Digital Skills

For the 4th Industrial Revolution Generation

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Digital Skills

Digital skills are the range of abilities that are needed to navigate the digital world effectively. These skills can include anything from basic computer literacy to more advanced skills like coding and data analytics. Essentially, digital skills are what allow us to interact with technology in a meaningful way. Whether you're a student, a professional, or just someone who wants to stay connected, having digital skills is becoming essential.

Why do we need Digital Skills?

With digital skills, you can connect with people from all over the world, access information on virtually any topic, and even start your own business. Additionally, as our world becomes more and more reliant on technology, having digital skills can give you a competitive edge in the job market.

Digital Skills for the Workplace

In the workplace, digital skills are becoming increasingly important. Many jobs now require some level of digital literacy, and some jobs are even entirely based on digital skills. Whether you're working in healthcare, finance, or education, having digital skills can make you more efficient, productive, and valuable to your employer.



Everyday Digital Skills

Digital skills aren't just important for work or school, they're also important for everyday life. From online shopping to online banking, having digital skills can make your life easier and more convenient.

And let's not forget about social media! With digital skills, you can connect with friends and family all over the world and share your experiences with others.



Learning Digital Skills

- YouTube tutorials
- Playing online games that teach coding
- Participating in online courses or webinars
- Joining online communities to connect with other learners







RESOURCES

- <u>W3Schools</u> offers free online courses on web development and other digital skills.
- <u>Codecademy</u> offers free interactive coding courses for a variety of programming languages.
- <u>Khan Academy</u> offers free courses in computer programming, computer science, and more.
- <u>Google Digital Garage</u> offers free online courses on a variety of topics including digital marketing, data analytics, and more.
- <u>MIT OpenCourseWare</u> offers free online courses in computer science and other digital skills.
- <u>edX</u> offers free online courses from top universities in a variety of digital skills and other topics.
- <u>Coursera</u> offers free online courses from top universities in a variety of digital skills and other topics.
- <u>Udemy</u> offers a wide range of free and paid courses on digital skills, from programming to digital marketing and more.
- <u>LinkedIn Learning</u> offers a free trial period with access to courses in a variety of digital skills, including web development, data analysis, and more.
- Swift Playgrounds learn to code and build real apps, solving interative puzzles and learning the basics of app building.

Popular course topics	Python	C#	Web Development	
Explore free or paid courses in topics that interest you.	JavaScript	Bash	Data Science	
	HTML & CSS	С	Computer Science	
Explore all courses	SQL	РНР	Web Design	
	Java	R	Cybersecurity	
	C++	Swift	Machine Learning	
Top career paths	Full-Stack Engineer	Back-End Engineer	iOS Developer	
Choose your career. We'll teach you the skills to get job-ready.	Front-End Engineer	Computer Science	Data Scientist	

GRAPHIC DESIGN RESOURCES

- <u>Krita</u> offers a free and open-source digital painting and drawing software with tutorials, resources, and a community forum.
- <u>Inkscape</u> offers a free and open-source vector graphics software that can be used for graphic design and illustration.
- <u>GIMP</u> offers a free and open-source image editing software that can be used for graphic design and digital drawing.
- <u>Canva</u> offers a free and paid version of their graphic design software with templates, resources, and a community forum.
- <u>Adobe Creative Cloud</u> offers a free trial period with access to software like Photoshop, Illustrator, and InDesign for graphic design and digital drawing..
- <u>OpenClipart</u> offers a collection of free clipart images that can be used in graphic design and digital drawing.
- <u>Freepik</u> offers a collection of free and paid vector graphics and illustrations that can be used in graphic design and digital drawing.

CTU's Team	Visual documents	Photos and videos	Print >	Marketing	Billing Creating	
Teams • 8 2	Worksuite	Video editor	Business cards	Logos	Presentation	1. m
	Docs	YouTube video editor	Cards	Posters		P 9
Home	Presentations	Photo editor	Invitations	Flyers		k/ 🕅
Projects	Whiteboards	Photo collages	Mugs	Brochures		
	PDF editor		T-Shirts	Social media	BLACK FRIDAY	ranh te
Templates	Graphs and charts		Hoodies	Websites		
💼 Brand Hub 👻			Calendars	Stickers	Browse Canva templates >	
			Labels	Yard signs	Choose from thousands of free, ready-to-use templates.	
Apps				QR Code Generator	······	
🖞 Canva for Teams						

GAME DEVELOPMENT AND DESIGN RESOURCES

- <u>Unity Learn</u> offers free tutorials, courses, and projects for learning Unity, one of the most popular game development engines.
- <u>Unreal Engine</u> offers a free version of their game development engine with tutorials, resources, and a community forum.
- <u>Blender</u> offers a free and open-source 3D creation software that can be used for game design and development.
- <u>Godot</u> offers a free and open-source game development engine with tutorials, resources, and a community forum.
- <u>GDevelop</u> offers a free and open-source game development software with a visual programming interface.
- <u>Construct</u> offers a free and paid version of their game development software with tutorials, resources, and a community forum.
- <u>GameMaker Studio</u> offers a free and paid version of their game development software with tutorials, resources, and a community forum.
- Pixel Prospector offers a collection of free game development resources, including game design documents, sound effects, and music.



Student

Learn the tools and workflows professionals use on the job.

Free

Sign up

Eligibility:

Students 16 years and older who are enrolled in an accredited educational institution and can provide consent to the collection and processing of their personal information.

- ✓ Latest version of the core Unity Platform
- ✓ Free assets to accelerate projects
- Resources to get started and learn Unity

Personal

Start creating with the free version of Unity.

Free

Get started Learn more

Eligibility: Revenue or funding less than \$100K in the last 12 months

- ✓ Latest version of the core Unity Platform
- Resources for getting started and learning Unity

Unity Learn

Access expert-led live sessions and ondemand training.

Start learning

SAFETY



An important skill for everyone using digital technology is safety.

Being safe online protects you, your friends and your family.

Consider the following images. Are they real and unedited, digitally edited or not real at all?



COMBINING DIGITAL SKILLS

When used together, digital skills can create something brand new.

They can be used to tell an interactive story, like a game, or create images based on a description.

They can be used to make tasks easier, like Artificial Intelligence (AI). AI is a field that requires a wide range of digital skills, including programming and data analysis.

Digital skills are critical for developing and implementing Al systems. As Al continues to evolve and become more integrated into our daily lives, the demand for individuals with strong digital skills will only continue to increase.



ARTIFICIAL INTELLIGENCE

Artificial intelligence (AI) - the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings





ARTIFICIAL INTELLIGENCE IN USE

- Fraud Detection by financial institutions which use your spending habits to detect and prevent financial crimes.
- Virtual Assistants like Siri, Alexa and Google Assistant which respond to users' requests.
- Smart homes use devices like smart thermostats and security systems to learn the users routine and preferences and adjusts settings.
- E-commerce uses AI to suggest products based on browsing and purchase histories.
- Al powered game engines can create more realistic intelligent game characters and opponents.
- Al can be used to create images from text descriptions

AI RESOURCES

1) Introduction To AI By The University Of Helsinki www.Elementsofai.com

2) Deep Learning Specialization www.coursera.org/specializations/deeplearning

3) Google BARD & ChatGPT AI for Increased Productivity www.udemy.com/course/exploring-chatgpt-anintroductory-guide-with-use-cases/

4) ChatGPT Bootcamp: From Beginner to Pro www.udemy.com/course/chatgpt-bootcamptfrom-beginner-to-pro/ 5) ChatGPT + Blogging (AI website tutorial for beginners) <u>www.udemy.com/course/chatgpt-blogging-ai-</u> <u>website-tutorial/</u>

6) Make Teaching Easier With AI (ChatGPT) www.udemy.com/course/make-teachingeasier-with-artificial-intelligence-chat-gpt/

7) Harvard's Data Science: Machine Learning www.edx.org/course/data-science-machinelearning

8) Stanford's CS224N

http://youtube.com/watch?v=rmVRLeJRkl4&lis t=PLoROMvodv4rOSH4v6133s9LFPRHjEmbmJ

Thank You for Listening!