



# TA/GA Schedule Generator

Installation Guide & User Manual

# Table of Contents

---

1. Installation Guide	
1.1 Prerequisites	3
1.2 Install/Run TA/GA Schedule Generator Installer	4
1.3 Select Destination Folder and Install Dependencies	5
1.4 Open TA/GA Schedule Generator	6
2. User Manual	
2.1 Dashboard / Home Screen	7
2.1.1 Dashboard Key Elements	8
2.2 How To Add a Course	9
2.2.1 Add Course Information Key Elements	10
2.2.2 Add Course Information Key Elements cont.	11
2.3 Adding TA or GA Information	12
2.3.1 Adding TA/GA Key Elements	13
2.4 Viewing Generated Schedules	14
2.4.1 Viewing Generated Schedules Key Elements	15
2.5 Tips	16

## 1.1 Prerequisites

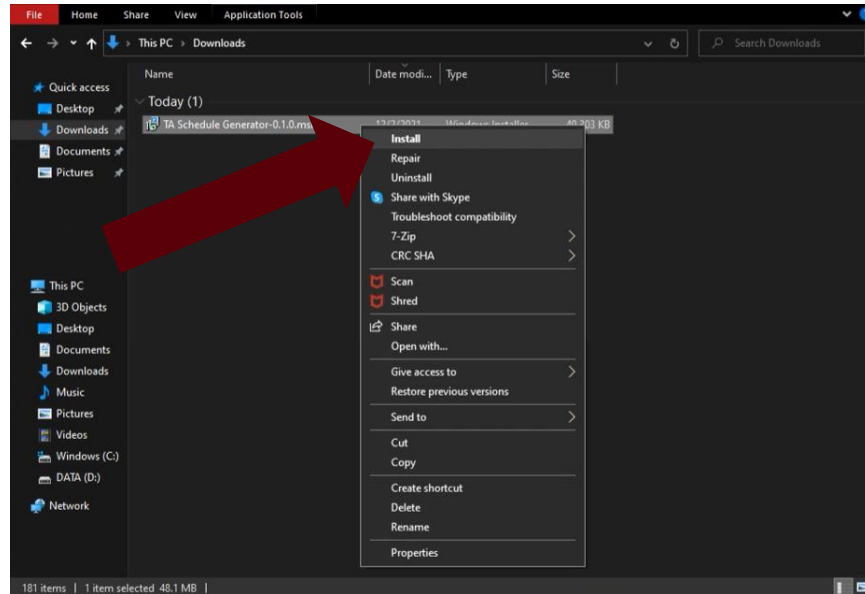
---

In order to install the TA/GA Schedule Generator, the following Hardware and Software requirements are required:

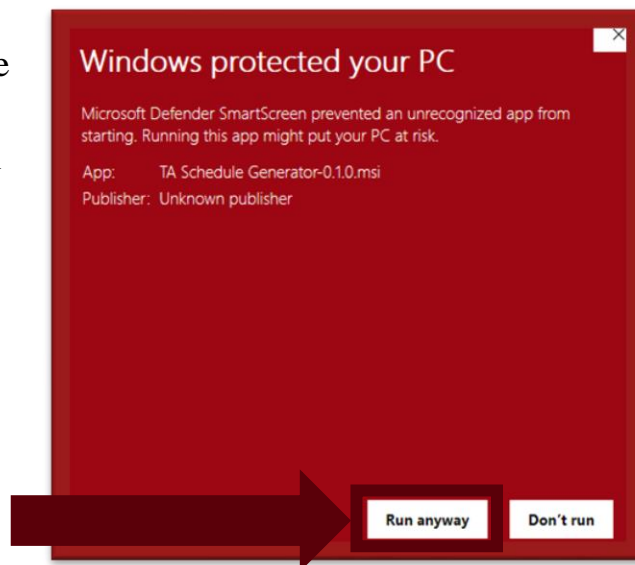
- Windows Operating System

## 1.2 Install & Run TA/GA Schedule Generator Installer

1. After locating the TA Schedule Generator-0.1.0.msi file, right-click and select 'Install' to begin the process of installing the TA Schedule Generator with the Setup Wizard.

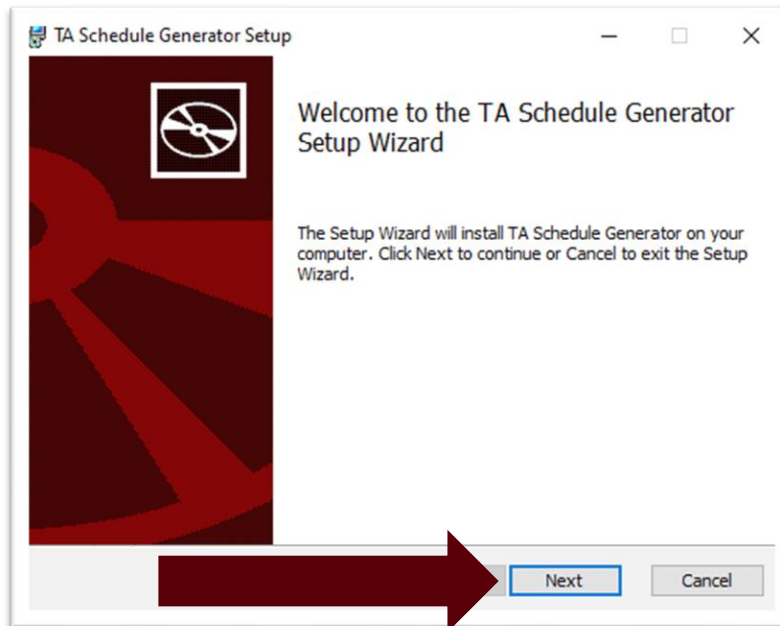


2. The Windows Defender SmartScreen may prevent the app from starting but selecting 'Run Anyway' will allow the Installer to begin setup for the application.

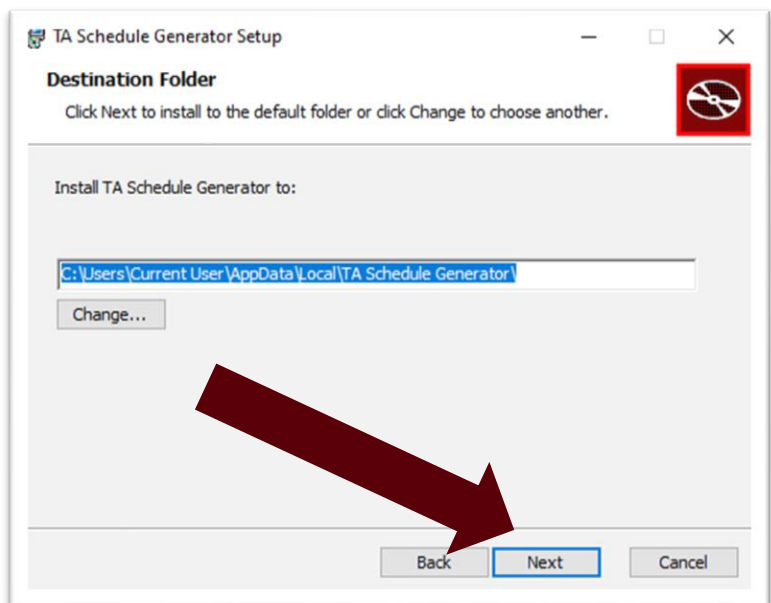


## 1.3 Select Destination Folder & Install Dependencies

3. The TA/GA Schedule Generator Setup Wizard will begin the install of the Schedule Generator application on the machine.

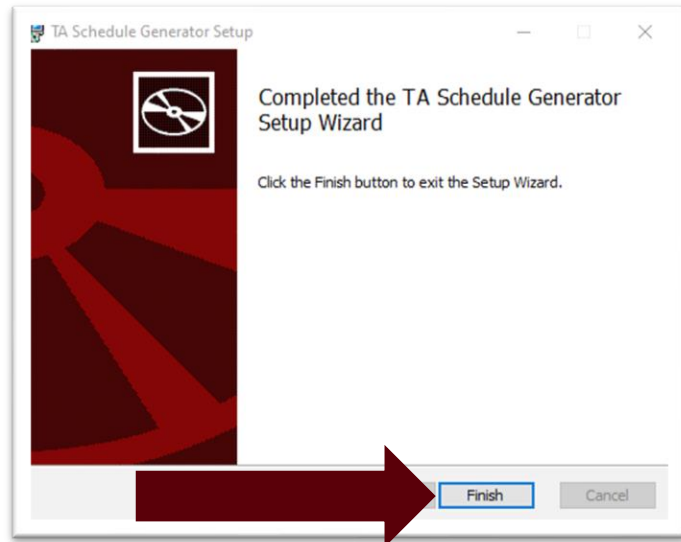


4. The Installer will pre-fill the Default 'Destination Folder' as the Current User's local AppData folder, but if needed the 'Change...' button allows for custom 'Destination Folder' selection.



## 1.3 Open TA/GA Schedule Generator

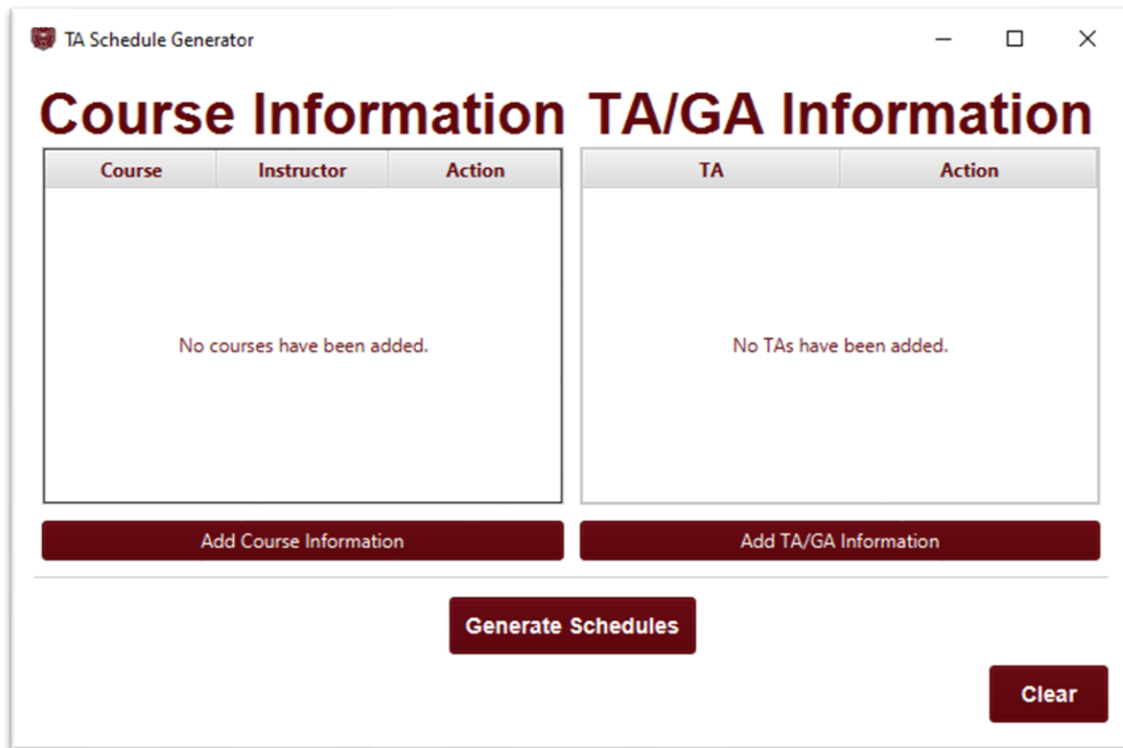
- The Installer will proceed to install all required dependencies for the application as well as create a desktop shortcut for the application and then display a prompt when done to exit the Setup Wizard.



- Upon double clicking the created Desktop shortcut named 'TA-GA Schedule Generator' the application should open and allow for data to be entered.

A screenshot of the 'TA Schedule Generator' application window. The window title is 'TA Schedule Generator'. It has a dark red header bar with the text 'Course Information TA/GA Information'. Below the header, there are two main sections. The left section is titled 'Course Information' and contains a table with columns 'Course', 'Instructor', and 'Action'. Below the table, it says 'No courses have been added.' and there is a red button labeled 'Add Course Information'. The right section is titled 'TA/GA Information' and contains a table with columns 'TA' and 'Action'. Below the table, it says 'No TAs have been added.' and there is a red button labeled 'Add TA/GA Information'. At the bottom center, there is a red button labeled 'Generate Schedules'. At the bottom right, there is a red button labeled 'Clear'.

## 2.1 Dashboard / Home Screen



The screenshot shows the TA Schedule Generator dashboard. At the top, the title "TA Schedule Generator" is displayed. Below the title, the dashboard is divided into two main sections: "Course Information" and "TA/GA Information". Each section contains a table with headers and a message indicating that no data has been added yet. Below the tables are buttons to "Add Course Information" and "Add TA/GA Information". At the bottom, there are buttons for "Generate Schedules" and "Clear".

Course	Instructor	Action
No courses have been added.		

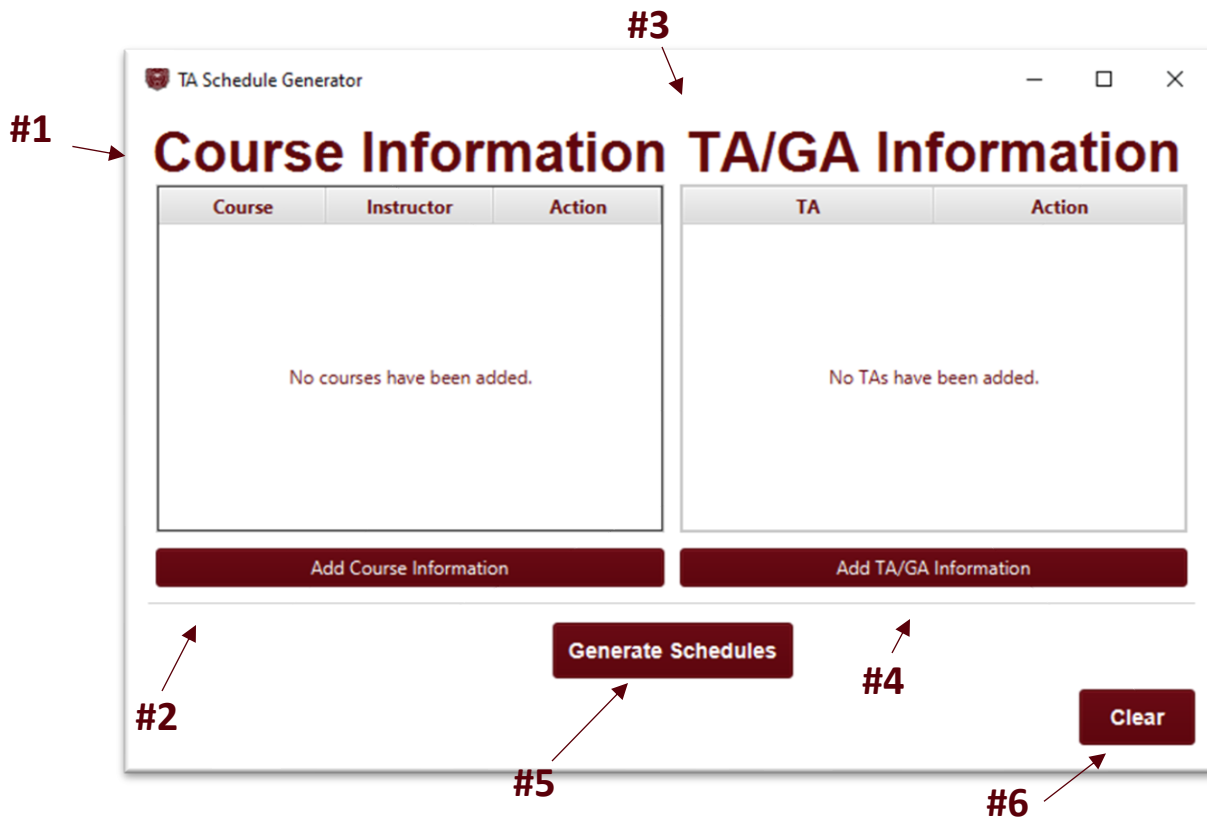
TA	Action
No TAs have been added.	

[Add Course Information](#) [Add TA/GA Information](#)

[Generate Schedules](#) [Clear](#)

The Dashboard is the home screen of the TA/GA Schedule Generator. From the Dashboard, you can navigate to the Add Course Information Scene, the Add TA/GA Information Scene, and the View Generated Schedules scene. Additionally, the Dashboard allows you to view courses and TAs/GAs that have already been inserted into the system.

## 2.1.1 Dashboard Key Elements



1. Course Information Table - information on previously entered courses will be displayed here
2. Add Course Information Button - click this button to navigate to the Add Course Information Scene
3. TA/GA Information Table - information on previously entered TAs/GAs will be displayed here
4. Add TA/GA Information Button - click this button to navigate to the Add TA/GA Information Scene
5. Generate Schedules Button - click this button to generate schedules based on course and TA/GA inputs. Also navigates to the View Generated Schedules Scene
6. Clear Button - click this button to remove all course and TA/GA inputs.



## 2.2 How To Add a Course

**Add Course Information**

Course Code  
The course code

Instructor Name  
The instructor that teaches this course

**Add Activities**

Activity Name  
Activity Name

Hours per Week  
Estimated hours per week

Must be TA  
☐ Yes ☒ No

Day of Week Start Time End Time

☐ Monday  
☐ Tuesday  
☐ Wednesday  
☐ Thursday  
☐ Friday

Add Activity

Activity	Action
No content in table	

Cancel Save Course Information

The Add Course Information scene is where all required course information is input into the system. From the Add Course Information Scene, you can provide the name of the course, the name of the course instructor, and add activities to the course.

## 2.2.1 Add Course Information Key Elements

**#1** → Course Code

**#2** → Instructor Name

**#3** → Activity Name

**#4** → Hours per Week

**#5** → Must be TA

Activity	Action
No content in table	

Cancel Save Course Information

1. Course Code Input - User input text for the course code will be entered here
2. Instructor Name Input - User input text for the instructor of the course will be entered here
3. Activity Name Input - User input for the activity name will be entered here
4. Hours per Week Input - User input for the length of the activity will be entered here
5. Must be TA Selection - User selection for if the activity requires a TA will be chosen here

## 2.2.1 Add Course Information Key Elements cont.

**Add Course Information**

Course Code  
The course code

Instructor Name  
The instructor that teaches this course

**Add Activities**

Activity Name  
Activity Name

Hours per Week  
Estimated hours per week

Must be TA  
☐ Yes ☒ No

Day of Week  
☐ Monday  
☐ Tuesday  
☐ Wednesday  
☐ Thursday  
☐ Friday

Start Time

End Time

**#6** → Day of Week  
**#7** → Start Time / End Time  
**#8** → Add Activity  
**#9** → Activity Table Header  
**#10** → Cancel / Save Course Information

Activity	Action
No content in table	

Cancel Save Course Information

6. Day Of Week Selection - User selection for the day or days of the week the activity takes place will be selected here. You can select multiple days for a single activity.
7. Start and End Time Selection - Activity beginning and end times will be selected from the dropdown lists here. Activities with fixed times require start and end times to avoid schedule conflicts with TAs/GAs, but not all activities require time inputs.
8. Add Activity - To add the activity information to the course, select the 'Add Activity' button.
9. Activity Table - Activities previously input for the course will be displayed here.
10. Save Course Information and Cancel Buttons - To save changes made, select the 'Save Course Information Button'. To discard the entered information, select the 'Cancel' button.

## 2.3 Adding TA or GA Information

The screenshot shows a window titled "TA Schedule Generator" with a subtitle "Add TA/GA Information". The window contains the following fields and controls:

- Name:** A text input field.
- Max Hours per Week:** A text input field with the value "20".
- Is the GA also a TA?:** Two radio buttons labeled "TA" and "GA only". The "GA only" button is selected.
- Add Times Unavailable:** A section containing a table with columns "Day of Week", "Start Time", and "End Time".

The "Add Times Unavailable" section includes a list of days (Monday, Tuesday, Wednesday, Thursday, Friday) with checkboxes. To the right of the days are two dropdown menus for "Start Time" and "End Time". Below the days is a button labeled "Add Time Unavailable".

At the bottom of the window are two buttons: "Cancel" and "Save TA/GA Information".

Day of Week	Start Time	End Time
<input type="checkbox"/> Monday		
<input type="checkbox"/> Tuesday		
<input type="checkbox"/> Wednesday		
<input type="checkbox"/> Thursday		
<input type="checkbox"/> Friday		

No content in table

The Add TA/GA Information scene is where all required TA/GA information is input into the system. From the Add TA/GA Information Scene, you can provide the name of the student, the maximum hours they can work per week, if the student is a TA or only a GA, and add times they are unavailable.

## 2.3.1 Adding TA/GA Key Elements

**Add TA/GA Information**

#1 Name

#2 Max Hours per Week

#3 Is the GA also a TA?  
☐ TA ☒ GA only

#4 Add Times Unavailable

#5 Day of Week

Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday ☐

#6 Add Time Unavailable

#7

Time	Action
No content in table	

#8

Cancel Save TA/GA Information

1. TA/GA Name Input - User input text for the student's name will be entered here
2. Max Hours per Week Input - User input text for the student's maximum hours of work per week will be entered here
3. TA or GA Selection - User selection for if the student is a TA or GA only will be made here
4. Start and End Time Selection - User will select the start and end time for when the student would be unavailable.
5. Day of Week Selection - This selection works in conjunction with the Start and End Time selection. The user will select the day or days that correspond to the Start and End Time the student is unavailable.
6. Add Times Unavailable - To add Time Unavailable to the student, select the 'Add' button. To discard the entered information, select the 'Remove' button beside the Time in the Unavailable Times Table.
7. Unavailable Times Table - Times unavailable previously input for the student will be displayed here.
8. Save TA/GA Information and Cancel Buttons - To save changes made, select the 'Save TA/GA Information' Button. To discard the entered information, select the 'Cancel' button.

## 2.4 Viewing Generated Schedules

**TA Schedule Generator**

< Previous Schedule      **Schedule 1 of 30**      Next Schedule >

**TA Schedules**

TA	Max Hours	Assigned Hours	Courses
Nabil Shawkat	20	20	CSC125 Grading, CSC232-02 Grading, CSC232-02 Lab, C
Samuel Nack	20	20	CSC125 Lab, CSC125 Office Hour, CSC333 Grading, CSC3
Afzak Khan	10	10	CSC130 Grading, CSC130 Office Hours
Bhoj Karki	20	20	CSC131 Grading, CSC131 Lab, CSC325 Grading, CSC325
Ayasha Siddika Nieu	20	20	CSC131 Office Hours, CSC323-01 Lab, CSC344 Grading

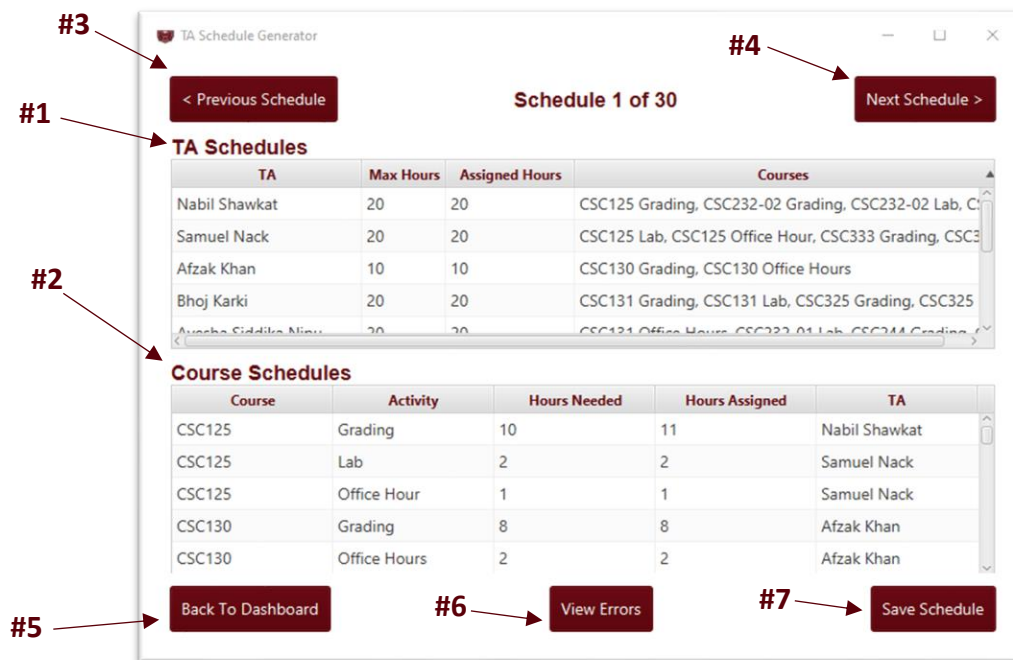
**Course Schedules**

Course	Activity	Hours Needed	Hours Assigned	TA
CSC125	Grading	10	11	Nabil Shawkat
CSC125	Lab	2	2	Samuel Nack
CSC125	Office Hour	1	1	Samuel Nack
CSC130	Grading	8	8	Afzak Khan
CSC130	Office Hours	2	2	Afzak Khan

Back To Dashboard      View Errors      Save Schedule

The View Generated Schedules scene is where the schedules generated based on user input will be displayed after the schedule generation is done. From the View Generated Schedules scene, you can cycle through the schedules, Save/Export a selected schedule, and View the Errors that could impact classes due to over/under assigned TA/Gas.

## 2.4.1 Viewing Generated Schedules Key Elements



1. TA Schedules Table – The schedules for TA/GAs are displayed here with each TAs assigned course activities, Max Hours, and Assigned Hours
2. Course Schedules Table – Each course activity is listed here with the Hours Needed, Hours Assigned, and the assigned TA or GA for the activity
3. Previous Schedule Button – To cycle through to the previous schedule hit the '< Previous Schedule' button
4. Next Schedule Button – To cycle through to the next schedule hit the '> Next Schedule' button
5. Back To Dashboard Button – In order to go back to the Dashboard press the 'Back To Dashboard' button
6. View Errors Button – To view the errors that occurred during schedule generation that could potentially affect a class/scheduling such as a course activity being over or under assigned hours
7. Save Schedule Button – To export schedules to be edited along with viewed later, pressing the 'Save Schedule' button proceeds to save the file with the corresponding schedule ranking number

## 2.5 Tips

---

Tip #1 – If TimeBlocks for a Course Activity or TA/GAs Time Unavailable do not match up exactly under or over-estimate the time accordingly (i.e., if a TA is unavailable from 2:00pm-3:05pm due to a class, include time for transportation and over-estimate the time as 3:15pm or 3:30pm)

Tip #2 – If a Course has multiple sections such as CSC131 taught Clif and CSC131 taught by Boomer, including a ‘-’ and section number can help in identifying the different course sections easier, Ex.

CSC131-01	Clif	Edit	Remove
CSC131-02	Boomer	Edit	Remove

Tip #3 – Each time schedules are generated there is a chance a more accurate schedule could be generated in a later generation. So, generating multiple schedules and saving each to compare later may result in a ‘better’ schedule

Tip #4 – Not to include Office Hours as a Course Activity if the time is to be shared among multiple Courses

Tip #5 – When viewing Generated Schedules, the schedules will automatically cycle (i.e., when going from Schedule #30 to Schedule #1 and vice-versa)

Tip #6 – If a singular TA is required for multiple Course Activities then combine the activities (Ex. Lab and Grading being combined to ‘Lab & Grading’ or ‘Lab+Grading’)

Tip #7 – Returning to the Dashboard after viewing Generated Schedules will clear the currently Generated Schedules and generate new schedules when the ‘Generate Schedules’ button is clicked

Tip #8 – The application will only save data that has been successfully ‘Saved’ so make sure to select ‘Save’ when entering information before closing the application