Induced representations and positivity in *-algebras

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For general rings $B \subset A$ and a B-module V the induced A-module is defined as $A \otimes_B V$. We define induced Hilbert space representations in case when A and B are $*$-algebras, i.e. we define a scalar product on $A \otimes_B V$. Thereby the hermitian B-module V should be positive with respect to the quadratic module $\sum A^2 \cap B$. For a special class of algebras we develop Mackey analysis. All notions are illustrated by a number of examples (Weyl algebra, enveloping algebras, q-CCR etc.).