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## edge covering

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Defines	minimal edge covering

Let  $G$  be a graph. An *edge covering*  $C$  on  $G$  is a subset of the vertices of  $G$  such that each edge in  $G$  is incident with at least one vertex in  $C$ .

For any graph, the vertex set is a trivial edge covering. Generally, we are more interested in *minimal coverings*. A minimal edge covering is simply an edge covering of the least possible .