



Student Management System

SMS Overview

*State Board for Community and
Technical Colleges*

SBCTC-ITD

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November 2001
March 2006
July 2012

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Introduction

The Student Management System (SMS) is used to administer and manage all student-related business functions for the Washington State community and technical colleges.

SMS is an integrated application system of modules and functions. Because SMS is based on tables of standard codes used by all the modules and functions in the application, colleges can customize it to fit their own requirements.

SMS Interfaces

The Student Management System is a full-featured and fully integrated application system. SMS interfaces with all other SBCTC-ITD administrative application systems.

SMS interfaces with the Payroll/Personnel Management System (PPMS) to:

- Produce employee contracts for faculty
- Complete MIS 6/2 Match reporting, including FTEF calculation and distribution, for State Board reporting
- Validate the PIN of instructors who are using the Instructor Briefcase

SMS interfaces with the Financial Management System (FMS) to:

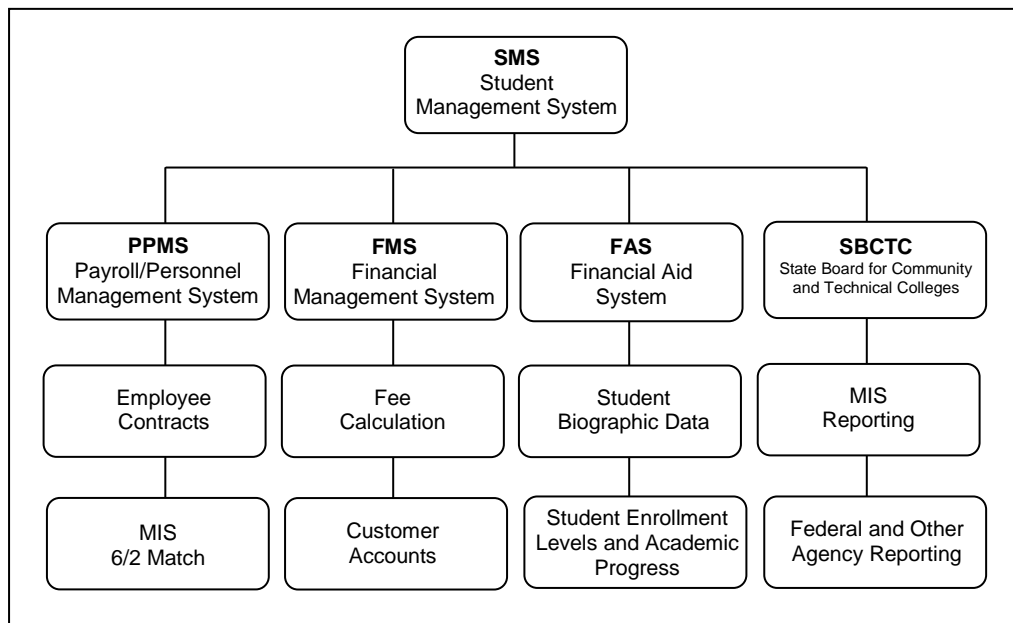
- Calculate student fees
- Update Customer Accounts with tuition and fee data

SMS interfaces with the Financial Aid System (FAS) to:

- Update student biographic data
- Verify student enrollment levels and academic progress

SMS interfaces with the State Board to:

- Provide MIS reporting
- Provide federal and other agency reporting



SMS Databases

The Student Management System accesses data from the following nine databases. Each database consists of data sets, which in turn are made up of records that contain data elements. Data elements are the smallest accessible units of information in the database.

SM (Student Management) Database

The SM database contains data about students and their enrollments, class and course data, and some user-defined tables.

The key SM data sets are:

- COURSE-D: Catalog information, by course
- CLASS-D: Quarterly class information, by quarter and item number
- STU-D: Student biographic information
- STU-YRQ-M: Quarterly student information, by student and quarter
- STU-CLASS-D: Quarterly student enrollment information, by student, quarter, and class
- STU-YRQ-XREF-D: Used as a “bridge” to link data sets

SMIS Database

The SMIS database contains a college’s copy of the student, enrollment, and class information submitted to the State Board for Community and Technical Colleges (SBCTC) during end-of-quarter reporting.

The key SMIS data sets are:

- MIS-COL-YRQ-M: Quarterly FTES information
- MIS-CLASS-D: Quarterly class information, by quarter and item number
- MIS-STU-D: Student biographic information
- MIS-STU-CLASS-D: Quarterly student enrollment information, by student, quarter, and class

TBL3 (Table 3) Database

The TBL3 database contains system-controlled tables as well as tables that are controlled by the State Board for Community and Technical Colleges. You cannot add, delete, or modify any of the data in this database.

TRAN (Transcript) Database

The TRAN database contains data about student grades and degrees.

The key TRAN data sets are:

- TRAN-CLASS-D: Grades, by class and student
- TRAN-DEGREE-D: Degrees and certificates awarded, by student
- TRAN-COMMENT-D: Descriptive comments added to a student's transcript

TRNSFR (Transfer) Database

The TRNSFR database contains information received from other colleges about grades and courses.

The key TRNSFR data sets are:

- TRNSFR-EVAL-D: Student transferred-in course information waiting to be evaluated
- TRNSFR-COURSE-D: Accepted transferred-in course information by student

TBL4 (Table 4) Database

The TBL4 database contains user-defined tables and process-defined data.

ADM (Admissions) Database

The ADM database contains information used to track the progress of students or prospective students from their first point of contact with a college. This tracking function can continue through the student's initial enrollment in classes, to graduation, and even beyond graduation.

The key ADM data set is:

- ADM-STU-D: Student biographic information

MAGWL (Waitlist) Database

The MAGWL database contains data about class waiting lists.

The key MAGWL data sets are:

- WAITLISTS: Information about quarterly class waitlists
- STUDENTS: Information about a student on a class waitlist
- CLASSES: Waitlist parameters for a class

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SMS Modules and Functions

The Student Management System is made up of the following modules:

- Course Management (see page 8)
- Student Biographic (see page 10)
- Admissions (see page 10)
- Registration (see page 12)
- Grades and Records (see page 14)
- Student Progress (see page 15)
- State and Federal Reporting (see page 19)

Along with these modules, SMS provides several student and faculty self-service functions that access the modules, such as Web Transaction Server functions.

Course Management Module

The SMS Course Management module is at the center of many important college activities. It consists of flexible and comprehensive processes that enable colleges to manage all aspects related to creating and maintaining their college courses.

With Course Management, you build and maintain class records for student registration. Reports provide in-house management reporting and projections as well as MIS reports required by the State Board.

With the Course Management module, you can:

- Establish your college course catalog information.
- Automatically build your college class schedule by copying information from quarter to quarter.
- Publish your printed class schedules and college catalog by downloading class schedule and course information from the HPUX to a desktop computer. The downloaded data is then formatted and printed using desktop publishing tools such as PageMaker.
- Identify general course characteristics, such as course titles and descriptions, course fees, and funding sources.
- Identify instructional characteristics of courses, such as instructional contact hours and full-time equivalent faculty (FTEF) percentages.
- Control class enrollment by tracking tenth-day enrollment and producing headcount reports.
- Create class clusters composed of multiple sections of a class and control enrollment in the cluster.
- Assign multiple instructors, days, times, and locations to classes.
- Automatically close classes when they have reached capacity during the registration process.
- Link one class to another so that when students register for one class they are automatically registered for the other.
- Evaluate staffing and enrollment trends.
- Manage faculty workload and staffing levels.

Interface with Other Systems

The Course Management module interfaces with the Payroll/Personel Management System (PPMS) in the following ways:

- Employee contracts
- MIS 6/2 match

The Course Management module interfaces with the Financial Management System (FMS) in the calculation of tuition and fees when a student registers for classes.

Course Management also includes special fields and other modifications that provide an interface with Schedule25 and Resource25, classroom scheduling systems from CollegeNET. Schedule25 automatically assigns rooms to classes using an optimization algorithm. Resource25 is a supplementary program to Schedule25 that determines space for one-at-a-time bookings of both academic and non-academic events.

Databases for the Course Management Module

Most course catalog data is stored in data set COURSE-D in the SM (Student Management) database. Most quarterly class data is stored in data set CLASS-D in the SM database. The TBL3 (Table 3) database contains values defined by the State Board. The TBL4 (Table 4) database contains user-defined values.

Student Biographic and Admissions Modules

The SMS Student Biographic and Admissions modules contain all biographic data necessary to fulfill admissions requirements. These modules provide the data necessary to support the registration process as well as grades and records.

Data in Student Biographic and Admissions is controlled by standard codes that are used throughout the system, including codes for punitive actions, ethnic origin, student intent, residency status, fee paying status, and high school attended.

Access to a student's biographic records is through SMS screens. The screens are used to add biographic data to the student's record or to display existing data in the student's records.

With the Student Biographic and Admissions modules, you can:

- Process applications for admission on the web. With Web Admissions, students can fill out one application, apply to any of the participating community and technical colleges and, at the same time, college staff can track and evaluate their applications.
- Create a new student's SMS record during the pre-admissions, admissions, or registration processes.
- Enter and maintain all biographic data for a student's record, such as name, address, birth date, residency status, high school attended, the student's program, and so forth.
- Track the progress of pre-admissions and admissions requirements completed by a prospective student, such as submitting transcripts and test scores.
- Generate and track documents sent to a student—such as prospect letters and acceptance letters—from the student's first contact with a college through enrollment in courses.
- Search for student records by student name.
- Store staff comments by student and quarter.
- Record test scores in a student's record using the SMS screens or by using an automated process.
- Assign punitive and non-punitive codes to a student's record. For example, a code could be used to initiate a special action—such as not allowing a registration appointment to be scheduled—or to indicate a student's participation in an extra-curricular activity, such as a sport.

- Change student identification (SID) numbers.
- Transfer data from SMS to a PC to generate student correspondence, such as letters of acceptance and notices of graduation eligibility.

Interface with Other Systems

The Student Biographic and Admissions modules interface with the Financial Aid System (FAS) in the following ways:

- For student records added manually to FAS, the student's biographic data is retrieved from SMS.
- A batch process updates ethnic origin, residency, sex, and address from SMS to FAS.
- A batch process can assign unusual action codes to all financial aid applicants who have submitted one tracking item.
- An indicator (in FAS) that a student has applied for admission is updated if the student's SID and name exist in SMS.

The Student Biographic and Admissions modules interface with the Financial Management System (FMS) in the following ways:

- A student's fee paying status for the year/quarter determines the amount of tuition, which is calculated based on FMS table entries. The calculated tuition and fees are stored in the FMS customer accounts records.
- A student's name from SMS is used on checks that are automatically calculated, on tuition and fee charges entered through Customer Accounts, and on all records in the financial aid expenditure file (FAEXP). If the student does not have a biographic record in SMS, the name on the most recent accounting transaction is used.

Databases for the Student Biographic and Admissions Modules

Most Student Biographic data is stored in the STU-D data set in the SM (Student Management) database. Most Admissions module data is stored in the ADM-STU-D data set in the ADM (Admissions) database.

Registration Module

The SMS Registration module provides all the functions associated with a student's enrollment in classes. It also provides the data necessary to support grades and student enrollment level records.

With the Registration module, you can:

- Register students using either SMS screens or batch processing
–or–
Students can use register for classes using web registration
- Print class schedules for students
- Use Requisite Checking to check for test, course, and other requirements
- Automatically check class capacities for WAOL web classes
- Automatically log registration transactions which college staff can view using SMS screens and in printed format
- Automatically calculate fees
- Block registration for financial or academic holds
- Assign registration appointments to new and returning students
- Register students in variable credit classes
- Assign indicators to registration transactions to indicate the following options: add, drop, withdraw, overload, audit, pass/fail
- Use a Waitlist process to place students in chronological order on a waiting list for a specific quarterly class section when the enrollment for that class reaches capacity

Interface with Other Systems

The Registration module interfaces with the Financial Aid System (FAS) in the following ways:

- The FAS check-writing process checks the student's enrolled credits for the specific year/quarter. If there is a discrepancy between the actual enrolled credits and the enrollment level (in the student's financial aid record), the student's check is not printed. The process then rejects the transaction and the student appears on a rejected transaction list.
- When the financial aid check is calculated, the credit amount for which the student has enrolled is entered in the student's financial aid record as "Credit Attempted."

- Batch processes are available that pass students' enrolled credit amount and graded credit amount to their financial aid record.
- Records of students who have been awarded financial aid, display an "F" at the top of the Registration screen; tuition and fees paid by financial aid also display on the Registration screen.

The Registration module interfaces with the Financial Management System (FMS) in the following ways:

- The registration function does the actual calculation of the student's tuition and fees and posts the charges to the customer account file. Subsequent adds and drops for the specific year/quarter trigger a new calculation. This new calculated amount is compared to the original to determine any additional charges or refunds that are due
- A batch process flags the student's enrollment record as official if the appropriate tuition and fees are paid.

Databases for the Registration Module

Most registration data is stored in data sets STU-YRQ-M and STU-CLASS-D in the SM (Student Management) database.

Grades and Records Module

The Grades and Records module provides all the functions for end-of-quarter grading and transcript maintenance.

With the Grades and Records module, you can:

- Create transcript records, including letter grades, plus and minus grades, and decimal grades
- Choose from several printed grade roster formats
- Enter grades using SMS screens or on the Internet using Instructor Briefcase
- Print transcripts or access transcripts through SMS screens
- Transfer and receive transcripts electronically
- Record information regarding degrees, certificates, completions, prior cumulative, and comments
- View transactions that occurred for a student's transcript, degrees, and course requirements
- Merge records for students who end up with more than one transcript

Interface with Other Systems

The Grades and Records module interfaces with Financial Aid System (FAS) in the following ways:

- Academic progress for financial aid students is measured against information in the grades module. A student's expected level of progress is based on the cumulative credits earned. Reports are available that identify those students who do not attain a satisfactory level of progress.

Databases for the Grades and Records Module

Most Grades and Records data is stored in the TRAN-STU-D and TRAN-CLASS-D data sets in the TRAN (Transcript) database.

Student Progress Module

The Student Progress module provides functions colleges can use to assist students in achieving success in college:

- Evaluation of transcripts that have been electronically received from other colleges
- Degree audits, to compare classes taken by a student with the requirements of a specific program
- An early intervention process to monitor student success
- An honor roll/probation process to identify students who have excelled as well as those who have failed to meet basic academic standards

Databases for the Student Progress Module

Evaluation of transcript data is stored in the TRNSFR (Transfer) database. Early intervention and honor roll/probation data is stored in the SM (Student Management) and TBL4 (Table 4) databases. Degree Audit data is stored in a SQL database on servers maintained by the SBCTC-ITD.

Student/Faculty Self-Service Functions

The SBCTC-ITD provides information technology that saves valuable time for students, faculty, and staff. Via on-campus kiosks and the Internet, these self-service functions quickly provide useful and up-to-date information, eliminating hours of wasted time.

On their own, students are able to conduct routine requests and transactions at the most convenient time and place. These self-service functions also provide non-traditional students—who may not be on campus during business hours—easy access to information. And, since students are able to help themselves more than ever before, faculty and staff can focus on more important student needs.

Web Transaction Server

The Web Transaction Server is a software application that enables your college to deliver online information from the SBCTC-ITD administrative systems, such as SMS, over the Internet. Your college can use the Web Transaction Server to enable users to enter and retrieve up-to-date information using a web browser.

Depending on the access your college gives to applications through the Web Transaction Server, users can view the information on any PC that is connected to the Internet. The PC can be in a computer lab on campus, in the user's home, or in another city or country.

Using the Web Transaction Server, the following SMS functions are web-enabled for ease of use and convenience to students:

- View their student schedules
- View a schedule and information for a specific class
- View their unofficial transcripts
- View their registration appointments
- Change their student PINs
- Plan a schedule for a quarter
- Register for classes
- View and/or update address information
- Retrieve Hope Scholarship information

Internet access for instructors includes the following functions:

- Grading
- Class rosters
- Employee PIN change function

Other Self-Service Functions

The following functions are available to students, staff or faculty through the Internet but do not use the Web Transaction Server:

- Web credit card payment
- Degree audit
- Web Admissions Center

State and Federal Reporting

The state and federal reporting functions assist colleges with required reporting of student, enrollment, class, and staff information. These functions also assist colleges with planning and forecasting of enrollment trends.

- Preliminary and final quarterly state reporting of student, enrollment, class, and staff information used for state government functions such as budget preparation and allocation, enrollment forecasting, enrollment audits, student tracking, system-level outcomes research, and summary information for legislative and external agency requests
- Class, student, and enrollment edits
- Automated course coding process for state and federal reporting
- Process to distribute FTEF (full-time equivalent faculty) amounts from instructor's payroll records into the records of the classes they are teaching
- Calculation of FTES (full-time equivalent student) and FTEF (full-time equivalent faculty)
- Reports to follow the movement of former vocational and academic students to meet state and federal reporting requirements
- A retention process, database, and reports to track students for 15 or more quarters for individual college studies on retention
- Federal reporting requirements including IPEDS reporting, Perkins Act reporting, and Student Right to Know reporting
- Other state reporting requirements including OFM reporting, student outcomes effort reporting, and work-force training legislation reporting