

## Chapter 4: Controlled Gates and Universal Circuit Building Blocks

This section is already in the book plan, but it has not been written fully yet. The book owner can press Generate section to write this part with the language model connected to TheoryTrace.

Section plan:

Explains controlled operations such as CNOT, CZ, and controlled rotations; introduces SWAP and Toffoli gates; and shows how these gates create correlations, entanglement, and reversible logic.

### References

References will be added when this section is generated.

## Document information

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<b>Project</b>	Quantum Circuits from First Principles
<b>Document</b>	Document 1.8
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<b>Verifier</b>	Not verified
<b>Downloaded</b>	July 03, 2026 20:22 KST
<b>Status</b>	Working
<b>Document link</b>	<a href="https://theorytrace.com/projects/quantum-circuits-from-first-principles/documents/chapter-4-controlled-gates-and-universal-circuit-building-blocks/">https://theorytrace.com/projects/quantum-circuits-from-first-principles/documents/chapter-4-controlled-gates-and-universal-circuit-building-blocks/</a>