



Cystadleuaeth Sgiliau Cymru
Skills Competition Wales

Competition Brief

Competition Title

IT Support Technician

Competition Overview

IT Support Technicians are crucial to the day to day functioning of businesses in today's modern world. They provide assistance to computer users by answering questions, resolving technical problems and maintaining a company's network, software and computer equipment.

In this competition, competitors will undertake a series of practical tasks which will demonstrate their abilities and skills in PC systems and networking. The full competition brief will be provided to each competitor on the morning of the competition heat

Entry Criteria

This competition is for those training for a career in the IT Industry and who are studying towards a Level 3 BTEC Diploma or an apprenticeship.

Please ensure your entrants have the skills and competences to complete the task.

Entry capacity restrictions by organisation

Maximum of 3 entries per organisation.

This is the maximum number of entries permitted by an organisation for this competition.

This is determined by 'location' and 'organisation'. 'Organisation' refers to the competitors' training provider/employer. 'Location' refers to a site where the competitor studies / is employed. For further guidance on these capacities, click [here](#)



UNDEB EWROPEAIDD
EUROPEAN UNION



Llywodraeth Cymru
Welsh Government

Cronfa Gymdeithasol Ewrop
European Social Fund

Brief

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.

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

- Storage
- Wireless
- Peripheral Devices
- RAM
- Graphics
- Cables and switch
- Microsoft Client (Windows 10)
- Oracle VM Virtual Box (get them to install one or both Virtualized O/S)
- Server (2016)

They should also be familiar with MS Office application software.

Internal component installation

- HDD / Additional HDD
- Memory
- NIC / VGA / Sound Card / WiFi NIC
- Power Unit
- BIOS
- Primary HDD set to none / DVD set to none
- Cables disabled
- Boot sequence

Peripheral Installation (EXTERNAL)

- Printer /Web Cam / Digital Camera / Scanner
- External HDD / DVD

Software Installation / Troubleshooting

- Installation
- Peripheral Drivers
- Network Components, correct IP / Subnet Mask Address
- Share a printer
- Operating System
- Application Software

Infrastructure List

1 of the following for each competitor:

- Network Cable Crimper
- Network Cable tester
- A section of network cable
- RJ45 Connectors
- Double Power Cable for Server and Monitor
- Power Cables for Client PC, Monitor and Printer
- Network cables (2 Grey) & (1 Red)
- VGA Cables and HDMI Cable
- Keyboard
- Mice
- Monitors
- Netgear WAC 104 - Wireless Access Point /Switch 4 Port
- Netgear Power Adapter
- Server - 20016 R2 System
- Client PC - Windows 10 System (Disassembled)
 - Case
 - Mainboard, CPU and Heat-sink/fan (Connected and configured)
 - RAM
 - Hard drive
 - DVD Drive
 - PSU
 - All relevant internal leads and connectors ESD Mat
- ESD Grounding Cable (1) and Plug (1)
- ESD Wristband (1) and Cable (1)
- Laptop – Windows 10 System – (wireless device)
- Laptop Power Adapter
- Konica Minolta PagePro 4650 Printer or Digital Camera or Webcam.
- Windows Server Operating System Disc (included in your disc pack) / USB stick
- Windows 10 Operating System Disc (included in your disc pack) / USB stick
- Windows 7 Operating System Disc (included in your disc pack) / USB stick
- Microsoft Office Disc (included in your disc pack) / USB stick
- Driver Disc (included in your disc pack) / USB stick
- USB Pen Drive (32Gb) containing Windows 10, Office 2010, Security Software and various drivers located on USB plus Oracle VM Virtual Box Installation Files (included in your disc pack)
- Tool Kit
- Electrical Extension Cable (6 way) ** Check the room hosting the event can handle the

power load **

- ThinkPad Network adapter - USB to RJ45

Competition Rules

For full terms and conditions of entry and competition rules visit www.skillscompetitionwales.ac.uk/terms-and-conditions

Generic competition rules

- Mobile phones are 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 judging panel.
- 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 the judging panel. Additional time will be allocated if the fault is beyond the control of the competitor.

Marking and Assessment

Marking and judging of this competition will be done by a team of experts from Industry, Further Education or Training Provider, using a marking criteria and allocated marks to ensure consistency; at least 1 marker will attend all regionals.

Breakdown of marking and assessment.

A	Health & Safety	10%
B	Installation	10%
C	Configuration	25%
D	Make an Ethernet Cable	5%
E	Maintenance and Fault Finding	10%
F	Domain	20%
G	Folders & Permissions	15%
H	Backup & Peripherals	5%
	Total	100%

Feedback and Recognition

Individual and Group verbal feedback will be provided at the end of the competition.

No results or awards will be awarded on the day, as marking will be quality assured.

All competitors will be issued with a Participation Certificate and invited to an online Celebration Event which will be held Thursday 17th March 2022, where the First, Second and Third Awards will be announced. Further details will be communicated to competitors and their points of contacts by email.

Marksheets will be made available to competitors after the quality assurance process has been completed.

Competition Lead

Lead Contact:

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Expert Contacts:

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Cystadleuaeth Sgiliau Cymru
Skills Competition Wales

Briff y Gystadleuaeth

Teitl y Gystadleuaeth

Technegydd Cymorth TG

Trosolwg o'r Gystadleuaeth

Mae Technegwyr Cymorth TG yn hanfodol i waith busnes o ddydd i ddydd yn y byd modern sydd ohoni. Maent yn rhoi cymorth i ddefnyddwyr cyfrifiaduron drwy ateb cwestiynau, datrys problemau technegol a chynnal rhwydwaith, meddalwedd ac offer cyfrifiadurol eu cwmni.

Yn y gystadleuaeth hon, bydd y cystadleuwyr yn ymgymryd â chyfres o dasgau ymarferol a fydd yn dangos eu galluoedd a'u sgiliau ym maes systemau cyfrifiadurol a rhwydweithio. Bydd y briff cystadlu llawn yn cael ei ddarparu i bob cystadleuydd ar fore rownd gyntaf y gystadleuaeth

Meini Prawf Cystadlu

Mae'r gystadleuaeth hon ar gyfer y rhai sy'n hyfforddi ar gyfer gyrfa yn y Diwydiant TG ac sy'n astudio ar gyfer Diploma BTEC Lefel 3 neu brentisiaeth.

Sicrhewch fod gan eich ymgeiswyr y sgiliau a'r gallu angenrheidiol i gwblhau'r dasg.

Cyfyngiadau capasiti mynediad yn ôl sefydliad

Uchafswm o 3 chystadleuydd fesul sefydliad.

Dyma uchafswm y cystadleuwyr a ganiateir o bob sefydliad ar gyfer y gystadleuaeth hon.

Penderfynir ar hyn yn ôl 'lleoliad' a 'sefydliad'. Mae 'sefydliad' yn cyfeirio at ddarparwr hyfforddiant/gyflogwr y cystadleuwyr. Mae 'lleoliad' yn cyfeirio at y safle lle mae'r cystadleuydd yn astudio/cael ei gyflogi. I gael rhagor o ganllawiau ynglŷn â chapasiti, cliciwch [yma](#).



Briff

Mae'r gystadleuaeth hon yn canolbwyntio ar yr holl ofynion hanfodol ar gyfer gyrfa lwyddiannus fel Technegydd Cymorth TG o fewn unrhyw ddiwydiant.

Mae'r gystadleuaeth hon yn profi'ch gallu i ffurfweddu caledwedd a meddalwedd TG i gwrdd â'r cwsmer gofynion. Bydd hyn yn cynnwys sefydlu rhwydwaith Cleient / Gweinydd gyda rheolwr parth.

Bydd cystadleuwyr yn cael amrywiaeth o gydrannau caledwedd a meddalwedd:

- Storio
- Di-wifr
- Dyfeisiau Ymylol
- Ram
- Graffeg
- Ceblau a switsh
- Cleient Microsoft (Windows 10)
- Blwch Rhithwir Oracle VM (gofynnwch iddynt osod un neu'r ddau Rhithwir O / S)
- Gweinydd (2016)

Dylent hefyd fod yn gyfarwydd â meddalwedd cymhwysiad MS Office.

Gosod cydran fewnol

- HDD / HDD Ychwanegol
- Cof
- NIC / VGA / Cerdyn Sain / WiFi NIC
- Uned Bwer
- BIOS
- Set HDD cynradd i ddim / set DVD i ddim
- Ceblau yn anabl
- Dilyniant esgidiau

Gosod Ymylol (ALLANOL)

- Argraffydd / Cam Gwe / Camera / Sganiwr Digidol
- HDD / DVD allanol

Gosod Meddalwedd / Datrys Problemau

- Gosod
- Gyrwyr Ymylol
- Cydrannau Rhwydwaith, Cyfeiriad Masg IP / Subnet cywir
- Rhannwch argraffydd

- System Weithredu
- Meddalwedd Cais

Rhestr Seilwaith

1 o'r canlynol ar gyfer pob cystadleuydd:

- Crimper Cable Rhwydwaith
- Profwr Cebi Rhwydwaith
- Rhan o gebl rhwydwaith
- Cysylltwyr RJ45
- Cebi Pŵer Dwbl ar gyfer Gweinydd a Monitor
- Cebiau Pŵer ar gyfer PC Cleient, Monitor ac Argraffydd
- Cebiau rhwydwaith (2 lwyd) ac (1 coch)
- Cebiau VGA a Cebi HDMI
- Allweddell
- Llygod
- Monitorau
- Netgear WAC 104 - Pwynt Mynediad Di-wifr / Switch 4 Port
- Addasydd Pŵer Netgear
- Gweinydd - System R16 20016
- PC Cleient - System Windows 10 (Dadosod)
 - Prif fwrdd, CPU a sinc gwres / ffan (Wedi'i gysylltu a'i ffurfweddu)
 - RAM
 - Gyriant caled
 - Gyriant DVD
 - PSU
 - Pob arweinydd a chysylltydd mewnol perthnasol ESD Mat
- Cebi Sylfaen ESD (1) a Plug (1)
- Band arddwrn ADC (1) a Cebi (1)
- Gliniadur - System Windows 10 - (dyfais ddi-wifr)
- Addasydd Pŵer Gliniadur
- Konica Minolta PagePro 4650 Argraffydd neu Camera Digidol neu Wegamera.
- Disg System Weithredu Gweinyddwr Windows (wedi'i gynnwys yn eich pecyn disg) / ffon USB
- Disg System Weithredu Windows 10 (wedi'i gynnwys yn eich pecyn disg) / ffon USB
- Disg System Weithredu Windows 7 (wedi'i gynnwys yn eich pecyn disg) / ffon USB
- Microsoft Office Disc (wedi'i gynnwys yn eich pecyn disg) / ffon USB
- Disg Gyrwr (wedi'i gynnwys yn eich pecyn disg) / ffon USB
- USB Pen Drive (32Gb) sy'n cynnwys Windows 10, Office 2010, Meddalwedd Diogelwch a gyrwyr amrywiol wedi'u lleoli ar USB ynghyd â Ffeiliau Gosod Blwch

Rhithwir Oracle VM (wedi'i gynnwys yn eich pecyn disg)

- Pecyn Offer
- Ceb1 Estyniad Trydanol (6 ffordd) ** Gwiriwch y gall yr ystafell sy'n cynnal y digwyddiad drin y llwyth pŵer **
- Addasydd Rhwydwaith ThinkPad - USB i RJ45

Rheolau'r Gystadleuaeth

I weld y telerau ac amodau mynediad llawn a'r rheolau cystadlu ewch i www.inspiringskills.gov.wales/terms-and-conditions

Rheolau cystadlu cyffredinol

- Rhaid diffodd ffonau symudol yn ystod y gweithgareddau cystadlu.
- Ni chaniateir gwrando ar gerddoriaeth drwy glustffonau yn ystod y gweithgareddau cystadlu.
- Os bydd unrhyw gwestiynau yn ystod y gweithgareddau cystadlu, dylid eu cyfeirio at banel beirniaid y gystadleuaeth.
- Ni ddylai cystadleuwyr gyfathrebu â chystadleuwyr eraill yn ystod gweithgareddau cystadlu.
- Cyfrifoldeb pob cystadleuydd yw cyrraedd yn brydlon ar gyfer pob sesiwn o'r gystadleuaeth. Ni chaniateir amser ychwanegol os byddwch yn cyrraedd yn hwyr.
- Os bydd methiant technegol gyda'ch offer dylech hysbysu'r panel beirniadu ar unwaith. Bydd amser ychwanegol yn cael ei ganiatáu os yw'r nam y tu hwnt i reolaeth y cystadleuydd.

Marcio ac Asesu

Caiff y gwaith o farcio a beirniadu'r gystadleuaeth ei gynnal gan dîm o arbenigwyr o blith Darparwyr Hyfforddiant, gweithwyr Addysg Bellach, neu gynrychiolwyr Diwydiant gan ddefnyddio meini prawf marcio a marciau wedi'u dyrannu i sicrhau cysondeb.

Dadansoddiad o farcio ac asesu.

A	Iechyd a Diogelwch	10%
B	Gosod	10%
C	Ffurfweddu	25%
D	Creu Ceb1 Ether-rwyd	5%
E	Cynnal a Darganfod Diffygion	10%
F	Parth	20%
G	Ffolderi a Chaniatadau	15%
H	Copiâu wrth gefn a Pherifferolion	5%

	Cyfanswm	100%
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Adborth a Chydnabyddiaeth

Bydd adborth llafar Unigol a Grŵp yn cael ei ddarparu ar ddiwedd y gystadleuaeth.

Ni roddir canlyniadau na gwobrau ar y diwrnod gan y bydd angen sicrhau ansawdd y marcio.

Bydd pob cystadleuydd yn cael Tystysgrif Cyfranogi ac yn cael ei wahodd i Ddigwyddiad Dathlu ar-lein a gynhelir Dydd Iau 17eg Mawrth 2022, lle bydd y Wobrau Cyntaf, Ail a Thrydedd yn cael eu cyhoeddi. Bydd manylion pellach yn cael eu cyfleu i gystadleuwyr a'u pwyntiau cyswllt trwy e-bost.

Bydd tafenni marciau ar gael i gystadleuwyr ar ôl i'r broses sicrhau ansawdd gael ei chwblhau.

Arweinydd y Gystadleuaeth

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