



# Virtual Work Experience: Cyber Security Specialist

## Micro Unit Outline

- **Relates to:** I.T./Computer Science; digital literacy and online safety; career exploration; work experience

<b>Date</b>		<b>Room</b>	
<b>Period</b>		<b>Class</b>	

### Equipment and resources

Each student requires a computer/device with good internet access and earphones.

### Accommodations and adjustments

# Virtual Work Experience: Cyber Security Specialist

**Years: 9-12**

**Duration: 3-5 lessons**

## Introduction:

- Transform the [Year13 X Microsoft Cyber Security Specialist Virtual Work Experience](#) from an individual student experience to a teacher-led class learning activity.
- Students gain insight into the world of cyber security and earn a certificate for their portfolio.
- The Virtual Work Experience will span several lessons depending on the length of your classes.
- Students must mark all activities as complete and finish the survey to earn their certificate.

## Learning Intentions:

- Explore the career of a cyber security specialist.
- Identify key skills and pathways in cyber security.
- Develop digital literacy and awareness of online safety.

## Enterprise Skills:

- Decision making
- Leadership
- Problem solving
- Digital literacy
- Critical thinking

## Student Success Criteria:

- ✓ I can explain what cyber security is, why it matters, and what a cyber security specialist does.
- ✓ I actively engage in the Virtual Work Experience activities to demonstrate my enterprise skills.
- ✓ I reflect on my learning experience and save my certificate to my profile.



# Cyber Security Specialist

Lesson Activity	Teacher Instruction
<p><b>Introduction</b> 10-15 min</p>	<p><b>Ask</b> Note responses on the board. Add new insights as the answers are revealed throughout the Virtual Work Experience. Reflect upon the questions at the end to measure how students' understanding has deepened.</p> <p>Activate students' prior knowledge by asking:</p> <ul style="list-style-type: none"> <li>• <b>What is 'cyber security' and why is it important?</b></li> <li>• <b>What does a cyber security specialist do, and where might they work?</b></li> <li>• <b>What interests and skills do they need?</b></li> </ul> <p><b>Read and Watch (5 min video)</b> Read the <a href="#">Cyber Security Virtual Work Experience Overview page</a> with the class. Watch the introductory video. Highlight that strong demand means lots of job opportunities when students finish school and further study.</p>
<p><b>A day in the life</b> 5 - 10 mins</p>	<p><b>Ask and watch (3 min video)</b> Ask students to identify answers to these questions as you watch the video together:</p> <ol style="list-style-type: none"> <li>1. <b>What does Dan like about his job?</b> Variety; the people; helping customers; solving problems; exciting being at the forefront of technology.</li> <li>2. <b>What was Dan's pathway into his current role?</b> Electrician -&gt; skills &amp; micro-courses -&gt; TAFE -&gt; uni -&gt; other qualifications -&gt; never stop learning.</li> <li>3. <b>What skills does he recommend?</b> Taking risks in exploring career pathways; problem solving; breaking and fixing things; being curious.</li> </ol>



<p><b>Pathways</b> 5 - 10 mins</p>	<p><b>View pathways map</b> Ask students to explain their understanding of key terms:</p> <ul style="list-style-type: none"> <li>• <b>Bachelor's Degree:</b> first university qualification; usually 3-4 years.</li> <li>• <b>VET:</b> Vocational Education &amp; Training at TAFE or Registered Training Organisation (RTO).</li> <li>• <b>Bootcamp:</b> Intensive short course to learn practical skills. Not always accredited but may be industry recognised.</li> </ul> <p>Note that all 3 entry points can lead to graduate jobs, they will likely result in different long-term role and earning outcomes.</p> <p>Remind students that a VET Diploma or Advanced Diploma may provide entry to, and credit towards, a university degree.</p>
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## Supporting Documents

Lesson Activity	Teacher Instruction
<p><b>Student Sign Up</b> 5 mins</p>	<p><b>Instruct</b> Provide students with the Cyber Security Specialist Virtual Work Experience link: <a href="https://year13.com.au/virtual-job-experience/cyber-security-specialist/overview">https://year13.com.au/virtual-job-experience/cyber-security-specialist/overview</a></p> <p>Click on 'Activities' in the left menu - students will be prompted to log in or sign up.</p> <ul style="list-style-type: none"> <li>• <b>Log in</b> using Google credentials</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• <b>Sign up</b> with an email address and password. Enter month and year of birth, and indicate they are studying at school. Skip the mobile verification step by clicking 'next'</li> </ul>



<p><b>Task 1: Recognise a phishing email</b> 10 -15 mins</p>	<p><b>Lead the activity</b></p> <ol style="list-style-type: none"> <li>1. Read the introduction and activity description with the class.</li> <li>2. 'Click here to get started' takes you to the egress <a href="#">Spot the Phish</a> activity.</li> <li>3. Work through the 8 email examples discussing each before deciding whether to click 'Phish' or 'Genuine'. If students disagree with the class consensus, they can choose a different answer on their individual device.</li> <li>4. Answers with explanations are revealed at the end - discuss with the class.</li> <li>5. Return to the Virtual Work Experience to read the conclusion together and instruct students to 'mark as complete' all three sections.</li> </ol>
<p><b>Task 2: In the Crosshairs</b> 2 hours</p>	<p><b>Set up the activity - students complete individually</b></p> <p>In this 'choose your own adventure style game', students get to decide how a company responds to real world security scenarios. These are the kinds of decisions they'll be able to impact in businesses as a Cyber Security Specialist.</p> <ol style="list-style-type: none"> <li>1. Read the introduction and activity description with the class.</li> <li>2. '<a href="#">Click here to get started</a>' and show students '<a href="#">In The Crosshairs</a>' to play. Enter a username, choose a colour and avatar, and watch the introductory tutorial together.</li> <li>3. Point out the Help &amp; Feedback button on the right.</li> <li>4. Instruct students to play the game on their individual device. Note: earphones are recommended.</li> <li>5. Return to the Virtual Work Experience to read the conclusion together and instruct students to 'mark as complete' all three sections</li> </ol>



<p><b>Task 3: Investigate a cybersecurity incident</b> 2 hours</p>	<p><b>Set up the activity - students complete individually</b></p> <ol style="list-style-type: none"> <li>1. Read the introduction and activity description with the class.</li> <li>2. Enter a username, choose a colour and an avatar and watch the introductory tutorial together.</li> <li>3. Point out the Help and Feedback button on the right. Instruct students to play the game on their individual device. Note: earphones are recommended.</li> <li>4. Return to the Virtual Work Experience to read the conclusion together and instruct students to 'mark as complete' all three sections.</li> </ol>
<p><b>Reflection and Extension</b> 15 - 30 mins</p>	<p><b>Reflect</b></p> <p>Upon completion, students are prompted to complete a multiple choice survey to measure the impact of the Virtual Work Experience. Deepen students' self-reflection by discussing their answers to questions:</p> <ul style="list-style-type: none"> <li>• <b>How likely are you to study STEM after school?</b></li> <li>• <b>How much do you know about careers in tech?</b></li> <li>• <b>How much better is your understanding of working as a cybersecurity specialist having taken this virtual work experience?</b></li> </ul> <p>Return to the introductory questions to reflect on how students' understanding of the occupation has developed.</p> <p><b>Certificates</b></p> <ol style="list-style-type: none"> <li>1. Students may download their certificates.</li> <li>2. Instruct them to upload their certificate to their <u>e-portfolio</u>.</li> </ol> <p><b>Extend</b></p> <ol style="list-style-type: none"> <li>1. Click on 'Next Steps' in the left side menu to explore related occupations.</li> <li>2. Explore and shortlist cyber security VET and university courses using the <u>Good Universities Guide</u>.</li> </ol>

