SET Lab Management Tool

USER MANUAL

Description:

This web-based application is created for the SET Lab management team to observe lab classes through different visualisations. Developed using the Python Dash framework and Plotly Express, it enables users to upload course information in either CSV or Excel formats. This user manual will show how to use and visualise all features of our Dash application.

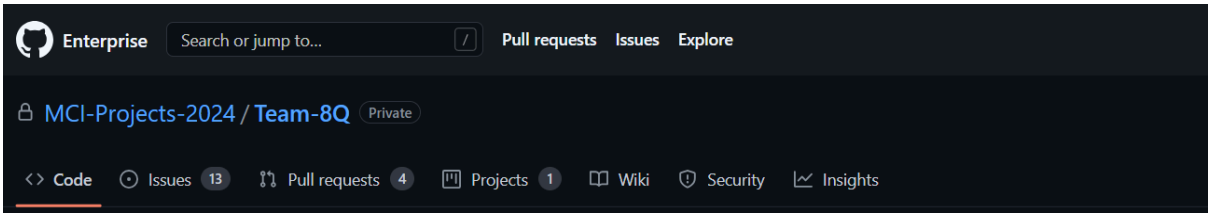
Steps:

Step 1: Access our Github link

https://github.cs.adelaide.edu.au/MCI-Projects-2024/Team-8Q/projects/1

Step 2: Access the link to go to our Dashboard

- Go to Code

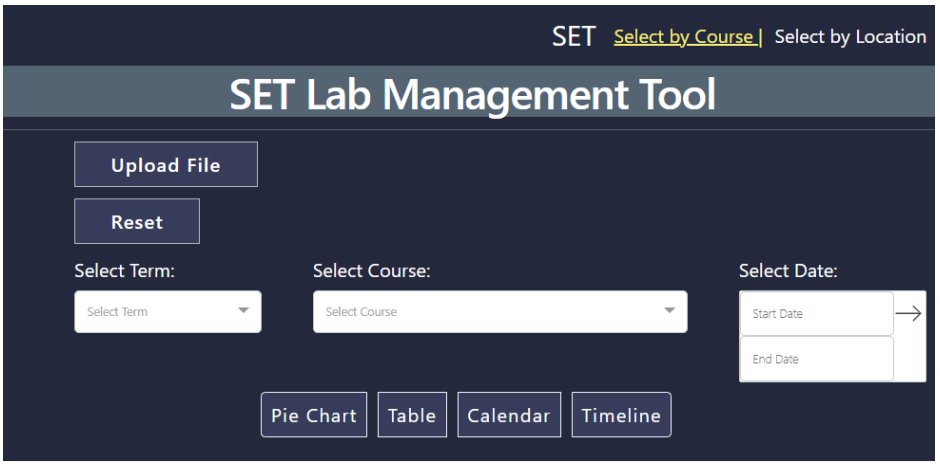


  - In the README.md, we have two options, users can:
    + Run the application locally by following the steps shown in the README.md and click the link http://127.0.0.1:8080/ in your web browser.
    + Otherwise, users can run on the Cloud service through the link https://mci-dash-app-iwjvfqdhnq-km.a.run.app

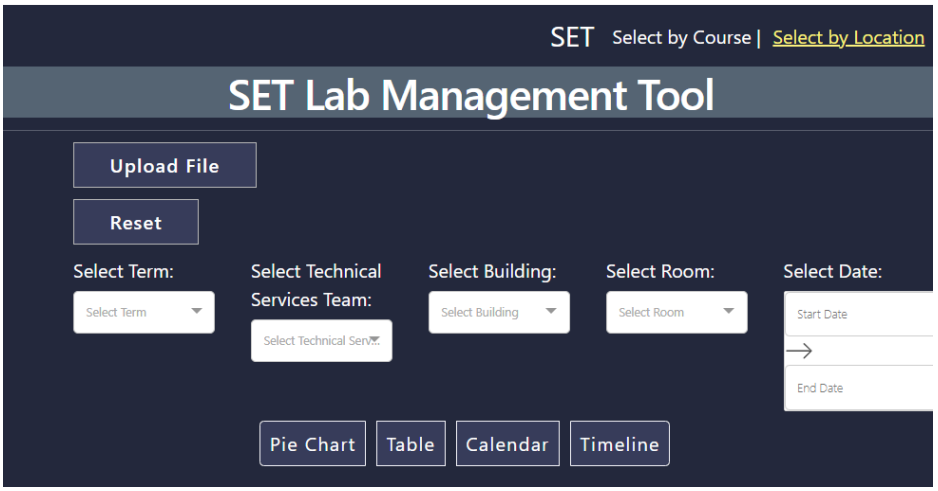
Step 3: Choosing 'Select by Course' or 'Select by Location'

Users can choose 'Select by Course' or 'Select by Location' by clicking 'Select by Course' or 'Select by Location' on the top right of the dashboard

If users would like to choose ‘Select by Course’ ⇨ Click ‘Select by Course’



Otherwise, users can choose ‘Select by Location’ ⇨ Click ‘Select by Location’

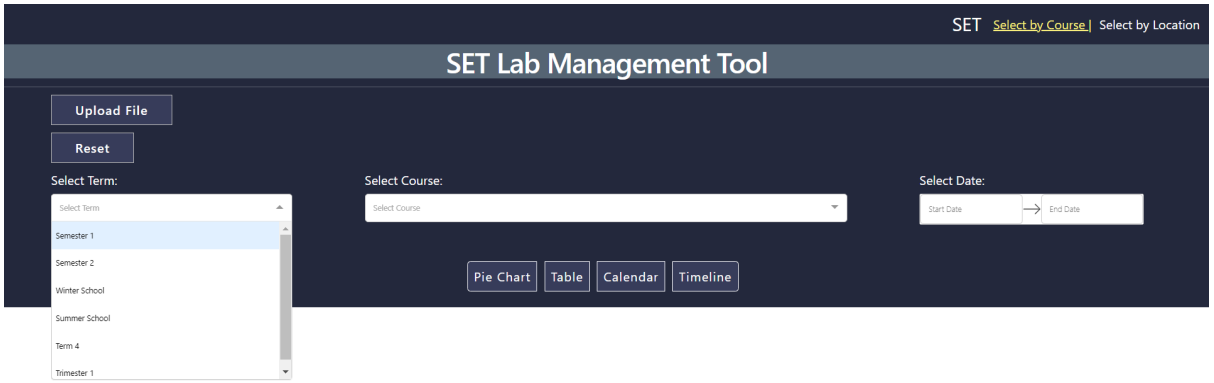


Step 4: Upload file

Go to Upload File ⇨ Go to the place that stores Excel spreadsheet file ‘SET Prac classes 2014 living doc.xlsx’.

Then, it needs time to load.

When it is ready, it will show the information in each drop-down.



After choosing ‘Select by course’/ ‘Select by location’ and Upload file, users can follow either step 5 showing the next step when choosing ‘Select by course’ or step 6 showing the next step when choosing ‘Select by location’.

<u>Step 5: Select options to visualise all features when choosing ‘Select by course’</u>

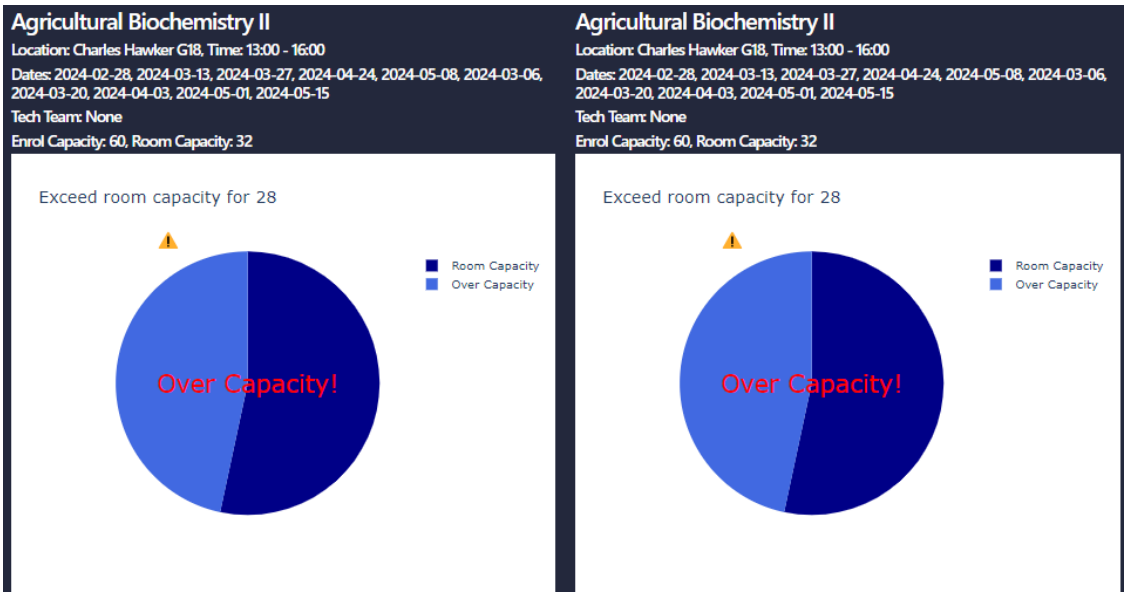
Users can follow these steps to visualise all features

Select a single Term/multiple Terms ⇨ select single Course/multiple Courses ⇨ select Date ⇨ select Pie Chart/ Table/ Calendar/ Timeline

5.1 Selecting Pie Chart

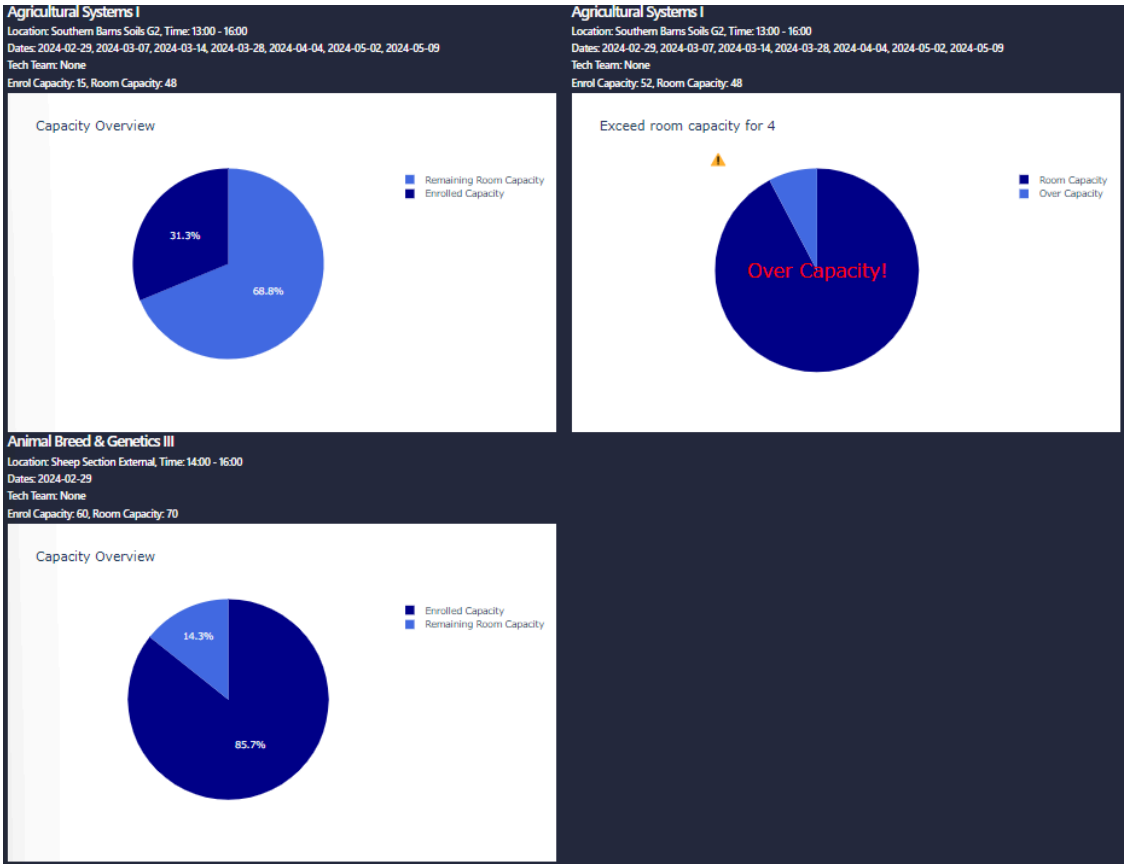
When selecting Pie Chart, each pie chart will show information about each course, the location of that course, the date range and time that course will be taught, the room capacity, the enrolled capacity, and the tech team. If the enrolled capacities are over the room capacity, it will show that the number of enrolled capacities is over the room capacity. Otherwise, it will show the number of enrolled capacities and the remaining room capacity.

Select Term	Select Course	Select Date	Select Pie Chart/Table/Calendar/ Timeline
Semester 1	Agricultural Biochemistry II	02/01/2024 - 06/30/2024	Pie Chart



Select Term	Select Course	Select Date	Select Pie Chart/Table/Calendar/ Timeline
Semester 1,	Animal Health II,	02/06/2024 -	Pie Chart

Semester 2, Trimester 1	Agricultural Biochemistry II, Agricultural Systems I, Animal Breed & Genetics III, Innovation in Agronomy III	11/17/2024	



5.2 Selecting Table

When selecting Table, each table will show information about each course, such as the name of the class, location, date range, and time that course will be taught, the room capacity, the enrolled capacity, and the tech team.

Select Term	Select Course	Select Date	Select Pie Chart/Table/Calendar/ Timeline
Semester 1	Agricultural Biochemistry II	02/01/2024 - 06/30/2024	Table

Agricultural Biochemistry II

Subject / Catalogue	Location	Time	Enrol Capacity	Room Capacity	Tech Team
AGRIC 2500WT	Charles Hawker G18	2024-02-28 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-03-13 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-03-27 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-04-24 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-05-08 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-03-06 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-03-20 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-04-03 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-05-01 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-05-15 13:00-16:00	60	32	

Select Term	Select Course	Select Date	Select Pie Chart/Table/Calendar/ Timeline
Semester 1, Semester 2, Trimester 1	Animal Health II, Agricultural Biochemistry II, Agricultural Systems I, Animal Breed & Genetics III, Innovation in Agronomy III	02/06/2024 - 11/17/2024	Table

Agricultural Biochemistry II

Subject / Catalogue	Location	Time	Enrol Capacity	Room Capacity	Tech Team
AGRIC 2500WT	Charles Hawker G18	2024-02-28 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-03-13 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-03-27 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-04-24 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-05-08 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-03-06 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-03-20 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-04-03 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-05-01 13:00-16:00	60	32	
AGRIC 2500WT	Charles Hawker G18	2024-05-15 13:00-16:00	60	32	

Animal Health II

Subject / Catalogue	Location	Time	Enrol Capacity	Room Capacity	Tech Team
ANIML SC 2545RW	Poultry Section External	2024-05-30 13:00-16:00	35	70	
ANIML SC 2545RW	Callaghan G32	2024-03-21 13:00-16:00	35	48	
ANIML SC 2545RW	Callaghan G32	2024-03-28 13:00-16:00	35	48	
ANIML SC 2545RW	Callaghan G32	2024-04-04 13:00-16:00	35	48	

5.3 Selecting Calendar

When selecting Calendar, the calendar will show information about the course each month. On the day that the course will be held, the calendar will show information about that course, such as location (building and room), length of time that course will be taught, name of class, and the tech team.

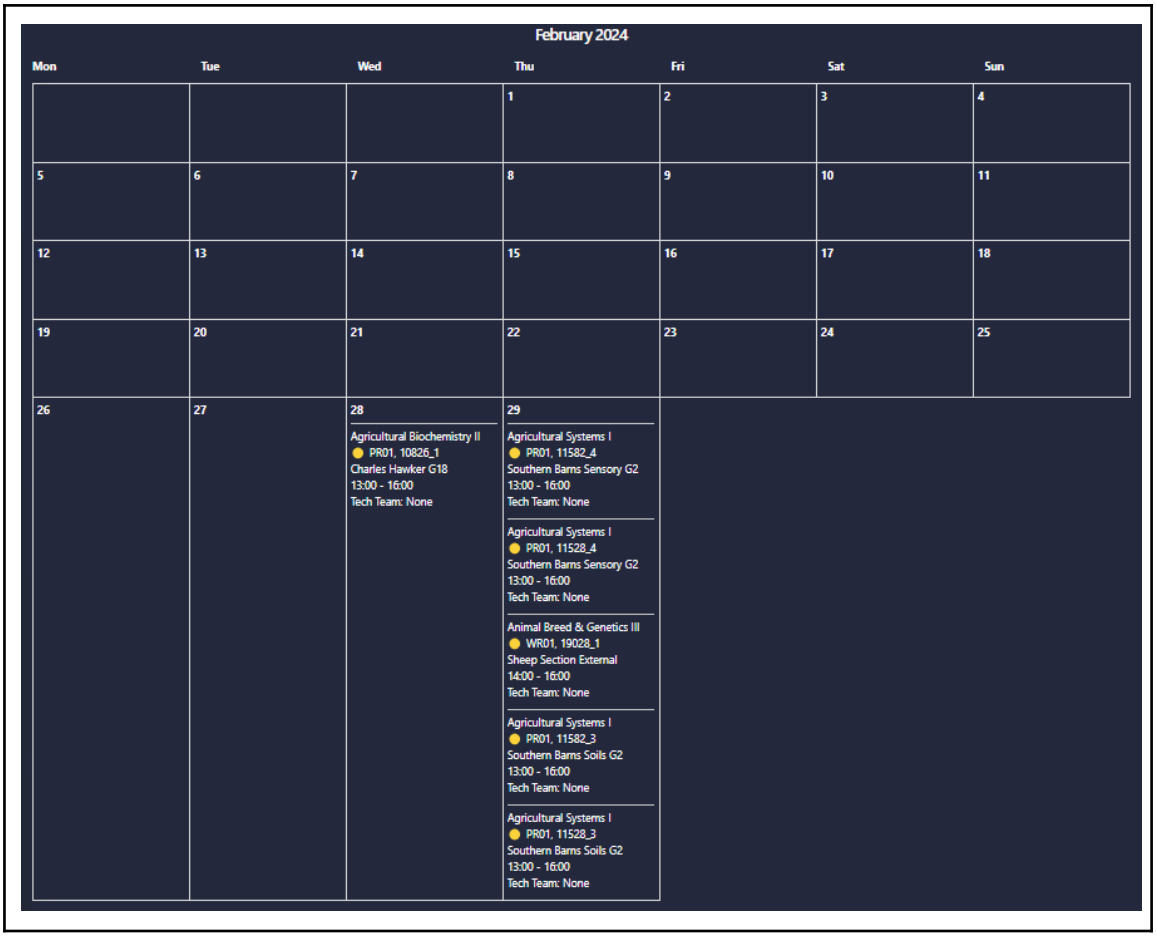
Select Term	Select Course	Select Date	Select Pie Chart/Table/Calendar/ Timeline

Semester 1	Agricultural Biochemistry II	02/01/2024 - 06/30/2024	Calendar

March 2024

Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6 Agricultural Biochemistry II PR02, 11562_1 Charles Hawker G18 13:00 - 16:00 Tech Team: None	7	8	9	10
11	12	13 Agricultural Biochemistry II PR01, 10826_2 Charles Hawker G18 13:00 - 16:00 Tech Team: None	14	15	16	17
18	19	20 Agricultural Biochemistry II PR02, 11562_2 Charles Hawker G18 13:00 - 16:00 Tech Team: None	21	22	23	24
25	26	27 Agricultural Biochemistry II PR01, 10826_3 Charles Hawker G18 13:00 - 16:00 Tech Team: None	28	29	30	31

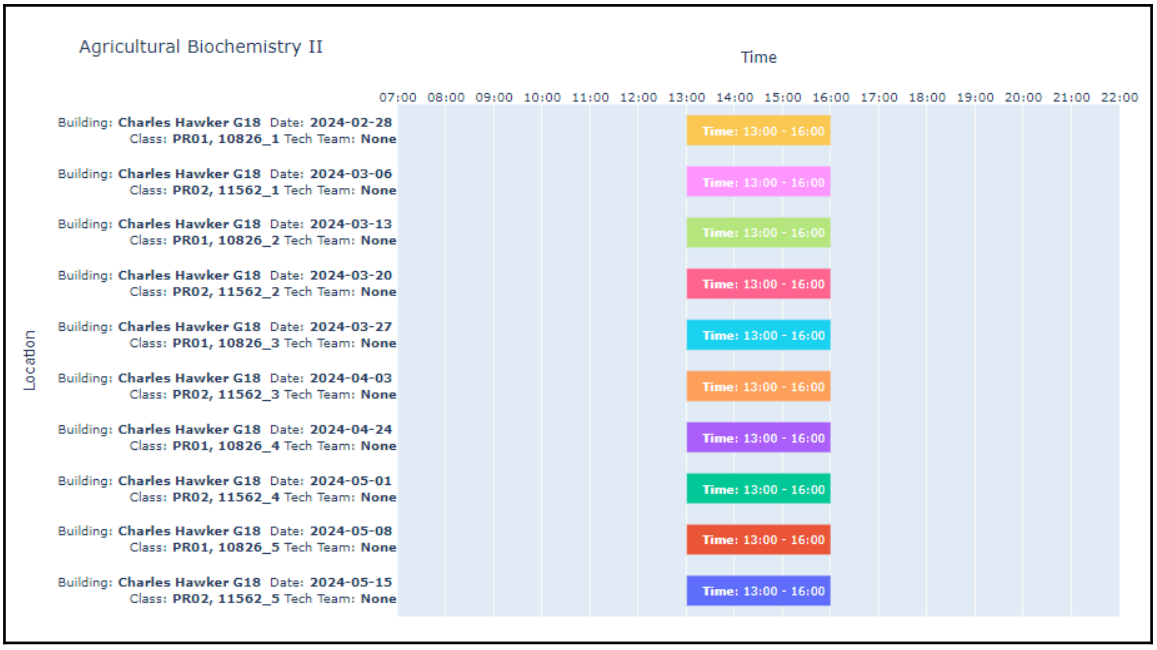
Select Term	Select Course	Select Date	Select Pie Chart/Table/Calendar/ Timeline
Semester 1, Semester 2, Trimester 1	Animal Health II, Agricultural Biochemistry II, Agricultural Systems I, Animal Breed & Genetics III, Innovation in Agronomy III	02/06/2024 - 11/17/2024	Calendar



5.4 Selecting Timeline View

When selecting Timeline, the timeline will show information about the course in a time range, such as location (building and room), date that the course will be taught, name of the class, and the tech team.

Select Term	Select Course	Select Date	Select Pie Chart/Table/Calendar/ Timeline
Semester 1	Agricultural Biochemistry II	02/01/2024 - 06/30/2024	Timeline



Select Term	Select Course	Select Date	Select Pie Chart/Table/Calendar/ Timeline
Semester 1, Semester 2, Trimester 1	Animal Health II, Agricultural Biochemistry II, Agricultural Systems I, Animal Breed & Genetics III, Innovation in Agronomy III	02/06/2024 - 11/17/2024	Timeline

<u>Step 6: Select options to visualise all features when choosing 'Select by location'</u>

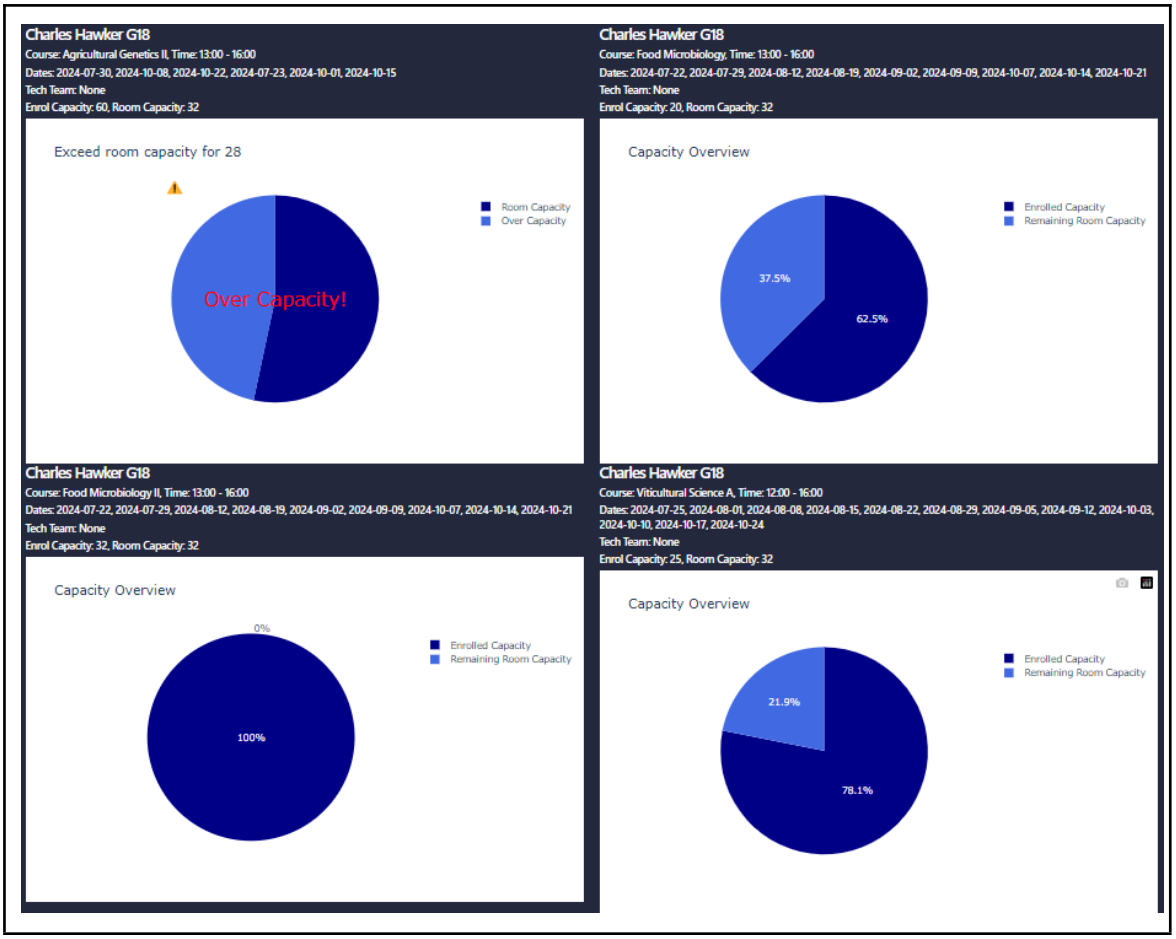
Users can follow these steps to visualise all features

Select single Term ⇨ select single Technical Services Team ⇨ select one Building ⇨ select one Room ⇨ select Date ⇨ select Pie Chart/Table/Calendar/Timeline

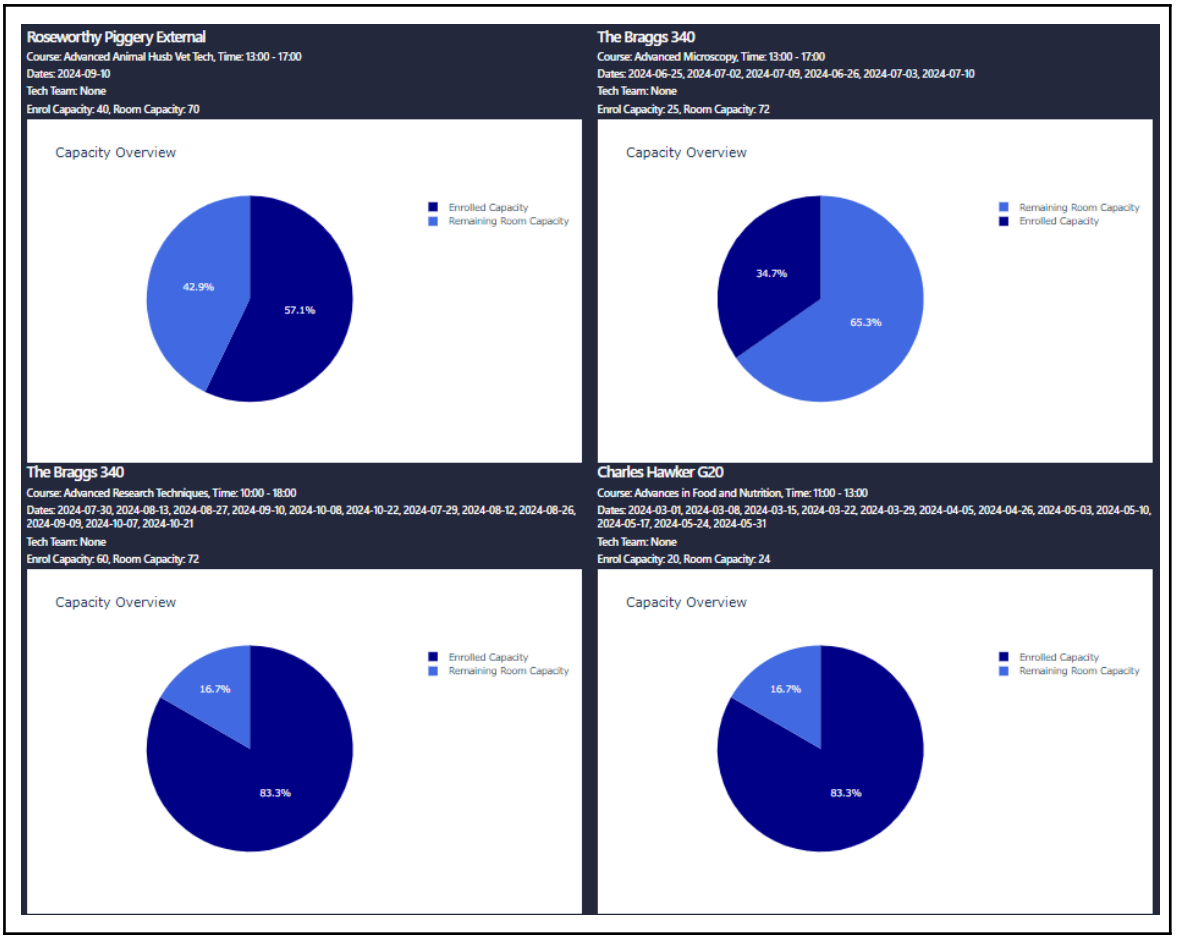
6.1 Selecting Pie Chart

When selecting Pie Chart, each pie chart will show information about how many courses will be held in the building, the date range and time that each course will be taught, the room capacity, the enrolled capacity, and the tech team. If the enrolled capacities are over the room capacity, it will show that the number of enrolled capacities is over the room capacity.

Select Term	Select Technical Services Team	Select Building	Select Room	Select Date	Select Pie Chart/Table/Calendar/Timeline
Semester 2	None	Charles Hawker	G18	07/01/2024 - 11/17/2024	Pie Chart



Select Term	Select Technical Services Team	Select Building	Select Room	Select Date	Select Pie Chart/Table/Calendar/Timeline
Semester 1, Semester 2, Trimester 1, Winter School	None, Structures and Natural Resources, D&M and E&I, Design & Manufacturing	Charles Hawker, Mawson, Rosewor thy Piggery, The Braggs, Williams	All	02/06/2024 - 11/17/2024	Pie chart



6.2 Selecting Table

When selecting Table, each table will show information about all courses that will be held in the building, such as the name of the class, location, length of time that course will be taught, the room capacity, the enrolled capacity, and the tech team.

Select Term	Select Technical Services Team	Select Building	Select Room	Select Date	Select Pie Chart/Table/Calendar/Timeline
Semester 2	None	Charles Hawker	G18	07/01/2024 - 11/17/2024	Table

Agricultural Genetics II

Subject / Catalogue	Course Descr	Location	Time	Enrol Capacity	Room Capacity	Tech Team
AGRIC 2510WT	Agricultural Genetics II	Charles Hawker G18	2024-07-30 13:00-16:00	60	32	
AGRIC 2510WT	Agricultural Genetics II	Charles Hawker G18	2024-10-08 13:00-16:00	60	32	
AGRIC 2510WT	Agricultural Genetics II	Charles Hawker G18	2024-10-22 13:00-16:00	60	32	
AGRIC 2510WT	Agricultural Genetics II	Charles Hawker G18	2024-07-23 13:00-16:00	60	32	
AGRIC 2510WT	Agricultural Genetics II	Charles Hawker G18	2024-10-01 13:00-16:00	60	32	
AGRIC 2510WT	Agricultural Genetics II	Charles Hawker G18	2024-10-15 13:00-16:00	60	32	

Food Microbiology

Subject / Catalogue	Course Descr	Location	Time	Enrol Capacity	Room Capacity	Tech Team
FOOD SC 7502WT	Food Microbiology	Charles Hawker G18	2024-10-21 13:00-16:00	20	32	
FOOD SC 7502WT	Food Microbiology	Charles Hawker G18	2024-10-14 13:00-16:00	20	32	
FOOD SC 7502WT	Food Microbiology	Charles Hawker G18	2024-10-07 13:00-16:00	20	32	
FOOD SC 7502WT	Food Microbiology	Charles Hawker G18	2024-09-09 13:00-16:00	20	32	
FOOD SC 7502WT	Food Microbiology	Charles Hawker G18	2024-08-19 13:00-16:00	20	32	
FOOD SC 7502WT	Food Microbiology	Charles Hawker G18	2024-08-12 13:00-16:00	20	32	
FOOD SC 7502WT	Food Microbiology	Charles Hawker G18	2024-07-29 13:00-16:00	20	32	
FOOD SC 7502WT	Food Microbiology	Charles Hawker G18	2024-07-22 13:00-16:00	20	32	
FOOD SC 7502WT	Food Microbiology	Charles Hawker G18	2024-09-02 13:00-16:00	20	32	

Select Term	Select Technical Services Team	Select Building	Select Room	Select Date	Select Pie Chart/Table/Calendar/Timeline
Semester 1, Semester 2, Trimester 1, Winter School	None, Structures and Natural Resources, D&M and E&I, Design & Manufacturing	Charles Hawker, Mawson, Roseworthy Piggery, The Braggs, Williams	All	02/06/2024 - 11/17/2024	Table

Advanced Animal Husb Vet Tech

Subject / Catalogue	Course Descr	Location	Time	Enrol Capacity	Room Capacity	Tech Team
VET TECH 2040RW	Advanced Animal Husb Vet Tech	Roseworthy Piggery External	2024-09-10 13:00-17:00	40	70	

Advanced Microscopy

Subject / Catalogue	Course Descr	Location	Time	Enrol Capacity	Room Capacity	Tech Team
BIOTECH 7009	Advanced Microscopy	The Braggs 340	2024-06-25 13:00-17:00	25	72	
BIOTECH 7009	Advanced Microscopy	The Braggs 340	2024-07-02 13:00-17:00	25	72	
BIOTECH 7009	Advanced Microscopy	The Braggs 340	2024-07-09 13:00-17:00	25	72	
BIOTECH 7009	Advanced Microscopy	The Braggs 340	2024-06-26 13:00-17:00	25	72	
BIOTECH 7009	Advanced Microscopy	The Braggs 340	2024-07-03 13:00-17:00	25	72	
BIOTECH 7009	Advanced Microscopy	The Braggs 340	2024-07-10 13:00-17:00	25	72	

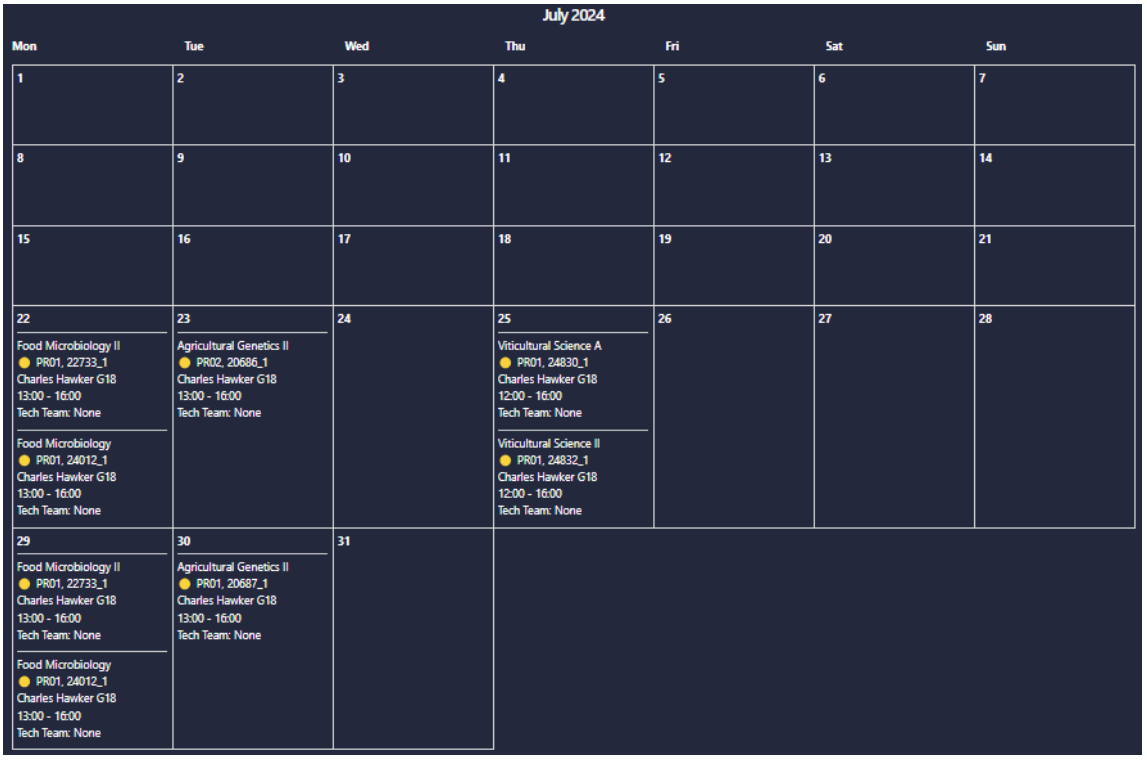
Advanced Research Techniques

Subject / Catalogue	Course Descr	Location	Time	Enrol Capacity	Room Capacity	Tech Team
BIOTECH 7003	Advanced Research Techniques	The Braggs 340	2024-08-26 10:00-18:00	60	72	
BIOTECH 7003	Advanced Research Techniques	The Braggs 340	2024-08-12 10:00-18:00	60	72	
BIOTECH 7003	Advanced Research Techniques	The Braggs 340	2024-07-29 10:00-18:00	60	72	
BIOTECH 7003	Advanced Research Techniques	The Braggs 340	2024-10-22 10:00-18:00	60	72	
BIOTECH 7003	Advanced Research Techniques	The Braggs 340	2024-08-13 10:00-18:00	60	72	
BIOTECH 7003	Advanced Research Techniques	The Braggs 340	2024-09-10 10:00-18:00	60	72	
BIOTECH 7003	Advanced Research Techniques	The Braggs 340	2024-08-27 10:00-18:00	60	72	
BIOTECH 7003	Advanced Research Techniques	The Braggs 340	2024-09-09 10:00-18:00	60	72	
BIOTECH 7003	Advanced Research Techniques	The Braggs 340	2024-07-30 10:00-18:00	60	72	
BIOTECH 7003	Advanced Research Techniques	The Braggs 340	2024-10-08 10:00-18:00	60	72	
BIOTECH 7003	Advanced Research Techniques	The Braggs 340	2024-10-07 10:00-18:00	60	72	
BIOTECH 7003	Advanced Research Techniques	The Braggs 340	2024-10-21 10:00-18:00	60	72	

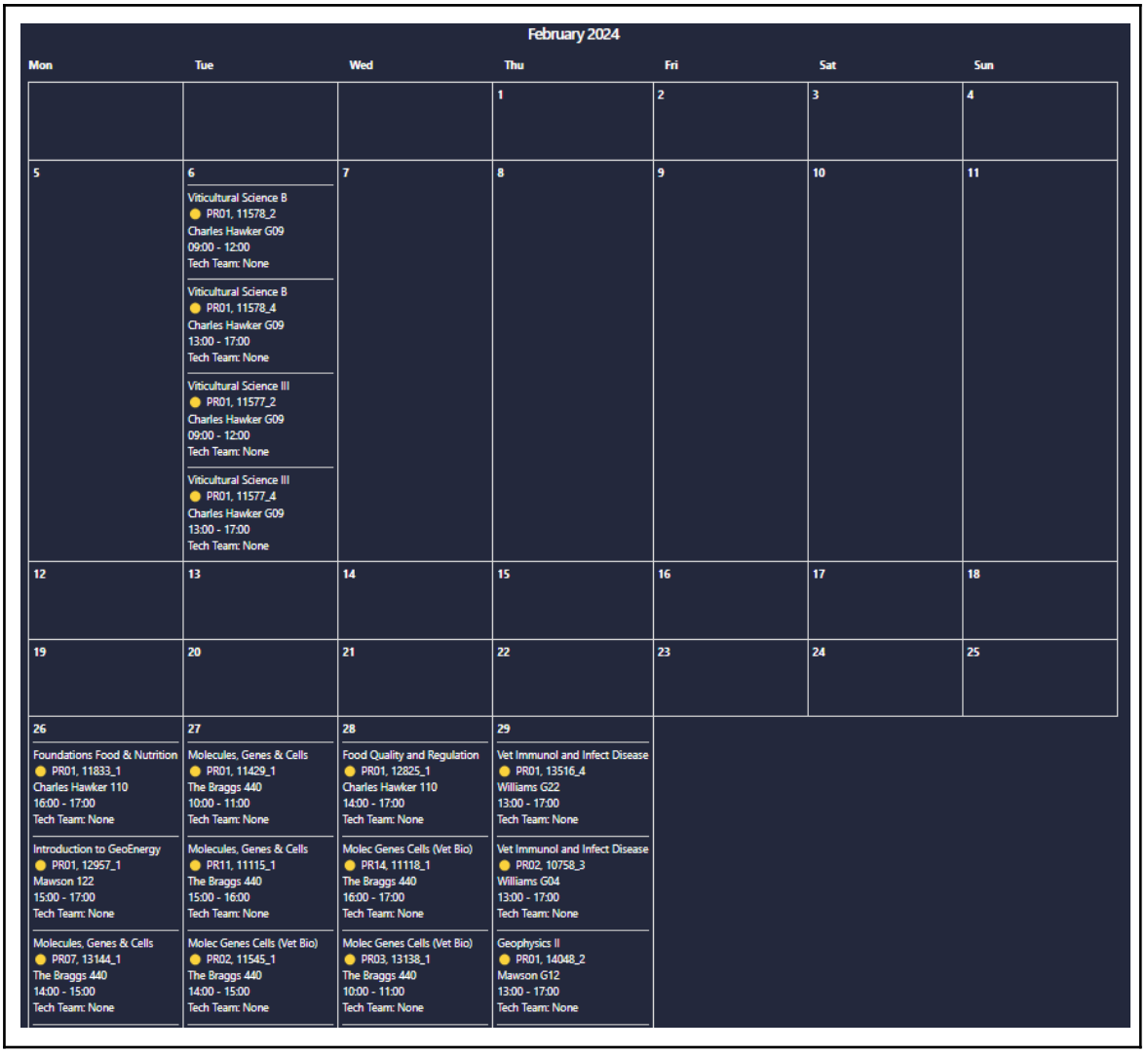
6.3 Selecting Calendar

When selecting Calendar, the calendar will show information about courses in each month. On the day that courses will be held, the calendar will show information about all of these courses, such as location (building and room), length of time that course will be taught, name of class, and the tech team.

Select Term	Select Technical Services Team	Select Building	Select Room	Select Date	Select Pie Chart/Table/Calendar/Timeline
Semester 2	None	Charles Hawker	G18	07/01/2024 - 11/17/2024	Calendar

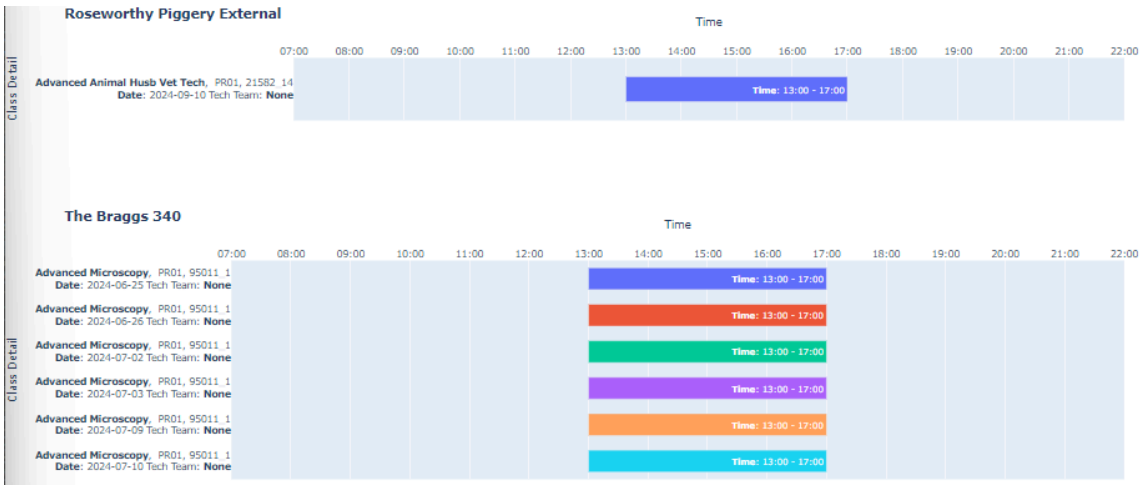


Select Term	Select Technical Services Team	Select Building	Select Room	Select Date	Select Pie Chart/Table/Calendar/Timeline
Semester 1, Semester 2, Trimester 1, Winter School	None, Structures and Natural Resources, D&M and E&I, Design & Manufacturing	Charles Hawker, Mawson, Rosewor thy Piggery, The Braggs, Williams	All	02/06/2024 - 11/17/2024	Calendar



6.4 Selecting Timeline view

When selecting Timeline, each timeline will show information about all courses in a time range, such as location (building and room), date that course will be taught, name of the class, and the tech team.

Select Term	Select Technical Services Team	Select Building	Select Room	Select Date	Select Pie Chart/Table/Calendar/Timeline
Semester 2	None	Charles Hawker	G18	07/01/2024 - 11/17/2024	Timeline

Semester 1, Semester 2, Trimester 1, Winter School	None, Structures and Natural Resources, D&M and E&I, Design & Manufacturing	Charles Hawker, Mawson, Rosewor thy Piggery, The Braggs, Williams	All	02/06/2024 - 11/17/2024	Timeline