The TxEIS "How To" Guide Series



TxEIS Scheduling

How to: PERFORM SCHEDULING FOR SECONDARY STUDENTS

Developed by the TEXAS COMPUTER COOPERATIVE





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Scheduling Overview

Set up the district and any campuses, transfer students to their next year campuses, create a master schedule for next year, and then assign students to courses. For the best results, you should use the guides in the following order:

- 1. Section 1: District and Campus Setup
- 2. Section 2: Creating Sections (choose one of the methods below)
 - Manually
 - Master Schedule Generator
 - MSALGO
- 3. Section 3: Student Scheduling Load

Prerequisites

- This guide assumes you are familiar with the basic features of the TxEIS Student software and have reviewed the TxEIS Student Overview guide.
- For more detailed information about individual fields, please see Help in the TxEIS Student software.
- This guide is based on TxEIS 2.0.0002.

How to use this guide

This guide was created as a way to fully describe the process of scheduling next year courses for secondary schools. You may use the guide to schedule any grade in which students move between courses independently of one another (that is, courses are not comprised of the same group of students). It is broken up into sections for your convenience. Feel free to extract or print only the sections that are relevant to you.

txMyZone

Secondary campuses who have the ^{tx}MyZone application (part of ^{tx}Suite) can allow students to request courses for the next school year. These course requests are then imported to TxEIS as part of the Scheduling process. For more information, please see the ^{tx}MyZone guide.

Secondary Scheduling Flowchart

There are several ways that you can generate schedules and assign students. All of the options are included in this guide. Below are three possibilities and the required steps you must take for them.

Option 1 : Manual Entry

Manually enter the master schedule and student schedules in TxEIS:

Option 2: Combination

Manually enter the master schedule but use the software to automatically load student schedules:

Option 3: Software Generated

Use the software to automatically create the master schedule and load the student schedules:





- 1. Use the **District and Campus Setup** section for your district and campus schedules.
- 2. Create sections on the Maintenance > Master Schedule > Campus > Section tab. See Help for more information about the fields on that page.
- 3. Manually add schedules for students on the Maintenance > Student Schedules > Course Requests tab.

- 1. Use the **District and Campus Setup** section for your district and campus schedules.
- 2. Create sections on the Maintenance > Master Schedule > Campus > Section tab. See Help for more information about the fields on that page.
- 3. Use the **Student Scheduling Load**section to load student schedules.

- 1. Use the **District and Campus Setup** section for your district and campus schedules.
- 2. Use either the **Master Schedule Generator** or **MSALGO** section to automatically create course sections.
- 3. Use the **Student Scheduling Load**section to load student schedules.

Suggested Scheduling Timeline

MARCH

- 1. Review and finalize course offerings for next school year, and consider graduation requirements.
- 2. Review the preliminary, agreed-upon schedule setup for next year (it's a good idea to meet as a group to create the preliminary schedule). Verify periods per day (e.g., traditional or A/B day).
- 3. Notify students of TxMyZone procedures and course offerings.
- 4. Change, if necessary, the Pregrid Grd Restr, Elective, Required and/or Exclude from Conflict Matrix fields in the Grade Reporting application (current year). These are the only fields that be changed.

Warning: Other changes could affect the current year schedule.

- 5. Determine if you will keep last year's schedule and make changes to it, or use the Master Schedule Generator or MSALGO to build next year's master schedule.
- 6. Follow the District and Campus Setup section of this guide:
 - Delete last year's scheduling information and create next year's master schedule.
 - Make any necessary changes and additions to courses, teachers, and rooms.
 - Move your student data to next year campuses (group transfer students).
- 7. Enter any required course requests via proxy, the Graduation Plan application, or individually before TxMyZone registration begins.
- 8. Open TxMyZone and allow students to enter course requests.

APRIL

- 1. Print course request tallies. Meet with your principal to decide on the number of sections needed and to review staffing issues.
- 2. Enter or update any changes needed to course requests.
- 3. Begin scheduling if you are using the Master Schedule Generator or MSALGO. If you are using last year's schedule begin making changes to the master schedule.
- 4. Complete any Admission, Review and Dismissal (ARD) committee decisions to make sure special education students are included in the count for class sections.

MAY

- 1. Perform the first trial run of the master schedule.
- 2. Run the scheduling load to test the master schedule.
- 3. Make changes to the Resource Allocator files as necessary and run additional trial runs of the master schedule.
- 4. Load students and analyze the scheduling run.
- 5. Resolve any and all conflicts by changing student course requests or adjusting the master schedule until you obtain a 100% load.
- 6. Accept the load (student schedules).

JULY/AUGUST

- 1. Run Move To Grade Reporting (MTGR).
- 2. After running MTGR, elementary campuses should create schedules in the Grade Reporting application (see the Perform the Scheduling Process for Elementary Students How-To guide).
- 3. Generate all student and teacher schedules and class lists.

Section I: District and Campus Setup

Set up the district and any campuses, create courses at the district level and select them for the campus level, transfer students to their new campuses, create course requests, and add instructor records.

Prerequisites

- This guide assumes you are familiar with the basic features of the TxEIS Student system and have reviewed the TxEIS Student Overview guide.
- For more detailed information about individual fields, see online Help in the TxEIS Student system.
- This guide is based on TxEIS 2.0.0002.

DISTRICT AND CAMPUS SETUP

Quick Checklist

Set up district-level scheduling options.				
Set up the campus-level scheduling options.				
Delete last year scheduling information.				
Create next year courses for the district, and select courses for any campuses.				
☐ First option for districts: Manual.				
☐ Second options for districts: From current year schedule.				
☐ Campus courses:				
☐ Manually select which courses will be offered for each campus.				
☐ Create campus courses from district courses.				
Group transfer students.				
Reverse any scheduling transfers as needed.				
Update the tx MyZone message with instructions to assist students who are using the tx MyZone Student Course Requests system.				
Add student course requests.				
Add and update instructor records for teachers who will be teaching next year, and delete any teachers that will be leaving the district.				
Add section records in the campus master schedule.				
Run the necessary preload reports and review the data. Make adjustments as needed.				

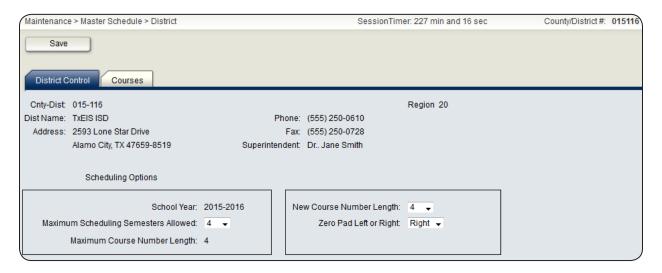
TxEIS Scheduling - Distr	rict and Campus Setup	

District and Campus Setup

Set Up District-Level Scheduling Options

It is important to set up all district-level Scheduling options as the primary step in the process.

Scheduling > Maintenance > Master Schedule > District > District Control

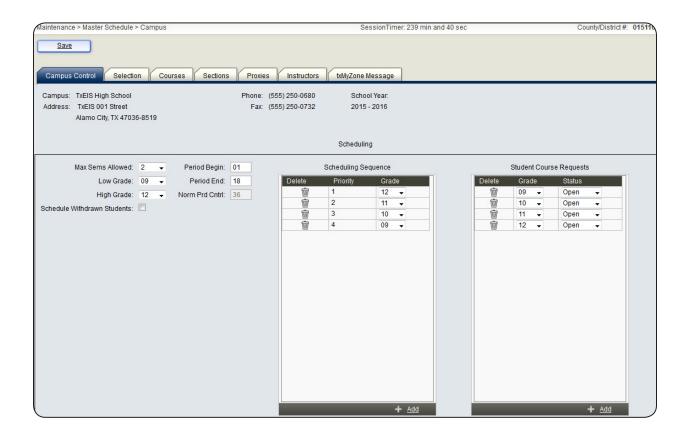


- 1. Ensure that the **School Year** field displays the upcoming school year.
- 2. In the **Maximum Scheduling Semesters Allowed** field, indicate the maximum number of semesters a campus can have next year.
- 3. The **Maximum Course Number Length** field displays how long next year course numbers can be.

You can change the course number length for next year courses. You must have security rights to see this option. See the TxEIS Scheduling - Change Course Number Length "How To" guide and/or video for more information on this process.

Set Up The Campus-Level Scheduling Options

Scheduling > Maintenance > Master Schedule > Campus > Campus Control

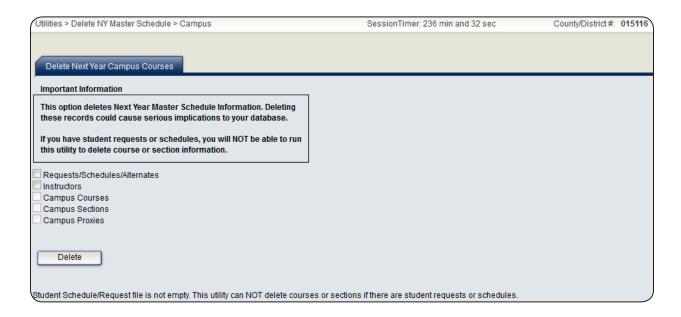


Set the following options for the campus:

- In the **Max Sems Allowed** field, set the number of semesters for the campus.
- Set the Low Grade and High Grade fields for the grade levels to be included in Scheduling for the campus.
- Set the **Period Begin** and **Period End** fields to include the beginning and ending periods of the day to be scheduled.
- The **Norm Prd Cntrl** field is automatically calculated based on the beginning and ending periods. The program multiplies the number of semesters scheduled by the number of periods per day. It is used to flag students whose course requests vary from what is normally expected.
- Select **Schedule Withdrawn Students** to schedule students who have been withdrawn from the current year, for the next year.
- Under **Scheduling Sequence**, select the order in which grade levels should be scheduled.
- Under **Student Course Requests**, ensure that all grade levels can access the ^{tx}MyZone Student Course Requests system as needed (i.e., set the **Status** field to *Open*).

Delete Last Year Scheduling Information

Scheduling > Utilities > Delete NY Master Schedule > Campus



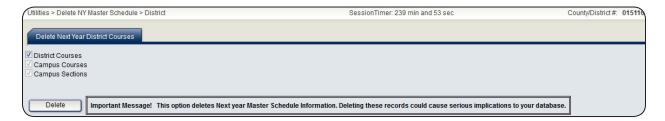
Delete next year campus courses with this utility so that you can create next year's master schedule from the current year master schedule. Student requests, schedules, and alternates must be deleted before you can delete campus courses. When the information for a field has been deleted, –Empty is displayed next to the field.

Delete all next year campus scheduling information. This must be done before deleting district information. All data, except proxies, must be deleted for each campus:

- Requests/Schedules/Alternates
- Instructors
- Campus Courses
- Campus Sections
- Campus Proxies

Campus proxies that are deleted will have to be recreated by each campus. Proxies are not created from the current year master schedule. If you want to keep your proxies, do not select this field.

Scheduling > Utilities > Delete NY Master Schedule > District



Delete next year district and campus courses, and campus sections with this utility so that you can create next year's master schedule from the current year master schedule. You must have deleted all campus information before these options are available. After deleting all campus information, delete all next year district scheduling information.

1. Select the **District Courses** field.

The Campus Courses and Campus Sections fields will be selected as well.

2. Click **Delete**.

When prompted to clear proxies, click **Dist + Proxies** to delete all campus proxies (campuses will have to recreate their proxies), or click **District** to delete courses but keep proxies.

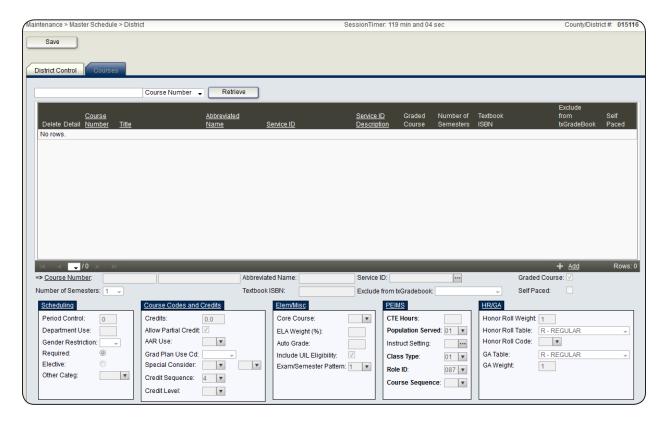
Create District And Campus Courses

There are two ways to create next year courses for the district and campuses. You may manually create the next year master schedule for the district and manually choose the courses for the campuses (Options 1) or create the next year master schedule for the district and campus from the current year master schedules (Options 2). Make sure you make any necessary changes to the district courses before you create the campus courses and any necessary changes to the campus courses before going to the next step.

District Courses Option 1

Manually Create Next Year Courses For The District

Scheduling > Maintenance > Master Schedule > District > Courses



1. Click **+Add** to manually enter information in the fields below the grid.

Ensure the following fields under **Scheduling** are set correctly for every course that will be offered next year:

- Period Control
- Department Use
- Gender Restriction
- Required/Elective
- Other Categ (txMyZone)

Note: See Help for more detailed descriptions of the individual fields.

2. Click **Save** to save your courses.

District Courses Option 2

Create Next Year Courses From The Current Year Schedule

Scheduling > Utilities > Create NY Master Schedule > District



Create next year district courses from current year district courses. If the next year master schedule already exists, you will not be able to create a new next year master schedule. Make sure you have deleted district and campus courses.

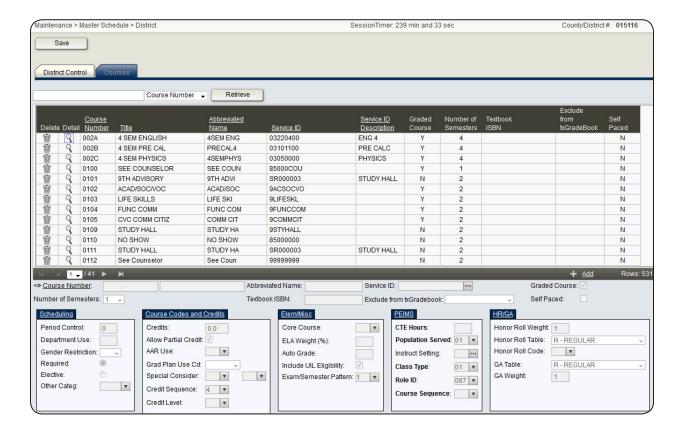


District Courses Options 1 And 2

Modify The Next Year District Course Information As Needed

Once you have created district courses using either option 1 or 2, make sure you make any changes before you create campus courses.

Scheduling > Maintenance > Master Schedule > District > Courses



Add any new courses to the district master schedule, and delete any courses that will not be offered next school year. Ensure the following fields under **Scheduling** are set correctly for every course that will be offered next year:

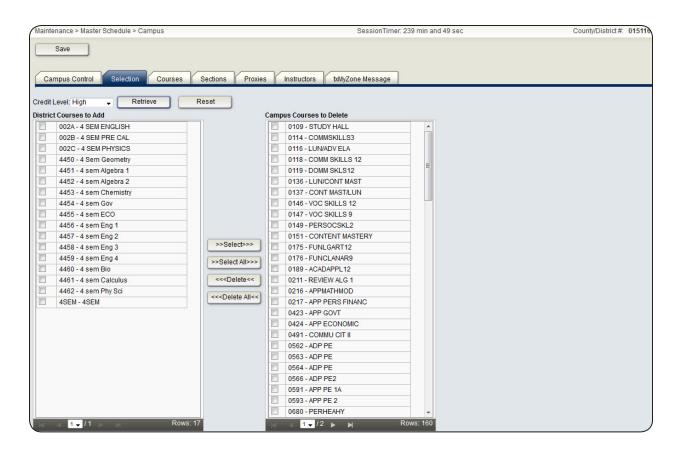
- Period Control
- Department Use
- **■** Gender Restriction
- Required/Elective
- Other Categ (^{tx}MyZone)

NOTE: If you are deleting any courses and they exist at one or more campuses, they must first be deleted from the campus course records.

Campus Courses Option 1

Manually Select Which Courses Will Be Offered For Each Campus

Scheduling > Maintenance > Master Schedule > Campus > Selection



Copy any new district courses to the campus.

Campus Courses Option 2

Create Campus Courses From District Courses

Scheduling > Utilities > Create NY Master Schedule > Campus



Create next year campus courses from district course records. Only campus courses that are offered at the district level are created in this step.

- 1. Indicate the records you want to create from current year records by selecting the following fields:
 - Instructors
 - Campus Courses
 - from CY campus
 - O from NY district
 - Campus Sections
 - Active Meeting Times (Teacher of Record)
 - O Include Withdrawn Meeting Times (Teacher of Record)

<u>Important</u>: If the campus wants to create next year sections using one of the Scheduling tools (Master Schedule Generator or MSALGO — see section II), do not select **Campus Sections**.

Notes

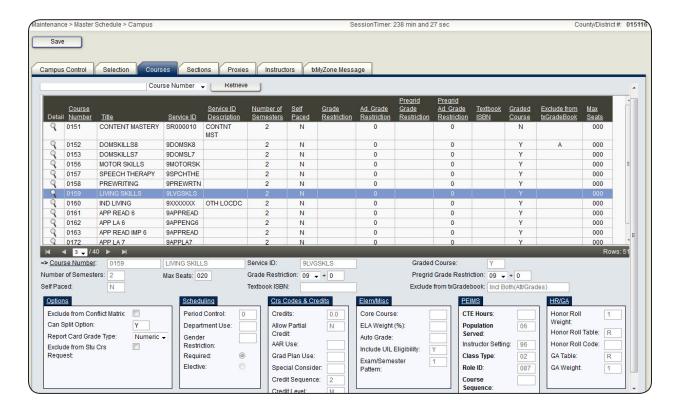
- O The next year campus course records can be completely rebuilt from the next year district master schedule, or the campus can modify the current year master schedule.
- O If you select to create campus courses from the next year district courses, all district courses will be added to the campus. This may not be the best option for districts with many different campuses offering a variety of courses.
- O If the campus wants to modify the existing master schedule, select **Campus Courses from CY campus**, and select **Campus Sections**.
- O If you do select to create campus sections, make sure to select the **Instructors** field as well or the sections will be created without instructors. Any instructors associated with sections will be deleted.
- O If you choose to copy the current year sections to next year, you can copy only active meeting time records, or you can copy all records.
- 2. Ensure that a next year master schedule is created for every campus, including elementary campuses, in the district.

Campus Courses Options 1 And 2

Modify The Next Year Campus Course Information As Needed

Before moving forward, make sure you make any changes necessary to your campus courses.

Scheduling > Maintenance > Master Schedule > Campus > Courses



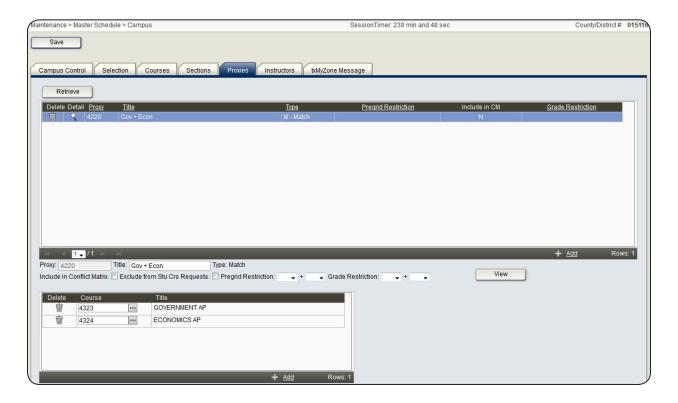
Modify next year courses as needed. Ensure the following fields are set correctly for every course that will be offered next year:

- Max Seats
- Grade Restriction
- **■** Pregrid Grade Restriction
- Under **Options**:
 - Exclude from Conflict Matrix
 - Exclude from Stu Crs Request

Once you have completed one of the two options for district and campus courses, continue with the following steps.

Add And Update Next Year Proxy Courses As Needed.

Scheduling > Maintenance > Master Schedule > Campus > Proxies



Recreate campus proxies, if you cleared them in any of the steps above.

Note: For more information about Proxies, see Help on the above page.

Clear And Assign Year End Status

Grade Reporting > Utilities > Assign or Clear Year-End-Status

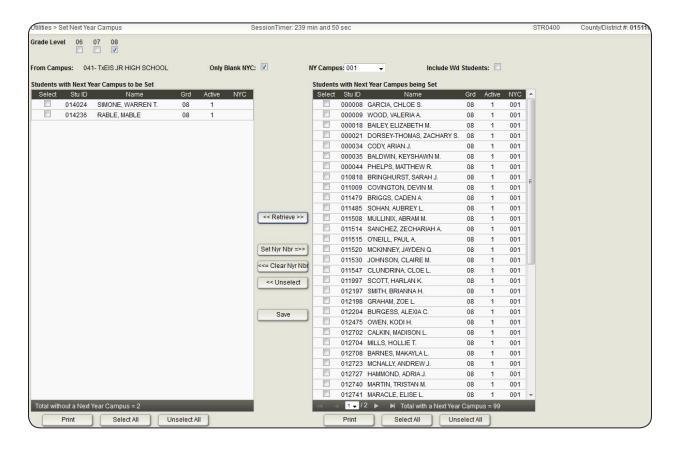


Notes

- This step in the scheduling process occurs in the TxEIS Grade Reporting application.
- Alternately, you can use the Reset Values utility in Registration to clear student year end status codes.
- 1. Run the utility at each campus to clear students' year end statuses.
- 2. Run the utility again to assign students new year end statuses.
 - KG and grades 1-8 are updated to 01: Promoted Next Grade.
 - Grades 9-11 are updated to 11: Advanced Next Grade.
 - Grade 12 is updated to 12: Graduated.

Transfer Students To Next Year Campus

Registration > Utilities > Set NY Campus



Transfer students in the high grade level at each campus in the district to their next year campuses. If the high grade level on a campus transfers to more than one campus, you must assign next year campus numbers to the students. The students will still be available on their current campuses.

Notes:

- This step in the scheduling process occurs in the TxEIS Registration application.
- The sending campus assigns the next year campus numbers.
- 1. Select the grade level you want to set the next year campus number to.
- 2. The **From Campus** field displays the campus you are logged in to.
- 3. Select **Only Blank NYC** to select only those students who do not have a campus assigned to them.
- 4. Select the next year campus from the **NY Campus** drop-down field.
- 5. Select **Include Wd Students** to include withdrawn students.

6. Click **Retrieve**.

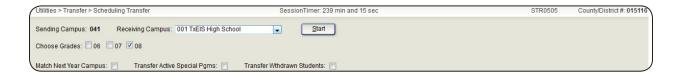
A list of student who need to have their next year campuses set displays on the left.

- 7. Select the students you wish to assign to the next year campus you have selected and click **Set Nyr Nbr** =>>.
- 8. Click Save.

Rerun the utility until all next year campus IDs have been set.

Group Transfer Students To Their Next Year Campus

Registration > Utilities > Transfer > Scheduling Transfer



Transfer groups of students from one campus to another campus for scheduling purposes with this utility. The students' record status codes are changed to 3: Currently enrolled this campus, will attend new camp nxt yr. for the current campus and 4: Enrolled another campus will attend this campus next year for next year's campus. Rerun the utility until all students are transferred to their next year campus.

- 1. Select the receiving campus.
- 2. Select the grades you want to transfer.
- 3. Select **Match Next Year Campus** if there are multiple next year campuses to which students in the high grade level will be transferred next year, and next year campus IDs have been assigned to those students. You must repeat this utility for each receiving campus. If this field is not selected, all students are transferred to the selected receiving campus, regardless of their assigned next year campus.
- 4. Select **Transfer Active Special Pgms** to transfer active special programs.

Notes

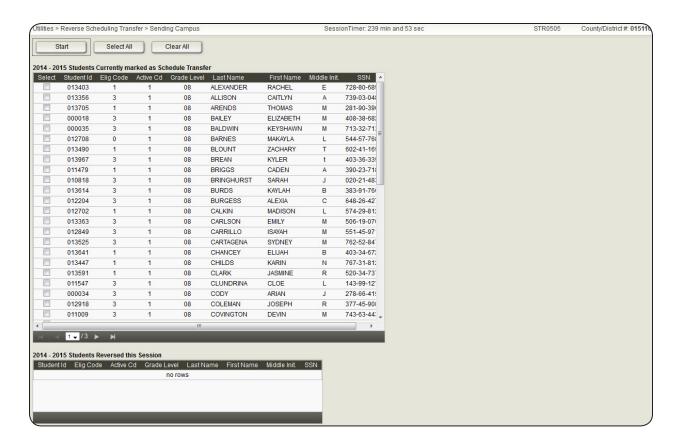
- The sending campus must perform the transfer.
- Programs from which students have withdrawn or exited are not transferred.
- The receiving campus must offer the special program being transferred, otherwise the programs are not transferred.
- The transfer will have to be done again if new students enroll at your campus after you

have run the utility.

■ If you are using the Graduation Plan application, perform Mass Move to Request in that application now if you have completed all of the preparation work in Graduation Plan. See the TxEIS Graduation Plan - Assign Graduation Plans and Move Courses to Requests "How To" guide.

Reverse Any Scheduling Transfers As Needed

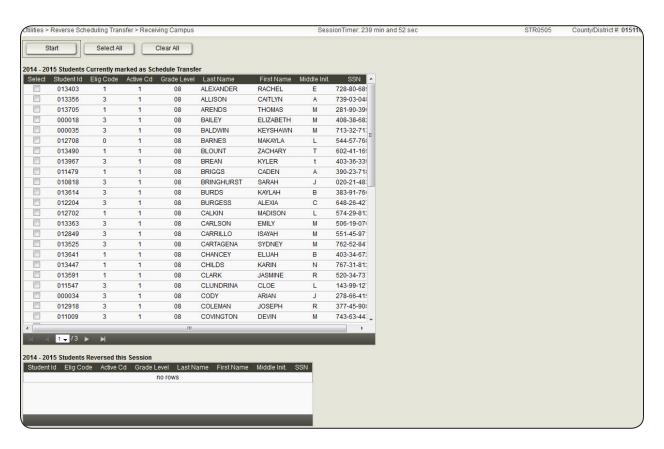
Registration > Utilities > Reverse Scheduling Transfer > Sending Campus



Reverse scheduling transfers, if necessary with the Reverse Scheduling Transfer - Sending Campus utility. Use this utility if you are logged on as the sending campus. All students with a record status code of 3 are displayed.

- 1. Select individual students or click **Select All** to select all students displayed.
- 2. Click Start.
- 3. The transfer for the selected students is reversed.

Registration > Utilities > Reverse Scheduling Transfer > Receiving Campus

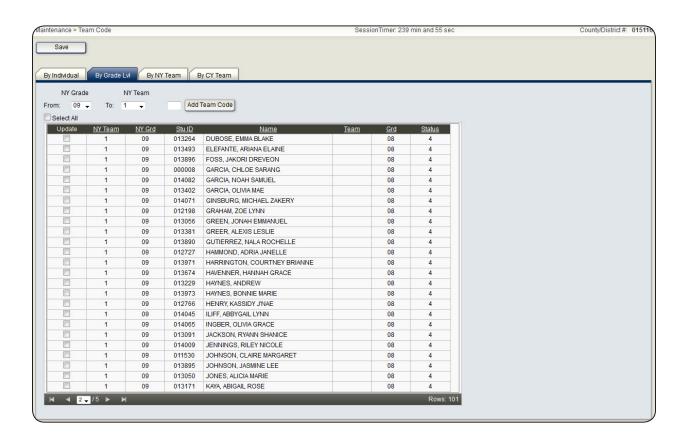


Reverse a scheduling transfer, if necessary, with the Reverse Scheduling Transfer - Receiving Campus utility. Use this utility if you are logged on as the receiving campus. All students with a record status code of 4 are displayed.

- 1. Select individual students or click **Select All** to select all students displayed.
- 2. Click Start.
- 3. The transfer for the selected students is reversed.

Assign Team Codes

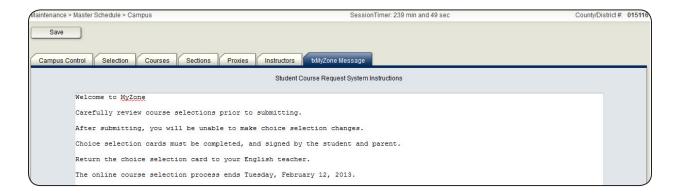
Scheduling > Maintenance > Team Code



Assign team codes to students for campuses that use the team teaching concept. Team codes can be assigned to students individually, by grade level, by current year team code, or by next year team code. This is an optional step.

<u>Update The txMyZone Message</u>

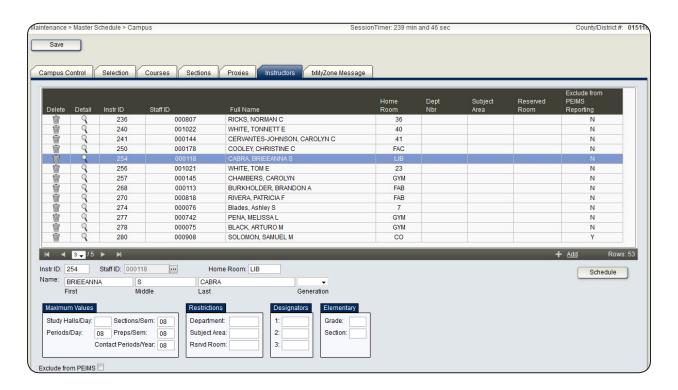
Scheduling > Maintenance > Master Schedule > Campus > txMyZone Message



Update the ^{tx}MyZone message with instructions to assist students who are using the ^{tx}MyZone Student Course Requests system.

Add And Update Instructor Records

Scheduling > Maintenance > Master Schedule > Campus > Instructors



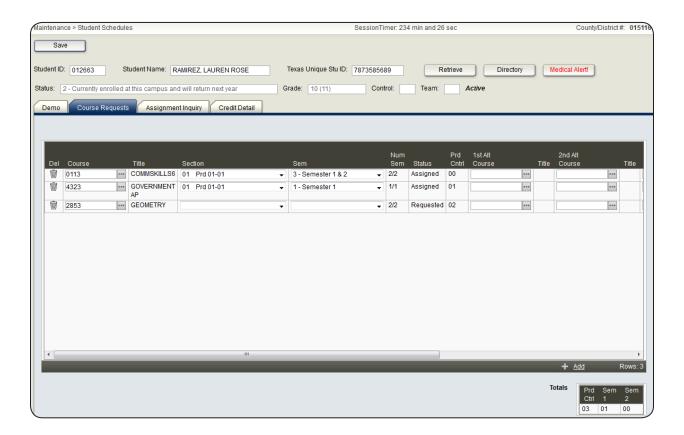
Add and update instructor records for teachers who will be teaching next year, and delete any teachers that will be leaving the district.

Add Student Course Requests

Enter course requests for student in one of the following three ways:

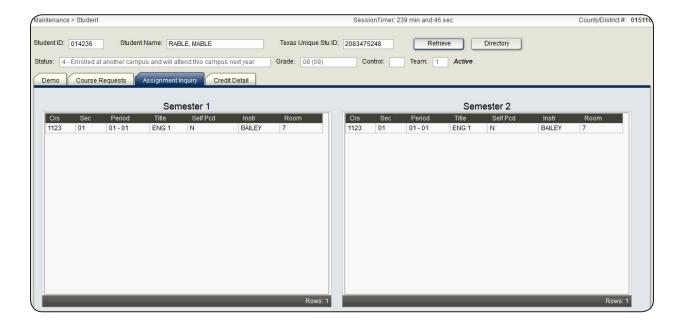
- Move courses attached to students' graduation plans to course requests. Refer to the TxEIS Student Graduation Plan Assign Graduation Plans and Move Courses to Request guide for more information (the guide will be available for the Spring 2015 software release).
- Have students enter course requests and alternate requests through ^{tx}MyZone. Refer to the ^{tx}MyZone training guide for more information.
- Enter course requests for students in the Scheduling application. This process is covered in the following steps.

Scheduling > Maintenance > Student Schedules > Course Requests



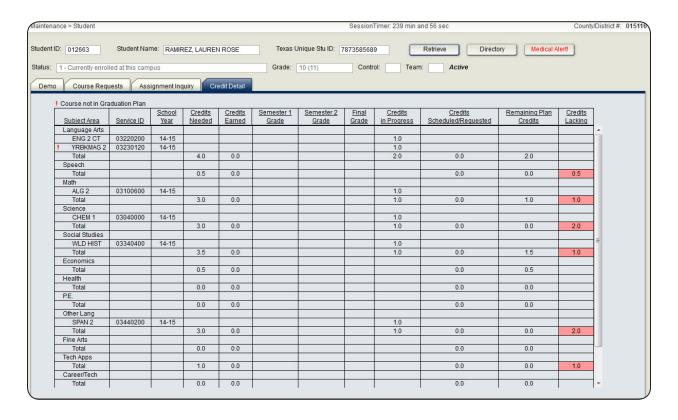
- 1. View, add, and adjust a student's course requests.
 - If students have had their Graduation Plan courses moved to course request, or if students have submitted requests through ^{tx}MyZone, the status for those courses display Requested. You must select a section and semester, at which point the status changes to Assigned.
 - You may also add or change a course, section, and semester for students.

Scheduling > Maintenance > Student Schedules > Assignment Inquiry



- 2. If necessary, review the student's course assignments once the course requests are saved. This step is optional.
 - Note: Only course requests with a status of Assigned on the Course Requests tab from the previous step display on this tab.

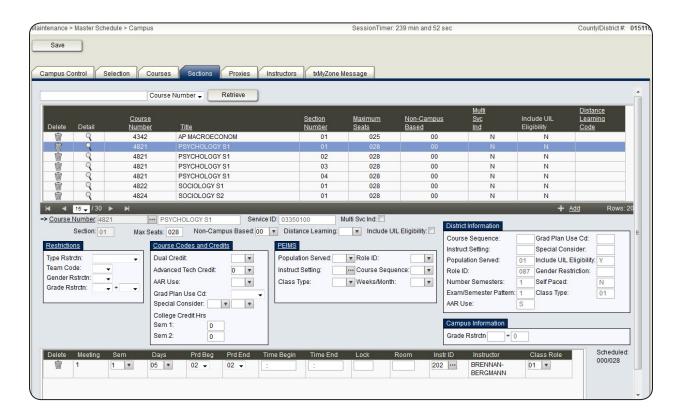
Scheduling > Maintenance > Student Schedules > Credit Detail



3. If necessary, review the student's graduation plan data. This step is optional.

Add Section Records In The Campus Master Schedule

Scheduling > Maintenance > Master Schedule > Campus > Sections



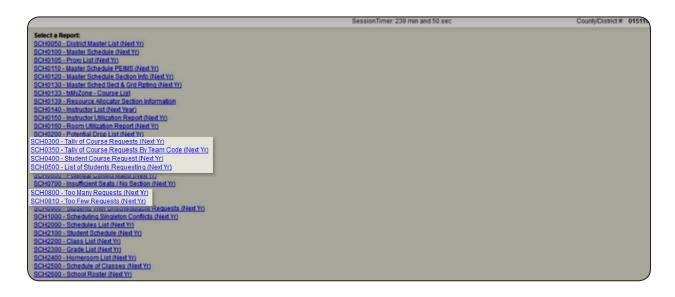
Option 1: Campuses who manually created next year's courses can manually create sections for those courses and assign resources to them. This requires you to provide information for all necessary fields. Go to the Maintenance > Master Schedule > Campus > Section tab. Please see Help for more information about the fields on that page.

Option 2: Campuses that copied their current year sections to next year can simply modify the existing sections on the Maintenance > Master Schedule > Campus > Sections tab.

Option 3: Campuses that will use a scheduling tool (i.e., Master Schedule Generator or MSALGO) to create their next year sections will not perform section maintenance on the Maintenance > Master Schedule > Campus > Sections tab until the sections are created and moved to the master schedule.

Run Reports

Scheduling > Reports > Scheduling Reports



Run the following preload reports and review the data. Be sure that all information is correct, especially if you are using the Master Schedule Generator. Make any adjustments at this time as needed.

- SCH0800 Too Many Requests (Next Yr)
- SCH0810 Too Few Requests (Next Yr)
- SCH0300 Tally of Course Requests (Next Yr)
- SCH0350 Tally of course Requests By Team Code (Next Yr)
- SCH0400 Student Course Request (Next Yr)
- SCH0500 List of Students Requesting (Next Yr)

Section II: Next Year Sections

Decide which method for creating and allocating resources for next year sections from the courses you created in the last section best suits your needs. You have three choices when creating and allocating resources for next years courses.

- Manually create sections on the Scheduling > Maintenance > Master Schedule > Campus > Sections tab.
- 2. Use the Master Schedule Generator, in conjunction with Resource Allocator, to prepare a master schedule of classes for the school by utilizing campus resources (courses, teachers, and rooms) and potential student scheduling conflicts.
- 3. Use MSALGO to generate a master schedule by viewing class period conflicts and then determining the periods in which to place the classes.

Prerequisites

- You must have already completed **Section I: District and Campus Setup** to continue with this section.
- The guide assumes you are familiar with the basic features of the TxEIS Student system and have reviewed the TxEIS Student Overview guide.
- For more detailed information about individual fields, see online Help in the TxEIS Student system.
- This guide is based on TxEIS 2.0.0002.

MASTER SCHEDULE GENERATOR

Quick Checklist

Set the meeting time parameters.
Clear the Resource Allocator records from the previous scheduling year.
Create the instructor, room, and section records.
Add and update the Master Schedule Generator tables.
☐ Departments
☐ Designators
☐ Subject Areas
□ Rooms
Update instructor information.
Print the Teacher and Resources File Listing report.
Add or modify instructor resources as needed.
Recalculate Master Schedule Generator section information.
Run the Room File Listing report.
Add and update section information as needed.
Run the Resource Allocator Section Information report.
Set options for running the Master Schedule Generator.
Generate the campus master schedule.
Run the Resource Allocator Master Schedule (NY) report.
Review the sections and meetings times.
Review the instructors assigned to the course sections and meeting times.
Run the Schedule of Classes (Next Yr) report.
Go to the Create Mstr Sched tab and accept the schedule, once everything is verified.
Verify the information is set properly, before running the trial scheduling load.

TxEIS Scheduling - Master Schedule Generator

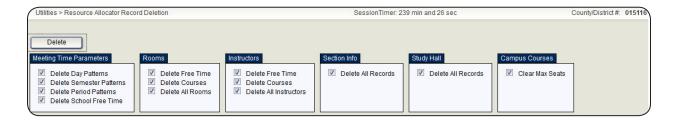
Run the trial scheduling load.	
Run the trial scheduling load reports.	
☐ Partial Sched Stu	
☐ Stu Reject List	
☐ Stu w/ Unsched Proxies	
☐ Unmatched Proxy Sec	
☐ Stu w/ Pre-assigned	
☐ Master Sched	
☐ Stu Sched	

Master Schedule Generator

The Master Schedule Generator uses the campus resources (courses, teachers, and rooms) to generate a master schedule based on student course requests.

Clear The Resource Allocator Records

Scheduling > Utilities > Resource Allocator Record Deletion

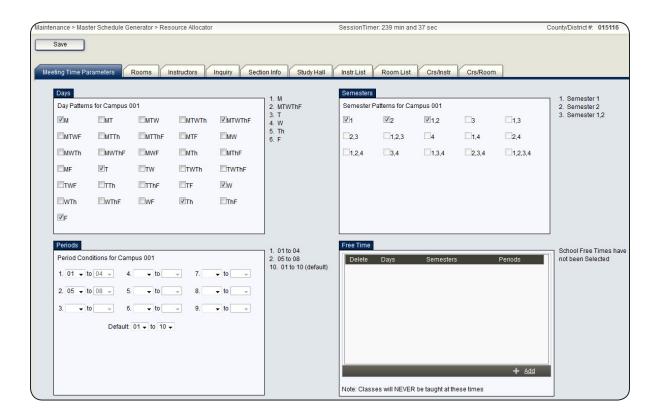


Clear the following records from the previous scheduling year using Resource Allocator Record Deletion.

- 1. Meeting time parameters.
 - Note: If you have already set your meeting time parameters or are using the same parameters as last year, do not select this.
- 2. Room records.
- 3. Instructor records
 - **Note**: Selecting **Delete All Instructors** will delete all instructors from the Scheduling application.
- 4. Section records.
- 5. Study hall records.
 - Note: This functionality is not currently used.
- 6. Max seats for the campus course sections.
 - **Note:** If you have already set the maximum seats for each course or are using the same settings as last year, do not select this.

Set The Meeting Time Parameters

Scheduling > Maintenance > Master Schedule Generator > Resource Allocator > Meeting Time Parameters



Set information for the following:

- 1. Day patterns.
- 2. Period ranges.
- 3. Semester patterns.
- 4. Free time patterns.

Create The Instructor, Room, And Section Records

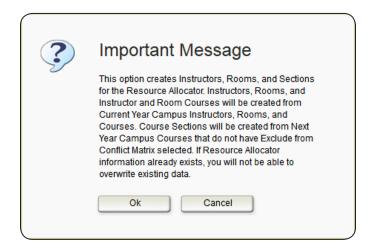
Use the Resource Allocator to copy information from the current year campus sections, next year campus courses, and next year instructor records to the master schedule rooms, instructor, and section tables.

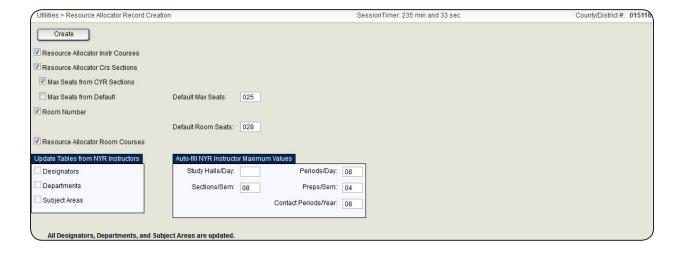
Note: If you do not want to generate sections for particular courses (e.g., special education courses), select **Exclude from Conflict Matrix** on the Maintenance > Master Schedule >

Campus > Courses tab.

Scheduling > Utilities > Resource Allocator Record Creation

A message is displayed indicating how the Resource Allocator works.





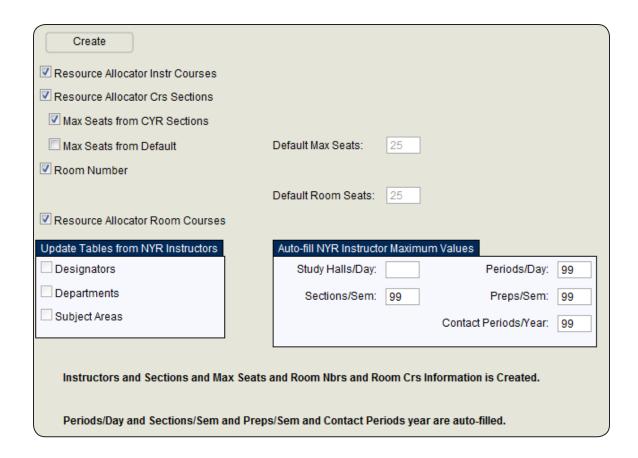
- Select Resoure Allocator Instr Courses if you want the Resource Allocator to copy instructors' current year courses and number of sections to the next year. To view instructor resources go to the Maintenance > Master Schedule Generator > Resource Allocator > Instructors tab.
- 2. Select **Resource Allocator Crs Section** if you want the Resource Allocator to create sections using next year courses. A row is created for each course on the Maintenance > Master Schedule Generator > Resource Allocator > Section Info tab.
 - Select Max Seats from CYR Sections if you want the Resource Allocator to update the maximum number of seats on the Maintenance > Master Schedule Generator > Resource Allocator > Section Info tab with the maximum number in the first section of the course in the current year.

- Select Max Seats from Default if you want the Resource Allocator to use the number you type in the Default Max Seats field.
- The **Default Max Seats** field is also used by the Resource Allocator to allocate seats for newly created courses.

Note: The **From Sec** and **To Sec** fields on the Maintenance > Master Schedule Generator > Resource Allocator > Section Info tab are generated by dividing the number of course requests by the maximum seats for that course (e.g., 33 requests for a course that has a maximum seat capacity of 15 would create 3 sections of the course with 13 seats remaining).

- 3. Select **Room Number** if you want the Resource Allocator to create the room table from the rooms assigned in the current year sections. If you assign rooms to instructors on the Maintenance > Master Schedule Generator > Resource Allocator > Instructors tab by typing in a room number in the **Rsrvd Room** field, do not select select **Room Number**.
- 4. In the **Default Room Seats** field, type the default number of seats available for a room. This is an optional step.
- 5. Select the fields under **Update Tables from NYR Instructors** only if you use designators, departments, and/or subject areas.
- 6. Under Auto-fill NYR Instructor Maximum Values, you must have values in the Periods/Day, Sections/Sem, Preps/Sem, and Contanct Periods/Year fields. You may type 99 in these fields to make sure that instructors don't have a value that is too small, which might exclude them from being assigned sections.
- 7. Add and update any Master Schedule Generator tables (see the next step), as necessary.
- 8. Click **Create**.

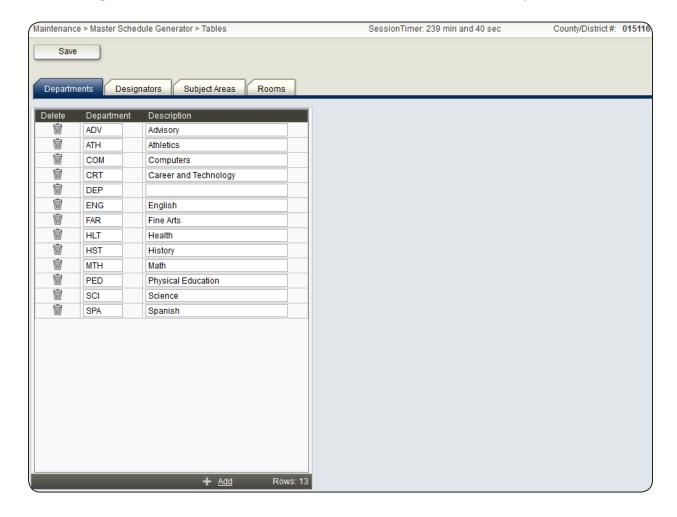
A message is displayed at the bottom of the page indicating which records were created.



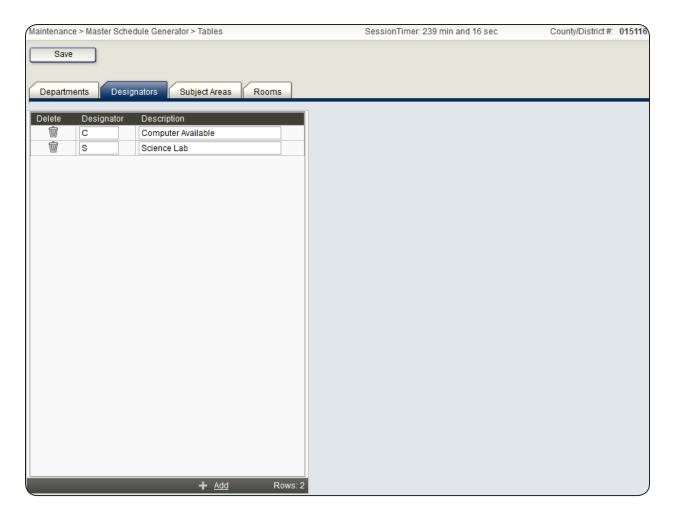
Add And Update The Master Schedule Generator Tables

Add and update the department, designator, subject area, and room code tables, if you use them. You do not have to complete this step in order to generate a campus schedule. You may skip this step and run the Resource Allocator and then update instructor information (next step).

Scheduling > Maintenance > Master Schedule Generator > Tables > Departments

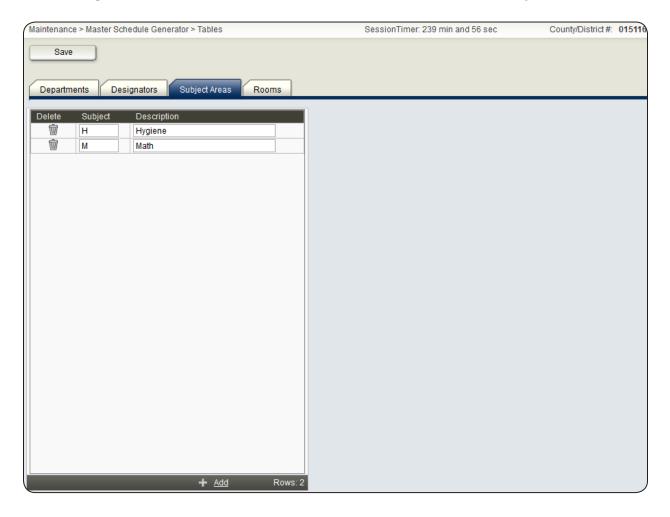


Scheduling > Maintenance > Master Schedule Generator > Tables > Designators



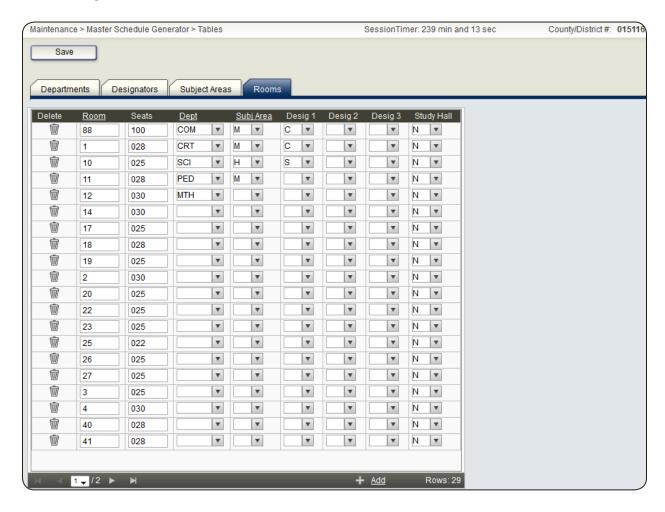
The Designators table is updated from the next year instructor records.

Scheduling > Maintenance > Master Schedule Generator > Tables > Subject Areas



The Subject Areas table is updated from the next year instructor records.

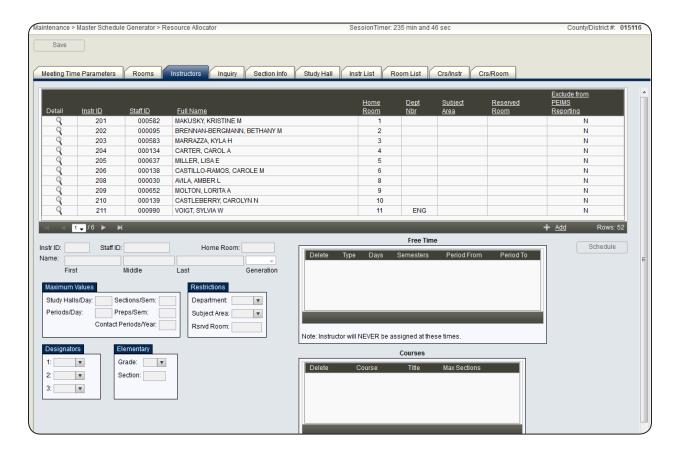
Scheduling > Maintenance > Master Schedule Generator > Tables > Rooms



The Rooms table is created from the current year sections.

Update Instructor Information

Scheduling > Maintenance > Master Schedule Generator > Resource Allocator > Instructors



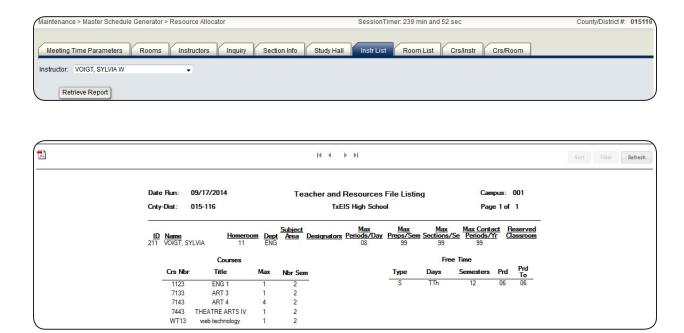
Review and update, as necessary, the information in the following sections:

- 1. Maximum Values.
- 2. **Restrictions**. In the **Rsrvd Room** field, you may type in a room for an instructor if they are in the same room all day.
- 3. **Designators**.
- 4. **Free Time**. Usually instructors have at least one free period, but you may add as many as is necessary.
- 5. **Courses**. These are the courses that can be assigned to the instructor.

Print The Teacher And Resources File Listing Report

Scheduling > Maintenance > Master Schedule Generator > Resource Allocator > Instr List

View the courses and free times for instructors who have been assigned to courses.



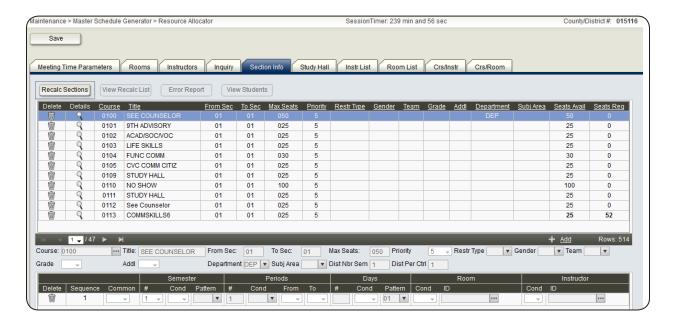
<u>Verify Instructor's Maximum Values, Resource Courses, And Free</u> <u>Time</u>

Scheduling > Maintenance > Master Schedule Generator > Resource Allocator > Instructors

- 1. Return to the Instructors tab.
- 2. Using the Teacher and Resources File Listing report, verify instructor's maximum values, resources courses, and free time, if any.
- 3. Add or modify instructor resources as needed.

Recalculate Master Schedule Generator Section Information

Scheduling > Maintenance > Master Schedule Generator > Resource Allocator > Section Info

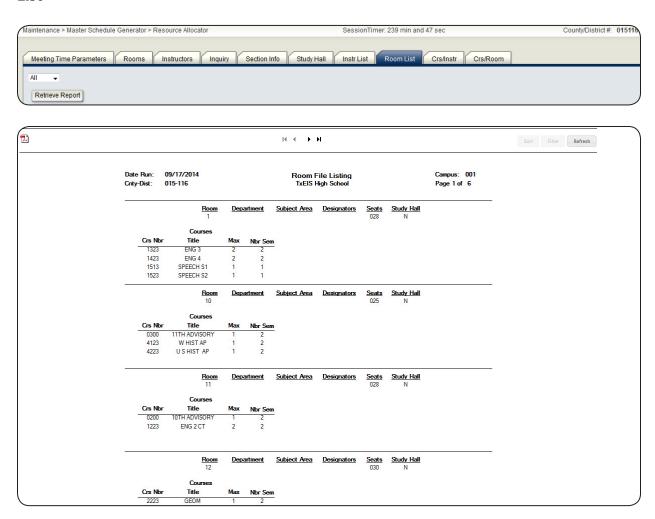


Recalculate your section information if you have made changes to your data as a result of any of the following reasons:

- You made changes to a student's course requests, thus increasing or reducing the number of students requesting the course(s).
- You changed the teacher's resource courses, by either increasing or reducing the number of teaching units for a course(s).
- You changed the number of seats for a course(s), by either increasing the number of seats or reducing the number of seats.
- 1. Change the values in the **From Sec** and **To Sec** fields as needed.
- Click Recalc Sections to recalculate the sections.
- 3. Click **View Recalc List** to view a report of courses for which the sections were recalculated.
- 4. Click **View Students** to view a report of students requesting the selected course.
- 5. If the **Error Report** button is enabled, click **Error Report** to view the errors.

Run The Room File Listing Report

Scheduling > Maintenance > Master Schedule Generator > Resource Allocator > Room List



Verify that all rooms are included in the schedule and that the courses and free times assigned to the room are correct.

Add And Update All Section Information As Needed

At this point, make sure that you have added and/or updated all section information. For the best campus schedule results, it is important that you have accurate information for course sections. See Help for this page for more information about the specific fields.

Scheduling > Maintenance > Master Schedule Generator > Resource Allocator > Section Info

Notes:

- Each course to be generated must be defined prior to running the Master Schedule Generator.
- Specific information should be added before generating the next year sections.
 For preplaced sections, enter the periods of the day the preplaced classes will meet. For example, Band and Athletics are normally preplaced in certain periods of the day. Enter which semester the one-semester courses will meet, enter conditional periods if classes have to meet only in the morning or only in the afternoon.

Run The Resource Allocator Section Information Report

Scheduling > Reports > Scheduling Reports > Resource Allocator Section Information Report (SCH0139)

Verify that all section information is correct.

Set Options For Running The Master Schedule Generator

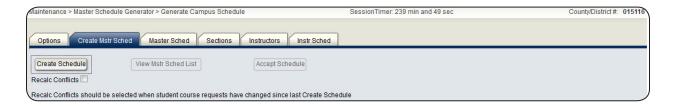
Scheduling > Maintenance > Master Schedule Generator > Generate Campus Schedule > Options



- 1. Select **Assign Teachers** to assign an instructor to each course section.
- 2. Select **Assign Rooms** to assign a room to each course section.
- 3. Select other fields as necessary (see Help for more details about each field).

Generate The Campus Master Schedule

Scheduling > Maintenance > Master Schedule Generator > Generate Campus Schedule > Create Mstr Sched



- 1. Click Create Schedule.
- 2. If errors are generated, click **Show Error** and review the report.
- 3. Make any corrections needed, and click **Create Schedule** again. Repeat this until the error report is no longer generated.

Note: If you made changes to the student course requests, you must select **Recalc Conflicts** before clicking **Create Schedule** the next time in order to recalculate the course conflicts based on the student course requests. (i.e., the number of student course requests that conflict with each other) to determine the best period to place a course section.

4. When the generator finishes, click **View Mstr Sched List** to view the Master Schedule Generator Priority Listing report. Review the report carefully.

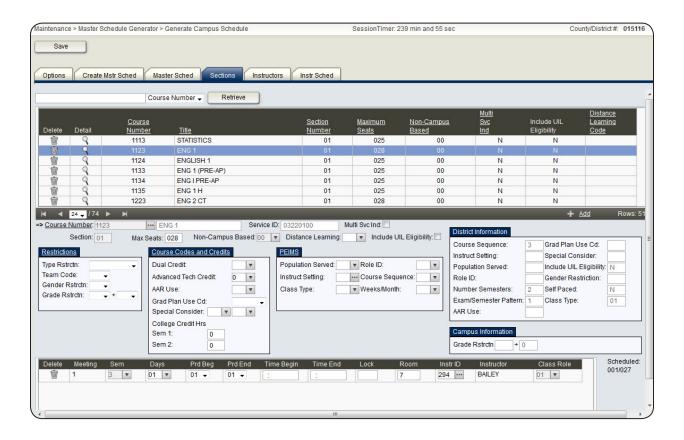
Run The Resource Allocator Master Schedule (Next Yr) Report

Scheduling > Maintenance > Master Schedule Generator > Generate Campus Schedule > Master Sched

Verify that all section information is accurate.

Review The Sections And Meeting Times

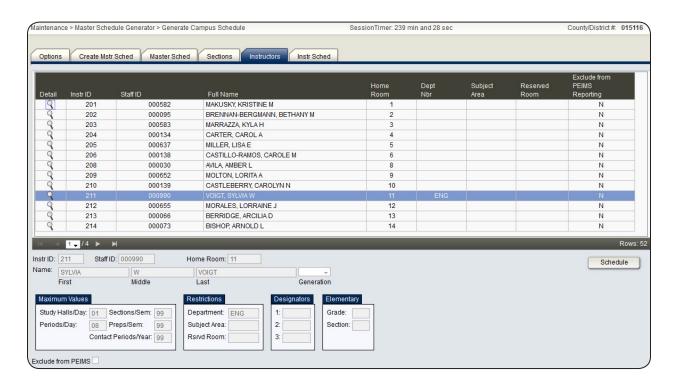
Scheduling > Maintenance > Master Schedule Generator > Generate Campus Schedule > Sections



Make any necessary changes to the sections and meeting times created by the Master Schedule Generator.

Review The Instructors Assignments

Scheduling > Maintenance > Master Schedule Generator > Generate Campus Schedule > Instructors



Verify instructors assigned to the course sections and meeting times created by the Master Schedule Generator, and make any necessary changes.

Run The Schedule Of Classes (Next Yr) Report

Scheduling > Maintenance > Master Schedule Generator > Generate Campus Schedule > Instr Sched



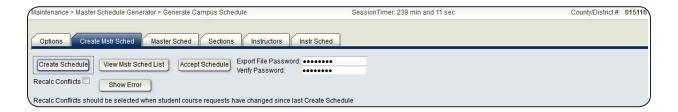
Verify the following:

All teachers are scheduled into the classes they should be teaching.

- All teachers received a full schedule.
- All teachers received the required number of conference periods. A conference period will display as a blank period for the teacher.

Accept The Schedule

Scheduling > Maintenance > Master Schedule Generator > Generate Campus Schedule > Create Mstr Sched



Return to the Create Mstr Sched tab to accept the schedule. Do not accept the schedule until you are certain it is correct.

- 1. Create a password for the zipped file, and enter the same password in both the **Export** File Password and Verify Password fields.
- 2. Click **Accept Schedule** to accept the master schedule.
- 3. When prompted, save the file to the appropriate location.

MSALGO

Quick Checklist

Enter and verify student course requests.
Run the Tally of Course Requests (Next Yr) report.
Run the necessary reports.
☐ SCH0200 - Potential Drop List
□ SCH0800 - Too Many Requests
☐ SCH0810 - Too Few Requests
Run the MSALGO export.
Set options for running MSALGO.
Enter the number of sections for each course.
Place the sections in the campus master schedule.
Run the necessary reports.
☐ Master Schedule
□ Tally
☐ Conflict Chart
☐ Conflict Matrix
Run the Move MSALGO Sections to TxEIS utility.

TxEIS Scheduling - MSALGO

MSALGO

Generate a master schedule by viewing class period conflicts and determining the periods in which to place the classes using MSALGO.

Note: Before running the MSALGO export, student course requests must be entered and verified as accurate, since the placement of courses are based around potential student conflicts.

Run The Tally Of Course Requests (Next Yr) Report

Scheduling > Reports > Scheduling Reports > SCH0300 - Tally of Course Requests (Next Yr

Determine how many sections are required for each course offered next year that has course requests.

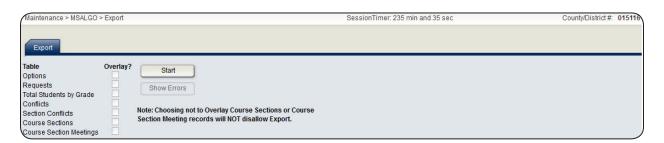
Scheduling > Reports > Scheduling Reports

Run and review reports:

- SCH0200 Potential Drop List
- SCH0800 Too Many Requests
- SCH0810 Too Few Requests

Run The MSALGO Export

Scheduling > Maintenance > MSALGO > Export



Extract all course records and student course requests for next year, and create a matrix of conflicts and a list of requests for all courses using the export.

If errors are encountered, the **Show Errors** button is enabled. Click **Show Errors** to view the error report.

Before continuing, use the report to verify the following information:

- Verify that courses excluded from the conflict matrix are correctly excluded.
- Verify that courses with no student requests are correct.

Set Options For Running MSALGO

Scheduling > Maintenance > MSALGO > Process > Options

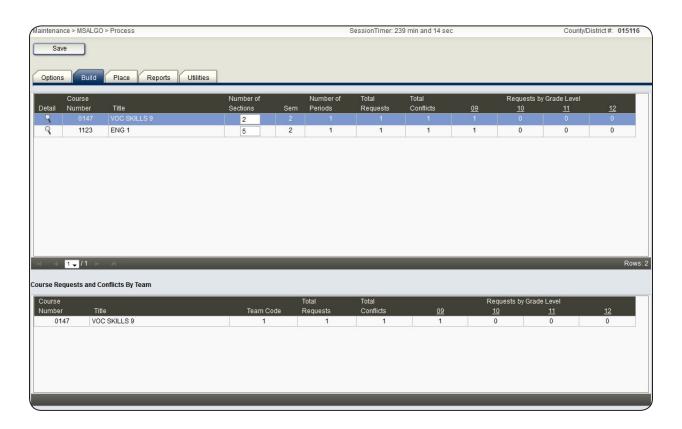


Set the following fields as necessary:

- 1. First Period
- 2. Nbr Periods
- 3. Low Grd Level
- 4. High Grd Level
- 5. **Nbr of Sem**

Enter The Number Of Sections For Each Course

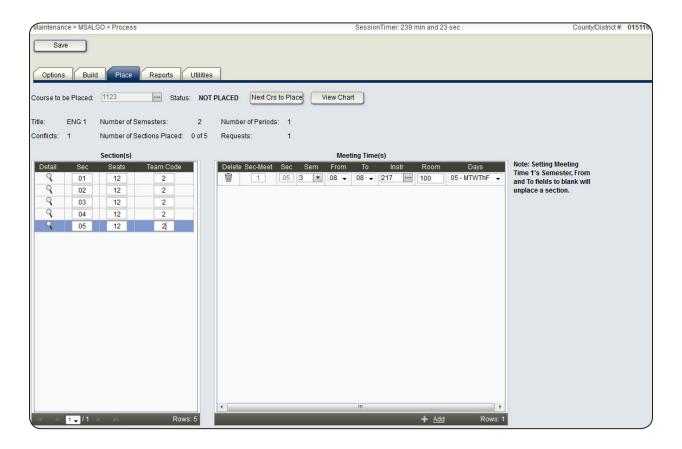
Scheduling > Maintenance > MSALGO > Process > Build



Type in the number of sections in the **Number of Sections** field only after the MSALGO options have been verified on the Options tab.

Place The Sections In The Campus Master Schedule

Scheduling > Maintenance > MSALGO > Process > Place



Note: You must enter and save the information on the Build tab before proceeding to this tab.

In the online Help, click the Using MSALGO to Place Sections link to view additional information.

- 1. Place all preplaced courses.
 - In the Courses to be Placed field, enter the first course that must be preplaced.
 - Click View Chart to view the placement charts, which will help you determine the periods in which to place the sections.
 - Specify the sections, number of seats, and team code (if in use) for the course to be placed.
 - Enter meeting times for each section.
 - Click Save to save the data for the course.
 - Enter the next preplaced course in the Courses to be Placed field, and repeat this process until you have entered all prescheduled courses.

- 2. After placing all preplaced courses, place all singleton courses.
 - Click the Next Crs to Place button to place the course sections as determined by MSALGO. Keep in mind that you can override the suggested courses at any time. However, it is to your advantage to follow the MSALGO logic as closely as possible.
 - Continue placing courses until all singleton courses have been placed.

Scheduling > Maintenance > MSALGO > Process > Utilities



3. After placing all singleton courses, and before placing doubleton courses, it is recommended that you back up the MSALGO tables by selecting the Backup MSALGO Tables option.

Scheduling > Maintenance > MSALGO > Process > Place

4. Place all doubleton courses.

Scheduling > Maintenance > MSALGO > Process > Utilities

5. After placing all doubleton courses, and before placing tripleton courses, it is recommended that you back up the MSALGO tables.

Note: It is also recommended that this backup be stored in a separate location from the backup performed after singleton courses were placed.

Scheduling > Maintenance > MSALGO > Process > Place

6. Place all tripleton courses, and so on.

Scheduling > Maintenance > MSALGO > Process > Utilities

NOTE: If you need to start over placing courses at a certain point, you can reload the MSALGO backup for the previous set of courses (such as singletons) by selecting the **Restore MSALGO Tables** option, and resume placing the subsequent courses (e.g., doubletons) again.

Run MSALGO Reports

Scheduling > Maintenance > MSALGO > Process > Reports

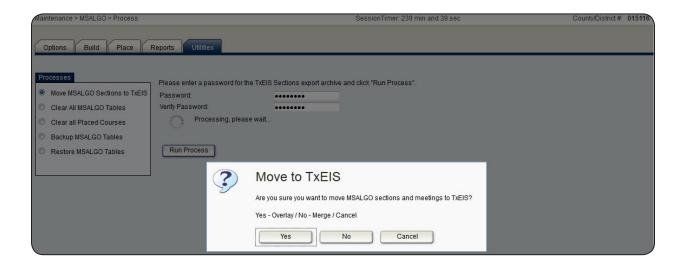


Run the following reports and ensure that all data is valid:

- 1. Select **Master Schedule** to produce the MSALGO Master Schedule report.
- 2. Select **Tally** to produce the MSALGO Course Request Tally report.
- 3. Select **Conflict Chart** to produce a report of course requests by team and grade level, a conflict chart, a seating chart, and a sections chart.
- 4. Select **Conflict Matrix** to produce a report of the number of students requesting each course, and a list and count of other courses these students have also requested.

Run The Move MSALGO Sections To TxEIS utility

Scheduling > Maintenance > MSALGO > Process > Utilities



Select the **Move MSALGO Section to TxEIS** option to move the sections from the MSALGO tables to the permanent section tables, which creates section and meeting time records in the TxEIS tables.

SECTION III: STUDENT SCHEDULING LOAD

Schedule students for sections of courses.

Prerequisites

- You must have completed **Section II Creating Next Year Sections**.
 - If you used the Master Schedule Generator > Generate Campus Schedule to generate your campus sections, you must first click **Accept Schedule** on the Create Master Schedule tab. Clicking **Accept Schedules** will move the sections from the temporary tables to the permanent section tables.
 - If you used MSALGO to create your campus sections, you must first run the Move MSALGO Section to TxEIS utility from the Maintenance > MSALGO > Process > Utilities tab. This will move the sections from the MSALGO tables to the permanent section tables.
- Before proceeding, ensure that the following are properly set:
 - On the Maintenance > Master Schedule > District > District Control tab, set the Maximum Scheduling Semesters Allowed field.
 - On the Maintenance > Master Schedule > Campus > Campus Control tab, set the following fields:

0	Max Sems Allowed
0	Low Grade
0	High Grade
0	Period Begin
0	Period End
0	Norm Prd Cntrl
0	Schedule Withdrawn Students - Select the field to include withdrawn students in the trial run.
0	Scheduling Sequence - Only grade levels with a priority are included in the scheduling load.

- Next year campus courses and sections must be created.
- Students must have next year course requests.
- The guide assumes you are familiar with the basic features of the TxEIS Student

software and have reviewed the TxEIS Student Overview guide.

- For more detailed information about individual fields, please see Help in the TxEIS Student software.
- This guide is based on TxEIS 2.0.0002.

Safety Precaution

As a safety precaution, you should export student course requests and sections as shown in the following two steps. If you need to start over with the original course requests or sections, you can import the files created by the export utility.

1. Export student course requests.

Scheduling > Utilities > Export > Student Requests (Unload)

- Save the export file to an appropriate location.
- If errors occur during the export, the Error List button is displayed. Click Error List to view the error report. Correct errors as needed.
- 2. Export sections.

Scheduling > Utilities > Export > Sections (Unload)

- Save the export file to an appropriate location.
- If errors occur during the export, the Show Error button is displayed. Click Show Error to view the error report. Correct errors as needed.

STUDENT SCHEDULING LOAD

Quick Checklist

Set options for running a scheduling load.
Run a trial run scheduling load.
Run the trial scheduling load reports.
□ Partial Sched Stu
☐ Stu Reject List
☐ Stu w/ Unsched Proxies
☐ Unmatched Proxy Sec
☐ Stu w/ Pre-assigned
☐ Master Sched
☐ Stu Sched
Accept the scheduling load.
Review student course requests.
Review student course assignments.
Assign control numbers to students.
Modify student schedules as needed.

TxEIS Scheduling - Student Scheduling Load

Run all of the post-load Scheduling reports.
☐ SCH2000 - Schedules List (Next Yr)
☐ SCH2100 - Student Schedule (Next Yr)
☐ SCH2200 - Class List (Next Yr)
☐ SCH2300 - Grade List (Next Yr)
☐ SCH2400 - Homeroom List (Next Yr)
☐ SCH2500 - Schedule of Classes (Next Yr)
CH2600 School Poster (Next Vr)

Student Scheduling Load

Set Options for Running a Scheduling Load to Schedule Students

Scheduling > Maintenance > Scheduling Load > Options



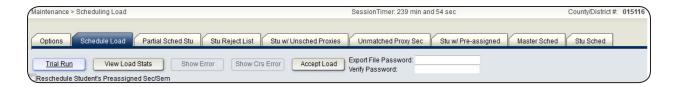
You have the following options to choose from for scheduling loads (see Help for a detailed description of the fields):

- 1. Select the **Course Balancing by Gender** field to balance courses by gender.
- Select the **Team Restriction can be Lifted** field to allow selectable team restrictions
 to be lifted. Do not select this field if you have assigned team codes to students and
 courses.
- 3. In the **Seat Balancing Intensity** field, select *High* so more students will have completed schedules. Choose *Low* if seat balancing is not a priority.
- 4. Select the **Gender Restriction can be Lifted** field to allow selectable gender restrictions to be lifted. Do not select this field if you have gender restrictions set on your courses or sections.
- 5. The **Retain Partial Schedules** is automatically selected. To retain partial student schedules, and thus be able to print a reject list, keep this field selected. If you would prefer to see the scheduling load percentages while running the trial run, clear this option.
- 6. Select the **Grd Lvl Restriction can be Lifted** field to allow selectable grade level restrictions to be lifted. Do not select this field if you have grade level restrictions set on your courses or sections.
- 7. Select the **Substitute Alternate Courses** field if you would like the program to schedule predefined course alternates for a student when the original class combination cannot be scheduled.

- 8. Select the **Schedule Required Courses First** field to prioritized required courses over electives.
- You may change the number in the **Seat Loading Factor** field to change the percentage above or below the maximum number of seats that can be scheduled for courses.
- 10. In the **Fill Unscheduled Periods with** field, type the course number of a course that will be used to fill any period that does not have a scheduled course.

Run A Trial Run Scheduling Load

Scheduling > Maintenance > Scheduling Load > Schedule Load



Note: Do not click **Accept Load** until you have run all available reports and are satisfied with the trial run. After running the reports, you will return to this tab to accept the load.

- 1. Click **Trial Run** to run a trail run scheduling load.
- 2. Click **View Load Stats** to view the report.
- 3. If errors are encountered, the **Show Error** and/or **Show Crs Error** buttons are enabled. Click the buttons to view the errors.
- 4. If you need to improve your scheduling load, run all reports necessary to identify reasons for unscheduled students, and make the necessary modifications. These reports are covered in the next steps.
- 5. To run the trial scheduling load again, click **Trial Run**. You can run as many trial runs as needed.

Run The Scheduling Load Reports

Verify that all data is correct, including the percentages, student reject listing, and class balancing.

- Scheduling > Maintenance > Scheduling Load
 - O Partial Sched Stu tab (partially scheduled students report)
 - O Stu Reject List (student reject listing report)

TxEIS Scheduling - Student Scheduling Load

Stu w/ Unsched Proxies (unscheduled sections of match proxies report)
 Unmatched Proxy Sec (unmatched sections of match proxy courses report)
 Stu w/ Pre-assigned (students with preassigned course sections or semesters, and students with cleared preassigned coursesections or semesters report)
 Master Sched (master schedule with reset seats report)
 Stu Sched (student schedules report)

If you are not yet satisfied with your scheduling load, make adjustments to the campus master schedule and/or student course requests, and then run the trial run again. Continue running trial runs and checking the reports until you are satisfied with the scheduling load.

Accept The Scheduling Load

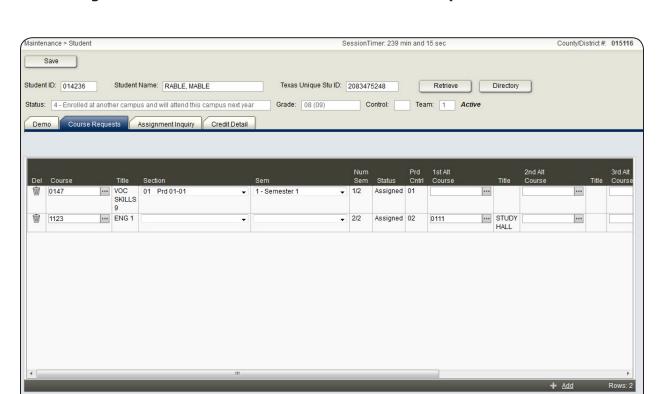
Return to the Schedule Load tab, and click **Accept Load** to accept the scheduling load, once you are satisfied with your scheduling load.

Scheduling > Maintenance > Scheduling Load > Schedule Load

When prompted, save a backup of the student course requests.

Review The Student Course Requests

Check that students have been properly assigned courses.



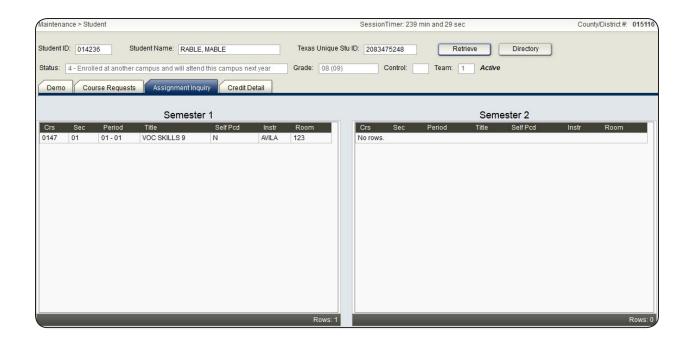
Scheduling > Maintenance > Student Schedules > Course Requests

The **Status** column on this page should be changed from Requested to Assigned. If necessary, assign students a section and semester to assign them to a course.

Review The Student Course Assignments

Scheduling > Maintenance > Student Schedules > Assignment Inquiry

View a students schedule from this tab.

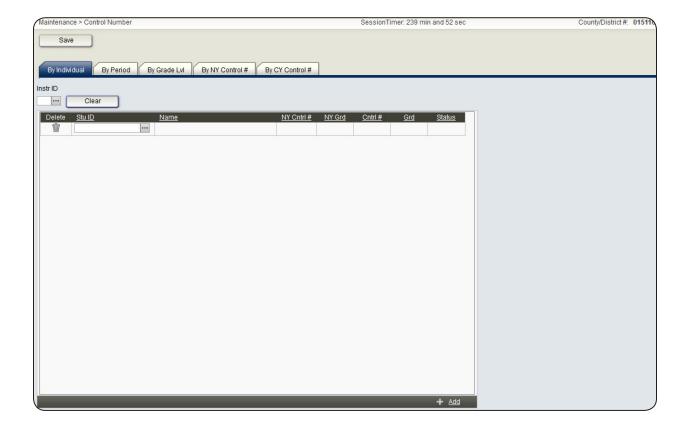


Assign Control Numbers To Students

Assign control numbers by individual, period, grade level, next year control number, or current year control number. This is an optional step.

Note: To see how to assign control numbers, please refer to Help for that particular tab.

Scheduling > Maintenance > Control Number

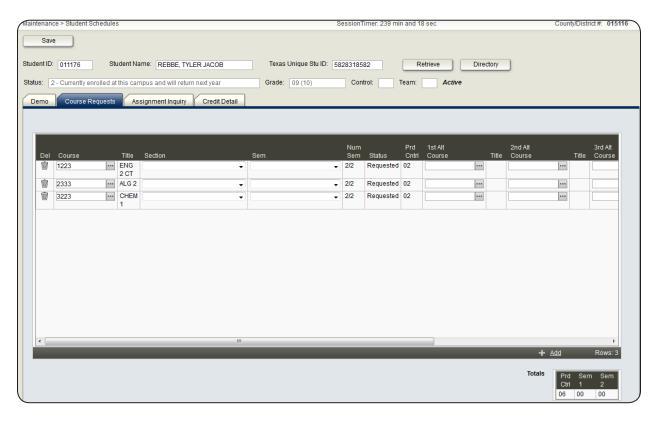


Modify Student Schedules As Needed

Modify student schedules individually or by group.

Modifiy Student Schedules Individually

Scheduling > Maintenance > Student Schedules > Course Requests



1. Select **+Add** to add courses, sections, and semesters for students.

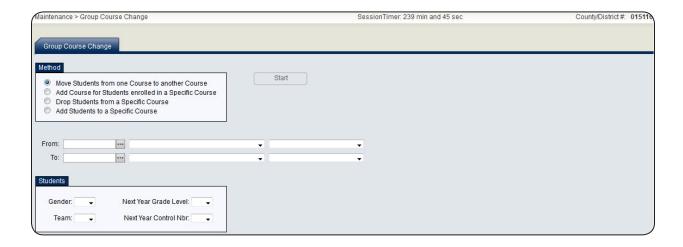
You may also select first, second, and third alternate courses for each course listed.

Note: See Help for more a more detailed description of each field.

2. Modify the courses listed for the student, as necessary.

Modify Student Schedules by Group

Scheduling > Maintenance > Group Course Change



Modify student schedules by group, as necessary. You may need to move a group of students from one course to another course, add a course, or delete a course for a group of students.

Note: See Help for a more detailed description of the process and each field.

Run All Post-Load Scheduling Reports

Scheduling > Reports > Scheduling Reports



Make sure all student schedulse are accurate by running the following reports:

TxEIS Scheduling - Student Scheduling Load

- SCH2000 Schedules List (Next Yr)
- SCH2100 Student Schedule (Next Yr)
- SCH2200 Class List (Next Yr)
- SCH2300 Grade List (Next Yr)
- SCH2400 Homeroom List (Next Yr)
- SCH2500 Schedule of Classes (Next Yr)
- SCH2600 School Roster (Next Yr)

SECTION IV: CONCLUSION

This concludes the scheduling process. The next process you will need to run is Move To Grade Reporting. Please review the following guides for more information about this process:

- TxEIS Student End-of-Year Checklist
- TxEIS Student Perform Move To Grade Reporting

Please also see the Perform The Scheduling Process For Elementary Students process guide for more information about the elementary scheduling process.

For more information about individual fields or pages, please see Help for that page.

