



UCL Department of Computer Science
CS M038/GZ06: Mobile and Cloud Computing
2011–2012, Term 2
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One-pager: The Viterbi Algorithm (Forney, Jr., 1973) Due: Start of lecture, 2th March 2012

Instructions: ***in your own words**, answer the following questions as **succinctly** as possible (in 200–500 words total, but shorter answers within this range are encouraged). Quoting figures or text from the assigned reading or from any other source is specifically prohibited.*

Given input bits **10100**, what bits would the convolutional encoder shown in Figure 3 output?

This convolutional encoder corresponds to the state machine shown in Figure 7 (top). Draw the path that the convolutional encoder takes through the trellis. Your diagram should look like Figure 7 (lower), only with edges (*aka branches*) forming one path through the trellis of length equal to the number of input bits.