



# What is Computing?

Computing is the process of designing, developing, and applying software and hardware systems to solve real-world problems.

It encompasses programming, data processing, cybersecurity, artificial intelligence, and IT management.

Computing is everywhere – it is cross-disciplinary. It powers the devices we use daily, from smartphones and laptops to cloud-based applications and digital assistants. Businesses, governments, and individuals rely on computing technologies to make informed decisions, automate tasks, and enhance productivity. It impacts industries like finance, healthcare, manufacturing and education.

One defining characteristic of computing is its ability to process vast amounts of information quickly and efficiently. For example, companies like Netflix and Amazon use cloud computing to scale and process billions of daily transactions, with massive amounts of data. AI-powered chatbots such as Google Assistant and Siri help improve customer interactions by providing instant responses and automating routine inquiries. Computing is not limited to a single industry or application. It is a foundational technology that continues to evolve, driving innovation across multiple sectors.