathway:

#### What is the job role?

The role of an IT Technician is to provide both remote support and attend site visits to install and maintain a range of different technologies.

#### **Essential experience:**

- Experience providing IT Support
- Windows Operating Systems
- SCCM
- Desktop Support
- Laptop / PC
- Software Installation

#### Qualifications

There are a number of technical qualifications including:

Microsoft (MOU), CompTIA,

A minimum of a BTEC, degree or equivalent relevant practical equivalent.



Average UK salary for IT careers

- Information technology and telecommunications directors £78,637
- IT business analysts, architects, and systems designers £50,127
- Information technology and telecommunications professionals £45,943
- IT project and programme managers £54,545
- IT specialist managers £52,716
- IT user support technicians £30,825
- IT operations technicians £32,813
- Programmers and software development professionals £45,153
- Information technology technicians  $\pounds 31,731$

Average salary figures taken from this link

# **Resources and Registration:**

For information and resources, including how to register, competition rules, and the steps to competing, visit our website.

#### **Pre-Competition Activities:**

Competitors should try to familiarise themselves with competition style activities even if you ask a fellow student to judge a completed work task during a practical session at college / training provider, this will help prepare you for the competition.

Also, familiarise yourself with current industry processes and procedures for undertaking a range of tasks you may need to complete.

One resource that competitors should familiarise themselves with to prepare for the competition is the precompetition activity, made available on **our website**.

# **Competition Structure:**

The IT Support Technician competition is split into three stages:

#### Stage 1: Entry Stage

A virtual led competition activity to illustrate competence and skill for IT Support Technician and allow selection to Stage 2.

# Stage 2: National Qualifier



This will be a virtually led or face to face competition round. You will be competing amongst other people across the country in this round. The top 8 highest scorers from the qualifiers will be then allowed to go through to the national finals.

# Stage 3: National Final

The top 8 highest scorers from across all the national qualifiers will be invited to compete at the UK National Final. There is no automatic entrance to the UK National Final for winners of each national qualifier heat. WSUK will announce the finalists following moderation of marks.

This competition tests your ability to configure IT hardware and software to meet customer requirements. This will involve setting up a Client /Server network with a domain controller.

Competitors will be presented with a variety of hardware and software components:

- storage
- wireless
- peripherals including printers
- RAM
- graphics
- cables and switches
- Microsoft Client (Windows 10)
- Microsoft Server 2012
- Oracle Virtual Box used to host Virtual Machines (VMs)

They should be familiar with application software Microsoft Office 2016 or later

#### Specification of the Tasks

Competitors taking part in this competition should have familiarity with the following:

Competence	Entry	Qualifier	Final
Internal component installation <ul> <li>HDD / Additional HDD</li> <li>DVD Drive</li> <li>Memory</li> <li>NIC / VGA / Sound Card / WIFI NIC</li> <li>Power Unit</li> <li>BIOS</li> </ul>	No	No	Yes
<ul> <li>Peripheral Installation (external)</li> <li>printer</li> <li>web cam / digital camera / scanner</li> <li>external HDD / DVD</li> </ul>	No	No	Yes



<ul> <li>Wireless Installation (external)</li> <li>Android tablet</li> <li>wireless access point</li> <li>WIFI dongle 802.11</li> </ul>	Yes	Yes	Yes
<ul> <li>Networking Equipment</li> <li>hub / switch / wireless access point</li> <li>network cables (Straight Thru and Crossover)</li> <li>create your own cables</li> </ul>	Yes	Yes	Yes
Software Installation / Troubleshooting <ul> <li>installation</li> <li>peripheral drivers</li> <li>network components, correct IP / subnet mask address</li> <li>share a printer</li> <li>operating system</li> <li>application software</li> <li>user management and file sharing</li> </ul>	Yes	Yes	Yes

# Marking and Assessment:

Each competition module will be assessed and marked independently of any other competition activity.

A panel of judges has been selected from a range of industry, college and training provider representatives. The judges' decisions will be moderated, and quality assured by WorldSkills UK before being confirmed.

#### Judges Top Tips:

#### **Preparation and Practice**

A successful competitor will need to be confident, calm and self-assured when competing. Prepare by practicing your skills and techniques to ensure you get the required standard / results you want without any surprises.

#### **Time Management**

Learn to manage your time effectively when completing tasks by working smart not fast! The tasks have allocated times, so practice working to time and under pressure to perfect your timing. If you run out of time in the competition you will lose marks.

#### Planning

Make your own plans for how to complete each task, work methodically and even write it down to help you prepare.



# Organisation

Make sure you are organised, make sure all stages of a task are completed. Organise all your equipment and materials for the task.

# Time constraints

Time yourself when completing tasks, making a note of any mistakes.

When practicing for the competition, each time you complete a task reduce the time and reduce the number of mistakes.

Identify ways of reducing the time to complete tasks (shortcuts).

# Health & Safely

In any IT work environment Health & Safety is especially important, make sure you use the appropriate PPE for the task, keep your work area tidy and work safely.

# Clean and Tidy

Keep your working area tidy as you can be more efficient in a tidy work area. Make sure that when you present your work to the judges it is clean and ready for final judging.

# Understanding

Read the task brief thoroughly and make sure you understand what you need to do. Do not be afraid to ask questions, remember there is only one silly question.....the one you don't ask!

# Do not worry!

If a part of a task has not gone as well as you might have wanted don't worry or dwell on it, just draw a line under that and get on with the next task. Always focus on the marks you can gain not what you might have lost.

#### Enjoy

To get to the WorldSkills UK national qualifiers or the WorldSkills UK national finals is a massive achievement that you should be extremely proud of! Make the most of the whole WorldSkills UK/ITST Skills Competitions process and enjoy it!

# **National Final**

The competitors will complete a series of tasks over 2 days and steadily construct a working internetwork of wired and wireless devices.

There will be a discrete PC build/troubleshooting/IT Help Desk task that will occur in a two-hour slot on the first or second day. Task duration will be 5 hours per day. Completed tasks will be marked on the same days

A period of familiarisation is scheduled to allow you to become acquainted with the tools, materials and equipment you will use during the competition and the tasks to be completed. Use this time to ensure you are confident in the use of application of all the equipment you will use.

# Training for the National Finals

The IT competition manager will provide a range of documentation to prepare you for the national final.



# **Digital Resources:**

Useful 'How to Guides' from our sponsors can be used to help you prepare for the competition:

- technology for teachers and students
- sakitech
- geek's lesson

#### **Competition Rules**

A completed registration is an indication that you have agreed to the following:

- a) WorldSkills UK Competition Rules
- b) WorldSkills UK Terms and Conditions

Please ensure that you are familiar with these documents ahead of any competition activity.

In addition, competitors must abide by the following competition-specific rules:

- mobile phones to be switched off during competition activity
- listening to music via headphones is not permitted during competition activity
- any questions during competition activity should be addressed to the competition Judge
- competitors should not communicate with other competitors during competition activity
- it is the responsibility of each competitor to arrive on time for each competition session. No additional time will be allowed if you arrive late.
- technical failure of your equipment should be reported immediately to your judge. Additional time will be allocated if the fault is beyond the control of the competitor.

#### **Beyond the National Finals**

You may join the Skills Champions programme, which allows continued involvement with competitions, including the opportunity to work with WorldSkills UK and visit schools, colleges, and events to inspire the next generation of competitors. Alternatively, if training is of interest to you, you could consider supporting WorldSkills UK with organising and training, and even helping to run the National finals.

Get inspired and become a part of WorldSkills UK today!

# Contact Details

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