Esther King Smith studied at the Royal College of Music with Dona Lee Croft, where she undertook both an undergraduate degree and a postgraduate diploma. Whilst studying at the RCM, Esther was awarded both the Helen Just and Susan Connell Prize and the Sacconi String Quartet Prize. In 2008 she was awarded a postgraduate scholarship at Canterbury Christ Church University to study for a Master's Degree with the late Carmel Kaine and the Maggini Quartet.

Esther enjoys a busy freelance career as a performer and teacher. She is the Principal Second Violinist of the Covent Garden Sinfonia. With CGS she performs across England and has made several successful recordings. Esther has been a member of the English Symphony Orchestra since 2017 and was appointed as the orchestra's Sub-Principal Second Violinist in 2021. She performs with orchestras across the country, most regularly with City of London Sinfonia, London Mozart Players, and the Novello Orchestra, which specialises in performing films live in concert.

Her diverse performances range from filming for BBC dramas, to playing at the Tower of London for the arrival of the Olympic Torch in 2012, to sharing a stage with pioneering Techno legend Derrick May. Recital engagements include the lunchtime concert series at Warwick Arts Centre and Imperial College, and for Bach to Baby. She performs regularly for Opera Holland Park, and played in the 'Alice Band' for their critically acclaimed production of Alice's Adventures in Wonderland. Esther teaches the violin at the Royal College of Music Junior Department, where she also coaches chamber music and directs both the Sinfonietta and String Orchestra. As well as teaching the violin at Imperial College, she also directs the Imperial College String Ensemble, and she is in demand as a tutor for orchestral courses. She has been a syllabus consultant for London College of Music Examinations and has recently become a mentor for Music Masters, supporting students on their Pathways programme.

In her spare time, Esther enjoys choral singing, (in 1995 she was the youngest ever holder of the Bishop of Oxford's Junior Chorister Award), baking, swimming (in order to counteract the baking), foreign languages and travel. She spent the Covid lockdowns learning to make her own clothes and has a growing wardrobe of handmade items.

Esther plays a 1757 Joseph Hill violin, which before she acquired it in 2006 had not been played for around 200 years.