# The Retention and Graduation Analysis System

# Overview

The University of Wisconsin System Office of Policy Analysis and Research (OPAR) routinely calculates and reports rates of student persistence (retention) and graduation within the UW System. Information on student retention and graduation appears in UW System Accountability Dashboard and a variety of UW System publications. The data is also reported to the National Center for Education Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS).

Retention and graduation rates are based on student enrollment records collected through the UW System's Central Data Request (CDR) and stored in an Oracle data warehouse. Database views perform the basic calculation of retention and/or graduation at the level of individual student records. Results from the views are aggregated and formatted prior to publication using database query and reporting tools such as InfoMaker and SAS.

### **Database Views**

There are three retention and graduation views on the Oracle data warehouse, CDR3. All the three views track retention and graduation using either Student SSN or Campus Student ID. The name of each view provides information on whether it analyzes retention and graduation of undergraduates on a year-to-year or term-to-term basis. Each view name also provides information on the CDR submissions that are included.

uwsa.v_retgrad_ug_year	Tracks retention and on a year-to-year basis; includes all finalized CDR submissions; <b>preferred view for year-to-year retention and graduation queries.</b>
uwsa.v_retgrad_ug_year_prod	Tracks retention and graduation on a year-to-year basis; includes finalized and not-yet-final CDR submissions; <b>used for preliminary year-to-year</b> <b>retention and graduate rates.</b>
uwsa.v_retgrad_ug_fallspring	Tracks retention and graduation on a term-to-term basis; includes all finalized CDR submissions; <b>used for term-to-term retention and graduate queries.</b>

The current retention and graduation views reflect the new UW institutional structure with 2-year campuses being a part of their receiving institutions. This structure is applied retroactively to student cohorts and outcomes for years before July 2018 when the UW restructuring happened.

- The current views include students who entered UW institutions in fall or spring term as new freshmen or new transfer students.
- Retroactive\_Unit and/or Retroactive\_Division can be used to generate historical cohorts for restructured institutions. For example, Retroactive\_Unit = 'B' will pull all students at UW-Milwaukee main and branch campuses no matter when students entered. Retroactive\_Division = 'B1' will pull all students at UW-Washington County no matter when students entered.
- Retention and graduation at same unit means retention and graduation at main and branch campuses, no matter when students entered and when outcomes happened.
- Retention and graduation at same division means retention and graduation at same division, branch, or location no matter when students entered and when outcomes happened.
- Transfer to different unit indicates transfer to a different UW institution. Transfers between main and branch campuses or transfers between branch campuses in one institution are not counted as transfer to different unit.

Retention and graduation are frequently reported for new freshmen entering full-time in fall semester. This population can be used to illustrate the **different types of fields** in the retention views:

- Student identifiers
  - The Student SSN and Campus Student ID fields reflect the values recorded with the student's entry as part of a cohort.
- Characteristics used to define and describe the student cohort
  - The student cohort is <u>defined</u> by year, term (fall), unit, division, retroactive\_unit, retroactive\_division, entrance status (new), classification (freshman), population (total minus study away), and full-time attendance.
  - The student cohort is <u>described</u> by year, unit, division, retroactive\_unit, retroactive\_division, sex, ethnicity/citizenship, residency status, high school class rank percentile, and a variety of other characteristics.
- Time period in which retention, transfer, remediation completion, or graduation outcomes are measured
  - In year-to-year views, the time period begins with the fall term and extends through the following summer. In term-to-term view, the time period begins with the fall term and extends through the following winter.
- Retention, transfer, remediation completion, or graduation outcomes associated with the time period
  - A student is counted as retained only if s/he is enrolled at the beginning of the time period, i.e., retained to the following fall term in year-to-year views and retained to the following spring term in term-to-term view. A student is counted as graduated if s/he receives his/her first bachelor's degree at any point during the time period, i.e., graduated at any time from the fall term through the following summer in year-to-year views and graduated at any time from the fall term through the following winter in term-to-term view.

#### **Examples of Using the Views**

The following examples illustrate the uses of the v\_retgrad\_ug\_year view.

Example 1: Produce retention and graduation rates by gender and underrepresented minority status (URM)

The inner query ("A") specifies the standard cohort and summarizes the retention and graduation outcomes by the gender and URM variables of interest. The outer query ("B") uses analytic functions of OracleSQL to calculate retention and graduation rates.

```
The inner query ("A"):

/* A. Sum outcomes by crosstab grouping variables */

SELECT

YEAR,

TERM,

RETROACTIVE_UNIT,

RETROACTIVE_DIVISION,

SEX,
```

```
UNDERREPRESENTED MINORITY,
      TIMEPERIOD,
      SUM(ENR UG SAME UNIT) ENR UG SAME UNIT,
      SUM(FIRST BACH SAME UNIT) FIRST BACH SAME UNIT,
      SUM(ENR UG ANY UW) ENR UG ANY UW,
      SUM(FIRST BACH ANY UW) FIRST BACH ANY UW
FROM
      UWSA.V RETGRAD UG YEAR
WHERE
      /* new freshmen retention cohort */
      CLASSIF IN ('A', 'B', 'C', 'D')
      AND ENTR STATUS='N'
      AND TERM='1'
      AND TOT MINUS STUDY AWAY FLAG='Y'
      AND TOT MINUS STUDY AWAY PART TIME ='N'
GROUP BY
      YEAR,
```

```
TERM,
RETROACTIVE_UNIT,
RETROACTIVE_DIVISION,
SEX,
UNDERREPRESENTED_MINORITY,
TIMEPERIOD
```

#### The outer query ("B"):

```
/* B: Calculate percent retained
  from cohort and cumulative percent degrees earned,
  within the desired grouping variables (partition) */
SELECT
      A.*,
      ENR UG SAME UNIT / FIRST VALUE(ENR UG SAME UNIT) OVER (
            PARTITION BY
                  YEAR,
                  TERM,
                  RETROACTIVE UNIT,
                  RETROACTIVE DIVISION,
                  SEX,
                  UNDERREPRESENTED MINORITY
            ORDER BY
                  TIMEPERIOD
            ) RET RATE SAME UNIT,
      SUM(FIRST BACH SAME UNIT) OVER (
            PARTITION BY
                  YEAR,
                  TERM,
                  RETROACTIVE UNIT,
                  RETROACTIVE DIVISION,
                  SEX,
                  UNDERREPRESENTED MINORITY
            ORDER BY
                  TIMEPERIOD
            RANGE BETWEEN UNBOUNDED PRECEDING AND CURRENT ROW)
            /
            FIRST VALUE (ENR UG SAME UNIT) OVER (
                  PARTITION BY
                  YEAR,
                  TERM,
                  RETROACTIVE UNIT,
                  RETROACTIVE DIVISION,
                  SEX,
                  UNDERREPRESENTED MINORITY
            ORDER BY
                  TIMEPERIOD
            ) CUM GRAD RATE SAME UNIT,
      ENR UG ANY UW / FIRST VALUE (ENR UG ANY UW) OVER (
            PARTITION BY
                  YEAR,
                  TERM,
                  RETROACTIVE UNIT,
                  RETROACTIVE DIVISION,
                  SEX,
                  UNDERREPRESENTED MINORITY
            ORDER BY
                  TIMEPERIOD
            ) RET RATE ANY UW,
      SUM(FIRST BACH ANY UW) OVER (
            PARTITION BY
                  YEAR,
```

```
TERM.
                  RETROACTIVE UNIT,
                  RETROACTIVE DIVISION,
                  SEX,
                  UNDERREPRESENTED MINORITY
            ORDER BY
                  TIMEPERIOD
            RANGE BETWEEN UNBOUNDED PRECEDING AND CURRENT ROW)
            FIRST VALUE (ENR UG ANY UW) over (
                  PARTITION BY
                  YEAR,
                  TERM,
                  RETROACTIVE UNIT,
                  RETROACTIVE DIVISION,
                  SEX.
                  UNDERREPRESENTED MINORITY
            ORDER BY
                  TIMEPERIOD
            ) CUM_GRAD_RATE_ANY_UW
/* [Insert query "A" from above] */
```

Example 2: Create custom tabulations

FROM

The query structure from Example 1 can be used to generate custom tables using variables that appear in v retgrad ug year. For example, an analyst could generate a new report by taking the query from Example 1 and replacing UNDERREPRESENTED MINORITY with ACT COMP SCORE. The analyst may wish to aggregate ACT scores in the inner query to look at ranges instead of individual scores. The following SELECT statement illustrates this modification. (To complete the modification to the inner query, the CASE WHEN statement needs to be repeated in the GROUP BY expression.)

```
/* A. Sum outcomes by crosstab grouping variables */
SELECT
      YEAR,
      TERM,
      RETROACTIVE UNIT,
      RETROACTIVE DIVISION,
      SEX,
      (CASE WHEN ACT COMP SCORE>='01' AND ACT COMP SCORE<='15' THEN 'Less than 16'
            WHEN ACT COMP SCORE>='16' AND ACT COMP SCORE<='20' THEN '16 to 20'
            WHEN ACT COMP SCORE>='21' AND ACT COMP SCORE<='25' THEN '21 to 25'
            WHEN ACT COMP SCORE>='26' AND ACT COMP SCORE<='29' THEN '26 to 29'
            WHEN ACT COMP SCORE>='30' AND ACT COMP SCORE<='36' THEN 'Greater than 29'
            ELSE 'Not Available'
            END) ACT COMP SCORE RANGE,
      TIMEPERIOD,
      SUM(ENR UG SAME UNIT) ENR UG SAME UNIT,
      SUM(FIRST BACH SAME UNIT) FIRST BACH SAME UNIT,
      SUM(ENR UG ANY UW) ENR UG ANY UW,
      SUM(FIRST BACH ANY UW) FIRST BACH ANY UW
```

Example 3: Join additional data for special-purpose analysis

The analysis component can also be used to analyze retention and graduation of special populations of interest. For example, we might wish to look at graduation rates of students from particular high schools, or transferring from WTCS institutions, or receiving certain forms of financial aid. The example below joins a table of students who graduated from Stevens Point Area High School in 2018 with the new freshmen retention cohort to produce output similar to the inner query of Example 1.

Caution: Joining data from other tables may result in queries that are very complex and take a long time to process.

```
/* A. Sum outcomes by crosstab grouping variables */
SELECT
      RG.YEAR,
      RG.TERM,
      RG.RETROACTIVE UNIT,
      RG.RETROACTIVE DIVISION,
      RG.TIMEPERIOD,
      SUM(RG.ENR UG SAME UNIT) ENR UG SAME UNIT,
      SUM(RG.FIRST BACH SAME UNIT) FIRST BACH SAME UNIT,
      SUM(RG.ENR UG ANY UW) ENR UG ANY UW,
      SUM(RG.FIRST BACH ANY UW) FIRST BACH ANY UW
FROM
      UWSA.V RETGRAD UG YEAR RG,
      (/* 2018 graduates of Stevens Point Area High School */
      SELECT
      STUDENT SSN,
      HS GRAD DATE
      FROM UWSA.STUDENT ANALYTICAL
      WHERE HS GRAD FROM= '502195'
        AND HS GRAD DATE=2018
      ) HS
WHERE
      /* full-time new freshmen retention cohort */
      RG.CLASSIF IN ('A', 'B', 'C', 'D')
      AND RG.ENTR STATUS='N'
      AND RG.TERM='1'
      AND RG.TOT MINUS STUDY AWAY FLAG='Y'
      AND RG.TOT MINUS STUDY AWAY PART TIME ='N'
      /* students from the high school */
      AND HS.HS GRAD DATE=FLOOR(RG.YEAR/100)
      AND HS.STUDENT SSN=RG.STUDENT SSN
GROUP BY
      RG.YEAR,
      RG.TERM,
      RG.RETROACTIVE UNIT,
      RG.RETROACTIVE DIVISION,
      RG.TIMEPERIOD
```

#### **Field Definitions**

The fields in the retention and graduation analysis views are documented below. When the field is defined in the Central Data Request (CDR) Manual, the CDR Data Element number (DE) is referenced. When the field is defined in other OPAR documents, the filename and location of the document is referenced. When the value of a field depends on other fields in the views, then those other fields are referenced in CAPITAL letters.

Field by Category	Description, CDR Data Element (DE #), or other reference source
Student identifier	
STUDENT_SSN CAMPUS_STUDENT_ID	DE 2010 DE 2012
Characteristics used to define and	d/or describe the student cohort
YEAR	Academic year, expressed as a six-digit integer. Ex: 201819
TERM	Academic term, expressed as a character. The values of this field are currently restricted to fall ('1') and spring ('2') terms.
UNIT	DE 2160
DIVISION	DE 2170
RETROACTIVE_UNIT	<ul> <li>Same as UNIT for 4-year campuses and for terms beginning from fall 2019-20.</li> <li>Same as receiving institution's UNIT for 2-year campuses other than Colleges Online.</li> <li>Colleges Online has a code of 'R' prior to fall 2018-19.</li> <li>In fall and spring 2018-19, students at Colleges Online were allocated to other 2-year campuses and this field is the same as UNIT of the allocated 2-year campus' receiving institution.</li> </ul>
RETROACTIVE_DIVISION	<ul> <li>Same as students' "home division" for terms beginning from fall 2019-20. Home division may be different from students' DIVISION.</li> <li>For 4-year campus prior to fall 2019-20, this field is the same as DIVISION.</li> <li>For 2-year campuses other than Colleges Online prior to fall 2019-20, this field is the same as new DIVISION code.</li> <li>Colleges Online has code of '40' prior to fall 2018-19.</li> <li>In fall and spring 2018-19, students at Colleges Online were allocated to other 2-year campuses and this field is the same as the new DIVISION code of the allocated 2-year campus.</li> </ul>
ENTR_STATUS	DE 2240. The values of this field are currently restricted to new ('N') and transfer ('T').
CLASSIF	DE 2210. The values of this field are currently restricted to degree-seeking undergraduates ('A','B','C', or 'D').
TOT_MINUS_STUDY_AWAY_ FLAG	"Overview of CDR Views," http://www.uwsa.edu/opar/cdr/views/overview.pdf
TOT_MINUS_STUDY_AWAY_ PART_TIME	"Overview of CDR Views," http://www.uwsa.edu/opar/cdr/views/overview.pdf
IPEDS_FLAG	"Overview of CDR Views," http://www.uwsa.edu/opar/cdr/views/overview.pdf
IPEDS_PART_TIME	"Overview of CDR Views," http://www.uwsa.edu/opar/cdr/views/overview.pdf

SEX	DE 2020
RES_STATUS	DE 2220
ACT_COMP_SCORE	DE 2150
HS_CLASS_RANK_PCT	DE 2105
AGE	"Overview of CDR Views," http://www.uwsa.edu/opar/cdr/views/overview.pdf
ETHNICITY_CITIZENSHIP_ UNDUP	"Overview of CDR Views," http://www.uwsa.edu/opar/cdr/views/overview.pdf
ETHNICITY_CITIZEN_UNDUP _HISP	"Overview of CDR Views," http://www.uwsa.edu/opar/cdr/views/overview.pdf
UNDERREPRESENTED_ MINORITY	"Overview of CDR Views," http://www.uwsa.edu/opar/cdr/views/overview.pdf
FIRST_GEN_COLLEGE_ STUDENT	DE 2065
INST_LAST	DE 2130
IMMED_NEW_FRESH	This computed field indicates whether the student entered as a New Freshman in the fall semester immediately following the student's graduation from high school.
	<ul> <li>This field has a value of 'Y' if <u>all</u> of the following conditions are met; otherwise the field has a value of 'N':</li> <li>The TERM of the student is the fall term ('1').</li> <li>The ENTR_STATUS of the student is 'N'</li> <li>The CLASSIF of the student is 'A', 'B', 'C', or 'D'.</li> <li>The high school graduation date (DE 2120) of the student is equal to the calendar year that begins the academic year indicated by YEAR. For example, if YEAR is 201819, then high school graduation date must equal 2018.</li> </ul>
REM_ENGL_REQ_NF	DE 2235 with minor recoding. When the student is a new freshman and DE equals 'Y', this field is 'Y'. When the student is a new freshman and DE does not equal 'Y', this field is 'N'. All other students have a value of null for this field.
REM_MATH_REQ_NF	DE 2230 with minor recoding. When the student is a new freshman and DE equals 'Y', this field is 'Y'. When the student is a new freshman and DE does not equal 'Y', this field is 'N'. All other students have a value of null for this field.
FIN_AID_CATEGORY	This computed field indicates what category of financial aid the student received in the first academic year of enrollment. (Aid received only in summer term is not used to derive this field.) Students who receive Pell grants [fin_aid_type (DE 2400)='24'] are assigned a value of '1'. Students who did not receive Pell grants and who received subsidized direct loans (fin_aid_type '56' or '91') are assigned a value of '2'. All other students are assigned a value of '3'.

# Time period in which retention, transfer, remediation completion, or graduation outcomes are measured

TIMEPERIOD	This computed field indicates the number of years or fall/spring terms that have elapsed since the student enrolled as part of the cohort.	
	<ul> <li>TIMEPERIOD begins with the term indicated by TERM in the year indicated by YEAR. Each TIMEPERIOD includes four terms in year-to-year views and two terms in term-to-term view. For example:</li> <li>In uwsa.v_retgrad_ug_year and uwsa.v_retgrad_ug_year_prod,</li> <li>If TERM is the fall term ('1'), TIMEPERIOD begins with the fall term and includes all terms through the following summer term.</li> <li>If TERM is the spring term ('2'), TIMEPERIOD begins with the spring term and includes all terms through the following winter term.</li> <li>In uwsa.v_retgrad_ug_fallspring,</li> <li>If TERM is the fall term ('1'), TIMEPERIOD 1, 3, 5begin with the fall term and includes the fall term ('1'), TIMEPERIOD 1, 3, 5begin with the fall term and includes the fall term ('1'), TIMEPERIOD 1, 3, 5begin with the spring term and includes the spring term and the following summer term; TIMEPERIOD 2, 4, 6begin with the spring term and the following summer term; TIMEPERIOD 2, 4, 6begin with the fall term and includes the spring term and the following summer term; TIMEPERIOD 2, 4, 6begin with the spring term and the following summer term; TIMEPERIOD 2, 4, 6begin with the fall term and includes the spring term and the following summer term; TIMEPERIOD 2, 4, 6begin with the fall term and includes the fall term and the following summer term; TIMEPERIOD 2, 4, 6begin with the fall term and includes the fall term and the following summer term; TIMEPERIOD 2, 4, 6begin with the fall term and includes the fall term and the following winter term.</li> </ul>	
	Enrollment, transfer, remediation completion, and/or degree activity is tracked until the student earns a bachelor's degree from the same division at which the student entered. Enrollment, transfer, remediation completion, or degree activity after that point is not included.	
Retention, transfer, remediation completion, or graduation outcomes associated with the time period		
ENR_UG_SAME_UNIT	This computed field indicates, as of the beginning of the TIMEPERIOD, whether the student has been retained as an undergraduate at the same institution where the student started.	
	<ul><li>This field has a value of 1 if all the following conditions are met; otherwise, the field has a value of 0:</li><li>In the beginning term of the TIMEPERIOD, the student is enrolled at the same</li></ul>	
	<ul><li>institution as indicated by RETROACTIVE_UNIT.</li><li>The beginning term of the TIMEPERIOD is not later than the term in which the</li></ul>	
	<ul> <li>student earned a bachelor's degree as indicated by FIRST_BACH_SAME_UNIT.</li> <li>In the beginning term of the TIMEPERIOD, the student is enrolled with an undergraduate classification (DE 2210). Undergraduate classification is defined as 'A', 'B', 'C', 'D', 'I', 'N', 'O', 'S', or 'T'.</li> </ul>	

ENR_UG_SAME_DIVISION	This computed field indicates, as of the beginning of the TIMEPERIOD, whether the student has been retained as an undergraduate at the same division where the student started.
	<ul> <li>This field has a value of 1 if all the following conditions are met; otherwise, the field has a value of 0:</li> <li>In the beginning term of the TIMEPERIOD, the student is enrolled at the same division as indicated by RETROACTIVE_DIVISION.</li> <li>The beginning term of the TIMEPERIOD is not later than the term in which the student earned a bachelor's degree as indicated by FIRST_BACH_SAME_DIVISION.</li> <li>In the beginning term of the TIMEPERIOD, the student is enrolled with an undergraduate classification (DE 2210). Undergraduate classification is defined as 'A', 'B', 'C', 'D', 'I', 'N', 'O', 'S', or 'T'.</li> </ul>
ENR_UG_ANY_UW	This computed field indicates, as of the beginning of the TIMEPERIOD, whether the student has been retained as an undergraduate at any UW institution.
	This field has a value of 1 if all the following conditions are met; otherwise, the field has a value of 0:
	<ul> <li>The student is enrolled at any UW institution in the beginning term of the TIMEPERIOD.</li> </ul>
	• The term of the year indicated by TIMEPERIOD is not later than the term in which the student earned a bachelor's degree as indicated by FIRST BACH ANY UNIT.
	• In the term of the year indicated by TIMEPERIOD, the student is enrolled with an undergraduate classification (DE 2210). Undergraduate classification is defined as 'A', 'B', 'C', 'D', 'I', 'N', 'O', 'S', or 'T'.
FIRST_BACH_SAME_UNIT	This computed field indicates whether the student earned a bachelor's degree for the first time from the same institution where the student started.
	This field has a value of 1 if all the following conditions are met; otherwise, the field has a value of 0:
	• The student received a bachelor's degree during any term falling within the TIMEPERIOD.
	• The student received a bachelor's degree from the same institution as indicated by RETROACTIVE_UNIT.
	• The student did not receive a bachelor's degree during an earlier TIMEPERIOD from the same institution as indicated by RETROACTIVE_UNIT.
FIRST_BACH_SAME_ DIVISION	This computed field indicates whether the student earned a bachelor's degree for the first time from the same division where the student started.
	<ul> <li>This field has a value of 1 if all the following conditions are met; otherwise, the field has a value of 0:</li> <li>The student received a bachelor's degree during any term falling within the TIMEPERIOD.</li> <li>The student received a bachelor's degree from the same division as indicated by RETROACTIVE_DIVISION.</li> <li>The student did not receive a bachelor's degree during an earlier TIMEPERIOD from the same division as indicated by RETROACTIVE_DIVISION.</li> </ul>

FIRST_BACH_ANY_UW	This computed field indicates whether the student earned a bachelor's degree for the first time from any UW institution.
	<ul> <li>This field has a value of 1 if all the following conditions are met; otherwise, the field has a value of 0:</li> <li>The student received a bachelor's degree during any term falling within the TIMEPERIOD.</li> <li>The student did not receive a bachelor's degree during an earlier TIMEPERIOD from any UW institution.</li> </ul>
FIRST_ASSOC_SAME_UNIT	This computed field indicates whether or not the student earned an associate degree for the first time from the same institution where the student started.
	<ul> <li>This field has a value of 1 if all the following conditions are met; otherwise, the field has a value of 0:</li> <li>The student received an associate degree during any term falling within the TH UNERPLOP</li> </ul>
	<ul> <li>TIMEPERIOD.</li> <li>The student received an associate degree from the same institution as indicated by RETROACTIVE_UNIT.</li> </ul>
	• The student did not receive a bachelor's degree or an associate degree during an earlier TIMEPERIOD from the same institution indicated by RETROACTIVE_UNIT.
FIRST_ASSOC_SAME_ DIVISION	This computed field indicates whether the student earned an associate degree for the first time from the same division where the student started.
	This field has a value of 1 if all the following conditions are met; otherwise, the field has a value of 0:
	• The student received an associate degree during any term falling within the TIMEPERIOD.
	• The student received an associate degree from the same division as indicated by RETROACTIVE_DIVISION.
	• The student did not receive a bachelor's degree or an associate degree during an earlier TIMEPERIOD from the same division indicated by RETROACTIVE_DIVISION.
FIRST_ASSOC_ANY_UW	This computed field indicates whether the student earned an associate degree for the first time from any UW institution.
	<ul> <li>This field has a value of 1 if all the following conditions are met; otherwise, the field has a value of 0:</li> <li>The student received an associate degree during any term falling within the TIMEPERIOD.</li> </ul>

• The student did not receive a bachelor's degree or an associate degree during an earlier TIMEPERIOD from any UW institution.

FIRST\_TRANS\_DIFF\_UNIT This computed field indicates whether the student transferred to a different institution for the first time from the institution where the student started.

This field has a value of 1 if all the following conditions are met; otherwise, the field has a value of 0:

- The student has an entrance status (DE 2240) of 'T' during any term falling within the TIMEPERIOD.
- In the term when the student has an entrance status of 'T', the student is enrolled as an undergraduate at an institution different from the institution indicated by RETROACTIVE\_UNIT. Undergraduate classification (DE 2210) is defined as 'A', 'B', 'C', 'D', 'I', 'J', 'N', 'O', 'S', or 'T'.
- The student did not receive a bachelor's degree during an earlier term from any UW institution.
- The student did not transfer to a different institution during an earlier TIMEPERIOD.

# COMPL\_ENGL\_REM\_REQ This computed field indicates whether the student completed English remediation requirements for the first time at the same institution where the student started.

This field has a value of 1 if all the following conditions are met; otherwise, the field has a value of 0:

- The student is a new freshman and requires English remediation.
- The student completed English remediation requirements during any term falling within the TIMEPERIOD. For students entering in fall term who are also enrolled in the preceding summer, English remediation completion in the preceding summer is incorporated into TIMEPERIOD=1.
- The student completed English remediation requirements at the same institution as indicated by RETROACTIVE\_UNIT.
- The student did not complete English remediation requirements during an earlier TIMEPERIOD at the same institution as indicated by RETROACTIVE UNIT.
- The student did not receive a bachelor's degree during an earlier term from the same institution as indicated by RETROACTIVE\_UNIT.

#### COMPL\_MATH\_REM\_REQ

This computed field indicates whether the student completed Math remediation requirements for the first time at the same institution where the student started.

This field has a value of 1 if all the following conditions are met; otherwise, the field has a value of 0:

- The student is a new freshman and requires Math remediation.
- The student completed Math remediation requirements during any term falling within the TIMEPERIOD. For students entering in fall term who are also enrolled in the preceding summer, Math remediation completion in the preceding summer is incorporated into TIMEPERIOD=1.
- The student completed Math remediation requirements at the same institution as indicated by RETROACTIVE\_UNIT.
- The student did not complete Math remediation requirements during an earlier TIMEPERIOD at the same institution as indicated by RETROACTIVE UNIT.
- The student did not receive a bachelor's degree during an earlier term from the same institution as indicated by RETROACTIVE\_UNIT.