

Rules

Last updated: Saturday 19th October 4:19pm

Most recent changes are shown in red ... older changes are shown in brown.

[\[Assignment Spec\]](#) [\[Database\]](#) [\[Rules\]](#) [\[Schema\]](#) [\[Test Cases\]](#) [\[Fixes+Updates\]](#) [\[Extras\]](#)

The following table attempts to describe what should happen for every possible case of rule type, min/max values, and academic object group types. The following notes describe some general points relating to table and rule cases.

- the **#** column indicates how many occurrences of a particular kind of rule are in the database; if the value is zero, the rule type will not appear in the testing database
- the phrase "if not filled to X UOC..." means "after you have considered all completed courses, if the number of UOC allocated to the rule is still less than X UOC..."
- if the **Min** value for a valid rule is zero, the rule is automatically satisfied, and will never appear in the TODO list of rules in the virtual transcript
- on allocating subjects to rules:
 - if adding a subject to an LR rule would cause the Max for that rule to be exceeded, then the subject cannot be allocated to any rule
 - a subject can be allocated to at most one CC/PE/FE/GE rule, in priority order
 - if there are any LR rules whose group the subject belongs to, it should also be allocated to all such rules, up to the Max for that rule
- if the **Group** is quoted as "empty", this means that either the `Rules.ao_group` value is null or the corresponding group has zero members
- rules with an empty group are treated specially, as noted under each rule type; some general principles:
 - if the rule with an empty group has an invalid min/max combination, it is invalid
 - if it has a valid min/max combination, it is treated as described in the rule
 - if the rule has no case for an empty group, then the empty group case is invalid

Type	Min	Max	Group	#	Notes
CC	null	null	subjects	0	Invalid rule ... ignore
CC	X UOC	null	subjects	79	Meaning: complete at least X UOC from subjects in group Task D: allocate subjects to rule; if not filled to X UOC, include in TODO Task E: if not filled, suggest unused subjects from group
CC	null	Y UOC	subjects	0	Invalid rule ... ignore
CC	X UOC	Y UOC	subjects	1171	Meaning: must complete at least X UOC and at most Y UOC from subjects in group Task D: allocate subjects to rule up to Y UOC; if not filled to X UOC, include in TODO Task E: for each subject in group, if adding subject's UOC would make the rule's allocation exceed Y UOC, then ignore it; otherwise add into the advice array
CC	any valid UOC	any valid UOC	empty	0	Meaning: treat as an empty group; same if group is non-null and is empty Task D: rule is automatically satisfied Task E: ignore (it suggests no subjects to take)
CC	any	any	streams or programs	0	Invalid rule ... ignore

Type	Min	Max	Group	#	Notes
DS	null	null	streams	1	Meaning: must complete 1 stream from group of streams Task D: not relevant Task E: not relevant
DS	X	null	streams	48	Meaning: must complete at least X streams from group of streams Task D: not relevant Task E: not relevant
DS	null	Y	streams	7	Meaning: must complete up to Y streams from group of streams Task D: not relevant Task E: not relevant

DS	X	Y	streams	18	Meaning: must complete at least between X and Y streams from group of streams Task D: not relevant Task E: not relevant
DS	any	any	subjects	1	Invalid rule ... ignore
DS	null	null	programs	0	Invalid rule ... ignore
Type	Min	Max	Group	#	Notes
FE	null	null	subjects	0	Invalid rule ... ignore
FE	X UOC	null	subjects	24	Meaning: must complete at least X UOC from any non-Gen-ed subjects in the subject group Task D: allocate subjects to rule; if not filled to X UOC, include in TODO Task E: if not filled to X UOC, add as special "(many choices)" item in array
FE	null	Y UOC	subjects	0	Invalid rule ... ignore
FE	X UOC	Y UOC	subjects	69	Meaning: must complete at between X and Y UOC from any non-Gen-ed subjects in the subject group Task D: allocate subjects to rule up to Y UOC; if not filled to X UOC, include in TODO Task E: if not filled to X UOC, add as special "(many choices)" item in array
FE	any valid UOC	any valid UOC	empty	0	Meaning: treat as FE rule with group = FREE#### Task D: treat as if one of above with group FREE#### Task E: treat as if one of above with group FREE####
FE	any	any	streams or programs	0	Invalid rule ... ignore
Type	Min	Max	Group	#	Notes
GE	null	null	subjects	0	Invalid rule ... ignore
GE	X UOC	null	subjects	1	Meaning: must complete at least X UOC from Gen-ed subjects in the subject group Task D: allocate subjects to rule; if not filled to X UOC, include in TODO Task E: if not filled to X UOC, add as special "(many choices)" item in array
GE	null	Y UOC	subjects	0	Invalid rule ... ignore
GE	X UOC	Y UOC	subjects	94	Meaning: must complete at between X and Y UOC from Gen-ed subjects in the subject group Task D: allocate subjects to rule up to Y UOC; if not filled to X UOC, include in TODO Task E: if not filled to X UOC, add as special "(many choices)" item in array
GE	any valid UOC	any valid UOC	empty	0	Meaning: treat as GE rule with group = GENG#### Task D: treat as if one of above with group GENG#### Task E: treat as if one of above with group GENG####
GE	any	any	streams or programs	0	Invalid rule ... ignore
Type	Min	Max	Group	#	Notes
IR	any	any	any	25	Meaning: simply gives some info ... not a "real" rule Task D: not relevant Task E: not relevant

Type	Min	Max	Group	#	Notes
LR	null	null	subjects	0	Invalid rule ... ignore
LR	X UOC	null	subjects	90	<p>Meaning: must complete at least X UOC from subjects in group</p> <p>Task D: allocate subjects to rule; if not filled to X UOC, include in TODO</p> <p>Task E: if not filled to X UOC, you may (optionally) add as special "(many choices)" item in the advice array</p>
LR	null	Y UOC	subjects	59	<p>Meaning: may not complete more than Y UOC from subjects in group</p> <p>Task D: if subject belongs to group and adding its UOC would exceed Max, then don't allocate it to any rule</p> <p>Task E: for each subject under consideration, if subject belongs to group and if adding UOC of subject would exceed Y UOC, then do not include subject in advice; the rule itself does not need to appear as a "(many choices)" item</p>
LR	X UOC	Y UOC	subjects	9	<p>Meaning: must complete between X and Y UOC from subjects in group</p> <p>Task D: allocate subjects to rule; if not filled to X UOC, include in TODO</p> <p>Task E: for each subject under consideration, if subject belongs to group and if adding UOC of subject would exceed Y UOC, then do not include subject in advice; the rule itself does not need to appear as a "(many choices)" item</p>
LR	any	any	empty	0	Invalid rule ... ignore
LR	any	any	streams or programs	0	Invalid rule ... ignore

Type	Min	Max	Group	#	Notes
MR	null	null	subjects	0	Invalid rule ... ignore
MR	X UOC	null	subjects	380	<p>Meaning: used as a pre-req for all subjects in a group; must have completed at least X UOC of subjects</p> <p>Task D: not relevant</p> <p>Task E: cannot enrol in any subject from the group unless X UOC completed</p>
MR	X UOC	null	null	886	<p>Meaning: used as a pre-req for an individual subject; must have completed at least X UOC of subjects</p> <p>Task D: not relevant</p> <p>Task E: cannot enrol in the subject that has this rule as a pre-req unless X UOC completed</p>
MR	any	Y UOC	subjects	0	Invalid rule ... ignore
MR	any	any	streams or programs	0	Invalid rule ... ignore

Type	Min	Max	Group	#	Notes
PE	null	null	subjects	0	Invalid rule ... ignore
PE	X UOC	null	subjects	368	<p>Meaning: complete at least X UOC from subjects in group</p> <p>Task D: allocate subjects to rule; if not filled to X UOC, include in TODO</p> <p>Task E: if not filled, suggest unused subjects from group</p>
PE	null	Y UOC	subjects	0	Invalid rule ... ignore

PE	any valid UOC	any valid UOC	empty	0	Meaning: treat as an empty group; same if group is non-null and <i>is</i> empty Task D: rule is automatically satisfied Task E: ignore (it suggests no subjects to take)
PE	X UOC	Y UOC	subjects	423	Meaning: must complete at least X UOC and at most Y UOC from subjects in group Task D: allocate subjects to rule up to Y UOC; if not filled to X UOC, include in TODO Task E: for each subject in group, if adding subject's UOC would make the rule's allocation exceed Y UOC, then ignore it; otherwise add into the advice array
PE	any	any	streams or programs	0	Invalid rule ... ignore

Type	Min	Max	Group	#	Notes
RC	null	null	subjects	61	Meaning: all subjects in group are recommended for students enrolled in stream/program Task D: not relevant Task E: add any not-yet-completed subject from the group into the advice array, unless the subject was rejected based on some other rule (most of the time, these subjects will already have been added to the advice array when other relevant rules were considered)
RC	not null	not null	subjects	0	Invalid rule ... ignore
RC	any	any	empty	0	Invalid rule ... ignore
RC	any	any	streams or programs	0	Invalid rule ... ignore

Type	Min	Max	Group	#	Notes
RQ	null	any	subjects or streams or programs	0	Invalid rule ... ignore
RQ	X UOC	any	subjects	218	Meaning: must have completed at least X UOC of subjects in the group Task D: not relevant Task E: if rule is not satisfied, cannot enrol in subject which has this rule as a pre-req Note: any non-null Max value can be ignored for RQ rules
RQ	X	any	streams	0	Meaning: must be currently enrolled in one of the streams in the group Task D: not relevant Task E: if rule is not satisfied, cannot enrol in subject which has this rule as a pre-req Note: any non-null Max value can be ignored for RQ rules
RQ	X	any	programs	0	Meaning: must be currently enrolled in one of the programs in the group Task D: not relevant Task E: if rule is not satisfied, cannot enrol in subject which has this rule as a pre-req Note: any non-null Max value can be ignored for RQ rules
RQ	any	any	empty	?	Invalid rule ... ignore

Type	Min	Max	Group	#	Notes
WM	null	null	none	0	Invalid rule ... ignore

WM	X UOC	null	none	18	Meaning: must complete at least X total UOC Task D: not relevant Task E: not relevant
WM	null	Y UOC	subjects	0	Invalid rule ... ignore
WM	X UOC	Y UOC	subjects	0	Invalid rule ... ignore
WM	any	any	subjects or streams or programs	0	Invalid rule ... ignore