**Sample Queries:**

**1. List all staffs in all units, as well as their Total cost and hours that spend on each session during the whole semester**

﻿Select S.Name,U.UnitCode, U.Semester, U.Year, E.SessionName, A.Hour,A.HourlyRate\*A.Hour AS TotalCost

From Activities A JOIN Staff S USING (StaffID)

JOIN Session E USING (SessionID)

JOIN Unit U USING (UnitID)

Table

Description automatically generated

**2. List the Total Cost for each Staff in one Unit**

﻿ ﻿Select S.Name, U.UnitCode, U.Semester, U.Year, SUM(A.Hour\*A.HourlyRate) AS TotalCost

From Activities A JOIN Staff S USING (StaffID)

JOIN Session E USING (SessionID)

JOIN Unit U USING (UnitID)

Group by S.StaffID

Table

Description automatically generated

**3. List the total Staff cost and workload for each Unit**

﻿Select U.UnitCode, SUM(A.Hour) AS TotalLoad, SUM(A.Hour \* A.HourlyRate) AS StaffCost

From Activities A JOIN Staff S USING (StaffID)

JOIN Session E USING (SessionID)

JOIN Unit U USING (UnitID)

Group By U.UnitID

Table

Description automatically generated

**4. List all the Non-Salary Costs for each Unit**

﻿Select U.UnitCode,N.NSCName, N.TotalCost

From OtherCost O JOIN NonSalaryCosts N USING (NSCID)

JOIN Unit U USING (UnitID)

Order by U.UnitCode

Table

Description automatically generated

**5. List the Total Non-Salary Cost for each Unit**

﻿ ﻿Select U.UnitCode, SUM(N.TotalCost)

From OtherCost O JOIN NonSalaryCosts N USING (NSCID)

JOIN Unit U USING (UnitID)

Group by U.UnitID

Table

Description automatically generated

**6. List the Total Non-Salary Cost and Staff Cost for each Unit**

﻿Select U.UnitCode, SUM(A.Hour) AS TotalLoad, U.Semester,U.Year,SUM(A.Hour \* A.HourlyRate) AS StaffCost,

(Select SUM(N.TotalCost)

From OtherCost O JOIN NonSalaryCosts N USING (NSCID)

JOIN UNIT Z USING (UnitID)

Where Z.UnitID = U.UnitID

Group by Z.UnitID) AS NonSalaryCost

From Activities A JOIN Staff S USING (StaffID)

JOIN Session E USING (SessionID)

JOIN Unit U USING (UnitID)

Group By U.UnitID

Table

Description automatically generated

**7. List all Staffs, and their teaching unit in 2020, where their workload is greater than 100 hours**

﻿ ﻿Select S.Name, U.UnitCode, U.Semester,U.Year,SUM(A.Hour) AS WorkLoad

From Activities A JOIN Staff S USING (StaffID)

JOIN Unit U USING (UnitID)

JOIN Session E USING (SessionID)

Where U.Year = 2020

Group by S.StaffID

Having WorkLoad >= 100

Table

Description automatically generated

**8. List all staffs and their workload in the units in 2020, and rank the workload from high to low**

﻿Select S.Name, U.UnitCode, U.Semester,U.Year,SUM(A.Hour) AS WorkLoad

From Activities A JOIN Staff S USING (StaffID)

JOIN Unit U USING (UnitID)

JOIN Session E USING (SessionID)

Where U.Year = 2020

Group by S.StaffID

Order by WorkLoad DESC

Table

Description automatically generated

**9. List the staff that teaches CITS5503 in 2020 semester 2, and show their total workload**

﻿Select S.Name, U.UnitCode, U.Semester,U.Year,SUM(A.Hour) AS WorkLoad

From Activities A JOIN Staff S USING (StaffID)

JOIN Unit U USING (UnitID)

JOIN Session E USING (SessionID)

Where U.Year = 2020 and U.UnitCode = "CITS5503" and U.Semester = 2

Group by S.StaffID

Table

Description automatically generated

**10. List the unit CITS1101 in 2021 semester 1, and show their staff, as well as their budget cost**

﻿ Select S.Name, U.UnitCode, U.Semester, U.Year, SUM(A.Hour\*A.HourlyRate) AS TotalCost

From Activities A JOIN Staff S USING (StaffID)

JOIN Session E USING (SessionID)

JOIN Unit U USING (UnitID)

Where U.UnitCode = "CITS1101" and U.Year = 2021 and U.Semester = 1

Group by S.StaffID

Table

Description automatically generated

**11. Print the sample summary for CITS 5503 in 2020 Semester 2 ( We can add more data if required)**

﻿Select U.UnitCode, SUM(A.Hour) AS TotalLoad, U.Semester,U.Year,

(Select COUNT(DISTINCT P.Name)

From Activities A JOIN Staff P USING (StaffID)

JOIN Unit R USING (UnitID)

Where R.UnitCode = U.UnitCode

) AS Num\_of\_Staff,

SUM(A.Hour \* A.HourlyRate) AS StaffCost,

(Select SUM(N.TotalCost)

From OtherCost O JOIN NonSalaryCosts N USING (NSCID)

JOIN UNIT Z USING (UnitID)

Where Z.UnitID = U.UnitID

Group by Z.UnitID) AS NonSalaryCost,

(Select B.Cost

From Unit G JOIN Budget B USING (UnitID)

Where IsEstimated = "YES" and B.IsLastSemester = "NO" and G.UnitID = U.UnitID ) AS Budget,

(Select COUNT(\*)

From Activities A JOIN Unit P USING (UnitID)

Where P.UnitID = U.UnitID

Group by P.UnitID) AS TotalActivities,

(Select COUNT(\*)

From OtherCost O JOIN Unit L USING (UnitID)

JOIN NonSalaryCosts USING (NSCID)

Where L.UnitID = U.UnitID

Group by L.UnitID) AS Total\_Number\_of\_NSC,

(Select SUM(A.Hour)

From Activities A JOIN Unit N USING (UnitID)

Where N.UnitID = U.UnitID

Group by N.UnitID) AS Total\_WorkLoad

From Activities A JOIN Staff S USING (StaffID)

JOIN Session E USING (SessionID)

JOIN Unit U USING (UnitID)

Where U.UnitCode = "CITS5503" and U.Year = 2020 and U.Semester = 2

Group By U.UnitID



Or All Units in all year semester

Table

Description automatically generated