Tunneling spectroscopy measurements on one-dimensional superconducting hybrid materials have revealed signatures of Majorana fermions which are the edge states of a bulk topological superconducting phase. We couple strong spin-orbit semiconductor InSb nanowires to conventional NbTiN superconductors to obtain additional signatures of Majorana fermions and to explore the magnetic-field driven topological phase transition. Specifically, we map out the phase diagram of the topological phase in the space of Zeeman energy and chemical potential, and investe the apparent closing and re-opening of the superconducting gap. We also investigate how the topological superconducting phase would manifest in finite size systems, by electrostatically splitting the wire into segments of varied length. By chaining up several segments of a nanowire, we are realizing a quantum simulator of the Kitaev chain with tunable on-site energies and couplings between the sites, a step towards quantum simulation with semiconductor nanostructures.