

```
[PERSON, MODULE] \\
                ModuleReg \_
                students: \mathbb{P}\ PERSON
                degModules: \mathbb{P} \, MODULE
                taking: PERSON \leftrightarrow MODULE
                    \mathrm{dom}\; taking \subseteq students
                    ran\ taking \subseteq degModules
  requires
                AddStudent\_
                \Delta ModuleReg
                p?: PERSON
                    p? \notin students
                    students' = students \cup \{p?\}
                    degModules' = degModules
                    taking' = taking
requires allows allows allows
                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
requires allowanuses
```