

Activity sheet 4

Give one example of how each emerging technology might change engineering and manufacturing.

Innovation and emerging technologies

How might IoT devices make	How might Al improve an	How might AR improve
a manufacturing workplace	engineering company's	a skilled machine
safer and smarter?	ability to innovate?	operator's career?
How might VR transform how engineering products are designed?	How might big data help make products more reliable?	How might autonomous systems change manufacturing?

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Activity sheet 5

List how emerging technologies and innovation influence prosthetics.

Innovation and emerging technologies

Materials	Processes
Emerging technologies	Collaboration
Ideas	Value created

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Innovation and emerging

technologies

Activity sheet 6

6a. Choose one emerging technology. Identify some possible positive and negative impacts on the economy, society and environment.

Technology:	
Positive impacts:	Negative impacts:
What principles or guidelines might ensure this technology has a net positive impact on sustainability?	Should engineers consider what value they create and the ethics of their innovations? Explain why.

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6b. These are six sectors where innovation and emerging technologies will be both necessary and likely: energy, farming, healthcare, homes, manufacturing and transport. Choose one sector to answer the following questions:

How might one sector change or grow in the future?	What engineering career opportunities might this create?