Training guide for departmental administrators:

Allocating Students to Teaching Activities in Enterprise Course Planner (ECP) and Enterprise Timetabler (ET)
1. Introduction

This training guide is intended for departmental administrators to work through the student to teaching activity allocation process in Enterprise Course Planner (ECP) and Enterprise Timetabler (ET), in a simple, step-by-step manner from which the underlying principles that that were explained and demonstrated in the accompanying training session should be reviewed and practiced. It assumes that users are familiar with the basic concepts outlined in the introductory Student Allocation training session, and have been set up appropriately in Authorisation Manager. It is designed to supplement the existing Enterprise user and training documentation.

Background

The 1314 academic timetable has mostly been finalised (teaching activities have been allocated locations, staff members, and timeslots). The next step in the QMUL timetabling process is to allocate students to teaching activities on a module by module basis. Over the past three weeks Activity Templates have been created for all teaching activities to enable these student allocations. This next round of training will be focused on two main areas:

1. Outlining the general student activity allocation process in ECP and ET
2. Working through allocating and un-allocating students to teaching activities

Note: You will only be able to allocate students to teaching activities that belong to modules from your department. Even if the student is from another department and they have chosen to study a module from your department, they will be enrolled on the module and therefore available for allocation to your department’s teaching activities.

Key Definitions

A number of key Scientia timetabling definitions are listed in the table below and are referred to throughout this guide:

Table 1: Key Definitions

<table>
<thead>
<tr>
<th>Scientia Term</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Activity</td>
<td>A teaching event that students attend from a module, such as Lecture, lab, tutorial or practical. All teaching activities that students are required to attend must be created from and linked to a genuine SITS module.</td>
</tr>
<tr>
<td>Activity Template</td>
<td>Activity templates are used to describe how each module is delivered from the perspective of a student taking that module. They provide a reliable mechanism to allocate students to teaching activities in a clash free manner and help to better structure the timetable database.</td>
</tr>
<tr>
<td>Student Set</td>
<td>A student set represents an individual student in the QMUL timetabling system.</td>
</tr>
<tr>
<td>Group based teaching activity</td>
<td>The students enrolled on the module are divided into groups and are allocated to one of the several activities that are linked to the module.</td>
</tr>
<tr>
<td>Non group based teaching activity</td>
<td>All of the students on the module are required to attend the same teaching activity. They are not subdivided into groups. For example Lectures or screenings are usually non group based, unless the size of module is too large to be accommodated in one venue.</td>
</tr>
</tbody>
</table>
3. **Key Concept — Activity Templates**

Activity Templates define how the teaching of a module is delivered from the perspective of a student studying that module. In the example in figure 1 below, the students enrolled on the BI500 module which is taught once a week to a large Lecture group of 100, split into smaller groups of 20 for Practicals, and then further split into even smaller groups of 10 for Tutorials. Three Activity Templates would be needed, one for the Lecture (size 100), one for the Practicals (size 20) and one for the Tutorials (size 10).

*Figure 1: Activity Template Structure*

Teaching activities are then created from the activity templates (or in QMUL’s case the templates have been created by the central timetabling team and linked to the relevant activities). With the structure that is set out in the example above all students on Module BI500 will attend the same lecture, they will be allocated to just one of the 5 practicals, and just one of the 10 tutorials. In the scenario above it is impossible for a student to attend more than 1 of the BI500 practicals. If this was in fact the requirements a separate template would have to be created for each activity the student had to attend. (There would be: five BI500 Tutorial Templates in the example above, each linked to just the one individual activity.)

**Note:** If there is one activity linked to the template all the students attend the one activity, if there are more than one, the students are divided up and allocated to one of the group based activities.

**Note:** Any students that are not allocated to activities or not correctly allocated to activities will not have an accurate personalised timetable this could cause them to miss classes and not having a student experience comparable to their peers.
4. Student Allocation Process

One to one meetings were held with the timetabling administrators from the Mile End Schools and the following overall student allocation process was agreed:

1. A one off bulk allocation of students to non-group based teaching activities (lectures, screenings, etc) will be performed by the central room booking team for continuing students on an agreed date. All students on the genuine teaching activities (from SITS) will be allocated to their teaching activities where there is enough space (activity planned size) and their schedule is clash free.
2. Schools will then review the results of this initial allocation and allocate any students that failed to allocate to the non-group based teaching activities for the reasons outlined in 1 above.
3. Schools will then allocate students to group based teaching using the activity templates on a module by module basis.

Table 2: Overview of the two methods of student allocation to teaching activities

<table>
<thead>
<tr>
<th>Type of teaching activity</th>
<th>Allocated Steps</th>
</tr>
</thead>
</table>
| Non-Group based teaching activities with no student choice. Such as Lectures, one off seminars. | 1. Bulk allocation by Space Management Unit via the Enterprise timetabling system.  
2. Reviewed and finalised by the schools in ECP and ET                                      |
| Group based teaching activities where students have a choice of which teaching activity to attend. Such as seminars, tutorials, IT and or practical labs. | 3. Auto Allocation in ECP by School administrators using one of the four bulk allocation methods that are detailed in table2 (Randomly, Evenly, Evenly, by module choice).  
4. Individual allocations adjusting the bulk allocations to fine tune them.                |

Table 3: The Four Bulk Allocation Methods in ECP

<table>
<thead>
<tr>
<th>Allocation Method</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| 1. Allocate by Module Choice | If this option is selected, the allocation process will attempt to allocate student sets with similar modules to the same activities. The user should bear in mind that in the case where all sets are unallocated the first set to activity allocation made will be arbitrary since there is no existing allocation to guide the process.  
If the user wishes to guide allocation towards specific activities, this can be achieved by making some allocations by hand. Once a set is allocated to an activity the allocation process will tend towards allocating sets with a similar module choice to that activity. |
| 2. Allocate by Name     | If the user elects to allocate student sets by name then the allocation process will begin with allocation of the student set that is first in the list when sorted alphanumerically and allocate that set to the first available activity. |
activity that has sufficient room for the set. The process will then move to the next student set and so on.

<table>
<thead>
<tr>
<th>3. Allocate Evenly</th>
<th>This allocation method will try to equally distribute the student allocations across the activities on the template. This option is used in conjunction with the minimum fill value.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Allocate Randomly</td>
<td>This allocation method is completely random.</td>
</tr>
</tbody>
</table>

**Write Back and Refresh**

As you make any changes in ET you will need to write them back to the database to commit them to the server by pressing the write back button. If the Write back icon is greyed out there are no changes to save and send to the server.

To view the changes that your colleagues have made and written back to the shared database you must refresh your view of the system by pressing this button.

**Note:** Changes are not safe until they have been written back to the server. If you want to discard the changes you have been making do not write them back, exit the application and do not save the image file if prompted.
5. Getting Started

Follow the steps below to log in to the system.

a. Log into your Virtual Machine and then open up your internet explorer web browser and enter the link below as illustrated in figure 2 below. Or click on the Scientia shortcut on the VM desktop.

   https://timetablesportal.qmul.ac.uk/Scientia/Portal/Main.aspx

Figure 2: Scientia Enterprise link

b. The Scientia Enterprise Timetabling system’s log in screen will then load and prompt you to log in. Enter your University user Id and password and press enter or click the logon button, as illustrated in figure 3 below:

Figure 3: Scientia Enterprise login

If you cannot log in to the Enterprise screen then contact: The IT helpdesk on: ext 8888, its-helpdesk@qmul.ac.uk
6. Loading the Enterprise Course Planner (ECP) Application

After logging in successfully, the Enterprise Portal screen illustrated in figure 4 below will become visible. Follow the steps below to open the ECP application.

a. Ensure you have selected the correct database/academic year by single left clicking on the ‘SCI1314’ tab at the top of the screen. The name of the selected database will turn white after it has been selected.
b. To load ECP single left click on the ECP icon as illustrated in figure 4 below. If you double left click the ECP application will launch twice.

c. If the ECP application is being run for the first time the software will need to be installed on your machine, click install if needed.
d. A series of loading screens will then appear and after a few minutes ECP will load as illustrated in figure 5 below.

Figure 4: The Enterprise portal

Figure 5: The main ECP screen
7. Filtering the ECP application and Finding your Templates

To view and edit your department’s course planning information follow the steps detailed in this section.

a. Maximise the main ECP screen by clicking on the maximise icon in the top right hand corner of the screen.

b. Left click on the Department(s) filter box to activate it.

c. Select your school or departments(s) from the list in the Unselected box.

d. Click on the right facing arrow and move the department you require into the Selected box.

e. The department filter list is now finalised in the selected box.

f. Click anywhere on the application’s main screen (that isn’t an action button) to apply the filter.

Figure 6: Customising the ECP screen and filtering data
g. The data in the ECP dashboard now relates just to the department you selected in the filter above as illustrated in figure 7 below.

h. To view your department(s) activity templates click on the show button next to the total templates value (as illustrated in figure 7 below)

*Figure 7: Filtered ECP screen/viewing Activity Templates*
i. The activity template window will then open.

Figure 8: Activity Template Window

8. Working with Activity Templates – Student Allocations

To view your department’s Activity Templates and then allocate students to their teaching activities follow the steps detailed in this section.
a. With the Activity Template window open, rearrange (drag and drop) the columns so that the four key pieces of information are next to each other. Name, Activity Type, Existing Activities and Planned Size.

**Figure 9: Activity Template Window – Re-Ordering Key Columns**

![Activity Template Window](image)

b. Working module by module select the Lecture Template by left clicking on it.

c. Next press the “Template Allocator” button

![Template Allocator](image)

d. The allocation screen will then open for the selected template. The student enrolled on the module, that the Activity Template has been created for are available for allocation on the left hand side of the screen. Students in Bold black font have not yet been allocated to an activity.

e. There is also no tick in the “Allocated tick box” that corresponds to the students in the list.
f. The activity(s) that have been associated with the selected Activity Template are listed in the middle of the screen. This will match the number of existing activities on the previous screen.

g. The “Total Size” of the activity is its planned size (as specified by the schools during the planning stage of the timetable construction period) and the “Real Size” of the activity (the actual number of students that have been allocated to the activity) are displayed side by side at the bottom of the screen.

**Figure 10: Activity Template Allocator window**

h. To bulk allocate all the students to the one lecture activity simply press the Allocate button at the top of the screen. Note if you select one student or a cluster of students on this window and then press the allocate button, only the selected students will be allocated to the activity(s).
The auto allocation window will open, offering four options to control and organise the student allocations. As all of the students will be going to the same lecture, the allocation method does not matter on this occasion.

Choose the random option radio button

Press Allocate

All of the allocated students are now in normal font (not bold) and have a tick in one of the activities and a tick in their allocated box.
m. Any unallocated students are still in bold font and have no allocation ticks.

n. The “Real Size” has now changed to display the number of students that have been allocated to the activity.

Figure 11: Reviewing the Bulk Allocation
0. To find all the unallocated students, move to the top right hand corner of the “Allocated” column header and select the “Unchecked” option. This will filter the screen to just the students that are unallocated on this template.

**Figure 12: Filtering to the Unallocated Students**

p. To allocate the remaining students double left click on the activity tick box that corresponds to the unallocated students one by one.

q. Remove the “Unallocated” filter
r. As the remaining students are allocated they return to normal font. If the real size of the activity has gone above the planned size (it has become overloaded) and the sizes will change to red font.

Figure 13: Overloaded Student Sets

s. Once you have allocated all the students for the template then press the Apply to save the changes on the screen.
t. The DataSync will then run, synchronising the data. Once the DataSync symbol has disappeared you can then move on to the next template.

u. Select the next template for the module from the template filter

Figure 14: Selecting another Template

v. The allocation window will then appear for the seminar activity template.

w. This is a group based activity template, where the students attend one of the multiple activities on this template.

x. To bulk auto allocate the students to one of the two activities on the selected template press the “Allocate” button, select the relevant allocation method and then review the results as before.
9. Manually allocating Individual Students to Activities

The students can be manually (individually) allocated to teaching activities by following the steps outlined below as illustrated in figure 15 below.

a. Double left click on the student/activity tick box as required.
b. To unallocate a student from the activities on the template select the students by left clicking on the blue block to the left of the desired student names.
c. Press “unallocated”
d. Press OK to return to the main ECP window

Figure 15: Manually Allocating Students and Unallocating

![Figure 15: Manually Allocating Students and Unallocating](image)
e. Write back from the ECP main application screen to save the allocation changes.

Figure 16: Writing back changes and Refreshing the ECP Dashboard

f. As you are making changes to student allocations in ECP the dashboard greys out to indicate that a change has been made. To refresh the ECP dashboard—recalculating the course planning dashboard, you will need to go to Dashboard | Refresh | Refresh All. **This is not a database refresh.**
10. Filtering Students by their Programme of Study

The allocation window can be filtered by the Programme of Study that the students are enrolled on. This could be helpful if you wanted to keep students from the same Programmes together in the same activity. To do this following the steps outlined below as illustrated in figure 17 below.

a. Right click on the Name column header
b. Select the “Column Chooser” option

c. Drag and Drop the Programme of Study Column from the Customisation palette to the Template window
d. Drag and Drop the Programme of Study Column from the Customisation pallete to the Template window

e. You can then filter the list of students by Programme of Study and manually allocated accordingly

f. Allocate the students to teaching activities Programme by Programme

Figure 18: Allocate Students by Programme of Study
11. Viewing Individual Student Timetables in ET

Once a student has been allocated to all of their timetable activities in ECP, it is possible to view and adjust their individual schedule in Enterprise Timetabler. To do this following the steps outlined below as illustrated in figure 19 below.

a. Open Enterprise Timetabler
b. In the Template Allocator screen in ECP click and select the relevant student.
    c. Right click on the highlighted student and select “Show Timetable”

Figure 19: Student Timetable click through
d. The selected student’s timetable is then displayed in Enterprise Timetabler and can be reviewed.

![Image of Enterprise Timetabler interface showing a student's timetable]

**Figure 20: Editing Student Sets**

![Image of Enterprise Timetabler interface showing the editing process]

e. To remove a student or add a student to the selected teaching activity in ET, select the activity.

f. Go to Edit, and select the Edit Student Sets option.
g. To remove an allocated student from an activity, select the student and press the left facing arrow. Moving the student form the selected box to the unselected box.

h. To allocate an unallocated student select the student and press the right facing arrow.

i. Right click on the Student Set name column header

j. Drag and drop any relevant data columns into the Student Set window. The students Programme of study, User Text 1 and User Text 2 will be useful. You can then filter by these student attributes if necessary.

Figure 21: Viewing Additional Student Details
12. Monitoring Student Allocations

As students are changing modules, it will be necessary to regularly check for students that have become unallocated from activities as they are no longer taking the associated module. To filter to unallocated students follow the steps outlined below as illustrated in figure 22 below.
a. Press the “Show” button next to the “with unallocated student sets” filter value on the Activity Template panel.
b. The Template Allocator window will then open, with only the templates that have student sets that require allocation in view. These can then be reviewed template by template and allocations made as necessary.

**Figure 22: Finding Unallocated Students**

13. **Clashing Student Allocations**

It may be necessary to deliberately clash a student’s timetable. Student allocations can only be clashed in the Enterprise Timetabler application. To clash student allocations follow the steps outlined below as illustrated in figure 23 and 24 below.
a. In Enterprise Timetabler select the activity that needs to have the student clash associated with it.

b. Go to Tools | Constraints to open the constraints window

**Figure 23: Constraint Breaking Mode**

![Constraint Breaking Mode](image)

- A
- B

c. Select “Never” for the “Always Avoid Double Booking” — Student sets radio button

**Figure 24: Breaking the Student Set Double Booking Constraint**

- C

d. Go to Edit | Edit Student Sets

e. Allocate the clashing Student Set(s) as illustrated on pages 21 to 23, in section 11.