

Digital Skills: Artificial Intelligence

DIGITAL SKILLS: ARTIFICIAL INTELLIGENCE

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Charles Sturt University
New South Wales



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ABOUT THIS BOOK: ADAPTATION STATEMENT

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The following changes were made to the adapted modules as a whole:

- Combined 15 modules (books) under 5 themes to create five books.
- Excluded the modules under UQ systems theme
- Added or changed content, links, branding and references in all modules for currency and to reflect Charles Sturt University perspective, practice, and systems.

The second module of this book, “Using AI tools” is an adaptation of [Using AI tools at university](#) Copyright © 2024 by Charles Sturt University, licensed under a [Creative Commons Attribution 4.0 International License](#), except where otherwise noted.

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DISCLAIMER

Charles Sturt University Library has exercised reasonable care and skill in preparing and compiling the information in this publication. While reasonable care has been taken to ensure that the information contained in this publication is correct at the time of publication, the field of AI is rapidly evolving, and the content provided reflects the knowledge readily available at the time of publication.

This guide is not intended to be solely relied upon as a comprehensive representation of technical, policy or ethical advice. Students are obliged to abide by the Academic Integrity Policy and Student Misconduct Rule 2020. At the time of publication un-authorised use of Generative Artificial Intelligence (AI) in assessment tasks (including exams, tests, thesis or dissertations) will be considered a breach of the Academic Integrity Policy and/or Student Misconduct Rule 2020.

RECOMMENDED CITATION

This textbook can be referenced. In APA citation style, it would appear as follows:

Charles Sturt University Library (2024). *Digital Skills*. New South Wales. Retrieved from <https://.....csu.edu.au>

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- Lorraine Rose, Maria Hurd, Tabitha Merrell, Jane Bowland and Sarah Rosetta for their contributions to [Using AI tools at university](#)

ACKNOWLEDGEMENT OF COUNTRY

‘Yindyamarra Winhanganba’ – The wisdom of respectfully knowing how to live well in a world worth living in.

We respectfully acknowledge the Traditional Owners and Custodians of the lands on which we reside. Charles Sturt University and its staff pay respect to Elders within First Nations communities and acknowledge the continuity of cultures, languages, leadership and knowledge systems.



Image: Charles Sturt University, Albury (Wiradjuri Land)

ARTIFICIAL INTELLIGENCE

ARTIFICIAL INTELLIGENCE MODULE OVERVIEW

Aims and objectives

This module will provide an introduction to the different types of Artificial Intelligence (AI) and the implications of AI for society.

This module will:

- explore key concepts such as machine learning, deep learning and neural networks
- outline various ethical implications and misconceptions surrounding AI
- explain ways generative AI tools can be used.

After completing this module, you will:

- know how to use AI responsibly in your studies
- be aware that information generated by AI tools should be checked with credible sources.



When using AI tools, ethical and responsible use principles, such as transparency, privacy, academic integrity, and fairness should be considered. For more information please refer to Charles Sturt University's [Statement of Principles for the use of Artificial Intelligence](#). Have a question about the principles? Email academicquality@csu.edu.au.

Module sections

1. [What is artificial intelligence](#)
2. [Types of AI](#)



Duration:

Approximately 30 minutes

Graduate Learning Outcomes



(GLOs)

Knowledge and skills you gain from this module will contribute to your Charles Sturt University [Digital Literacies GLO](#).

This module is part of [Digital Skills](#), a series of online modules to help you quickly build your digital skills so you can succeed in study and work.

Return to [Charles Sturt University Library](#).

3. [AI – Impact on society](#)
4. [Using AI tools in your studies](#)
5. [AI at Charles Sturt University](#)
6. [Check your knowledge](#)
7. [Conclusion](#)

1. WHAT IS ARTIFICIAL INTELLIGENCE

Artificial intelligence (AI) can be explained as machines behaving intelligently by problem solving or completing tasks. It is a very broad subject that involves computer science, cognitive science, mathematics, philosophy, neuroscience, linguistics and many other disciplines.

 Check how much you know already about AI



An interactive H5P element has been excluded from this version of the text. You can view it online here:

<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=27#h5p-1>



Interested in learning about machine learning, artificial intelligence and deep learning? Check out these free resources online:

- fast.ai
- [LinkedIn Learning](#) (requires Charles Sturt University login)
- [Coursera](https://www.coursera.org)

Machine learning, neural networks, and deep learning

Machine learning

When most people mention AI, they're usually talking about machine learning. This term covers algorithms that get better with experience, without needing specific instructions for every improvement. Examples of such algorithms include evolutionary algorithms, Markov chains, and neural networks.

Neural networks

Neural networks are algorithms, modelled after the human brain, that use a system of interconnected nodes called artificial neurons. This allows them to be trained, so that when given complex data, they can produce desired outputs. For example, let's say we wanted a network that can recognise cats. We would give it two sets of images containing "cats" and "not cats". Then neurons will apply mathematical operations to the image and produce a first guess. This guess is usually incorrect, however the network then adjusts these calculations until it responds to features of the training data (such as tails or whiskers) and starts being correct more often. Once training is complete, the network can be given new images. It will then use those features it learned during training to calculate the likelihood that any given image is a cat.

Deep learning

More complex problems require more artificial neurons. These neurons are usually arranged into "layers". When there are many of these layers, it is referred to as a "deep" neural network. These are harder to train, requiring more data, but they can complete many more operations on inputs, making them better suited to complex tasks. This type of neural network is usually the kind you hear about playing board games, generating images or interpreting natural language.



[But what *is* a Neural Network? | Deep learning, chapter 1 \(YouTube, 18m40s\)](#) discusses the basics of what a neural network is and how deep learning occurs in machine learning.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=27#oembed-1>

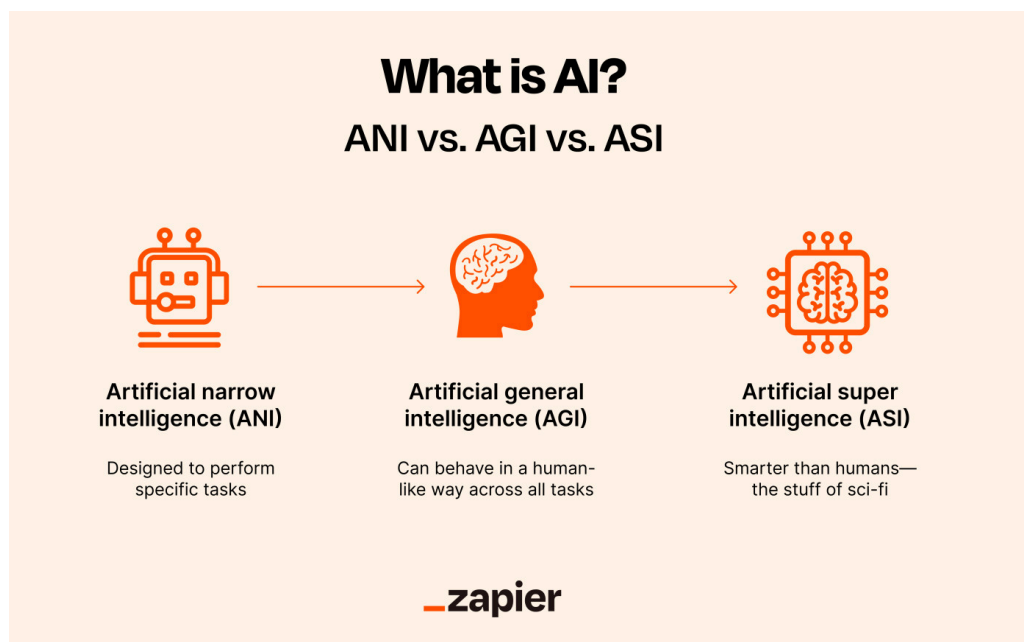
2. TYPES OF AI

[ANI vs AGI vs ASI](#)

[Predictive vs Generative AI](#)

[GANs and CNNs](#)

ANI vs AGI vs ASI



What is AI? ANI vs. AGI vs. ASI, Zapier, 26 September 2023, <https://zapier.com/blog/artificial-general-intelligence/>

Artificial Narrow Intelligence (ANI)

ANI is programmed to perform a single task. It is the only type of AI that is currently readily available on the market for consumers. ChatGPT, Siri and Google Translate are all examples of ANI. ANI is capable of completing simple repetitive tasks a lot faster than humans can, for instance checking weather, performing web searches or analysing raw data.

Artificial General Intelligence (AGI)

AGI is the type of AI that is seen in movies like *I, Robot* (2004) with Will Smith. AGI is expected to be able to reason, solve problems, make judgments and plan, learn from and use prior knowledge in decision-making. This means that AGI could potentially do a variety of tasks instead of focusing on a single narrow objective.

Artificial Super Intelligence (ASI)

ASI hypothetically possesses intelligence far surpassing that of humans. It is purely theoretical at this point and there is debate about whether or not this level of AI will ever be achieved or realised.



Read more in the Zapier blog article [What is artificial general intelligence \(AGI\)?](#) 26 September 2023

Predictive vs Generative AI

Generative AI is a tool that uses machine learning to create new content from its inputs, ranging from text and images to music. Predictive AI uses the power of machine learning to forecast future events and enhance outcomes.

Predictive AI

Predictive AI uses data to extrapolate and make predictions from previous trends. This type of AI is used heavily in finance to make trades on the stock market, or in science to analyse large amounts of data.

Generative AI

Generative AI (GenAI) is based on the Natural Language Models and is a form of ANI. It creates a series of predictions based on existing online data, to generate new or similar content in response to written prompts. Generative AI such as Midjourney or Chat-GPT has rapidly increased in popularity in recent years, as these AI tools can respond quickly to user prompts, enabling opportunities for real-time application.

Generative AI tools are trained using diverse online datasets, including websites and social media conversations. This technology can create contextually relevant, human-like responses to user prompts and is versatile enough to generate software code, images, video, song lyrics and music.



To learn more read [Generative AI vs Predictive AI: What's the difference?](#) (eWeek 11 January 2024)



[How ChatGPT works? \(YouTube 6m15s\)](#)



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GANs and CNNs

Generative Adversarial Networks or GANs are a framework used to train AI by making two different neural networks work in opposition to each other. The generator creates data (like images), and a discriminator evaluates this data, trying to distinguish between real and generated (fake) data. The generator aims to produce data so convincing that the discriminator cannot tell it apart from real data, while the discriminator gets better at telling the difference. Through this competition, both networks improve, leading to highly realistic synthetic data generation.

Convolutional Neural Networks or CNNs are a special type of neural network that uses a mathematical operation known as a “convolution” instead of multiplication for some of its nodes. This helps a lot in processing two-dimensional data, and this type of AI is used often for images and movies.



[CNN, GNN, and GAN: What are They? \(YouTube 2m43s\)](#)



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Check your knowledge



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<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=31#h5p-2>

3. AI - IMPACT ON SOCIETY

The development and uptake of AI has been rapid and it is currently being used in some exciting and life-changing ways, however it does come with some ethical and employment concerns. The impact it will have on our everyday lives and jobs should be considered. Some examples are:



Read [The Impact of AI and Automation on Australia's Job Market: An In-Depth Analysis](#) from LinkedIn.

Self-driving cars

One concern with self-driving cars is trying to control the decisions the cars will make in a deadly situation. If the car is about to crash into a pedestrian, should the AI protect the victim or the driver? This is a form of the philosophical problem, the [trolley dilemma](#).

When this dilemma is applied to self-driving cars, programmers must make a similar moral decision to determine what the outcome of a potential crash should be when developing AI.



[The self-driving trolley problem: how will future AI systems make the most ethical choices for all of us?](#) an article from The Conversation, 24 November 2021, ponders this question: "Unlike humans, robots lack a moral conscience and follow the "ethics" programmed into them. At the same time, human morality is highly variable. The "right" thing to do in any situation will depend on who you ask."

Amazon jobs AI

Amazon created an AI to help narrow down applications for jobs they had advertised. The AI was developed to take hundreds of resumes and reduce it down to the top 5 for recruiters to interview. However, before being fully implemented and after various test runs, the AI was found to have a gender

bias towards males due to the data it was using: the last 10 years of successful hires. Since there was a male bias in the technology industry the AI was unfairly undervaluing women, and any applicants who mentioned women in their resume.

The AI simply scanned the data it was given for patterns and similarities and applied the lessons learnt to its task, however it lacked the nuance or rules for not valuing individuals based on their gender. Read more: [Insight – Amazon scraps secret AI recruiting tool that showed bias against women](#) (Reuters, 11 October 2018).

Unemployment – automatic tellers, chatbots etc

AI being able to undertake various tasks has the potential to replace a human completing those same tasks. This creates uncertainty in some industries around their future.

Fake news generator

AI used to generate language is being rapidly developed. In 2020 [Open AI](#) developed a model called GPT-3 and used it to write an article for the Guardian – [A robot wrote this entire article. Are you scared yet, human? GPT-3](#).

This [article explaining GPT-3](#) concludes that “GPT-3 can generate samples of news articles which human evaluators have difficulty distinguishing from articles written by humans.”

In 2019, [OpenAI’s model, called GPT-2](#), generated coherent paragraphs of text unsupervised. The paper released discussing its uses, has a number of samples within showing its capabilities.



For a very detailed look into how the model works, read the full paper, [Language models are Unsupervised Multitask Learners](#), published by OpenAI staff Alec Radford, Jeffrey Wu, Rewon Child, David Luan, Dario Amodei and Ilya Sutskever.

The samples illustrate how the model can be given a sentence or two, and then produce completely made up stories with consistent details from the given information.

One of the samples of the GPT-2 model generating paragraphs of text from a small sample:

Context (human-written): In a shocking finding, a scientist discovered a herd of unicorns

living in a remote, previously unexplored valley, in the Andes Mountains. Even more surprising to the researchers was the fact that the unicorns spoke perfect English.

GTP-2: The scientist named the population, after their distinctive horn, Ovid's Unicorn. These four-horned, silver-white unicorns were previously unknown to science.

Now, after almost two centuries, the mystery of what sparked this odd phenomenon is finally solved.

Dr. Jorge Pérez, an evolutionary biologist from the University of La Paz, and several companions, were exploring the Andes Mountains when they found a small valley, with no other animals or humans. Pérez noticed that the valley had what appeared to be a natural fountain, surrounded by two peaks of rock and silver snow.

Pérez and the others then ventured further in to the valley. "by the time we reached the top of one peak, the water looked blue, with some crystals on top," said Pérez.

Pérez and his friends were astonished to see the unicorn herd. These creatures could be seen from the air without having to move too much to see them – they were so close they could touch their horns.

While examining these bizarre creatures the scientists discovered that the creatures also spoke some fairly regular English. Pérez stated, "We can see, for example, that they have a common 'language', something like a dialect or dialectic."

Dr. Pérez believes that the unicorns may have originated in Argentina, where the animals were believed to be descendants of a lost race of people who lived there before the arrival of humans in those parts of South America.

While their origins are still unclear, some believe that perhaps the creatures were created when a human and a unicorn met each other in a time before human civilization. According to Pérez, "In South America, such incidents seem to be quite common."

However, Pérez also pointed out that is likely that the only way of knowing for sure if unicorns are indeed the descendants of a lost alien race is through DNA. "But they seem to be able to communicate in English quite well, which I believe is a sign of evolution, or at least a change in social organization," said the scientist.

AI text-adventure game

Nathan Whitmore, a graduate of Northwestern University, has used GPT-2 to create a text adventure game that creates itself as you play it. You can read more about Nathan's work and play the game on his tumblr website, [Quick, to the rat cave!](#)

Image generator

Nvidia has produced a generative adversarial network (GAN) that generates entirely new images that appear real. To see this in action go to thispersondoesnotexist.com, every time you refresh the page you will be greeted with a brand new image produced by the generator.



[A Style-Based Generator Architecture for Generative Adversarial Networks \(YouTube, 6m17s\)](#) illustrates and describes how a GAN takes the images of three people to generate a completely new image.



One or more interactive elements has been excluded from this version of the text. You can view them online here: <https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=35#oembed-1>

Google Lens

Google Lens is an image recognition app for Android devices that uses your smartphone camera and deep machine learning to detect an object and understand what it is and offer suggestions. It can be used for actions such as shopping, translating text and searching.

4. USING AI TOOLS IN YOUR STUDIES

- [Ways generative AI tools may help your study](#)
- [Risks with using generative AI tools for study](#)
- [Copyright](#)
- [Generative AI tool examples](#)

Generative AI, such as Dall.E or Google Translate, has seen rapid advances in recent years and is likely to continue to evolve rapidly. Generative AI can generate new data, such as text, images, and audio, that is similar to existing data. This type of AI is trained using deep learning techniques and can be used in a variety of applications.

There is potential for you to **use Generative AI responsibly** to assist you in your studies but there are also **risks that you must consider** when using this type of technology.



When using AI tools, ethical and responsible use principles, such as transparency, privacy, academic integrity, and fairness should be considered. For more information please refer to Charles Sturt University's [Statement of Principles for the use of Artificial Intelligence](#). Have a question about the principles? Email academicquality@csu.edu.au.



Read [Your guide to generative Artificial Intelligence \(AI\)](#) for current information and advice regarding AI use in your studies and assessments.



Watch [Using Generative AI Technology at Charles Sturt University](#) (Zoom recording 13m38s). This video is an assistive tool for students studying at Charles Sturt University in relation to the ethical and appropriate use of generative AI technology.

Ways generative AI tools may help your study

Generative AI tools may be able to:

- generate quizzes or flashcards.

- recommend authoritative sources on a topic for you to follow up.
- summarise information on a topic to help you get started.
- improve your grammar, sentence construction and other language skills.

Generative AI can also:

- explain the solution to different types of problems to increase your understanding e.g mathematical problems, coding errors, formulas.
- analyse data e.g. create spreadsheets, tables and organise information.
- provide creative inspiration or suggestions that you can build on.
- restore low quality images or video.

Risks with using generative AI tools for study

You need to consider these risks when using generative AI tools for study or work.



1. Do not provide any private information when using these tools.
2. Verify any information provided by generative AI tools with **credible sources** and check for missing information.
3. **Acknowledge** any generative tools that you use for your assignments or work and how you used them. For example, include the name, model or version, date used and how you used it in your assignment or work.
4. Be sure to **check with your course coordinators** if you plan to **use generative AI tools** to help you complete assignments.

Academic integrity

If you use AI tools and present the work as your own, you put your [academic integrity](#) at risk.

Our [Generative AI: For study](#) guide has tips on how to cite or acknowledge your use of these tools.

Incomplete, inaccurate or offensive information

Information provided by generative AI tools may be:

- Incorrect
- Out of date
- Biased or offensive
- Lacking common sense
- Lacking originality.

Generative AI, such as ChatGPT, has limitations:

- **Recency Limit:** ChatGPT's knowledge is up to a specific cutoff date, meaning it won't have information on events or developments that occurred after that date.
- **Accuracy Limitations:** ChatGPT can sometimes provide incorrect or misleading information.
- **Contextual Understanding:** ChatGPT may not fully grasp the context or nuances of certain questions or topics, leading to less relevant responses.
- **Depth of Knowledge:** For highly specialized or niche topics, ChatGPT might not have as detailed information as a domain expert would.
- **Subjectivity and Bias:** ChatGPT's responses can inadvertently reflect biases present in the data it was trained on.
- **Creative Content:** ChatGPT might struggle with generating accurate and reliable information in creative or abstract contexts.
- **Personalization:** It cannot access personal data unless explicitly provided during the conversation, limiting personalized advice or information.
- **Verification and Sources:** ChatGPT cannot browse the internet or access real-time data, making it important to verify current facts and figures from reliable sources.

Source: Answer provided by OpenAI's ChatGPT version 4 on 8 February 2024.

Comparison of information provided by the freely available ChatGPT 3.5 and subscription version ChatGPT 4, responses collected 8 Feb 2024:

**You**

Who is the current British monarch?

**ChatGPT**

As of my last update in January 2022, the reigning British monarch was Queen Elizabeth II. However, there might have been changes since then. Please verify with up-to-date sources for the current British monarch as my information might be outdated.



Question asked of OpenAI's ChatGPT version 3.5 on 8 February 2024

Question: Who is the current British monarch?

ChatGPT 3.5 response: As of my last update in January 2022, the reigning British monarch was Queen Elizabeth II. However, there might have been changes since then. Please verify with up-to-date sources for the current British monarch as my information might be outdated.

ChatGPT 4 response: As of my last update in April 2023, King Charles III is the current British monarch, having ascended to the throne following the passing of Queen Elizabeth II on September 8, 2022.

Copyright

Under Australian copyright law, works created by non-humans are not eligible for copyright protection. In addition, there is a question about the materials used to train AI and what protection these materials had, which may lead to future legal challenges.

The [Complex World of Style, Copyright and Generative AI blog](#) discusses some of the issues around copying works to train AI and whether that should be considered copyright infringement.



“Better Sharing With AI” by [Creative Commons](#) was generated by the DALL-E 2 AI platform with the text prompt “A surrealist painting in the style of Salvador Dali of a robot giving a gift to a person playing a cello.” Shared to the public domain via [CC0](#).

Generative AI tool examples

Be sure to check the usage policies or conditions of any tools before you start using them.

[Awesome Generative AI](#) provides a list of modern generative AI projects and services.

Microsoft Bing CoPilot

Free resource available online, does not need an account and is powered by Chat GPT4. Bing CoPilot uses advanced AI to understand and generate responses. Copilot is a public web service available to all users on copilot.microsoft.com, bing.com/chat, or through Copilot in Microsoft Edge and Copilot in Windows. Copilot is also available through the Copilot, Bing, Edge, Microsoft Start, and Microsoft 365 mobile apps.



[Get started with Microsoft Copilot for Microsoft 365](#)

Perplexity AI

[Perplexity AI](#) is an AI powered search engine. If you ask a question, the response includes in-text citations from web sources that you can follow up to learn more about the topic. Note: It does not include any scholarly sources in its responses. It is important to consult [different types of academic sources](#) for your assignments and not solely rely on information from web pages.

Gemini

[Gemini](#), recently re-branded from ‘Bard’, is Google’s experimental generative AI tool based on their [LaMDA conversational AI model](#). You need a Google account to use it. Google warns that some of Gemini’s responses may be inaccurate so it is important to verify the information provided with other sources.



Gemini allows voice input and you can export the responses to Google Docs or Gmail.

ChatGPT

[ChatGPT](#) is a language model and can generate text responses based on text questions you ask. ChatGPT 3.5 is currently free to use, but you must create an account to access it. Chat GPT Plus, which provides access to Chat GPT 4 and Dall.E 3 currently requires a subscription.

Remember that whatever tool you use, you should always check the information provided is accurate. Always cross-verify the facts and data you receive.

It’s always important to [evaluate information](#) to ensure it is suitable.

Using ChatGPT

We asked OpenAI’s ChatGPT version 3 on 27 January 2023 the following questions to help explain how to use the tool for study. ChatGPT’s responses have been edited for clarity and brevity:

What are recommendations for how to ask questions of Chatgpt?

Here are some recommendations for asking questions of ChatGPT:

- **Be specific:** The more specific your question is, the more accurate the response will be. Avoid asking open-ended questions that can have multiple answers.
- **Use proper grammar and punctuation:** ChatGPT is a language model and performs best when it is given well-formed sentences.
- **Provide context:** If your question is related to a specific topic or field, provide some context to help ChatGPT understand the question better.
- **Be concise:** Keep your question short and to the point. Long and complex sentences can be difficult for ChatGPT to understand.
- **Avoid asking personal information:** ChatGPT is a machine learning model and it does not have personal information. It also has a knowledge cut-off so it might not have the most recent data.
- **Be patient:** ChatGPT is a large model and it can take a moment to generate a response.
- **Be aware of its limitations:** ChatGPT is a model trained on a large dataset of text, so it may not have knowledge of certain information or events that have occurred after its knowledge cut-off date. It might also struggle with certain types of questions, like understanding sarcasm or idiomatic expressions.

Can Chatgpt provide information about authoritative sources for different study topics?

ChatGPT has access to a vast amount of information and can certainly provide information about authoritative sources for different study topics. However, it is important to note that not all the information provided by the model may be accurate or up-to-date. It is always a good idea to verify any information provided by ChatGPT with multiple sources and to consider the credibility of the source before using it for research or academic purposes.

To find authoritative sources, you can ask ChatGPT for things like:

- Can you give me some **reputable sources** for information on [topic]?
- What are some **well-known** journals or books on [topic]?
- Who are some **experts** or **researchers** in the field of [topic]?



Additional note from us: For many topics, new authors, articles or books may have been published in recent years. You may **miss key information** if you rely solely on ChatGPT's recommendations.

Is ChatGPT able to critically analyse information?

ChatGPT can generate responses based on patterns and associations it has learned from the text it has been trained on, but it **cannot understand the meaning** or **context** of the information it is processing. Therefore, it cannot make judgments about the accuracy or reliability of the information it is providing.

It's also good to keep in mind that the information is generated based on the data it was trained on, which might contain **biases** and **inaccuracies**.

It's a good practice to **cross-check** the information provided by ChatGPT with **credible sources** before making any decision or taking any action.

Dall.E 3

OpenAI's [Dall.E 3](#) can generate images based on text input, edit existing images and create variations of existing images. Dall-E 3 can be accessed via ChatGPT Plus which is currently a subscription-based resource. Consider any **privacy implications** before you upload photos.

Dall.E 3 could help you:

- visualise a concept
- make plans
- experiment with designs.



Dall-E 3 generated this image from the prompt:
Create a photo of the Peregrine falcons that live
in the water tower on the Orange NSW campus
of Charles Sturt University



Actual image of Peregrine falcons in the Water
Tower on the Orange campus of Charles Sturt
University (Source; [FalconCam Project: Live
streams](#), February 2024).

5. AI AT CHARLES STURT UNIVERSITY

Charles Sturt University Research Initiatives

The [Artificial Intelligence and Cyber Futures Institute](#) has details on research areas and opportunities for students and researchers.

Referencing

Referencing GAITs has been incorporated into Charles Sturt's [APA Referencing Summary](#) and [Academic Referencing Tool \(ART\)](#). The [Academic Skills](#) team provides assistance with referencing and you can make an appointment or ask a question on their [Study Success Forum](#).

Checking references found by AI

Information generated by AI may be unreliable or fake. See if citations are legitimate by checking:

- If the Journal or Book title exists in [Primo](#) or [TROVE](#)
- If the volume issue number and dates correspond
- If the page numbers and article or chapter title correspond

If yes to all of the above, then the reference *might* be useful, but before you use or cite any source you should read it and evaluate the information yourself using the [CRAP test](#).

For more information read Matthew Hillier's article on TECHE blog; [Why does ChatGPT generate fake references?](#).

External to Charles Sturt University

Free online courses

[The elements of AI](#) is a free online course for everyone interested in learning what AI is, what is possible (and not possible) with AI, and how it affects our lives – with no complicated maths or programming required.

[Teaching AI ethics: The series – Leon Furze](#) covers nine topic areas: bias and discrimination, environmental concerns, truth and academic integrity, copyright, privacy, datafication, emotional recognition, human labour and power.

6. CHECK YOUR KNOWLEDGE

All the answers to the quiz questions can be found in this module.

Artificial Intelligence quiz

There are 7 questions to answer. After you answer a question, click the arrow to move to the next question.



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<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=55#h5p-3>

Module summary

1 What is artificial intelligence?

Artificial Intelligence is best thought about as computers behaving intelligently to solve a problem or complete tasks.

2 Types of AI

- There are three different types of AI. Artificial Narrow Intelligence (ANI), Artificial General Intelligence (AGI) and Artificial Super Intelligence (ASI).
- Society is currently using ANI in everyday life through technology such as personal assistants on phones.

3 AI – exciting for some, scary for others

With the rise of artificial intelligence in everyday life it has been met with various levels of emotion. Uses of AI such as self-driving cars, fake news and employment concerns being at the forefront.

4 Using AI tools in your study

- You can use AI tools to help with studies but there are risks that you must consider.
- Information generated by AI tools should be checked with credible sources.
- It is important to acknowledge your use of generative AI tools and to check that you are permitted to use them.

5 Studying AI at Charles Sturt University

There are several research initiatives at Charles Sturt University that students can explore.

7. CONCLUSION



Congratulations !

You have completed the **Artificial Intelligence** module.

[Digital Skills](#) – choose other modules to build your digital capabilities.

USING AI TOOLS

USING AI TOOLS MODULE OVERVIEW

Artificial Intelligence (AI) is transforming various fields – including the academic study space – where AI tools are increasingly being utilised to enhance and streamline processes. Learning to use AI tools effectively and appropriately is an essential digital literacy skill for your studies and future career.

Aims and objectives

This module is designed to start you on your journey to learn more about AI technology and give you the background to use AI effectively and with integrity.

Each chapter discusses using AI tools in a stage of your study process.

This module will:

- explore key concepts around using AI tools at each stage of your study process, from planning to producing outputs
- outline various ethical implications and risks surrounding AI
- explain ways generative AI tools can be used.

After completing this module, you will:

- know how to use AI responsibly in your studies if permitted in your subject outline.
- be aware that information generated by AI tools should be checked with credible sources.

Module sections

1. [Using AI to plan and prepare](#)
2. [Building better prompts](#)
3. [Evaluate and analyse](#)



Duration:

Approximately 45 minutes

Graduate Learning Outcomes



(GLOs)

Knowledge and skills you gain from this module will contribute to your Charles Sturt University [Digital Literacies GLO](#).

This module is part of [Digital Skills](#), a series of online modules to help you quickly build your digital skills so you can succeed in study and work.

Return to [Charles Sturt University Library](#).

4. [Presenting outputs created with AI](#)
5. [AI Tools](#)
6. [Check your knowledge](#)
7. [Conclusion](#)

Key Point



When using AI tools, ethical and responsible use principles, such as transparency, privacy, academic integrity, and fairness should be considered. For more information please refer to Charles Sturt University's [Statement of Principles for the use of Artificial Intelligence](#). Have a question about the principles? Email academicquality@csu.edu.au.



Read [Your guide to generative Artificial Intelligence \(AI\)](#) for current information and advice regarding AI use in your studies and assessments.

1. USING AI TO PLAN AND PREPARE

Artificial Intelligence (AI) has become a buzzword, and for good reason. It has the potential to revolutionise the way we approach study and research. However, before diving into the world of AI, it is important to have a clear understanding of what you hope to achieve from using these AI tools plus the benefits and risks involved.

This chapter will guide you through the process of using AI in the planning stage of your study. We will explore the rationale for using AI, its purpose, and the benefits, risks and limitations. Finally, we will delve into the ethical considerations of using AI. Learning to use these tools effectively and with integrity is an important part of becoming a digitally fluent citizen.

- [Why use AI when planning your study?](#)
- [Ways you can use AI tools when planning your study](#)
- [Using AI – Risks, Limitations and Ethics](#)

Key Point

Before deciding to use an AI tool (for example, ChatGPT), **check with your subject coordinator or lecturer or supervisor** to make sure that it's permissible in your subject, and that your intended use won't breach the University's academic integrity policy (refer to [Your guide to generative AI](#) for Charles Sturt University's policies and rules regarding use of Generative AI tools at university).

Why use AI when planning your study?

When embarking on your first assessment or researching a major project the first step involves assimilating and integrating the enormous amount of literature that already exists. This can take time and is a key area where AI tools can help. There are several ways you can use many different AI tools in this planning phase. Using AI responsibly at this initial stage will improve your efficiency and productivity plus promote critical thinking.



See our [AI tools](#) chapter for links and information on some of the AI tools we describe below.

Ways you can use AI tools when planning your study

Key Point

When using AI tools to plan your research, keep accurate records about the sources of those AI generated notes or summaries, so you can reference appropriately and find original sources later. Consider using our documenting tool in the chapter's Creating content by [building better prompts](#) and [Evaluate and analyse content created](#).

Brainstorm and generate ideas

Using AI tools to generate ideas can be a good starting point in researching for an assessment or project. Ask a Generative AI (GenAI) tool (such as ChatGPT, Copilot or Gemini) to brainstorm ideas or use a more specific AI research tool such as [SciSpace](#) to search for key concepts or ask a research question. SciSpace will then show questions related to your initial search and insights from top papers.



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<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=593#h5p-13>

Understand difficult concepts

If you're struggling to understand a concept, GenAI tools can provide concise summaries using language that is easy to understand. Keep in mind that AI-produced summaries may not be completely accurate or contain all necessary information. Use GenAI tools such as ChatGPT for summaries, but consider the question (or prompt) you ask the tool so that you receive a useful answer. Crafting good prompts is discussed further in the section [Building better prompts](#).



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<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=593#h5p-14>

Scope the literature

Locating relevant articles with AI tools can help you start looking for literature. You can use GenAI tools such as ChatGPT, but there are also more specific AI tools such as [Research Rabbit](#), [Keenious](#) and [Sematic Scholar](#) (see our chapter on [AI tools](#) for further suggestions). You may need to sign up for an account and always look for the free ones.



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<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=593#h5p-15>

Assist with reading

When researching for an assessment or trying to better understand a topic, GenAI tools can help you identify which readings, authors or key concepts to focus on.

Keep in mind that GenAI tools tend to reflect existing social biases, so if you ask for key readings or key authors you may get a list that skews towards social groups who have traditionally had more power and privilege. Being aware of this bias is important and using multiple tools to source information (such as the library databases), not just AI, when investigating will help.

Specific AI research tools can summarise academic papers. Look for TLDRs (Too Long; Didn't Read – super short summaries of the main objective and results) found in [Sematic Scholar](#) and [SciSpace](#). Other tools such as [ChatPDF](#) can summarise and answer questions about PDF documents users upload onto the site. GenAI tools can also create summaries when you use the right prompts.



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<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=593#h5p-16>

Tips on using programs and software

Ask GenAI tools for advice on how to use applications such as Microsoft Word and Excel, or generate some code. Leveraging AI tools for coding can significantly enhance productivity and accuracy.



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<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=593#h5p-17>

Exercise

Start using an AI tools now! Go to an AI tool (see our lists in [AI tools](#)) and sign up. Then try to:

- Brainstorm a question
- Ask for clarification of a concept

How did you go? Experiment with different tools and don't forget to tweak your prompt if the content provided isn't what you are after (see [Building better prompts](#) for ideas).

Using AI – Risks, Limitations and Ethics

Remember that these AI tools results are affected by their limitations which include:

Limitations	Producing inaccurate or false information	Data set being used	Data bias and misrepresentation
What does it mean?	These tools can produce misinformation and what is known as hallucinations meaning the references produced may be fabricated.	Where is this information coming from and how old is it? For example ChatGPT 3.5 had its last knowledge update in January 2022.	Outputs may not be neutral and the content may reflect the biases inherent in the data and the algorithms used.
How to avoid?	Always investigate the sources and check any references. Put your critical thinking hat on and question the output then verify by checking other reliable resources (such as library databases).	Look for a description of the data set being used to train the tool (often in the “About” or “Help” sections) to give you an understanding of the data being drawn on to create the content.	Recognising that bias exists is a good first step, the ensure you evaluate the sources and use other resources to gain a different picture.

As with all sources used in your assessments, you should evaluate them for their quality and biases. Learn how to evaluate key information sources, like AI tools, on our [Evaluating information webpage](#) and in our [Evaluating websites, news and media guide](#). We talk more about the ethical use of AI in the chapter on [Presenting outputs created with AI](#).

See our Digital Skills module on [Using AI tools in your studies](#) for other uses and risks to consider.

Learn more

Want to learn more about hallucinations? Watch this video on [Why Large Language Models Hallucinate](#).

2. BUILDING BETTER PROMPTS

This chapter delves into the concept of prompts, explaining the meaning of “building a prompt” and how to go about creating one. We’ve included hints and tips on prompt creation and provide suggestions and resources for additional training and information on this topic.

- [What does building a prompt mean?](#)
- [How do I build a prompt?](#)
- [Building a prompt for a specific purpose](#)
- [Hints and tips for prompt building](#)
- [AI prompt generators](#)

What does building a prompt mean?

Building a good prompt is like finding the right keywords in a search and can help achieve your desired outcome. Your prompt can take the form of a question, text, information or coding. Essentially anything that communicates to the AI tool what response you are looking for. You could think of a prompt as a seed or a conversation starter. You can start with simple prompts and gradually build the capabilities of the AI; this process is known as building.

How do I build a prompt?

Considerations when building a prompt:

Tone

Tone is the attitude or mood that you want the AI tool to deliver. Authors often use tone when they want to convey a particular mood or style. For example, academics often use a formal tone when writing for peer reviewed journals.

How do you choose your tone?

Consider the purpose of your output. Is it a fun email to a friend? Is it a simplified version of a concept that you want to better understand?

Audience

Think about your intended audience, as this will affect your output. Are you creating prompts to start a discussion for your subject? Are you looking at creating marketing content? Are you going to write a social post promoting your work?

Audience Exercise



Go to your favourite Gen AI tool and add in prompts for a topic of interest, to:

- Suggest subject discussion points for your study group.
- Promote your topic through a social media post.

Did you see a difference when writing for different audiences?

Clarity

Be very clear when writing your prompt. AI tools are not intuitive, you will need to be very specific when asking for outputs. For example; if you ask for a response to a question, think about if you want the answer to be a long response or a concise response.

Role play

Play acting or role play is a way of putting yourself into a situation to better understand it. You can do this with AI tools by getting them to “act as though...”. This provides very clear directions for what sort of output you want from the tool. A really good example of this can be seen in a blog post by Harvard University [Getting started with prompts for text-based Generative AI tools](#).

Role Play Exercise



Go to your favourite Gen AI tool:

- Ask it to give a summary of a topic of interest.
- Now ask it to act as though it is a university lecturer and give a summary of the same topic.

Can you see a difference?

Type of output

What type of output do you want your Generative AI tool to give you? There are many outputs that can be generated by Gen AI tools. Some of these include:

- computer code
- text
- images
- video
- music
- speech
- product designs

Different tools are built for different uses. If you are using Research Rabbit for example, it will give you a list of references that you can use when searching. Check the specifics of your tool, and use the next chapter, [Evaluate & Analyse](#) to assess the tool.

Building a prompt for a specific purpose

See [Using AI to plan & prepare](#) for more information around building prompts for brainstorming, understanding concepts and finding research on a topic.

Different tools will help you create different prompts so consider intended use. Explore specific tools listed in our [AI tools](#) chapter.

Hints and tips for prompt building

Boolean operators for AI

Just as you use AND, OR, NOT to refine a search, there are words you can use in your AI prompt that will assist you in including the information you do want and excluding the information that you don't want. Use DO to include information in your prompt.

Example

Write a short question for a survey to Librarians regarding the use of Universal Design for Learning, do include School Librarians.

You can see in the example above that we have specifically included “School Librarians” in our prompt. If we wanted to exclude School Librarians and only focus on University Librarians we could write it like this:

Example

Write a short question for a survey to Librarians regarding the use of Universal Design for Learning, don't include school librarians.

Your turn:

Exercises



Try inputting the above examples into a text-based AI tool and take note of differences in the results.

Use examples

By providing examples in your prompt, you supply the AI tool with specific information necessary to generate the desired outcomes. You can see a great example of this in a blog post by the Thesis Whisperer [Using ChatGPT \(ChattieG\) to write good.](#)



Be careful with this one – remember copyright and don't upload existing paragraphs and ask tools to infringe on copyright by rewriting them.

Examples

PROMPT: The cat in the hat sat on the mat. Write a short sentence similar to this one for the cat in a wig

RESPONSE: the cat in the wig danced on a twig.

Build on previous prompts

As you do with searching, start with broad or basic questions and build on those to find more information. This allows the AI Tool to understand what you are looking for and allows you to refine your prompt to ensure you are getting your best results.

Try changing the wording, tone or add more context and specifics to guide the AI.

Make corrections

By working with the AI, providing feedback and corrections, you build on the knowledge available. It is important to remember that AI is a tool. You need to review the outputs and correct mistakes or ask for clarifications if needed. You still need to have a good working knowledge of your topic to ensure the information is correct and useful.

Document your prompts

Documenting your prompts helps you to evaluate the effectiveness of the results and may be required as [evidence of use](#).



Use the exercise below to create a document to help you keep track of the changes you are making to your prompt and why.



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<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=595#h5p-18>

AI prompt generators

Prompt generation can be complicated. There are generative tools specifically designed to create prompts. You can use the tips and tricks listed above, but you can also use these tools and we have listed a few below.

Remember to use the evaluation tips in [Evaluate & Analyse](#) to see if this tool is useful for you.

Title of Tool	Description
Taskade	Although there are some subscription services you can start with the free version. Remember to use the evaluation tips in the following chapters to see if this tool is useful for you.
Freedough	This prompt generator will give you prompts for ChatGPT, Midjourney and Stable Diffusion.
AI Tools	This is specifically for text to image. There is a free builder on this site, but you can subscribe and have access to the more advanced version.
Coefficient	This is a free prompt generator that can help you build prompts for text as well as formulas in spreadsheets.

You can find many more tools by going to your favourite search engine and searching for “AI prompt generator”.

More information

There are also many courses about prompts. LinkedIn Learning has a broad collection including both beginner and advanced. Once you are logged in to [LinkedIn Learning](#), search for “AI prompt engineering” to see the options.

3. EVALUATE AND ANALYSE

- [Introduction](#)
- [Evaluation](#)
- [Risks, limitations and constraints of results](#)
- [Bias](#)
- [Evidence of use](#)
- [Document your planning](#)
- [Ethics](#)

Introduction

Most current forms of Artificial Intelligence (AI) have a narrow focus and can only do one thing well. As a student you need to carefully consider which AI tool/s to use, as well as how you will evaluate and analyse any results from these tools.

So far in this module we have covered:

- [Using AI to plan and prepare](#) considering why you might use AI and the benefits and risks of these tools.
- And in the [creating content by building better prompts](#) chapter we looked at locating and selecting resources, information and tools (possibly including AI tools), and began utilising these tools.

Analysing your results is an important step in the research process especially if you use AI to collect information. This chapter will:

- Guide you through the process of evaluating your results and de-conflicting any discrepancies.
- Explore the potential risks, limitations, and constraints of results, including the potential for bias.
- Discuss the importance of documenting your planning and methodology, as well as providing evidence of use, such as a copy of your prompts.



Check out [Charles Sturt Library Guides](#) for subject-specific evaluation support or for more general advice read: [Evaluating websites, news and media](#)

Evaluation

Four points you may be considering at this stage regarding use of AI tools:

1. “[How do I evaluate the tools I have used?](#)“
2. “[How do I evaluate the information the tools have provided?](#)“
3. “[How do I use AI tools to help me evaluate the information I have?](#)“
4. “[Is it ethical to use AI tools to help me evaluate information/data?](#)“

1. Evaluating AI tools:

It is important that with every tool you use that you consider if the results you received were accurate, relevant and useful for the desired purpose. You might like to ask yourself some questions about the tool to decide if the tool you used was appropriate or if you might consider using a different tool or no tool at all next time.



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<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=597#h5p-19>

2. Evaluating information gained from AI tools:

By evaluating the information obtained from AI tools, you can reconcile discrepancies, correct any inaccuracies, ensure the relevance and suitability of the information for its intended use, and address ethical concerns.. [Rose \(2023\)](#) provides the following suggestions for evaluating AI-generated content.



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<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=597#h5p-20>

3. AI Tools that can be used to help evaluate information:

Current AI tools cannot think critically about the information they source and so cannot evaluate information. However there are tools available to help make sifting through data easier. Most will be useful

for quantitative data (for example [Julius AI](#)) but there are a few that would be useful for transcribing (for example [Otter.ai](#)) and then sorting qualitative data (for example [MonkeyLearn](#)). Please see the [AI Tools](#) page for information on different tools, including links, a short blurb on what they do and tips on how to use them.

4. Ethics of using AI for evaluating information:

Key considerations:

- Am I allowed to use AI for this? Consider the [university policies, principles](#) and expectations for [Academic Integrity](#).
- How can I use it to help simplify or increase the speed of evaluating data so that I can spend more time critically thinking about the results?
- Am I totally dependent on AI tools? If the answer is yes, then it is not ethical to use it, as you cannot claim to have added value to your field of study.

AI tools cannot evaluate information like a human. We can think critically about the output, identify limitations, identify incorrect data, generate new data (for example through interviews or field measurements), identify bias within a program, and thoroughly investigate. AI, in its current form, does not have these skills.



Question: How can we use AI ethically if so much of what it generates is based on others' ideas and works?

Answer: Use it as a tool to help streamline a process, not to think for you. For example, use it to:

- locate information, similar to the use of a search engine,
- generate data from information you have gained, for example, transcribe an interview,
- generate data from your input like graphing data from a survey you have completed.

Regardless of how you are using it, remember, it is working through algorithms and not thinking or judging the accuracy, fairness, ethics or morals of the input or the output. Always check and apply your own judgment. Consider the rules and regulations of your institution and their policies regarding the use of AI. While studying at Charles Sturt University, this might also include carefully checking your assessment outlines.

Risks, limitations, and constraints

Different AI programs and generators have different risks, limitations and constraints. For this reason, you may need to use several tools to achieve the results you are looking for and each comes with drawbacks. [Koch \(2023\)](#) noted that because AI requires a lot of data, there can be blindspots, where it won't know what to do, or times when it does not consider rights or legislation such as privacy laws.

Some key risks, limitations and constraints are below.

Risks	Limitations	Constraints
Inaccurate information/ Hallucinations.	Most AI tools can only do one thing well.	Data set being used (How old is data?).
Data bias/misrepresentations.	They cannot think critically about research/outputs.	Blindspots due to new situations/ inputs/information so unsure what to do.
May ignore legislation and privacy laws.	Limits of use due to pricing/ subscription costs.	Number of people who can access results (e.g. only one user – does not allow for collaborative research).

In your evaluation and analysis of tools, it is good practice to note any of the risks, limitations or constraints that may have impacted your results.

Bias

Bias is a distortion of facts based on inclination or prejudice. This could lead to unfair results or treatment of people or research. Results that AI generates may have bias, based on how the AI was programmed, or what data/prompts you input into the program. [Koch \(2023\)](#) noted that “If your data isn't representative, the AI will replicate that bias in its decision making, which is exactly what Amazon saw when its [AI recruitment bot penalized women candidates](#) after being trained on resumes in a male-dominated dataset.” Bias in data or results that AI generates from your input, can impact on your studies. It is therefore important to try to be inclusive with inputs and note this issue or limitation.



When analyzing and evaluating data and results, you should be aware of the social biases inherent in both the inputs and the traditionally more educated groups that produce research outputs. It's important to recognize that the internet allows anyone, regardless of qualifications, to share opinions, which may not always be based on factual research. You

should critically assess the bias, authority, and purpose of their sources. Acknowledging these potential biases and limitations is crucial during the evaluation and analysis stages of research.

Evidence of use

To demonstrate academic integrity it is important that throughout your research process you document any use of AI tools, this will help to validate your research if necessary. Keeping a log or record in your methodology section of your research is a great start. This might include a copy of your prompts, edits to prompts, screenshots of results (for example tables and graphs). See [Building better prompts](#) for more information on recording prompts and [Presenting outputs created with AI](#) for more information on referencing use of AI and AI generated material.

To prepare evidence as you research you may like to use a modified version of [Cornell Notes](#), like the one shown below.



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<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=597#h5p-21>

Document your planning

Documenting your planning will vary depending on your level of study. A key component of planning is managing timing and data collection. Whether you are writing your first academic essay or completing research for publishing, you must first understand what you need to do. [Planning and preparing](#) requires you to first familiarise yourself with the task. For an undergraduate student, this might mean reading your assessment outline carefully and asking your subject coordinator any vital questions you have. For an honours student, this might be identifying a gap in your field of interest to research. Once you understand the task, you can then work on timing. Here are some tips to consider when planning your timing:

- Make sure to set aside a greater portion of your time for collecting and analysing data/research. When you know your topic well, the writing becomes much easier.
- Consider your methodology. Collecting primary research (research you collect yourself from the

source e.g. surveys, interviews, etc.) is also much more time consuming than secondary research (others research that may provide you with insight into your field of study).

- Make sure to also set aside time to review, proof and edit your final draft.

Another major consideration during the planning and preparing is how you will organise the data you collect. Consider the following when planning data collection method and storage:

- What methodology/ies will you use? How do you plan on adding this information into your output method (e.g. report, essay, thesis, multimodal presentation, etc.)
- How will primary research be collected (in person, online, written, recorded in some way, physical collection, digital collection)?
- Where is the data/research being stored (on a hard drive, USB, the cloud, in a special facility for physical samples)?
- What kind of permissions do you have/need for collection and storage of data? E.g. consider privacy requirements and copyright of material used.
- Other ethical considerations? E.g. do you need to apply for permissions from an ethics committee?
- Other considerations? E.g. Have you provided yourself time to develop an Appendix for your collection/samples?

Once you have a rough plan of the basics, you might also like to document [your search plan](#) (don't forget to include prompts and AI tools used in this section – see [Building better prompts](#) for more on how to do this), how you will evaluate your information (e.g. using the [SIFT method](#) or the [CRAP test](#)), any [literature](#), [systemic or systemic-like reviews](#) you might need to do, any [further research required](#), reading and [writing](#) method and style and [referencing](#).

Included in the activity below is a generic planning tool to help you get started with your task. Please note, however, that it will not cover all kinds of tasks or at all levels of study. You might also like to know that you can skip sections, or come back to them later, and download the information you submit throughout the document on the last page. You may like to check out some of the links above for more information on each part of the planning stage that you might consider documenting.



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<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=597#h5p-22>

Documenting your planning will help you later evaluate your aims and whether you achieved your goals or not. It will also help you to organise your data for a easier process when it comes to analysing the data.

Ethics

As you have read in the [Ethics of using AI for evaluating](#) section (above), there are a lot of considerations around ethical use of AI. In the [Presenting outputs created with AI](#) chapter, there is advice on steps you can take to ensure you are utilising these tools ethically.

Reference

Koch, R. (2023, January 27). ChatGPT, AI, and the future of privacy. *Proton*. January 22, 2024, https://proton.me/blog/privacy-and-chatgpt?utm_source=proton_users&utm_medium=email&utm_campaign=ww-en-2c-generic-coms_email-g_awa-newsletter_feb_2023&utm_term=proton_users

Attribution

Content adapted from: Rose, R. (2023). [*Evaluating ChatGPT-generated content*](#) in [ChatGPT in Higher Education](#). University of North Florida Digital Pressbooks. [CC BY 4.0](#)

4. PRESENTING OUTPUTS CREATED WITH AI

This chapter introduces key considerations for using Artificial Intelligence (AI) in creating presentations and other academic outputs like essays and literature reviews. It covers practical aspects such as AI tools for enhancing presentations, grammar checks, and image sourcing, as well as ethical considerations like properly acknowledging AI sources, referencing AI contributions, and avoiding unreliable AI-generated content.

- [How to use AI to create presentations](#)
- [How to use AI in delivering presentations](#)
- [How to use AI in your written outputs](#)
- [Acknowledging the use of AI generated material](#)
- [Responsible use of AI](#)

How to use AI to create presentations

Various software and applications have already integrated AI into their interface to help create, enhance and deliver visually appealing presentations. There are also more specific tools you could look at, a couple of examples include:

- [Tome](#): promotes itself as an AI storytelling tool, but it is the most effective when used to generate PowerPoint presentations. Simply enter a prompt, and Tome will generate presentation slides on your chosen topic, including text and images. Slides are editable and can be shared. The free trial has limitations and it does require fact checking for accuracy.
- [Beautiful.AI](#): another subscription AI presentation tool, uses a back-end system called DesignerBot to create AI generated presentations that can include figures, tables, infographics, charts and other data. Mostly aimed at businesses, but can create professional looking slides for a variety of contexts. Includes a separate prompter to create AI generated images.
- [Simplified's AI Presentation Maker](#): handles image and content creation for any topic and the first set is free. Includes a number of other AI tools.

How to use AI in delivering presentations

Instead of getting GenAI tools to create a presentation for you, use them to assist you in the creation process by:

- Brainstorming ideas for the content of your presentation
- Suggesting a structure or activities for your presentation to aid in engagement
- Provide feedback on the presentation. An example is [PowerPoint's Speaker Coach](#).



An interactive H5P element has been excluded from this version of the text. You can view it online here:

<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=599#h5p-23>

How to use AI in your written outputs

Providing content directly generated by AI is unlikely to be allowed. But there are other appropriate ways to use AI to improve your writing.

- Improve your written communication skills by refining your language and style using a tool such as [Grammarly](#)
- Creative decorative images for presentations using tools such as [DALL-E](#), [Midjourney](#) or [Firefly](#)
- Restore low quality images or upscale images, [LetsEnhance](#) is one example.
- Help analyse data by creating tables and collating information. GenAI tools can collate input data when using the right prompts. Careful about the data you enter into a GenAI tool in terms of privacy.
- Check coding errors or formulas with GenAI tools or more specific AI coding checkers.

Key Point



When using AI in your assessments don't forget to document the use, review the accuracy of the content produced plus acknowledge and reference the tool used.

Acknowledging the use of AI generated material

At a minimum, you should include a declaration of use that explains what technologies, if any, you have used in working on your assessment.

- Describe the AI tool used.
- Note how the information was generated, including the prompts you used, and the date accessed.



You could add this declaration as a footnote, or at the end of your reference list, but check with your subject coordinator to clarify.



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<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=599#h5p-24>

In certain circumstances, in addition to a declaration, you may also be required to cite and reference material generated by artificial intelligence as you would any other source in your assessment. Academic skills provide suggestions for [referencing GenAI](#) in APA 7 style and the APA Style Blog has [How to cite ChatGPT](#).



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online here:

<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=599#h5p-25>

Responsible use of AI

When using AI tools for study and research, you need to recognise the ethical risks as well as risks to your academic integrity. Relying on AI tools can reduce your ability to develop critical thinking and research skills (Charles Darwin University Library, 2023).

Some of the key ethical concerns include:



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<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=599#h5p-26>

Complete this memory card game to match the key concerns listed above with a scenario:



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<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=599#h5p-27>

Understanding the limitations and issues of AI means you can critically evaluate the tools you use and the content generated to make sure you are using tools ethically and with academic integrity.

Learn more

[Using Generative AI Technology at Charles Sturt University](#)

This video is an assistive tool for students studying at Charles Sturt University in relation to the ethical and appropriate use of generative AI technology.

[Teaching AI ethics: The series – Leon Furze](#) covers nine topic areas: bias and discrimination, environmental concerns, truth and academic integrity, copyright, privacy, datafication, emotional recognition, human labour and power.

Reference

Charles Darwin University Library. (2023). Using AI tools at university. <https://www.cdu.edu.au/library/language-and-learning-support/study-skills/learning-cdu/using-ai-tools-university>

5. AI TOOLS

This chapter introduces a selection of AI tools that can be used in academic study. It highlights the dynamic nature of AI tools, with constant changes, new arrivals, and shifts to premium versions. We recommend considering a few options, and keep in mind that new AI tools arrive daily. Each tool has unique capabilities and uses, so it's important to choose the right tool for your specific needs.

- [GenAI tools](#): Generative AI (GenAI) is a type of artificial intelligence that uses machine learning algorithms to generate new data based on existing data.
- [AI Research Tools](#): There are many AI-powered tools available for academic research. These tools can help researchers search for research, analyse data, extract key insights, and make informed decisions with greater speed and accuracy.
- [AI Tools for teaching and learning](#): There are several tools specifically designed for teaching and learning in mind. These help provide teachers with lesson planning support such as producing handouts, questions and presentations. For students there are note taking tools and organisational tools to help you get organised and with time management.

Icon Key



Free tools are completely free to use with all features.



Freeware tools include basic functionality for free. Additional features may need to be paid for.



Open source tools are developed in a collaborative manner and can be used, modified or shared openly. This software can be used for free and often includes a lot of support documentation.









Paid tools can only be used after purchasing, and agreeing to, a product licence.

GenAI Tools



Key Point



For those considering the use of GenAI Tools (also known as GAITs), please be mindful of the [university policies/principles](#) and expectations of their use for study and assignments. You can find out more on the [Your guide to generative Artificial Intelligence \(AI\)](#) webpage and the [Generative AI: For Study](#) Library Guide.







Tools	Summary	Help and Tutorials	Cost
Anthropic's Claude 2	Chatbot. A genAI Large Language Model, in open beta and has limited unpaid users.	How to use new Claude 2.1	
Gemini (Google's Bard)	Chatbot. An internet-connected genAI tool, powered by PaLM2 and it is free.	Getting Started with Gemini AI. How to use Gemini AI - Tutorial for beginners.	
Meta AI's Hugging Face Llama 2 Chat	Chatbot. A genAI tool with a user interface provided by Perplexity Labs, free to use.	Llama 2 with Hugging Face Pipeline: Tutorial for beginners	
Microsoft's Copilot in Bing	Chatbot. A Microsoft search engine now with AI-powered functionality; requires Microsoft sign-in and using Edge web browser software and is free. Can be used to navigate large content (e.g. government websites) for information and locate sources. Can add documents that are held securely, not accessible to others, for use in copilot. Provides its process of thought.	How Copilot for Microsoft 365 works Get started with Microsoft Copilot for Microsoft 365 Get started with Microsoft Copilot Studio: How to create your first copilot	
OpenAI's ChatGPT	Chatbot. A genAI chatbot with the current free public version running GPT-3.5 and the paid ChatGPT Plus accounts having access to GPT-4.	Introducing ChatGPT ChatGPT Tutorial 2024: How to use ChatGPT - Beginner to Pro!	
Adobe Firefly	Multimodal genAI. A suite of generative AI tools developed by Adobe for generating images. Free or premium plans.	Overview of Adobe Firefly Learn how to use Adobe Firefly: 5 minute tutorial	







Tools	Summary	Help and Tutorials	Cost
OpenAI's DALL-E 2	Multimodal genAI. A genAI system developed by OpenAI that can create realistic images from a text description.	How to use DALL-E 2: A step-by-step guide How to use DALL-E 2 to generate images & A.I. Art	
Midjourney AI	Multimodal genAI. A genAI for creating images, can only be accessed via their official Discord server.	Discord Help Centre Midjourney quick start guide	
Stability AI's Stable Diffusion	Multimodal genAI. AI text-to-image generator.	How to use Stable Diffusion Stable Diffusion crash course for beginners	
D-iD	Video creation platform. Humanises interactions with digital world. Creates agents/avatars which can be used in presentations, videos or to chat with.	Getting Started FAQs A step-by-step guide to creating videos with D-iD	
Runway v2	Multimodal genAI. Can generate novel videos with text, images or video clips.	How to use Runway Gen-2 to create AI videos Runway Gen-2 ultimate tutorial: Everything you need to know!	
ElevenLabs	Converts text to speech online for free with AI voice generator. Creates natural sounding voices in any language. Changes your voice with speech to speech. Access Dubbing studio for further editing of voices.	Voice cloning guide: how to use our technology safely and follow best practice How to use ElevenLabs AI to Clone your voice & generate natural speech from text	







Tools	Summary	Help and Tutorials	Cost
HeyGPT	Chatbot. For when you have reached character limit. Can chat with larger files, websites, etc. Files stored locally and temporarily. Pinecones can be used to store larger files/vectors. Unlock Premium features with a one off fee. No subscription to keep using. Chats with files etc.	HeyGPT You can now summarize files and websites on http://HeyGPT.chat!	
Perplexity	Chatbot. Similar to ChatGPT but provides references from recent literature. Free. Does not read PDF's very well.	Will this AI tool blow ChatGPT out of the water for research?	






AI Research Tools

For those undertaking a more research heavy assessment, honours project or systematic-like reviews, you may benefit from utilising some of the more research focused and literature mapping AI tools. They may make a great research assistant. We have already mentioned some of these throughout this resource but there are many others, and this landscape is constantly evolving! Many of the tools can move to premium versions, so if you get asked to start paying look for alternatives and consider changing or moving between different tools. If you plan on publishing, some further guidance for use of these tools is provided in the “[Where to publish: Scholarly publishing & Generative AI](#)” Libguide.

Tools	Summary	Help and Tutorials	Cost
ResearchRabbit	A citation-based literature mapping tool. Add relevant seed papers to a collection to receive recommendations for related, or connected, papers. Simple keyword search function also provided. Free to use, login with a free account.	Welcome to Research Rabbit	
Semantic Scholar	AI-powered academic search and discovery tool. AI algorithms assist in discovering hidden connections and links between research topics. New Semantic Reader application contextualises citations and improves accessibility among other features. Free to use, login with a free account.	Semantic Scholar 101: search	
Connected Papers	Creates a graph that maps literature related to an inputted paper. Input using an existing article, or conduct a topic search to locate an article. Search engine is powered by Semantic Scholar. Free tier (offering 5 graphs per month) available.	How to use connected papers to find similar and relevant research literature papers/tutorial review	
SciSpace	Is a comprehensive academic platform providing access to over 200 million research papers. Assists researchers in discovering, understanding, writing, formatting, and publishing their research. Simplifies academic texts and ensures compliance with journal guidelines. Free to use, login with a free account.	Introducing SciSpace	
Keenious	An AI-based tool to help find high quality research papers to enhance your work. Analyses the downloaded article, a link to the article, a selected passage from the article or written text and recommends similar or related content. Find ideas for an essay or article. You can use Keenious directly in Word, through a web browser or in Google Docs.	Keenious product video	
ChatPDF	Can summarise and answers questions about PDF documents users upload onto the site. Free version with limits: 3 PDFs/day and 50 questions/day.	How to use ChatPDF: the AI chatbot that can tell you everything about your PDF	

Tools	Summary	Help and Tutorials	Cost
Perplexity	A genAI search engine powered by GPT-3. Provides accurate and comprehensive answers to user queries using up to date sources, explores topics in depth to learn new things, interacts with your files and organises threads on topics. Has a copilot feature with specific aims in mind, e.g. academic research, professional research, etc.	Getting started	
Elicit	A genAI academic research tool powered by GPT-3. Use for finding papers, filtering study types, automating research flow, brainstorming, summarising and more. Can add own library (e.g. your own research/research notes etc.). New version can cost money, 5000 free credits to start. Considers what researchers use it for with own work (PDF's. E.g. can extract. Can create columns too for different types of information. Can use to get evidence backed answers quickly.	Start your literature review here! Elicit AI research assistant literature review tool tutorial	
Litmaps	Creates interactive literature maps - collections of articles that make up your different research topics. Free version allows 1 Litmap. Litmaps helps to navigate papers. It can quickly find derivatives/prior works to see what other works have cited seed paper/s. Can see what has happened in research since and where it has moved to, just from a single seed paper.	Introduction to Litmaps	
Scopus AI	Search tool powered by genAI that enhances your understanding and enriches your insights with unprecedented speed and clarity. Available when logged in to Scopus.		
Consensus	Academic search engine using AI to find insights in research papers. Ask research questions, find relevant answers within research papers, and synthesise the results.	AI Research Tools: Consensus	
MonkeyLearn	Provides text analytics, creates instant data visualisations and detailed insights, supports various types of analysis. MonkeyLearn is a fully featured Artificial Intelligence Software designed to serve Startups, Enterprises. MonkeyLearn provides end-to-end solutions designed for Web App. This online Artificial Intelligence system offers Graphical Data Presentation, Text Analysis, Summarization, Topic Clustering, Taxonomy Classification at one place.	Advice and answers from the MonkeyLearn Team AI guides	







Tools	Summary	Help and Tutorials	Cost
Julius AI	JuliusAI is a powerful AI data analyst that helps you analyze and visualize your data. Chat with your data, create graphs, build forecasting models, and more. It helps you to interpret, analyze, and visualize complex data in a user-friendly manner, making data analysis accessible to individuals without a background in data science or statistics.	How to use Julius AI? A step by step guide	
Tableau	Allows user to connect to data, create data visualizations, present your findings, and share your insights with others. Various products at different pricing. Can access a free trial. Students and teachers can apply for a free 1 year license.	Tableau tutorial - a step-by-step guide for beginners	
Microsoft Power BI	Turns data into visuals with advanced data-analysis tools, AI capabilities, and a user-friendly report-creation tool. Works with Copilot, an AI tool that create reports in seconds, generate DAX calculations, create summaries, and get answers, all in conversational language.	How to use Microsoft Power BI - tutorial for beginners Get started with Power BI desktop	
Polymer	Free trial for 14 days. Create visualizations, build dashboards, and present your data like a pro — in minutes. Can work with data across different platforms.	Polymer app overview	
Akkio	Free trial for 14 days. Adds AI-powered analytics and predictive modeling to your service offering, so customers can chat with their data, create live charts and graphs, and predict future trends. It also helps generate reports and predictions.	Getting started with Akkio The complete beginner's guide to machine learning	
Copyseeker	Helps reverse image search to find images you may want to use and where they came from. Great for locating image rights and illegal copies of users works.	Copyseeker.net: AI-powered reverse image search Reverse image search - things you should know	 Only API function has a fee.

Tools	Summary	Help and Tutorials	Cost
Scite assistant	Science researcher. Accesses research articles. Assisting in generating easy tables/scaffolds from our inputs to allow for analysis of information early and save time. Free trial 7 days.	How does scite Assistant work? Scite tutorials/guides	
Cognosys	Free version. Connects to other apps, improves workflow and automates tasks. Provides a variety of sources plus the links to where the information was found (i.e. articles). Up to date (better at finding newer research). Won't replace literature reviews.	Agent GPT rival on the browser: Cognosys AI - beginner's tutorial: No code AI agent	
Aomni	As a research tool, it provides more recent research, shows internal thought process and how it found information and why. Also provides better overview of information. Includes a free trial.	Aomni AI research tool: how to use in 2024 (step by step)	
Notion	Notion is a connected workplace that supports docs, wikis, projects and calendar functions. It helps build and use databases and is designed to support small business, enterprises and personal use. AI has been added to Notion to also help answer questions, summarise information, and act as an integrated assistant. It has an education pricing which is free for students, teachers and student organisations and discounts for teams and schools.	Reference Getting started with Notion AI: introduction and everything we'll cover in this course	
Weights and Biases	Quickly track experiments, version and iterate on datasets, evaluate model performance, reproduce models, and manage your ML workflows end-to-end. Supports visualisation of data with live metrics, datasets, logs, code, and system stats in a centralized location. Helps analyze collaboratively across your team to uncover key insights and allows for comparing side-by-side to debug easily, and build iteratively.	Welcome to Weights & Biases - introduction walkthrough (2020) A complete Weights & Biases tutorial Quickstart guide	

AI Tools for teaching and learning

Here are a few more AI tools mainly with teachers in mind to help streamline the lesson planning process and save time so that the focus can be more on the time in the classroom not on admin. There are also a few AI tools added here for students who want to streamline some of the processes like note taking. Please note however that when taking away one process, that usually contributes to retaining information, it is a good idea to use that time to implement another learning strategy such as teaching someone else what you learnt. This way you have saved time but also worked towards retaining the information you have learnt.

Tools	Summary	Help and Tutorials	Cost
Otter AI	Creates meeting notes. Real time transcriptions. Can use to record collaborative meetings and discussions. Also has a workspace for teams and organisations.	Otter quick start guide	
Eduaide AI	Lesson planning platform. Helps generate teaching resources, streamline administrative duties, creates assessments, adjust difficulty level to meet divers learners, accesses over 15 languages, has a chat function. It also can help provide timely, relevant and actionable feedback.	Eduaide.ai quick run-through Eduaide - AI for teacher	
Goblin Tools	Magic ToDo - Input an item you have to do and it generates a list of smaller steps to help manage those big tasks. Formalizer - improves ideas/writing. Judge - helps identify tone of text. Estimates timeframe of tasks. Generates a list of tasks based on random thoughts input. Chef - Write ingredients, dietary needs, serving sizes and anything else needed to get a recipe for what you can cook.	What the tech: Goblin Tools	 Through webpage. App has a small one time fee.
Immerse zone	Helps reverse image search using image file or sketch. Searches quotes.	How to find similar images with Immerse.zone AI	
ChatTube	ChatTube allows you to chat with YouTube videos in real-time using AI - ask questions, get summaries, pinpoint key points, translate content, and more.		
Quizalize	Helps teachers create quizzes. Use quizzes in interactive games. Student progress can be monitored and gaps in learning pinpointed with student data tools. Can add follow up activities. Can use others quizzes.	How to use Quizalize: the basics Welcome to Quizalize. All you need to know in two minutes!	

Tools	Summary	Help and Tutorials	Cost
TeachMateAI	AI-powered digital assistant. AI tools include free access to our Report Writer, Activity Ideas Generator, and Maths Starter Questions — to improve learning experiences while drastically reducing your workload. Supports Australian curriculum	Step-by-step instructions A step-by-step guide for TeachMateAI - updated summer 2023	
Translate Video	Generates captions, subtitles, video dubbing, AI voice-overs, records voice, generates transcripts and exports files for video content. Exports of files however require a subscription.		
Twee	Generates learning resources to use in class. Can generate questions, activities or summaries for youtube videos (5 minutes at a time in the free version). Can generate texts on topics with activities for students to work through in class. Can also help generate tasks to build vocabulary and grammar. Generates homework tasks and tasks to get students talking.	Twee: AI tools for English teachers to create EFL lesson plans fast and with minimal effort AI powered tools for English teachers	
Teach AI	Generates gamification lessons for student engagement, quiz generation, lesson plans, and other teaching resources. Also provides an AI tutor and automates school reports.	Introducing TeachAi: unlocking next-generation educational potential with generative AI	
Khanmigo	Provides one-on-one tutoring, lesson planning, insightful student feedback, provides suggested next moves for students to improve/complete task, helps students learn code.		
Structured	Day planner that automatically syncs across devices. Can import calendars, plan recurring tasks and customise alerts. Structured assistant uses AI technology to organise a schedule based on prompts you put in about what you want to do and timing.	How to use the structured assistant	

Can't find the right tool?

See [Futurepedia](#) for this ever-expanding list or check out [There's an AI for that](#) for AI tools lists and their launch dates if you want to try the latest tools, or try the search function for a quick list of relevant tools.

6. CHECK YOUR KNOWLEDGE

All the answers to the quiz questions can be found throughout this resource.

Quiz

There are 4 questions to answer. After you answer a question, click the arrow to move to the next question.



An interactive H5P element has been excluded from this version of the text. You can view it online here:

<https://opentext.csu.edu.au/digitalskillsworkwithinformation/?p=607#h5p-28>

Module Summary

1

Using AI to plan and prepare

- **Understanding AI in study and research:**
 - AI presents opportunities to revolutionise study and research methods.
 - Clear understanding of the goals, benefits, and risks is essential before utilising AI tools.
- **Why Use AI in planning research:**
 - AI aids in assimilating existing literature, enhancing efficiency, productivity, and critical thinking.
 - Various AI tools offer assistance in brainstorming, summarizing, and scoping literature.
- **Using AI tools in research planning:**
 - Brainstorming Ideas: AI tools can generate ideas or research questions, facilitating the initial phase of a project.

- Understanding Concepts: AI tools provide concise summaries to aid comprehension of complex concepts.
- Scoping Literature: AI tools help locate relevant articles and literature, expediting the research process.
- Assisting with Reading: AI tools assist in identifying key readings, authors, and concepts, though users should be wary of inherent biases.
- **Risks, limitations, and ethics of using AI:**
 - Limitations include inaccuracies, reliance on outdated data, and biases inherent in algorithms.
 - Users should critically evaluate AI-generated content, verify sources, and be mindful of biases.
 - Ethical considerations surrounding AI usage should be acknowledged and addressed throughout the research process.

2

Building better prompts

- **Building effective prompts for AI tools:**
 - Understand the components of a prompt and how they influence AI-generated outputs.
- **Key elements of prompt building:**
 - **Tone:** Consider the desired mood or style of the output, tailored to the intended audience and purpose.
 - **Audience:** Define the target audience to shape the content and tone of the AI-generated output.
 - **Clarity:** Ensure clear and specific instructions to the AI tool to generate accurate outputs.
 - **Role play:** Direct the AI tool to “act as though” to provide precise guidance for desired outputs.
 - **Type of output:** Specify the desired format of the AI-generated content, such as text, images, or code.
- **Building prompts for specific purposes:**
 - Tailor prompts to specific research or project goals, considering the capabilities of different AI tools.
- **Hints and tips for effective prompt building:**
 - Utilise boolean operators to refine prompts and include or exclude specific information.
 - Incorporate examples to guide the AI tool in generating accurate outputs.
 - Gradually build on previous prompts to refine and enhance the AI-generated results.
 - Make corrections and provide feedback to the AI tool to improve the accuracy of outputs.
 - Document prompts to evaluate effectiveness and track modifications over time, especially in higher degree research settings.
 - Use a prompt generator.

3

Evaluate & analyse

- **Considerations for using AI tools in research:**
 - Choose AI tools carefully based on their narrow focus and capabilities.
 - Evaluate and analyse results obtained from AI tools to ensure accuracy and relevance.
- **Evaluation stage:**
 - Assess the accuracy, relevance, and usefulness of AI-generated outputs.
 - De-conflict discrepancies and address any inaccuracies in the results.
 - Consider the risks, limitations, and constraints of using AI tools.
- **Evaluating AI tools:**
 - Assess the appropriateness of AI tools based on the accuracy and relevance of their results.
 - Reflect on whether the tool fulfilled its intended purpose and consider alternative tools for future use.
- **Evaluating information from AI tools:**
 - De-conflict results to ensure accuracy and relevance for the research purpose.
 - Address ethical considerations in the evaluation process, including biases in AI-generated content.
- **AI tools for information evaluation:**
 - Utilise AI tools to streamline data analysis but acknowledge their limitations in critical evaluation.
 - Consider university policies and ethical guidelines when using AI for data evaluation.
- **Documenting use of AI tools:**
 - Maintain records of AI tool usage, including prompts, edits, and results, to facilitate transparency and reproducibility in research.
- **Ethical considerations:**
 - Adhere to ethical guidelines in AI tool usage, research planning, and data evaluation.
 - Ensure transparency and accountability in the use of AI tools throughout the research process.

4

Presenting outputs created with AI

- **Using AI to create presentations:**
 - Various software and applications integrate AI to create visually appealing presentations.
 - Examples include Tome, Beautiful.AI, and Simplified's AI Presentation Maker.
- **Using AI in delivering presentations:**
 - Rather than having AI create presentations, it's advised to use AI to assist in brainstorming ideas, suggesting structures, and providing feedback.
- **Using AI in written outputs:**
 - Directly using AI-generated content is typically not allowed.

- However, AI tools like Grammarly can help refine language and style, while others like DALL-E and LetsEnhance can aid in creating decorative images and restoring/upscaling images, respectively.
- **Acknowledging the use of AI generated material:**
 - It's important to document the use of AI in assessments, review the accuracy of the content, and acknowledge and reference the tools used.
 - At a minimum, include a declaration of use explaining the technologies used, how the information was generated, and the date accessed.
- **Responsible use of AI:**
 - Recognize the ethical risks associated with using AI tools and ensure responsible and ethical use, as over-reliance on AI can diminish critical thinking and research skills.

5 AI Tools

- There are a range of AI tools available, keep in mind the dynamic nature of AI tools, with constant changes, new arrivals and shifts to premium versions.
- Investigate your options and choose the tool that suits your needs.

Declaration

The author acknowledges the use of [ChatGPT 3.5](#) to create a summary of each chapter in February 2024, using the prompt: “Provide a summary of the following content in dot points...”.

7. CONCLUSION



Congratulations !

You have completed the Using AI tools at university module.

[Digital Skills](#) – choose other modules to build your digital capabilities.