To give you some background on how timetable clashes are typically identified and arranged, we've prepared the following steps we might take when creating a timetable and looking at avoiding clashes.

1. Start this exercise by referring to the below **teacher availability**. Look at each teacher and note the webinar/s they are assigned to teach (under *Assigned Webinar*) and their availability on Monday, Wednesday and Thursday. Observe those teachers who have more time constraints/limitations. Take note of:
   1. Teachers who have less availability.
   2. Teachers who are scheduled to teach multiple classes

*The below table contains the name of different teachers and the webinars they are scheduled to teach. Each teacher may be available at different times during the day.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Teacher** | **Assigned Webinar** | **Availability (Monday)** | **Availability (Wednesday)** | **Availability (Thursday)** |
| Apple | DEN201 A, DEN302 A | Monday - Anytime | Wednesday 1pm to 5pm | Thursday 9am to 3pm |
| Strawberry | DEN201 B, DEN302 B | Monday - Anytime | Wednesday 9am to 1pm |  |
| Grape | DEN203 A, DEN203 B | Monday - Anytime | Wednesday 1pm to 5pm |  |
| Mango | ICT302 A | Monday - Anytime | Wednesday 1pm to 3pm |  |
| Pear | ICT302 B,  DEN302 C | Monday - 9am to 11am | Wednesday 9am to 11am | Thursday 9am to 11am |
| Banana | ICT302 C | Monday - Anytime |  | Thursday 9am to 5pm |
| Orange | ICT106 A | Monday - Anytime |  | Thursday 1pm to 5pm |

1. Using the data below, construct the timetable (keeping in mind the teacher availability discussed earlier).
   * Keep the **same level units on the same day** where possible to reduce days needed for classes. i.e. keep first year units (100 level), second year units (200 level) or third year units (300 level) on the one day.

*The below table lists the units to be offered in the timetable (including the unit code, name and level). The last column 'Classes Needed' specifies how many webinars the unit will need to have.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit** | **Unit Name** | **Unit level** | **Classes Needed** |
| DEN201 | Enterprise Architecture | Second year  (200 level) | 2 classes (DEN201 A, DEN201 B) |
| DEN203 | IT Strategy & Management | Second year  (200 level) | 2 classes (DEN203 A, DEN203 B) |
| ICT106 | Technical User Support | First year  (100 level) | 1 class (ICT106 A) |
| ICT302 | Entrepreneurship and Innovation | Third year  (300 level) | 3 classes (ICT302 A, ICT302 B, ICT302 C) |
| DEN302 | Cloud Infrastructure | Third year  (300 level) | 3 classes (DEN302 A, DEN302 B, DEN302 C) |
|  |  | Total no. of classes | 11 classes |

1. Once you have assigned the classes to the time slots, refer to the list of students below and the units they need to be enrolled in. Check if there are any clashes and adjust where and when necessary.

|  |  |
| --- | --- |
| **Student** | **Units needed** |
| Student A | DEN302,ICT106,ICT302 |
| Student B | DEN201,DEN302 |
| Student C | DEN201,DEN203,DEN302,ICT302 |
| Student D | DEN201,DEN203,ICT302 |