

# Contents

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<b>1</b>	<b>What is the Computing Ambassadors scheme?</b>	<b>3</b>
<b>2</b>	<b>What are the benefits to becoming a Computing Ambassador?</b>	<b>7</b>
<b>3</b>	<b>Six ways to work with schools</b>	<b>9</b>
<b>4</b>	<b>Before your session</b>	<b>12</b>
<b>5</b>	<b>What does the computing curriculum look like?</b>	<b>13</b>

# What is the Computing Ambassadors scheme?

**Welcome!**

Thank you for aspiring to help improve the lives of young people. This guidebook is designed to help you more easily engage with young people and schools to help inspire the next generation into careers that involve computing and technology.

There is a workforce shortage in the tech sector and women are significantly underrepresented in the industry. As a Computing Ambassador you are an important part of the solution as these challenges will only be overcome through education and industry working together.

The Computing Ambassadors scheme removes barriers and facilitates opportunities for industry to support schools and students to access industry expertise.



**As a Computing Ambassador you will play a crucial role in:**

- ✓ **improving computing skills and knowledge among young people**
- ✓ **improving pupil attitudes towards computing**
- ✓ **raising aspirations and creating a more diverse workforce**

**1 What is the Computing Ambassadors scheme?**

**2 What are the benefits to becoming a Computing Ambassador?**

**3 Six ways to work with schools**

**4 Before your session**

**5 What does the computing curriculum look like?**

## Examples of future careers in computing

Technology	Creative	Healthcare	Climate	Security	Data
AI developer	Graphic designer	Clinical scientist	Architectural technologist	Cyber intelligence officer	Data scientist
Software developer	Video games artist	Data analyst	Quality engineer	Systems analyst	Intelligence analyst
App developer	User experience (UX) designer	Wearable tech engineer	Machine learning engineer	Forensic computer analyst	Cloud infrastructure specialist
Network engineer	Web designer	Software engineer	Hydraulic modeller	IT security co-ordinator	Database administrator

1 What is the Computing Ambassadors scheme?

2 What are the benefits to becoming a Computing Ambassador?

3 Six ways to work with schools

4 Before your session

5 What does the computing curriculum look like?

# How to sign up to become a Computing Ambassador

## 1 / Register online

Go to [stem.org.uk/register](https://stem.org.uk/register) and select STEM Ambassador.

## 2 / Online Induction

Find out what to expect as a Computing Ambassador.  
A link will be sent after you register.

## 3 / Apply for a free DBS or PVG

Essential for working with young people, this will require a digital ID check via an app.


## 5 / Connect with your STEM Ambassador support team

Once approved, your STEM Ambassador support team will be in touch, they are your main point of contact for any questions.

## 6 / Begin volunteering

Once you've received your approved DBS or PVG certificate you're ready to go!

### YOU COULD START BY:

-  Signing up for an activity with a teacher or youth leader
-  Improving your skills with our free online courses on MyLearning
-  Offering an activity to teachers and youth leaders near you

## 4 / Register on the Computing Ambassadors Scheme

Once approved, go to your profile, on the 'Skills and Qualifications' tab find the 'Schemes Participation' box.  
Search for and select 'Computing Ambassadors'.  
If you're happy to, tick the box to share your details so you can be contacted about additional training opportunities and resources.

1 What is the Computing Ambassadors scheme?

2 What are the benefits to becoming a Computing Ambassador?

3 Six ways to work with schools

4 Before your session

5 What does the computing curriculum look like?

# Additional steps to volunteering as a Computing Ambassador

## 1 Register your DBS certificate with the Update Service

You must register your DBS certificate with the **Update Service** within 28 days from the approval. This makes the renewal process in 3 years time much easier and is free to all our Ambassadors.



## 2 Sign up to the STEM Ambassador Community

We advise all of our Ambassadors to **sign up to the STEM Community**. This is where all guides are kept, and where you can see upcoming online events.

## 3 Request an I.D. Card

If there is already an appropriate photograph on your online account, we will request an I.D. card for you when your DBS is approved. If there is no photograph or the photograph is not suitable (we include guidelines for this in the approved email we send) then please upload a photo and email **SARegistration@stem.org.uk** to request a new I.D card.

## 4 Attend a User Support Session

We have regular **online support sessions** that can help you get started, and attending them also counts towards your recorded hours. More information on these can be found on the **STEM Community**.

1 What is the Computing Ambassadors scheme?

2 What are the benefits to becoming a Computing Ambassador?

3 Six ways to work with schools

4 Before your session

5 What does the computing curriculum look like?

# What are the benefits to becoming a Computing Ambassador?

## ✓ Inspire young people by:

- raising awareness of a breadth of career opportunities in computing-related fields
- helping them to understand that people just like them have successful computing-related careers
- sharing insight to study pathways suitable for your role/industry

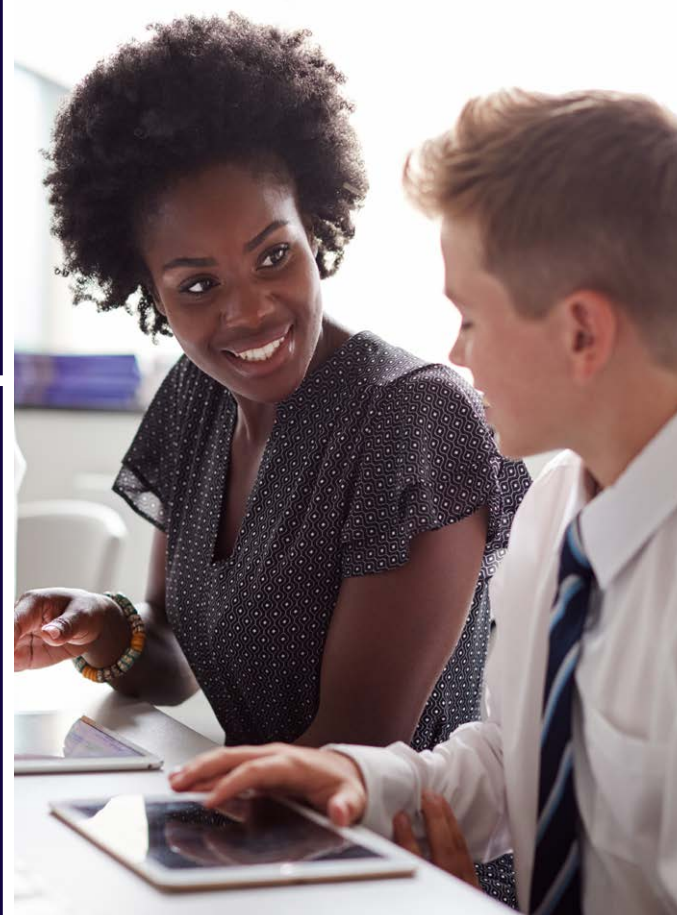
## ✓ Support teachers and schools:

Working with you as a Computing Ambassador will enable a teacher to provide meaningful careers guidance by:

- linking curriculum learning to careers in computing
- bringing real-world expertise into the classroom

## ✓ Advocate for your industry whilst developing new skills:

- represent your organisation and industry to help solve the computing and tech skills shortage
- develop your own skills by communicating with a new audience in a new environment
- receive induction training and access to a supportive Computing Ambassadors community group:  
<https://ncce.io/CAcommunity>



1 What is the Computing Ambassadors scheme?

2 What are the benefits to becoming a Computing Ambassador?

3 Six ways to work with schools

4 Before your session

5 What does the computing curriculum look like?

# Finding a volunteering opportunity

There are three ways to find volunteering opportunities:

## 1 On the STEM Ambassadors website

Search for volunteering opportunities posted by schools, colleges and youth or community groups.

Alternatively, create an offer outlining your skills and experience or activities you can offer, so that activity organisers can invite you to support them.

## 2 Via your regional STEM Ambassadors Delivery Partner

Your regional STEM Ambassadors Delivery Partner will regularly share information with you about relevant local volunteering opportunities by email.

## 3 Through your existing contacts

Like many STEM Ambassadors, you could organise your own volunteering activities with an organisation with which you or your employer have an existing link. You might suggest an activity to the organiser, or come up with an idea together to meet their needs.

Remember that your STEM Ambassador Support Team can help you with any questions or issues.

We can help you with any queries before you sign up, provide support through registration and signpost to training and resources.

Email us at [stem-ambassadors@stem.org.uk](mailto:stem-ambassadors@stem.org.uk)

Once you're fully approved you can also ask for help from other Ambassadors via the STEM Ambassador Community.

1 What is the Computing Ambassadors scheme?

2 What are the benefits to becoming a Computing Ambassador?

3 Six ways to work with schools

4 Before your session

5 What does the computing curriculum look like?

# Six ways to work with schools

As a Computing Ambassador, you will play an important role in providing a real-world context to learning and helping young people understand the qualifications and experience they will need to pursue a career in your industry.

The following are areas for which a school will typically request support from a Computing Ambassador.



## 1 Support in-class

Teachers and students benefit from the real-world context a Computing Ambassador can bring to a topic they are learning.

✓ [Activities for a primary classroom](#)

✓ [Activities for a secondary classroom](#)

## 2 GCSE Options

Support the teacher by talking to parents and students about the importance of computer science and career opportunities.

✓ [Read this blog on encouraging girls to opt for computer science](#)

1 What is the Computing Ambassadors scheme?

2 What are the benefits to becoming a Computing Ambassador?

3 Six ways to work with schools

4 Before your session

5 What does the computing curriculum look like?

### 3 Attend a careers fair

The format will vary by school, but this typically involves representing your organisation and industry in a market stall format.

✓ Read our supporting guidance on engaging with young people as an Ambaassador

### 4 Help deliver a computing related club or competition

See the NCCE Primary and Secondary enrichment pages for a wide range of enrichment activities covering topics such as App Development and cyber security challenges; there are even several space themed projects! As a Computing Ambassador you can offer to help deliver one of these at a school local to you or respond to teacher requests via the STEM Ambassador website.

### 5 Share your experience and expertise at student outreach events

These events aim to encourage students to consider computing-related careers through inspirational talks and engaging practical activities. Computing Hubs across England will run several themed events each year aimed at 11-to-18 Year olds. If you would like to help support these events look out for requests on the platform or reach out to your local Computing Hub.

### 6 Support the CyberFirst programme

The CyberFirst programme needs Ambassadors with experience of cyber security to work with young people at schools and colleges.

1 What is the Computing Ambassadors scheme?

2 What are the benefits to becoming a Computing Ambassador?

3 Six ways to work with schools

4 Before your session

5 What does the computing curriculum look like?

# Logging your activity

If you organised your own volunteering activity, you will need to log it online as soon as possible.

If you completed an activity posted on the digital platform, it will automatically be logged but you will be asked to provide feedback.

## Why should I log my activity?

You can see a record of your activity and can be recognised for your volunteering hours through our STEM Certificates and STEM Inspiration Awards.

Your STEM Ambassadors Delivery Partner can identify and address gaps in provision and ensure that as many young people as possible can access the opportunities offered by the STEM Ambassadors programme.

STEM Learning can demonstrate the reach and impact of the programme, which will ensure funding can continue and more young people can benefit.

## Logging your activity is simple

Go to your Ambassador dashboard, click on *Activities*, then *Add activity* and complete the details requested. Further instructions can be found in the Library on the STEM Ambassador Community Training Hub.

1 What is the Computing Ambassadors scheme?

2 What are the benefits to becoming a Computing Ambassador?

3 Six ways to work with schools

4 Before your session

5 What does the computing curriculum look like?

# Before your session

## Read the STEM Ambassadors Handbook

Refer to the **STEM Ambassadors Handbook** for more comprehensive guidance on volunteering.

## Know your audience

Find out from your school contact as much as you can about the young people you will be working with. This will help you plan your involvement and ensure it is pitched at the right level. Wherever possible, include a hands-on activity that will help engage your audience.

## Reach out to the Computing Ambassador Community

You can use the **Computing Ambassador Community** to connect with other Computing Ambassadors and share best practice and tips with one another.



1 What is the Computing Ambassadors scheme?

2 What are the benefits to becoming a Computing Ambassador?

3 Six ways to work with schools

4 Before your session

5 What does the computing curriculum look like?

# What does the computing curriculum look like?

Schools in England are expected to follow the National Curriculum for computing. The opening statement shares the ambitious intention for all pupils:

"A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science and design and technology and provides insights into both natural and artificial systems."

Resources created by the National Centre for Computing Education (which STEM Learning manages on behalf of the DfE) provide an overview of the primary and secondary curriculum:

- ✓ [Introduction to the computing curriculum in primary schools](#)
- ✓ [Introduction to the computing curriculum in secondary schools](#)

Schools in Scotland, Wales and Northern Ireland follow a different curriculum so please check the specifics with the session lead.

1 What is the Computing Ambassadors scheme?

2 What are the benefits to becoming a Computing Ambassador?

3 Six ways to work with schools

4 Before your session

5 What does the computing curriculum look like?

To find out more and access the full range of support, visit:

[www.stem.org.uk/stem-ambassadors/computing-ambassadors](http://www.stem.org.uk/stem-ambassadors/computing-ambassadors)

