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A bipartite graph is a chain graph if it does not contain an induced subgraph isomorphic to  $2K_2$ . The chain cover number of a bipartite graph  $G$  is the minimum integer  $k$  such that the edge set of  $G$  is the union of  $k$  chain graphs. While NP-complete for bipartite graphs, we show that for chordal bipartite graphs, a minimum chain cover can be found in polynomial time. (Received February 12, 2007)