

$[PERSON, MODULE]$

$ModuleReg$
$students : \mathbb{P} PERSON$ $degModules : \mathbb{P} MODULE$ $taking : PERSON \leftrightarrow MODULE$
$dom\ taking \subseteq students$ $ran\ taking \subseteq degModules$

$AddStudent$
$\Delta ModuleReg$ $p? : PERSON$
$p? \notin students$ $students' = students \cup \{p?\}$ $degModules' = degModules$ $taking' = taking$

$RegForModule$
$\Delta ModuleReg$ $p? : PERSON$ $m? : MODULE$
$p? \in students$ $m? \in degModules$ $p? \mapsto m? \notin taking$ $taking' = taking \cup \{p? \mapsto m?\}$ $students' = students$ $degModules' = degModules$