$[PERSON, MODULE]$

___ *ModuleReg* _____

$students : \mathbb{P}\ PERSON$

$degModules : \mathbb{P}\ MODULE$

$taking : PERSON \leftrightarrow MODULE$

_____

$\mathrm{dom}\ taking \subseteq students$

$\mathrm{ran}\ taking \subseteq degModules$

_____

___ *AddStudent* _____

$\Delta ModuleReg$

$p? : PERSON$

_____

$p? \notin students$

$students' = students \cup \{p?\}$

$degModules' = degModules$

$taking' = taking$

_____

1

$\begin{array}{|l}\hline \textbf{\textit{RegForModule}} \\\hline \Delta\textit{ModuleReg} \\[4pt]
p? : PERSON \\[4pt]
m? : MODULE \\\hline
p? \in students \\[4pt]
m? \in degModules \\[4pt]
p? \mapsto m? \notin taking \\[4pt]
taking' = taking \cup \{\, p? \mapsto m? \,\} \\[4pt]
students' = students \\[4pt]
degModules' = degModules \\\hline
\end{array}$